## UNITED STATES SECURITIES AND EXCHANGE COMMISSION

Washington, D.C. 20549

### **FORM 20-F**

(Mark One)

□ REGISTRATION STATEMENT PURSUANT TO SECTION 12(b) OR (g) OF THE SECURITIES EXCHANGE ACT OF 1934
 OR
 ☑ ANNUAL REPORT PURSUANT TO SECTION 13 OR 15(d) OF THE SECURITIES EXCHANGE ACT OF 1934
 For the fiscal year ended December 31, 2023
 OR
 □ TRANSITION REPORT PURSUANT TO SECTION 13 OR 15(d) OF THE SECURITIES EXCHANGE ACT OF 1934
 OR
 □ SHELL COMPANY REPORT PURSUANT TO SECTION 13 OR 15(d) OF THE SECURITIES EXCHANGE ACT OF 1934

# **UBS AG**

Commission file number: 1-15060

(Exact name of registrant as specified in its charter)

**Switzerland** 

(Jurisdiction of Incorporation or Organization)

Bahnhofstrasse 45, CH-8001 Zurich, Switzerland and

Aeschenvorstadt 1, CH-4051 Basel, Switzerland

(Address of Principal Executive Offices)

UBS AG meets the conditions set forth in General Instruction (I)(1)(a) and (b) of Form 10-K, as applied to annual reports on Form 20-F, and is therefore filing this Form 20-F with the reduced disclosure format.

David Kelly 600 Washington Boulevard Stamford, CT 06901 Telephone: (203) 719 3000

(Name, Telephone, E-mail and/or Facsimile number and Address of Company Contact Person)

Securities registered or to be registered pursuant to Section 12(b) of the Act:

Please see page 3.

Securities registered or to be registered pursuant to Section 12(g) of the Act:

Please see page 3.

Securities for which there is a reporting obligation pursuant to Section 15(d) of the Act: Please see page 3.

Indicate the number of outstanding shares of each of the issuer's classes of capital or common stock as of 31 December 2023:

#### **UBS AG**

Ordinary shares, par value USD 0.10 per share: 3,858,408,466 ordinary shares (none of which are treasury shares)

Indicate by check mark if the registrant is a well-known seasoned issuer, as defined in Rule 405 of the Securities Act.

		Yes □	No ☑		
f this report is an an	nual or transition re	eport, indicate by check	mark if the registrant i	s not required to file reports j	pursuant to
Section 13 or 15(d)	of the Securities Exc	change Act of 1934.			
Note — Checking		Yes □ not relieve any registran hange Act of 1934 from		ts pursuant to Section 13 or 1 r those Sections.	5(d) of the
Securities Exchange	Act of 1934 during		ths (or for such shorter	be filed by Section 13 or 15(o period that the registrant was its for the past 90 days.	
		Yes ☑	No □		
	5 of Regulation S-T		pter) during the precedi	ractive Data File required to bing 12 months (or for such sheles).	
		Yes ☑	No □		
		nitions of "large accele		rated filer, a non-accelerated and filer" and "emerging growth	
Large accelo	erated filer	Accelerated f	filer □	Non-accelerated filer ☑ Emerging growth company	
	t has elected not to u		ion period for complying	with U.S. GAAP, indicate by ng with any new or revised fine Exchange Act. □	
† The term "new or		ccounting standard" ref ts Accounting Standard		d by the Financial Accounting oril 5, 2012.	g Standards
effectiveness of	its internal control	over financial reporting	under Section 404(b) of	to its management's assessment of the Sarbanes-Oxley Act (1) sued its audit report.	
				k whether the financial stater y issued financial statements.	
		of the registrant's exec		equired a recovery analysis one relevant recovery period pu	
Indicate by check i	mark which basis of		ant has used to prepare ing.	the financial statements inclu	ided in this
U.S. GAAP □	International Fir		lards as issued by the Ir rds Board  ☑	nternational Accounting	Other

If "Other"	has been	checked i	in response	to the j	previous	question.	, indicate	by check	k mark	which	financial	statement	t item	the
				r	egistrant	has elect	ed to follo	ow.						

Item 17 □	Item 18 □

If this is an annual report, indicate by check mark whether the registrant is a shell company (as defined in Rule 12b-2 of the Exchange Act)

#### Securities registered or to be registered pursuant to Section 12(b) of the Act:

Title of each class	Trading symbol(s)	Name of each exchange on which registered
ETRACS Alerian Midstream Energy Index ETN due June 21, 2050	AMNA	NYSE Arca
ETRACS Alerian Midstream Energy High Dividend Index ETN due July 19, 2050	AMND	NYSE Arca
ETRACS Alerian Midstream Energy Total Return Index ETN due October 20, 2050	AMTR	NYSE Arca
ETRACS Alerian MLP Index ETN Series B due July 18, 2042	AMUB	NYSE Arca
ETRACS Quarterly Pay 1.5x Leveraged MarketVector BDC Liquid Index ETN due June 10, 2050	BDCX	NYSE Arca
ETRACS MarketVector Business Development Companies Liquid Index ETN due April 26, 2041	BDCZ	NYSE Arca
ETRACS Monthly Pay 1.5x Leveraged Closed-End Fund Index ETN due June 10, 2050	CEFD	NYSE Arca
ETRACS Bloomberg Commodity Index Total Return Series B due October 31, 2039	DJCB	NYSE Arca
ETRACS 2x Leveraged MSCI USA ESG Focus TR ETN due September 15, 2061	ESUS	NYSE Arca
UBS AG FI Enhanced Large Cap Growth ETN due June 19, 2024	FBGX	NYSE Arca
ETRACS 2x Leveraged IFED Invest with the Fed TR Index ETN due September 15, 2061	FEDL	NYSE Arca
ETRACS Monthly Pay 2xLeveraged US High Dividend Low Volatility ETN Series B due October 21, 2049	HDLB	NYSE Arca
ETRACS IFED Invest with the Fed TR Index ETN due September 15, 2061	IFED	NYSE Arca
ETRACS 2x Leveraged US Value Factor TR ETN due February 9, 2051	IWDL	NYSE Arca
ETRACS 2x Leveraged US Growth Factor TR ETN due February 9, 2051	IWFL	NYSE Arca
ETRACS 2x Leveraged US Size Factor TR ETN due February 9, 2051	IWML	NYSE Arca
E-TRACS Alerian MLP Infrastructure Index Series B due April 2, 2040	MLPB	NYSE Arca
ETRACS Quarterly Pay 1.5x Leveraged Alerian MLP Index ETN due June 10, 2050	MLPR	NYSE Arca
ETRACS 2x Leveraged MSCI US Momentum Factor TR ETN due February 9, 2051	MTUL	NYSE Arca
ETRACS Monthly Pay 1.5x Leveraged Mortgage REIT ETN due June 10, 2050	MVRL	NYSE Arca
ETRACS Monthly Pay 2xLeveraged Preferred Stock ETN due September 25, 2048	PFFL	NYSE Arca
ETRACS 2x Leveraged MSCI US Quality Factor TR ETN due February 9, 2051	QULL	NYSE Arca
ETRACS 2x Leveraged US Dividend Factor TR ETN due February 9, 2051	SCDL	NYSE Arca
ETRACS Monthly Pay 2xLeveraged US Small Cap High Dividend ETN Series B due November 10, 2048	SMHB	NYSE Arca
ETRACS CMCI Total Return ETN Series B due April 5, 2038	UCIB	NYSE Arca
ETRACS 2x Leveraged MSCI US Minimum Volatility Factor TR ETN due February 9, 2051	USML	NYSE Arca
ETRACS Whitney US Critical Technologies ETN due March 13, 2053	WUCT	NYSE Arca

Securities registered or to be registered pursuant to Section 12(g) of the Act: None

Securities for which there is a reporting obligation pursuant to Section 15(d) of the Act:  $$\operatorname{None}$$ 

**Cautionary Statement:** Refer to the *Cautionary Statement Regarding Forward-Looking Statements* section in the Annual Report 2023 (page 266).

#### **Cross-reference table**

Set forth below are the respective items of SEC Form 20-F, and the locations in this document where the corresponding information can be found.

- Annual Report refers to the Annual Report 2023 of UBS AG annexed hereto, which forms an integral part hereof.
- **Supplement** refers to certain supplemental information contained in this forepart of the Form 20-F, starting on page 9 following the cross-reference table.
- Financial Statements refers to the consolidated financial statements of UBS AG, contained in the Annual Report.

In the cross-reference table below, page numbers refer either to the Annual Report or the Supplement, as noted.

Please see page 3 of the Annual Report for definitions of terms used in this Form 20-F relating to UBS.

Form 20-F item	Response or location in this filing
Item 1. Identity of Directors, Senior Management and Advisors.	Not applicable.
Item 2. Offer Statistics and Expected Timetable.	Not applicable.
Item 3. Key Information	
B – Capitalization and Indebtedness.	Not applicable.
C – Reasons for the Offer and Use of Proceeds.	Not applicable.
D – Risk Factors.	Annual Report, <i>Risk factors</i> (23-35).
<b>Item 4</b> . Information on the Comp	pany.
A – History and Development of the Company	Not required under the reduced disclosure format.
B – Business Overview.	Annual Report, <i>Our businesses</i> (5-11).
C – Organizational Structure.	Not required under the reduced disclosure format.
D – Property, Plant and	Annual Report, Property, plant and equipment (252)
Equipment.	
Information required by SEC Regulation S-K Part 1400	Annual Report, <i>Information required by Subpart 1400 of Regulation S-K</i> (253-258), <i>Loss history statistics</i> (76-77), and Note 9 to the Financial Statements ( <i>Financial assets at amortized cost and other positions in scope of expected credit loss measurement</i> ) (165-168).
Item 4A. Unresolved Staff	None.
Comments.	
Item 5. Operating and Financial	Review and Prospects.
A – Operating Results.	Annual Report, <i>Financial and operating performance</i> (36-49), Note 1 to the Financial Statements ( <i>Summary of material accounting policies</i> ) (140-156).
B – Liquidity and Capital Resources.	Not required under the reduced disclosure format.
C—Research and Development, Patents and Licenses, etc.	Not required under the reduced disclosure format.
D—Trend Information.	Not required under the reduced disclosure format.
E—Critical Accounting	Not applicable.
Estimates	
Item 6. Directors, Senior Manage	
A – Directors and Senior Management.	Not required under the reduced disclosure format.
B – Compensation.	Not required under the reduced disclosure format.
C – Board practices.	1: Annual Report, <i>Board of Directors</i> (117-119). The term of office for members of the Board of Directors and its Chairman expires after completion of the next Annual General Meeting. The next UBS AG Annual General Meeting is scheduled on 23 April 2024. 2: Annual Report, <i>Clauses on change of control</i> (120), and Note 30 to the Financial Statements ( <i>Related parties</i> ) (235-237). 3: Annual Report, <i>Members of the Board of Directors</i> (117-119), <i>Audit Committee</i> (118),
	Compensation Committee (118), and Auditors (121-122).

D—Employees.	Not required under the reduced disclosure format.
E—Share Ownership.	Not required under the reduced disclosure format.
F—Disclosure of a registrant's	Not applicable.
action to recover erroneously	
awarded compensation.	
Item 7. Major Shareholders and I	Related Party Transactions.
A—Major Shareholders.	Not required under the reduced disclosure format.
B—Related Party Transactions.	Not required under the reduced disclosure format.
C—Interests of Experts and	Not applicable.
Counsel.	
Item 8. Financial Information.	
A—Consolidated Statements	1, 2, 3, 4, 6: Please see Item 18 of this Form 20-F.
and Other Financial Information.	5: Not applicable.
	7: Information on material legal and regulatory proceedings is in Note 17 to the Financial
	Statements (Provisions and contingent liabilities) (176-180).
	For developments during the year, please see also the note <i>Provisions and contingent</i>
	liabilities in the Consolidated Financial Statements section in our respective quarterly
	reports for the First, Second and Third Quarters 2023, filed on Forms 6-K dated April 27,
	2023, August 31, 2023 and November 7, 2023, respectively. The disclosures in each such
	Quarterly Report speak only as of their respective dates. 8: Annual Report, <i>Dividend distributions</i> (116).
B—Significant Changes.	None.
Item 9. The Offer and Listing.	NOIIC.
A – Offer and Listing Details.	Not applicable.
B—Plan of Distribution.	Not applicable.
C—Markets.	Cover page (3). UBS AG shares are not listed.
D—Selling Shareholders.	Not applicable.
E—Dilution.	Not applicable.
F—Expenses of the Issue.	Not applicable.
1—Expenses of the Issue.	Not applicable.
Item 10. Additional Information.	
A—Share Capital.	Not applicable.
B—Memorandum and Articles	1: Supplement (10-13).
of Association.	2: Supplement (10-13).
	3: Annual Report, <i>Share capital structure</i> (115-116), <i>Shareholders' participation rights</i>
	(116), Elections and terms of office (117), and Statutory quorums (116). Supplement (10-
	13).
	4: Supplement (10-13).
	5: Supplement (10-13).
	6: Share capital structure (115-116).
	7: Annual Report, Change of control and defense measures (120).
	8: There is no requirement for UBS AG shareholders to disclose ownership, as UBS AG
	shares are not listed.
	9: Supplement (10-13) and Annual Report, <i>Share capital structure</i> (115-116),
	Shareholders' participation rights (116), Elections and terms of office (117), Change of
	control and defense measures (120).
	10: Supplement (10-13).

C—Material Contracts.	The Terms & Conditions of the outstanding Tier 2 capital instrument are included as exhibit 4.1 to this Form 20-F. For information on these notes, refer to <i>Swiss SRB total loss-absorbing capacity framework</i> on page 94-96 of the Annual Report.
	The parent bank merger agreement dated 7 December 2023 UBS AG and Credit Suisse AG is filed as Exhibits 4.3 hereto and the Swiss bank merger agreement dated 9 February 2024 between UBS Switzerland AG and Credit Suisse (Schweiz) AG is filed as Exhibit 4.4 hereto. The mergers described in these agreements will be carried out with some procedural simplifications and without any consideration given that both companies are or – in the case of the merger between UBS Switzerland AG and Credit Suisse (Schweiz) AG – will be wholly-owned by the same parent entity. Upon completion, all assets and liabilities of Credit Suisse AG and Credit Suisse (Schweiz) AG, respectively, will, in principle, transfer automatically to UBS AG and UBS Switzerland AG, respectively. For further information, please see <i>Integration of Credit Suisse</i> on page 4 of the Annual Report.
	The Asset Transfer Agreement by which certain assets and liabilities of UBS AG were transferred to UBS Switzerland AG is filed as Exhibit 4.2, and is described under <i>Joint liability of UBS Switzerland AG</i> on page 241 of the Annual Report
D—Exchange Controls.	Other than in relation to economic sanctions, there are no restrictions under the Articles of Association of UBS AG, nor under Swiss law, as presently in force, that limit the right of non-resident or foreign owners to hold UBS's securities freely. There are currently no Swiss foreign exchange controls or other Swiss laws restricting the import or export of capital by UBS or its subsidiaries, nor restrictions affecting the remittance of dividends, interest or other payments to non-resident holders of UBS securities. The Swiss federal government may impose sanctions on particular countries, regimes, organizations or persons which may create restrictions on exchange of control. A current list, in German, French and Italian, of such sanctions can be found at www.seco-admin.ch. UBS may also be subject to sanctions regulations from other jurisdictions where it operates imposing further restrictions.
E—Taxation.	UBS AG has no shareholders other than UBS Group AG, which is a Swiss company.
F—Dividends and Paying	Not applicable.
Agents.	N-41'1-1-
G—Statement by Experts.  H—Documents on Display.	Not applicable.  UBS files periodic reports and other information with the Securities and Exchange Commission. You may read and copy any document that we file with the SEC on the SEC's website, www.sec.gov. Much of this information may also be found on the UBS website at www.ubs.com/investors.
I—Subsidiary Information.	Not applicable.
J—Annual Report to Security Holders	Not applicable
	tive Disclosures About Market Risk.
(a) Quantitative Information About Market Risk.	Annual Report, Market risk (77-85).
(b) Qualitative Information About Market Risk.	Annual Report, Market risk (77-85).
(c) Interim Periods.	Not applicable.
Item 12. Description of Securities	s Other than Equity Securities.
A – Debt Securities	Not applicable.
B – Warrants and Rights	Not applicable.
C – Other Securities	Not applicable.
D – American Depositary Shares	Not applicable.
Item 13. Defaults, Dividend	There has been no material default in respect of any indebtedness of UBS or any of its
Arrearages and Delinquencies.	significant subsidiaries or any arrearages of dividends or any other material delinquency not cured within 30 days relating to any preferred stock of UBS AG or any of its significant subsidiaries.
Item 14. Material Modifications	None.
to the Rights of Security Holders and Use of Proceeds.	TOIC.
<b>Item 15.</b> Controls and Procedures	S.
(a) Disclosure Controls and Procedures	Annual Report, US disclosure requirements (123), and Exhibit 12 to this Form 20-F.

(b) Management's Annual Report on Internal Control over Financial Reporting	Annual Report, Management's report on internal control over financial reporting (125).
(c) Attestation Report of the Registered Public Accounting Firm	Annual Report, Report of Independent Registered Public Accounting Firm (126).
(d) Changes in Internal Control over Financial Reporting	None.
Item 16A. Audit Committee Financial Expert.	Not required under the reduced disclosure format.
<b>Item 16B.</b> Code of Ethics.	Not required under the reduced disclosure format.
Item 16C. Principal Accountant	Annual Report, Auditors (121-122).
Fees and Services.	None of the non-audit services so disclosed were approved by the Audit Committee pursuant to paragraph (c) (7)(i)(C) of Rule 2-01 of Regulation S-X.
Item 16D. Exemptions from the Listing Standards for Audit Committees.	Not applicable.
Item 16E. Purchases of Equity Securities by the Issuer and Affiliated Purchasers.	UBS AG does not have any class of equity securities registered pursuant to Section 12 of the Exchange Act.
Item 16F. Changes in Registrant's Certifying Accountant.	Not applicable.
Item 16G. Corporate Governance.	UBS AG has debt securities listed on the New York Stock Exchange (NYSE), and therefore discloses below the key differences from its corporate governance practices to the NYSE standards relevant to US-listed companies.
	Responsibility of the Audit Committee regarding independent auditors Our Audit Committee is responsible for the compensation, retention and oversight of independent auditors. It assesses the performance and qualifications of external auditors and submits proposals for appointment, reappointment or removal of independent auditors to the BoD. As required by the Swiss Code of Obligations, the BoD submits its proposals for a shareholder vote at the annual general meeting (AGM). Under NYSE standards audit committees are responsible for appointing independent auditors.
	Discussion of risk assessment and risk management policies by the Risk Committee As per the Organization Regulations of UBS AG, the Risk Committee, instead of the Audit Committee, as per NYSE standards, oversees our risk principles and risk capacity on behalf of the BoD. The Risk Committee is responsible for monitoring our adherence to those risk principles and monitoring whether business divisions and control units maintain appropriate systems of risk management and control.
	Supervision of the internal audit function Although under NYSE standards only audit committees supervise internal audit functions, the Chairman of the BoD (the Chairman) and the Audit Committee share the supervisory responsibility and authority with respect to the internal audit function.
	Responsibility of the Compensation Committee for performance evaluations of senior management of UBS Group AG  In line with Swiss law, UBS Group AG's Compensation Committee, together with its BoD, proposes for shareholder approval at the UBS Group AG AGM the maximum aggregate amount of compensation for the BoD, the maximum aggregate amount of fixed compensation and the aggregate amount of variable compensation for the Group Executive Board. As UBS AG's BoD members are the same as the UBS Group AG BoD members, this approval by group shareholders is also applicable for UBS AG. The members of the Compensation Committee are elected by the AGM. Under NYSE standards it is the responsibility of compensation committees to evaluate senior management's performance and to determine and approve, as a committee or together with the other independent directors, the compensation thereof.  Proxy statement reports of the Audit Committee and the Compensation Committee
	NYSE standards require the aforementioned committees to submit their reports directly to shareholders. However, under Swiss law all reports to shareholders, including those from

	the aforementioned committees, are provided to and approved by the BoD, which has ultimate responsibility to the shareholders.  Shareholder votes on equity compensation plans NYSE standards require shareholder approval for the establishing of and material revisions to all equity compensation plans. However, as per Swiss law, the BoD approves compensation plans. Shareholder approval is only mandatory if equity-based compensation plans require an increase in capital. No shareholder approval is required if shares for such plans are purchased in the market.
<b>Item 16H.</b> Mine Safety Disclosure.	Not applicable.
Item 16I. Disclosure Regarding Foreign Jurisdictions that Prevent Inspections	Not applicable.
Item 16J. Insider trading policies	Not applicable.
Item 16K. Cybersecurity.	Annual Report, Operational risks affect our business (24-25), Risk management and control (51-92), Cybersecurity governance (118).
Item 17. Financial Statements.	Not applicable.
Item 18. Financial Statements.	Annual Report, Financial statements (124-249), and Additional regulatory information (251-258).
Item 19. Exhibits	Supplement (14).

#### **Supplemental information**

#### Disclosure Pursuant To Section 219 of the Iran Threat Reduction And Syrian Human Rights Act

Section 219 of the US Iran Threat Reduction and Syria Human Rights Act of 2012 ("ITRA") added Section 13(r) to the US Securities Exchange Act of 1934, as amended (the "Exchange Act") requiring each SEC reporting issuer to disclose in its annual and, if applicable, quarterly reports whether it or any of its affiliates have knowingly engaged in certain activities, transactions or dealings relating to Iran or with the Government of Iran or certain designated natural persons or entities involved in terrorism or the proliferation of weapons of mass destruction during the period covered by the report. The required disclosure may include reporting of activities not prohibited by US or other law, even if conducted outside the US by non-US affiliates in compliance with local law. Pursuant to Section 13(r) of the Exchange Act, we note the following for the period covered by this annual report:

UBS has a Group Sanctions Policy that prohibits transactions involving sanctioned countries, including Iran, and sanctioned individuals and entities. However, UBS Switzerland AG maintains one account involving the Iranian government under the auspices of the United Nations in Geneva after agreeing with the Swiss government that it would do so only under certain conditions. These conditions include that payments involving the account must: (1) be made within Switzerland; (2) be consistent with paying rent, salaries, telephone and other expenses necessary for its operations in Geneva; and (3) not involve any Specially Designated Nationals (SDNs) blocked or otherwise restricted under US or Swiss law. In 2023, the gross revenues for this UN-related account were approximately USD 5,731.46. We do not allocate expenses to specific client accounts in a way that enables us to calculate net profits with respect to any individual account. UBS AG intends to continue maintaining this account pursuant to the conditions it has established with the Swiss Government and consistent with its Group Sanctions Policy.

As previously reported, UBS had certain outstanding legacy trade finance arrangements issued on behalf of Swiss client exporters in favor of their Iranian counterparties. In February 2012 UBS ceased accepting payments on these outstanding export trade finance arrangements and worked with the Swiss government who insured these contracts (Swiss Export Risk Insurance "SERV"). On December 21, 2012, UBS and the SERV entered into certain Transfer and Assignment Agreements under which SERV purchased all of UBS's remaining receivables under or in connection with Iran-related export finance transactions. Hence, the SERV is the sole beneficiary of said receivables. There was no financial activity involving Iran in connection with these trade finance arrangements in 2023, and no gross revenue or net profit.

In connection with these trade finance arrangements, UBS Switzerland AG has maintained one existing account relationship with an Iranian bank. This account was established prior to the US designation of this bank and maintained due to the existing trade finance arrangements. In 2007, following the designation of the bank pursuant to sanctions issued by the US, UN and Switzerland, the account was blocked under Swiss law and remained subject to blocking requirements until January 2016. Client assets as of 31 December 2023 were CHF 3,097.40. Gross revenues were USD 3.69 equivalent.

# Item 10. Additional Information. B—Memorandum and Articles of Association.

Please see the Articles of Association of UBS AG (Exhibit 1.1 to this Form 20-F) and the Organization Regulations of UBS AG (Exhibit 1.2 to this Form 20-F).

Set forth below is a summary of the material provisions of the Articles of Association of UBS AG (the "Articles"), Organization Regulations of UBS AG (the "Organization Regulations") and relevant Swiss laws, in particular the Swiss Code of Obligations, relating to the ordinary shares of UBS AG (the "shares"). This description does not purport to be complete and is qualified in its entirety by references to Swiss law, including Swiss company law, and to the Articles and Organization Regulations.

The principal legislation under which UBS AG operates, and under which the shares are issued, is the Swiss Code of Obligations.

## Shares and Shareholders

#### Shares

The shares are registered shares (Namenaktien) with a par value of USD 0.10 per share and are issued as uncertificated securities (einfache Wertrechte) (in the sense of the Swiss Code of Obligations) The shares are fully paid up, and there is no liability of shareholders to further capital calls by UBS AG. The shares rank pari passu in all respects with each other, including voting rights, entitlement to dividends, share of the liquidation proceeds in case of the liquidation of UBS AG, preemptive rights in the event of a share issue (Bezugsrechte) and advance subscription rights in the event of the issuance of equity-linked securities (Vorwegzeichnungsrechte).

#### Share Register

Swiss law distinguishes between registration with and without voting rights. Shareholders must be registered in our share register as shareholders with voting rights in order to vote and participate in shareholders' meetings or to assert or exercise other rights related to voting rights.

Swiss law and the Articles require UBS AG to keep a share register in which the names, addresses and nationality (or registered office in the case of legal entities) of the owners of the shares are recorded. The main function of the share register is to register shareholders entitled to vote and participate in shareholders' meetings, or to assert or exercise other rights related to voting rights.

A shareholder will be registered in our share register with voting rights upon disclosure of its name, address and nationality (or registered office in the case of legal entities). However, we may decline a registration with voting rights if the shareholder does not declare that it has acquired the shares in its own name and for its own account. If the shareholder refuses to make such declaration, it will be registered in our share register as a shareholder without voting rights.

In order to register shares in our share register, a shareholder must file a share registration form with the share register. Failing such registration, a shareholder may not vote at or participate in shareholders' meetings, but will be entitled to receive dividends and other rights with financial value, such as preemptive rights in the event of a share issue (*Bezugsrechte*) and advance subscription rights in the event of the issuance of equity-linked securities (*Vorwegzeichnungsrechte*), and its share of liquidation proceeds. Shareholders registered in our share register may at any time request from us a confirmation of the shares that they hold according to our share register.

#### Shareholders' Meetings

A shareholders' meeting is convened by the Board of Directors (the "BoD") or, if necessary, by the company's statutory auditors upon notification of the shareholders at least 20 days prior to such meeting. An invitation to any shareholders' meeting will be sent to all registered shareholders. The Articles do not require a minimum number of shareholders to be present in order to hold a shareholders' meeting.

Unless otherwise provided by Swiss law or the Articles (as indicated below), resolutions require the approval of a majority of the votes represented, excluding blank and invalid ballots, at a shareholders' meeting in order to be passed.

Under Swiss corporate law (or Swiss banking law, as the case may be), a resolution passed at a shareholders' meeting with the approval of at least a two-thirds of the votes, and a majority of the nominal value of shares, in each case represented at such meeting is required in order to approve:

- A change in the corporation's stated purpose in its articles of association;
- The consolidation of shares, unless the consent of all the shareholders concerned is required;
- The restriction or exclusion of preemptive rights in the event of a share issue (Bezugsrechte);
- The conversion of participation certificates into shares;
- The introduction of shares with preferential voting rights;
- Any restriction on the transferability of registered shares;
- Any change in the currency of the share capital;
- The introduction of a casting vote for the person chairing the shareholders' meeting;
- A provision of the articles of association on holding the shareholders' meeting abroad;
- The delisting of the equity securities of the corporation:
- The creation of conditional capital, the introduction of a capital band or, in accordance with Swiss banking law, the introduction of reserve capital;
- An increase in share capital in consideration of contributions in kind, or by off-set of a claim, or involving the granting of special privileges, or from the transformation of reserves into share capital;
- A change of domicile of the corporation;
- The introduction of an arbitration clause in the articles of association;
- Dispensing with the designation of an independent voting representative for conducting a virtual shareholders' meeting in the case of corporations whose shares are not listed on a stock exchange (e.g., UBS AG); or
- Dissolution of the corporation.

Under the Articles, a resolution passed at a shareholders' meeting with the approval of at least two-thirds of the votes represented at such meeting is required in order to approve:

- A change to the provisions in the Articles regarding the number of members of the BoD;
- Removal of one-quarter or more of the members of the BoD; or
- The deletion or modification of the provision of the Articles establishing these supermajority requirements.

At shareholders' meetings, a shareholder can be represented by a legal representative or under a written power of attorney by a proxy who does not need to be a shareholder or, under a written or electronic power of attorney, by the independent proxy. Votes are taken electronically, by written ballot or by a show of hands. Shareholders representing at least 3% of the votes represented may always request that a vote or election take place electronically or by a written ballot.

#### Net Profits and Dividends

Swiss law requires that at least 5% of the annual net profits of a corporation must be retained and booked as statutory retained earnings until these retained earnings equal, together with the corporation's statutory capital reserve, no less than 50% of the corporation's share capital registered in the commercial register. Any remaining net profit of the corporation may be allocated by the shareholders represented at the applicable shareholders' meeting.

Under Swiss law, dividends may be paid by a corporation only if, based on its audited standalone statements prepared in accordance with Swiss law, the corporation has sufficient distributable profits from the previous financial years or if the reserves of the corporation are sufficient to allow distribution of a dividend. In either event, dividends may be paid by the corporation only after approval by the shareholders' meeting. The BoD may propose to the shareholders that a dividend be paid, but cannot itself set the dividend. The corporation's statutory auditors must confirm that any dividend proposal of the BoD is in accordance with Swiss law and the corporation's articles of association.

Dividends are usually due and payable after the shareholders' resolution relating to the allocation of profits has been passed. Under Swiss law, the statute of limitations in respect of dividend payments is five years.

#### Preemptive and Advance Subscription Rights

Under Swiss law, any share issue, whether for cash or non-cash consideration or for no consideration, is subject to the prior approval of the shareholders' meeting. Existing shareholders of a Swiss corporation have certain preemptive rights in the event of a share issue (*Bezugsrechte*) and advance subscription rights in the event of the issuance of equity-linked securities (*Vorwegzeichnungsrechte*) to subscribe for the new shares or equity-linked securities, as the case may be, in proportion to the nominal amount of shares held. However, the articles of association of the corporation or a resolution approved at a shareholders' meeting by at least two-thirds of the votes and a majority of the nominal value of the shares, in each case represented at the meeting, may limit or exclude such preemptive or advance subscription rights in certain limited circumstances.

#### Notices

Notices to the shareholders may, at the choice of the BoD, be validly given by publication in the Swiss Official Gazette of Commerce or in a form that allows proof by text. The BoD may designate further means of publication as well.

#### **Board of Directors Borrowing Power**

Neither Swiss law nor the Articles restrict in any way our power to borrow and raise funds, provided that any such borrowing is entered into on arms' length terms.

Listed companies, such as UBS Group AG, may grant loans to members of their BoD based on their articles of association. UBS Group AG's articles of association restrict its ability to grant loans to members of its BoD as follows: First, loans to the independent members of the BoD shall be made in accordance with the customary business and market conditions. Second, loans to the non-independent members of the BoD shall be made in the ordinary course of business on substantially the same terms as those granted to UBS employees. Third, the total amount of such loas shall not exceed CHF 20m per member. As the members of UBS AG's BoD are the same as the members of UBS Group AG's BoD, these restrictions are enforced with respect to the UBS AG's BoD members even though this provision of Swiss law is not applicable to UBS AG.

#### **BoD** Compensation

The BoD is ultimately responsible for approving the compensation strategy and principles proposed by the Compensation Committee, which determines compensation-related matters in line with the principles set forth in the Articles. As determined in the Articles and the Organization Regulations, the Compensation Committee supports the BoD with its duties to set guidelines on compensation and benefits, to oversee implementation thereof, to approve certain compensation, such as the total compensation for the Chairman and the non-independent BoD members, and, upon proposal of the Chairman, proposes the remuneration / fee framework for independent BoD members for approval by the BoD.

The members of the BoD of UBS AG are the same as of the UBS Group AG BoD. For UBS Group AG, the Compensation Committee supports the BoD with its duties to set guidelines on compensation and benefits, to oversee implementation thereof, to approve certain compensation and to scrutinize executive performance. Annually, and on behalf of the Group BoD, the Compensation Committee of UBS Group AG (among other things):

- approves the total compensation for the Chairman and the non-independent BoD members;
- upon proposal of the Chairman, proposes the remuneration / fee framework for independent BoD members for approval by the BoD;
- upon proposal of the Chairman and Group CEO, approves the remuneration / fee frameworks for external supervisory board members of significant Group entities;
- proposes to the BoD, for approval by the AGM, the maximum aggregate amounts of BoD compensation and GEB fixed compensation and the aggregate amount of variable compensation for the GEB.

Members of the UBS Group AG BoD must use a minimum of 50% of their fees to purchase UBS Group AG shares, which are blocked for four years, and they may elect to use up to 100% of their fees to purchase blocked UBS shares. The fixed fees of the Chairman and Vice Chairman for their services on the UBS Group AG board are delivered 50% in cash and 50% in shares, which are blocked for four years. The number of shares is calculated based on the average closing price of the 10 trading days leading up to and including the grant date.

#### **Conflicts of Interests**

Swiss law requires directors and members of senior management to inform the BoD immediately and comprehensively of any conflicts of interest affecting them. The BoD then has to take the measures required to safeguard the interests of the corporation. Directors and officers are personally liable to the corporation for any breach of these provisions. In addition, Swiss law contains a provision under which payments made to a shareholder or a director or any person associated therewith, other than at arm's length, must be repaid to the corporation if the shareholder or director was acting in bad faith.

In addition, the Organization Regulations provide that the member of the BoD or senior management with a conflict of interest shall participate in discussions and a double vote (meaning a vote with and a vote without the conflicted individual) shall take place. A binding decision on the matter requires the same outcome in both votes. This is subject to exceptional circumstances in which the best interests of UBS dictate that the member of the BoD or senior management with a conflict of interest shall not participate in the discussions and decision-making involving the interest at stake.

#### Retirement of Board Members

There is no age-limit requirement for retirement of the members of the BoD. The term of office for each BoD member is until the next annual general meeting of shareholders, and no BoD member may serve for more than 10 consecutive terms of office. In exceptional circumstances the BoD can extend this limit.

#### <u>The Company</u> Repurchase of Shares

Swiss law limits a corporation's ability to hold or repurchase its own shares. We and our subsidiaries may repurchase shares only if and to the extent that (i) we have freely distributable reserves in the amount of the purchase price and (ii) the aggregate nominal value of all shares held by us and our subsidiaries does not exceed 10% of our nominal share capital (or 20% of our nominal share capital in specific circumstances). Repurchases for cancellation purposes approved by the shareholders' meeting are not subject to the 10% threshold for own shares within the meaning of article 659 paragraph 2 of the Swiss Code of Obligations. We must create a special reserve in our standalone financial statements prepared in accordance with Swiss law in the amount of the purchase price of any repurchased shares. Furthermore, in our consolidated financial statements, own shares are recorded at cost and reported as treasury shares, resulting in a reduction in total shareholders' equity. Shares held by us or any of our subsidiaries do not carry any rights to vote at shareholders' meetings.

#### Sinking Fund Provisions

There are no provisions in Swiss law or in the Articles requiring us to put resources aside for the exclusive purpose of redeeming bonds or repurchasing shares.

#### Registration and Business Purpose

UBS AG was incorporated and registered as a corporation limited by shares (*Aktiengesellschaft*) under the laws of Switzerland. It is entered into the commercial registers of Canton Zurich and Canton Basel-City on February 28, 1978 under the registration number CHE-101.329.561 and has registered domiciles in Zurich and Basel, Switzerland. The business purpose of UBS AG, as set forth in article 2 of the Articles, is the operation of a bank, with a scope of operations extending to all types of banking, financial, advisory, trading and service activities in Switzerland and abroad. UBS AG may establish branches and representative offices as well as banks, finance companies and other enterprises of any kind in Switzerland and abroad, hold equity interests in these companies, and conduct their management. UBS AG is authorized to acquire, mortgage and sell real estate and building rights in Switzerland and abroad. UBS AG may borrow and invest money on the capital markets. UBS AG is part of the group of companies controlled by the group parent company UBS Group AG. It may promote the interests of the group parent company or other group companies. It may provide loans, guarantees and other kinds of financing and security for group companies. UBS AG is a wholly owned subsidiary of UBS Group AG.

#### **Duration and Liquidation**

UBS AG has an unlimited duration.

Under Swiss law, we may be dissolved at any time by way of liquidation or in the case of a merger in accordance with the Swiss Federal Act on Merger, Demerger, Transformation of Assets of October 3, 2002, as amended, based on a resolution passed at a shareholders' meeting with the approval of at least a two-thirds majority of the votes, and a majority of the nominal value of shares, in each case represented at such meeting. As UBS AG is a Swiss bank, the Swiss Financial Market Supervisory Authority FINMA is the only competent authority to open restructuring or liquidation (bankruptcy) proceedings with respect to UBS AG.

Under Swiss law, any surplus arising out of a liquidation (after the settlement of all claims of all creditors) must be used first to repay the nominal share capital of UBS AG. Thereafter, any balance must be distributed to shareholders in proportion to the paid-up nominal value of shares held.

#### Other

Ernst & Young Ltd, Aeschengraben 9, 4051 Basel, Switzerland, PCAOB number 1460, have been appointed as statutory auditors and as auditors of the consolidated accounts of UBS AG. The auditors are subject to election each year by the shareholders at the annual general meeting.

#### Item 19. Exhibits.

Exhibit number	Description
1.1	Articles of Association of UBS AG dated 4 April 2023.
1.2	Organization Regulations of UBS AG dated 1 March 2024.
2(b)	Instruments defining the rights of the holders of long-term debt issued by UBS Group AG and its subsidiaries.
	We agree to furnish to the SEC upon request, copies of the instruments, including indentures, defining the rights of the holders of our long-term debt and of our subsidiaries' long-term debt.
2(d)	Description of securities registered under Section 12 or the Securities Exchange Act of 1934.
4.1	Terms and Conditions of Tier 2 Subordinated Notes of UBS AG due 2024, issued 15 May 2014. (Incorporated by reference to Exhibit 4.3 to UBS AG's Annual Report on Form 20-F for the fiscal year ended December 31, 2014)
4.2	Asset Transfer Agreement between UBS AG and UBS Switzerland AG dated 12 June 2015. (Incorporated by reference to Form 6-K of UBS AG filed on June 17, 2015)
4.3	Merger Agreement between UBS AG and Credit Suisse AG dated 7 December 2023.
4.4	Merger Agreement between UBS Switzerland AG and Credit Suisse (Schweiz) AG dated 9 February 2024.
12	The certifications required by Rule 13(a)-14(a) (17 CFR 240.13a-14(a)).
13	The certifications required by Rule 13(a)-14(b) (17 CFR 240.13a-14(b)) and Section 1350 of Chapter 63 of Title 18 of the U.S. Code (18 U.S.C. 1350).
15	Consent of Ernst & Young Ltd. with respect to UBS AG.
97	UBS Group U.S Listing Standards Clawback Policy.
101	Interactive Data Files (sections of the Annual Report formatted in inline XBRL (Extensible Business Reporting Language)). Furnished electronically herewith.

#### **SIGNATURES**

The registrant hereby certifies that it meets all of the requirements for filing on Form 20-F and that it has duly caused the undersigned to sign this annual report on its behalf.

#### **UBS AG**

/s/ Sergio Ermotti
Name: Sergio Ermotti

Title: President of the Executive Board

/s/ Todd Tuckner

Name: Todd Tuckner

Title: Chief Financial Officer

/s/ Steffen Henrich

Steffen Henrich Name: Title: Controller

Date: March 28, 2024

# Annual Report 2023

UBS AG





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#### **Corporate information**

**UBS AG** is incorporated and domiciled in Switzerland and operates under Art. 620ff. of the Swiss Code of Obligations as an Aktiengesellschaft, a corporation limited by shares. The addresses and telephone numbers of the two registered offices of UBS AG are: Bahnhofstrasse 45, CH-8001 Zurich, Switzerland, telephone +41-44-234 11 11; and Aeschenvorstadt 1, CH-4051 Basel, Switzerland, telephone +41-61-288 50 50. The corporate identification number is CHE-101.329.561. UBS AG is a bank. The company was formed on 29 June 1998, when Union Bank of Switzerland (founded in 1862) and Swiss Bank Corporation (founded in 1872) merged to form UBS AG.

#### **Contacts**

#### **Switchboards**

For all general inquiries ubs.com/contact

Zurich +41-44-234 1111 London +44-207-567 8000 New York +1-212-821 3000 Hong Kong SAR +852-2971 8888 Singapore +65-6495 8000

#### **Investor Relations**

UBS's Investor Relations team manages relationships with institutional investors, research analysts and credit rating agencies.

ubs.com/investors

Zurich +41-44-234 4100 New York +1-212-882 5734

#### **Media Relations**

UBS's Media Relations team manages relationships with global media and journalists.

ubs.com/media

Zurich +41-44-234 8500 mediarelations@ubs.com

London +44-20-7567 4714 ubs-media-relations@ubs.com

New York +1-212-882 5858 mediarelations@ubs.com

Hong Kong SAR +852-2971 8200 sh-mediarelations-ap@ubs.com

#### Office of the Group Company Secretary

The Group Company Secretary handles inquiries directed to the Chairman or to other members of the Board of Directors.

UBS Group AG, Office of the Group Company Secretary PO Box, CH-8098 Zurich, Switzerland

sh-company-secretary@ubs.com

Zurich +41-44-235 6652

#### **Shareholder Services**

UBS's Shareholder Services team, a unit of the Group Company Secretary's office, manages relationships with shareholders and the registration of UBS Group AG registered shares.

UBS Group AG, Shareholder Services PO Box, CH-8098 Zurich, Switzerland

sh-shareholder-services@ubs.com

Zurich +41-44-235 6652

#### **US Transfer Agent**

For global registered share-related inquiries in the US.

Computershare Trust Company NA PO Box 43006 Providence, RI, 02940-3006, USA

Shareholder online inquiries: www.computershare.com/us/investor-inquiries

Shareholder website: computershare.com/investor

Calls from the US +1-866-305-9566 Calls from outside the US +1-781-575-2623 TDD for hearing impaired +1-800-231-5469 TDD for foreign shareholders +1-201-680-6610

#### Corporate calendar UBS AG

More information about future publication dates is available at ubs.com/global/en/investor-relations/events/calendar.html

#### **Imprint**

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# Our key figures

#### **UBS AG consolidated key figures**

	As of or for the year ended			
USD m, except where indicated	31.12.23	31.12.22	31.12.2	
Results				
Total revenues	33,675	34,915	35,828	
Credit loss expense / (release)	143	29	(148)	
Operating expenses	29,011	25,927	27,012	
Operating profit / (loss) before tax	4,521	8,960	8,964	
Net profit / (loss) attributable to shareholders	3,290	7,084	7,032	
Profitability and growth <sup>1,2</sup>				
Return on equity (%)	6.0	12.6	12.3	
Return on tangible equity (%)	6.7	14.2	13.9	
Return on common equity tier 1 capital (%)	7.6	16.8	17.6	
Return on leverage ratio denominator, gross (%)	3.2	3.4	3.4	
Cost / income ratio (%)	86.2	74.3	75.4	
Net profit growth (%)	(53.6)	0.7	13.5	
Resources <sup>1</sup>				
Total assets	1,156,016	1,105,436	1,116,145	
Equity attributable to shareholders	55,234	56,598	58,102	
Common equity tier 1 capital <sup>3</sup>	44,130	42,929	41,594	
Risk-weighted assets <sup>3</sup>	333,979	317,823	299,005	
Common equity tier 1 capital ratio (%) <sup>3</sup>	13.2	13.5	13.9	
Going concern capital ratio (%) <sup>3</sup>	17.0	17.2	18.5	
Total loss-absorbing capacity ratio (%) <sup>3</sup>	33.3	32.0	33.3	
Leverage ratio denominators		1,029,561	1,067,679	
Common equity tier 1 leverage ratio (%) <sup>3</sup>	4.0	4.2	3.9	
Liquidity coverage ratio (%) <sup>4</sup>	189.7			
Net stable funding ratio (%)	119.6		•••••	
Other				
Invested assets (USD bn) <sup>2,5,6</sup>	4,505	3,981	4,614	
Personnel (full-time equivalents)	47,590	47,628	47,067	

<sup>1</sup> Refer to the "Targets, capital guidance and ambitions" section of the UBS Group Annual Report 2023 for more information about our performance measurement. 2 Refer to "Alternative performance measures" in the appendix to this report for the definition and calculation method. 3 Based on the Swiss systemically relevant bank framework as of 1 January 2020. Refer to the "Capital, liquidity and funding, and balance sheet" section of this report for more information. 4 The disclosed ratios represent averages for the fourth quarter of each year presented, which were calculated based on an average of 63 data points in the fourth quarter of 2023. Refer to the "Capital, liquidity and funding, and balance sheet" section of this report for more information. 5 Consists of invested assets for Global Wealth Management, Asset Management and Personal & Corporate Banking. Refer to "Note 31 Invested assets and net new money" in the "Consolidated financial statements" section of this report for more information. 6 Starting with the second quarter of 2023, invested assets from associates in the Asset Management business division, to better reflect the business strategy. Comparative figures have been restated to reflect this change.

#### Alternative performance measures

An alternative performance measure (an APM) is a financial measure of historical or future financial performance, financial position or cash flows other than a financial measure defined or specified in the applicable recognized accounting standards or in other applicable regulations. A number of APMs are reported in UBS's external reports (annual, quarterly and other reports). APMs are used to provide a more complete picture of operating performance and to reflect management's view of the fundamental drivers of the business results. A definition of each APM, the method used to calculate it and the information content are presented under "Alternative performance measures" in the appendix to this report. These APMs may qualify as non-GAAP measures as defined by US Securities and Exchange Commission (SEC) regulations.

## Terms used in this report

•	
"UBS," "UBS Group," "UBS Group AG consolidated," "Group" and "the Group"	UBS Group AG and its consolidated subsidiaries
"UBS Group excluding the Credit Suisse AG sub-group"	All UBS Group entities, excluding the Credit Suisse AG sub-group
"UBS AG," "UBS AG consolidated," "UBS AG sub-group," "we," "us" and "our"	UBS AG and its consolidated subsidiaries
"Pre-acquisition UBS"	UBS before the acquisition of the Credit Suisse Group
"Credit Suisse AG," "Credit Suisse AG consolidated" and "Credit Suisse AG sub-group"	Credit Suisse AG and its consolidated subsidiaries
"Credit Suisse Group" and "Credit Suisse Group AG consolidated"	Credit Suisse Group AG and its consolidated subsidiaries, before the acquisition by UBS
"Credit Suisse" and "Credit Suisse sub-group"	Credit Suisse AG, its consolidated subsidiaries, Credit Suisse Services AG, and other small former Credit Suisse Group entities now directly held by UBS Group AG
"UBS Group AG" and "UBS Group AG standalone"	UBS Group AG on a standalone basis
"Credit Suisse Group AG" and "Credit Suisse Group AG standalone"	Credit Suisse Group AG on a standalone basis
"UBS AG standalone"	UBS AG on a standalone basis
"UBS Switzerland AG"	UBS Switzerland AG on a standalone basis
"UBS Americas Holding LLC"	UBS Americas Holding LLC and its consolidated subsidiaries
"Pre-acquisition Global Wealth Management"	The UBS Global Wealth Management business division before the acquisition of the Credit Suisse Group (data, if any, from before the date of the acquisition of the Credit Suisse Group)
"UBS AG Global Wealth Management"	The Global Wealth Management business division of UBS AG and its consolidated subsidiaries
"Pre-acquisition Personal & Corporate Banking"	The Personal & Corporate Banking business division before the acquisition of the Credit Suisse Group (data, if any, from before the date of the acquisition of the Credit Suisse Group)
"UBS AG Personal & Corporate Banking"	The Personal & Corporate Banking business division of UBS AG and its consolidated subsidiaries
"Pre-acquisition Asset Management"	The Asset Management business division before the acquisition of the Credit Suisse Group (data, if any, from before the date of the acquisition of the Credit Suisse Group)
"UBS AG Asset Management"	The Asset Management business division of UBS AG and its consolidated subsidiaries
"Pre-acquisition Investment Bank"	The Investment Bank business division before the acquisition of the Credit Suisse Group (data, if any, from before the date of the acquisition of the Credit Suisse Group)
"UBS AG Investment Bank"	The Investment Bank business division of UBS AG and its consolidated subsidiaries
"1m"	One million, i.e., 1,000,000
"1bn"	One billion, i.e., 1,000,000,000
"1trn"	One trillion, i.e., 1,000,000,000,000

In this report, unless the context requires otherwise, references to any gender shall apply to all genders.

# Our business model and environment

Management report

# Integration of Credit Suisse

#### **Integration of Credit Suisse**

On 12 June 2023, our parent company, UBS Group AG, acquired Credit Suisse Group AG, succeeding by operation of Swiss law to all assets and liabilities of Credit Suisse Group AG, and became the direct or indirect shareholder of all of the former direct and indirect subsidiaries of Credit Suisse Group AG.

In December 2023, the Board of Directors of UBS Group AG approved the merger of UBS AG and Credit Suisse AG, and we entered into a definitive merger agreement with Credit Suisse AG. The completion of the merger is subject to regulatory approvals and is expected to occur by the end of the second quarter of 2024. The Group also expects to complete the transition to a single US intermediate holding company in the second quarter of 2024 and the planned merger of UBS Switzerland AG and Credit Suisse (Schweiz) AG in the third quarter of 2024.

> Refer to "Acquisition and integration of Credit Suisse" in the "Our strategy, business model and environment" section in the UBS Group Annual Report 2023

# Our businesses

We operate through five business divisions: Global Wealth Management, Personal & Corporate Banking, Asset Management, the Investment Bank and Non-core and Legacy. Our global reach and the breadth of our expertise are the major assets setting us apart from our competitors. Our Group functions are support and control functions that provide services to the Group. Virtually all costs incurred by the support and control functions are allocated to the business divisions, leaving a residual amount that we refer to as Group Items in our segment reporting. Disclosures in this report may refer to Group functions as Group Items.

We see joint efforts as key to our growth, both within and between business divisions. We combine our strengths to provide our clients with better, innovative solutions and differentiated offerings, for example, our Global Family & Institutional Wealth offering with integrated global coverage.

## Global Wealth Management

We are a leading and truly global wealth manager and strive to help our clients pursue what matters most to them. We are focused on serving the needs of ultra high and high net worth individuals through trusted relationships with our advisors, while expanding our specialized services. We offer clients our global reach, our advisory approach led by the Chief Investment Office (the CIO) and access to our platform with its broad array of solutions, alongside our premium brand.

#### **Organizational changes**

During the first half of 2023, we took several steps to simplify our organizational structure into four regions: Americas, EMEA, Asia Pacific and Switzerland. We also unified key solutions and functions under global leads. This will facilitate further convergence and simplification of our global operating model, while retaining the flexibility for local and regional differences.

In June 2023, the new Global Wealth Management leadership team was announced, including the creation of a new business unit, Global Wealth Management Strategic Clients, which is focused on enabling and delivering to our strategic clients globally, working in partnership with our regional business leaders and supported by senior client coverage teams.

#### How we do business

Our distinctive approach to wealth management helps our clients pursue what matters most to them by offering advice, expertise and solutions, and delivering on our client promise.

Our advice to clients is led by our global CIO, which produces the *UBS House View*, identifying investment opportunities designed to protect and increase our clients' wealth over the long term. CIO views drive investment recommendations for advisory clients and investment decisions for discretionary clients representing more than USD 1.5trn in fee-generating assets globally.

We make available to clients a broad range of securities and investment products. In addition to traditional equity and fixed-income securities, our investment specialists source and craft a range of investment products, including separately managed accounts (SMAs), structured products, sustainable- and impact-investing products, and alternative investments. Our alternative investments offering gives clients access to private markets, including equity, real estate and other real assets, and investments in private equity funds and hedge funds. We offer our own private equity multi-manager investments and enable clients to access selected single-manager funds and open-ended programs.

To complement this advice, we provide clients with advice on wealth planning, sustainability-focused and impact investing, and corporate and banking services. Our specialist teams also advise on art and collecting, family strategy and governance, philanthropy, next generation, and wealth transition.

Our Global Family & Institutional Wealth service model, in collaboration with the Investment Bank, provides specialized services to meet the needs of family offices and ultra high net worth clients. For clients with institutional-level trading, execution and clearing needs, our Unified Global Markets offers access to the full capabilities of the Global Markets business of the Investment Bank.

In Asia Pacific and Switzerland, the *Direct Investment Insights* function on our online banking platform enables clients to trade directly based on CIO insights via their smartphones and other digital devices. *Advice Compass* enables advisors to conveniently identify the most relevant ideas and solutions for clients during one-to-one meetings.

To provide our clients with the full breadth of investment management products and solutions, our Global Lending Unit offers extensive mortgage, securities-based and structured lending expertise, catering to sophisticated client lending needs.

> Refer to the UBS Group Sustainability Report 2023, available under "Annual reporting" at ubs.com/investors, for more information about sustainability matters



#### Clients

Listening to our clients' views and considering their risk profiles and their investment goals



#### Ideas in a UBS House View context

Well-researched investment advice, thought leadership.



#### **Design of solutions**

Solutions aligned with the UBS House View: discretionary and advisory mandates, alternatives, structured solutions, etc.



#### Communications

Transmission to clients and advisors.



#### Implementation and execution

Positioning of solutions by advisors, seamless execution. Tailored advice to clients.

The investment advice for and management of more than USD 1.5trn in fee-generating assets globally, underpinned by robust risk management.

Note: The Chief Investment Office develops a clear, concise and consistent investment assessment, the UBS House View, consisting of strategic asset allocation and tactical asset allocation.

Our newly established Global Wealth Management Strategic Clients unit aims to deliver the best advice and guidance to our strategic client segments, including business owners, female clients, the next generation of wealthy clients, athletes and entertainers, and multi-cultural investors. To this end, we have developed a dedicated approach and resources with specialized teams supporting our clients in achieving their goals.

We are investing in our operating platforms and tools to better serve our clients' needs, improve their experience, enhance overall advisor productivity and improve our operational resilience. We aim to make our services faster and more responsive and offer more convenience to our clients. For example, our Global Wealth Management clients have invested more than USD 9bn in *UBS My Way*, our discretionary mandate solution that enables clients to customize their portfolio themselves via the UBS mobile banking app. Additionally, we continue to broaden our offering across asset classes and themes, collaborating with best-in-class managers across the most relevant strategies. We are making continuous improvements to our direct-to-client digital offerings and have rolled out innovative new solutions, such as *UBS My Way on mobile*, a next-generation discretionary mandate solution that now enables clients to tailor their investments within their risk profile to their individual preferences via their mobile devices.

We also closely collaborate across business divisions to deliver our best capabilities to clients. Joint efforts with the Investment Bank, Asset Management and selected external partners enable us to offer clients broad access to financing, global capital markets and bespoke portfolio solutions. For example, in the US market, the SMA initiative with Asset Management continues to gain momentum, with USD 158bn in assets under management.

#### **Competition**

Our main competitors fall into two categories: competitors with a strong position in the Americas but more limited global footprints, such as Morgan Stanley, JPMorgan Chase and Bank of America; and competitors with international footprints but with a smaller presence than UBS in the US, such as Julius Baer, BNP Paribas and HSBC. We also compete with fintech firms in some regions and products. We have strong positions in the largest region (the US) and the fastest-growing regions (Asia Pacific and the Middle East). The size of our global franchise, bespoke cross-divisional solutions and premium brand and reputation set us apart and would be difficult to replicate.

## Personal & Corporate Banking

As the leading bank in Switzerland, we provide a comprehensive range of financial products and services to private, corporate and institutional clients. Personal & Corporate Banking is the core of our bank in Switzerland, the only country where we operate in all of our business areas. We are fully committed to our home market, as our leading position in Switzerland is crucial in terms of sustaining our global brand and the stability of our profits. We draw on a broad network of branches and highly qualified client advisors, complemented by modern digital banking services and customer service centers.

#### **Organizational changes**

Refer to "Personal & Corporate Banking" in the "Our strategy, business model and environment" section of the UBS Group Annual Report 2023 for more information about Personal & Corporate Banking from a Group perspective, including information about the planned merger of UBS Switzerland AG and Credit Suisse (Schweiz) AG

#### How we do business

We provide our personal banking clients with access to a comprehensive, life-cycle-based offering. This includes a broad range of basic banking products, from payments to deposits, cards and convenient online and mobile banking, as well as lending (predominantly mortgages), investments and retirement planning services. In 2023, UBS was named "Best Bank in Switzerland" by *Euromoney* for the ninth time since 2012. Personal & Corporate Banking works closely with Global Wealth Management to provide our clients with access to leading wealth management services.

Our corporate and institutional clients benefit from our financing and investment solutions, in particular access to equity and debt capital markets, syndicated and structured credit, private placements, leasing, and traditional financing. We offer transaction banking solutions for payment and cash management services, trade and export finance, and global custody solutions for institutional clients.

Personal & Corporate Banking works closely with the Investment Bank to offer capital market and foreign exchange products, hedging strategies, and trading capabilities, as well as corporate finance advice. In cooperation with Asset Management, we also provide fund and portfolio management solutions.

In 2023, we continued to support our clients' sustainability ambitions. In the corporate client segment, we further expanded our client-centric approach and focused on supporting our clients by advising them as part of a strategic dialogue and launching a sustainability-linked loan for multi-national corporations. We also took positive steps in providing transparency and sustainability insights to our private clients. With the launch of the carbon tracker in the UBS key4 mobile banking app, clients can see an estimated carbon footprint for their purchases with UBS credit and debit cards and through UBS TWINT, helping them navigate the carbon footprints of their purchases in a relatively simple manner.

> Refer to the UBS Group Sustainability Report 2023, available under "Annual reporting" at *ubs.com/investors*, for more information about sustainability matters

We are building stronger relationships with our clients during the life cycle of their property ownership and providing services along the value chain. With our strategic partner Baloise, we offer *Houzy*, a leading homeowner platform in Switzerland with a nationwide network of qualified craftsmen and comprehensive services through buying, renovation, maintenance and sale of property. Services relating to property transactions and promotion financing are provided through our partner, *Brixel*. Our exclusive partnership with SMG Swiss Market Group enables us to extend our ecosystem network to Switzerland's largest real estate portals, such as Homegate and Immoscout24.

#### Our operations and our competitors

We operate primarily in our Swiss home market, where we are organized into 10 regions, covering distinct Swiss economic areas. We operate a multi-channel approach, and we are constantly developing our digital and remote channels.

In Personal Banking, our main competitors are the cantonal banks, Raiffeisen, PostFinance and other regional and local Swiss banks; we also face competition from international neobanks and other national digital market participants. Areas of competition are basic banking services, mortgages and foreign exchange, as well as investment mandates and funds.

In the corporate and institutional business, the cantonal banks and globally active foreign banks are our main competitors. We compete in basic banking services, cash management, trade and export finance, asset servicing, investment advice for institutional clients, corporate finance and lending, and cash and securities transactions for banks. We also support the international business activities of our Swiss corporate clients through local hubs in New York, Frankfurt, Singapore and the Hong Kong SAR in competition with globally active foreign banks. No other Swiss bank offers its corporate clients local banking capabilities abroad.

## Asset Management

Asset Management is a global, large-scale and diversified asset manager. We offer investment capabilities and styles across all major traditional and alternative asset classes, as well as advisory support to institutions, wholesale intermediaries and our Global Wealth Management clients.

Our strategy is focused on capitalizing on the areas where we have a leading position<sup>1</sup> and differentiated capabilities (including alternatives, sustainability, indexed customization, separately managed accounts (SMAs) and key markets in Asia Pacific) in order to further drive profitable growth, while building on our strong business division partnerships across the Group.

#### **Organizational changes**

In October 2023, we completed the sale of our 51% stake in UBS Hana Asset Management Co., Ltd. to Hana Securities, after that firm exercised its buyout option. Hana Securities now owns 100% of UBS Hana Asset Management Co., Ltd.

> Refer to "Asset Management" in the "Our strategy, business model and environment" section of the UBS Group Annual Report 2023 for more information about the Asset Management business division from a Group perspective

#### How we do business

We offer clients a wide range of investment products and services across all major traditional and alternative asset classes, in the form of segregated, pooled or advisory mandates, as well as registered investment funds in various jurisdictions. Our capabilities include equities, fixed income, hedge funds (single- and multi-manager), real estate and private markets, and indexed and alternative beta strategies, including exchange-traded funds (ETFs), as well as sustainable- and impactinvesting products and solutions.

We also draw on the breadth of our capabilities to offer asset allocation and currency investment strategies across the risk–return spectrum, customized multi-asset solutions, and advisory and fiduciary services.

We continue to develop our award-winning<sup>2</sup> Indexed business globally, with a focus on customization, and provide client solutions across equities, fixed income and commodities, as well as sustainability-focused products. Our offering also includes a wide range of ETFs in Europe, Switzerland and Asia.

In our Real Estate & Private Markets business, we continue to build on our global scale, leading core capabilities and highly differentiated sustainable-investing and specialized-thematic offering, including our Cold Storage, Energy Storage and Life Sciences strategies. We also continue to expand our leading multi-manager capabilities across real estate, infrastructure and private equity, including the development of new products to meet the growing demand from wealth management clients.

Sustainable and impact investing remain key areas of interest for our clients. In 2023, we further expanded our offering across asset classes and themes, including new net-zero ambition products. We launched our first sustainability-focused fund of hedge funds strategy, created in close collaboration with Global Wealth Management. We also partnered again with Aon to launch the UBS Global Emerging Markets Equity Climate Transition Fund, which tilts toward emerging market companies supporting the transition to a low-carbon economy, while factoring in important social considerations.

Stewardship is a fundamental element of our sustainability strategy. In 2023, we sharpened our five-year climate engagement program's focus and also aligned our voting policy to our evolved climate engagement objectives. In addition, to support our increasing focus on natural capital, we became a founding member of the Nature Action 100 collaborative engagement initiative and joined the Principles for Responsible Investment's Stewardship Advisory Committee for its initiative on nature.

Property in the UBS Group Sustainability Report 2023, available under "Annual reporting" at ubs.com/investors, for more information about sustainability matters

We also continue to build on our joint efforts with the other business divisions, enabling our teams to draw on the best ideas, solutions and capabilities from across the firm in order to deliver high-quality investment performance and experiences for our clients. For example, in 2023 we continued to expand our separately managed accounts (SMA) offering as part of our joint initiative with Global Wealth Management in the US. In support of this initiative, we launched the SMA Hub, a new self-service portal that enables financial advisors to generate custom client reports or proposals in only minutes.

Geographically, we are building on our extensive and long-standing presence in the Asia Pacific region, including China, where we continue to capitalize on our on- and offshore products and market presence, including our joint ventures.

To support our growth, we are focused on disciplined execution of our operational excellence initiatives. This includes further automation, simplification, process optimization and offshoring or nearshoring of selected activities, complemented by continued enhancements to our platform and development of our analytics and data capabilities. One example is our Portfolio Engineering & Trading initiative, which will streamline trading and portfolio implementation across our active and index capabilities through an integrated technology architecture. It will harmonize processes and enable further scalability of customization across asset classes.

#### Our operations and our competitors

Our business division is organized into five areas: Client Coverage; Investments; Real Estate & Private Markets; Products; and the COO area. We cover the main asset management markets globally, and have a local presence in 23 locations across four regions: the Americas; Asia Pacific; EMEA; and Switzerland. We have nine main hubs: Chicago; the Hong Kong SAR; London; New York; Shanghai; Singapore; Sydney; Tokyo; and Zurich.

Our main competitors are global firms with wide-ranging capabilities and distribution channels, such as AllianceBernstein, Allianz Asset Management, Amundi, BlackRock, DWS, Franklin Templeton, Invesco, J.P. Morgan Asset Management, Morgan Stanley Investment Management, Schroders, SSGA Funds Management and T. Rowe Price, as well as firms with a specific market or asset-class focus.

1 Third-largest asset manager of SI assets (Morningstar); USD 156bn assets invested in hedge fund businesses, real estate and private markets.

#### Investment Bank

The Investment Bank provides services to institutional, corporate and wealth management clients, helping them raise capital, invest and manage risks, while targeting attractive and sustainable risk-adjusted returns for shareholders. Our traditional strengths are in equities, foreign exchange, research, advisory services and capital markets, complemented by a focused rates and credit platform. We use our data-driven research and technology capabilities to help clients adapt to evolving market structures and changes in regulatory, technological, economic and competitive landscapes.

Aiming to deliver market-leading solutions by using our intellectual capital and electronic platforms, we work closely with Global Wealth Management, Personal & Corporate Banking and Asset Management to bring the best of the firm's capabilities to our clients. We do so with a disciplined approach to balance sheet deployment and costs.

Our priority is providing high-quality execution and seamless client service, through an integrated, solutions-led approach, with disciplined growth in the advisory and execution businesses, while accelerating our digital transformation. In Global Banking, we position ourselves as trusted advisors via our client coverage and ability to provide access to the wider suite of UBS's capabilities. In Global Markets, we enable clients to buy, sell and finance securities on capital markets worldwide and to manage their risks and liquidity.

#### **Organizational changes**

In October 2023, we launched our Strategic Insights and Advisory team in Global Banking, our content and advisory offering that brings together the expertise of the UBS Strategic Insights group and the Credit Suisse Corporate Insights group.

In December 2023, we announced the formation of our Executive Client Group, which is aimed at advising our clients at the C-suite level on strategic matters and is intended to drive a broad array of transactions to enhance the impact of our Global Banking coverage teams.

> Refer to "Investment Bank" in the "Our strategy, business model and environment" section of the UBS Group Annual Report 2023 for more information about the Investment Bank from a Group perspective

#### How we do business

Our business division consists of two areas: Global Banking and Global Markets, which are supported by Investment Bank Research. Our global coverage model utilizes our international industry expertise and product capabilities to meet clients' emerging needs.

Our Global Banking business advises clients on strategic business opportunities, such as mergers, acquisitions and related strategic matters, and helps them raise capital, in both public and private markets, to fund their activities.

Our Global Markets business enables clients to buy, sell and finance securities on capital markets worldwide and to manage their risks and liquidity. We distribute, trade, finance and clear cash equities and equity-linked products, as well as structuring, originating and distributing new equity and equity-linked issues. From origination and distribution to managing risk and providing liquidity in foreign exchange, rates, credit and precious metals, we help clients to realize their financial goals. We provide flexible, innovative and bespoke access to solutions, from market and insight tools to trading strategies and execution.

Our Investment Bank Research business continues to publish research based on primary data to concentrate on datadriven outcomes and offers clients differentiated content about major financial markets and securities around the globe, with analysts based in more than 20 countries and with coverage of more than 3,400 stocks in 49 different countries. The Strategic Insights team provides timely and relevant information and insights to help clients quickly make decisions regarding their most important questions.

<sup>2</sup> Best ESG Fund House (Passive), ESG Clarity Awards 2023; Best ESG Emerging Market Equity Fund (Passive), ESG Clarity Awards 2023.

We seek to develop new products and solutions consistent with our capital-efficient business model, typically related to new technologies or changing market standards.

The Investment Bank offers our clients global advice and access to the world's primary, secondary and private capital markets, including through an extensive array of sustainability-focused advice, products, research and events. The Investment Bank is focused on meeting clients' needs, including those with respect to environmental, social and governance (ESG) considerations and sustainable finance, helping to reshape business models and investment opportunities and to develop sustainable finance products and solutions.

In Global Markets, we develop products and solutions designed to meet clients' specific and increasingly detailed ESG objectives. In carbon emissions solutions, our clients continued to access solutions that are linked to the recently launched UBS Constant Maturity Commodity Index emissions index, as well as those that are available via our execution and clearing capabilities for carbon emissions futures. We continued to scale the number of portfolio certificates linked to a range of sustainability and climate investment themes, despite challenging market conditions throughout 2023.

UBS is a founding member of Carbonplace, a marketplace platform that seeks to build infrastructure to scale voluntary carbon markets, with the aim of enabling firms such as UBS to offer clients the ability to buy, sell, hold and retire voluntary carbon credits.

In Global Banking, ESG is a core component of many corporate business strategies and a key tool in achieving sustainability in business and corporate operating models. As pressure from regulators and other key stakeholder groups, such as customers, investors and employees, is increasing, so is the need for transformation. The ESG Advisory group provides the necessary lens helping UBS's clients assess ESG topics throughout the corporate life cycle.

UBS arranged USD 53.7bn in green, social, sustainability and sustainability-linked themed (GSSS) bonds through 102 deals during 2023. We also solidified our market position in the Swiss franc-denominated market with a combined market share of nearly 50%. We have also built a strong position in the ESG-labelled local debt market in Brazil.

Our independent ESG research team collaborates with UBS sector analysts and *UBS Evidence Lab* primary research experts, providing data-driven insights into ESG-relevant questions. The ESG research team works to identify touchpoints between markets, society and the environment, and to respond to ESG issues as they move to the center of investors' agendas. UBS sector lead analysts authored a variety of our flagship *ESG Sector Radar* reports, as well as a broad range of *ESG Company Radar* reports.

Our *ESG Company Radar* research reports, which we launched in 2022, assess the impact of ESG factors at company level, and we continued to see a very positive client response to those reports. Other types of ESG content include thematic and cross-sectoral collaborations, *ESG Keys* (which covers sustainable investing topics), and an increasing number of regional perspectives from our expanded ESG team, which works out of our offices in New York, London, the Hong Kong SAR, Tokyo and Sydney.

#### > Refer to the UBS Group Sustainability Report 2023, available under "Annual reporting" at ubs.com/investors, for more information about sustainability matters

Our digital strategy harnesses technology to provide access to sources of unique, global liquidity, personalized advice and differentiated content. The Investment Bank strives to be the digital investment bank of the future, focused on delivering innovation-led solutions, and efficiencies for our clients. As the world around us changes, our digital capabilities aim to harness emerging technologies and create new products and solutions, which enable our clients to adapt to evolving market structures and achieve their investment goals.

Our ambition to be the most client-focused, efficient and data-driven investment bank is being realized through the simplification of technology architecture, increased speed and quality of delivery and the attraction of best-in-class talent. As we look forward to the continued evolution of our digital capabilities, we will see increased adoption of technologies, such as generative artificial intelligence, the consistent re-use of platforms and products, and the continued drive to make progress in our overall strategic imperatives, with regard to a new, combined Investment Bank.

Joint efforts between the Investment Bank and the other business divisions (for example, our work with Global Wealth Management on our new Global Family & Institutional Wealth coverage) and, externally, strategic partnerships (for example, UBS BB jointly with Banco do Brasil, focused on Latin America) continue to be key strategic priorities. Partnerships with Global Wealth Management and Asset Management enable us to provide clients with broad access to financing, global capital markets and portfolio solutions. We expect these initiatives to continue to lead to growth by delivering global products to each region, leveraging our global connectivity across borders and sharing and strengthening our best client relationships.

#### Our operations and our competitors

Our two business areas, Global Banking and Global Markets, are organized globally by product. Our business is regionally diversified, with a presence in more than 30 countries. We cover the main investment banking markets globally and have major financial hubs across four regions: the Americas; Asia Pacific; EMEA; and Switzerland.

Our global reach gives attractive options for growth. In the Americas, the largest investment banking fee pool globally, we continue to focus on increasing market share in our core Global Banking and Global Markets businesses. In Asia Pacific, opportunities arise mainly from expected market internationalization and growth in China, where we plan to grow by strengthening our presence, both onshore and offshore. In EMEA, we plan to leverage our strong base and brand recognition even further.

Competing firms operate in many of our markets, but our strategy differentiates us, with our focus on leadership in the areas where we have chosen to compete and a business model that leverages talent and technology rather than balance sheet. Our main competitors are the major global investment banks (e.g., Morgan Stanley and Goldman Sachs) and corporate investment banks (e.g., Bank of America, Barclays, Citigroup, BNP Paribas, Deutsche Bank and JPMorgan Chase). We also compete with boutique investment banks and fintech firms in certain regions and products.

## Non-core and Legacy

In 2023, subsequent to the acquisition of the Credit Suisse Group by UBS, Non-core and Legacy was created at the UBS Group level, to bring together positions and businesses, mainly including those of Credit Suisse, which are not aligned with the Group's strategy and policies.

From a UBS AG consolidated perspective, Non-core and Legacy includes the remaining assets and liabilities of UBS's Non-core and Legacy Portfolio, previously reported in Group Functions (now renamed to Group Items), and smaller amounts of assets and liabilities of UBS's business divisions that have been assessed as not strategic in light of the acquisition of the Credit Suisse Group.

> Refer to "Non-core and Legacy" in the "Our strategy, business model and environment" section of the UBS Group Annual Report 2023 for more information about Non-core and Legacy from a Group perspective

## Group functions

The Group functions are support and control functions that provide services to the Group, focusing on effectiveness, risk mitigation and efficiency.

#### How we are organized

The Group functions include the following major areas: Group Services (which consists of the Group Operations and Technology Office, Corporate Services, Compliance, Regulatory & Governance, Finance, Risk Control, Human Resources, Communications & Branding, Legal, the Group Integration Office, Group Sustainability and Impact, and Chief Strategy Office) and Group Treasury.

#### **Group Services**

The vast majority of the support and control functions are fully aligned or shared among the business divisions, where they have full management responsibility. By keeping the activities of the businesses and support and control functions closely aligned, we improve efficiency and create a working environment built on accountability and collaboration. Virtually all costs incurred by the support and control functions are allocated to the business divisions, leaving a residual amount that we refer to as Group Items in our segment reporting in accordance with IFRS Accounting Standards. Certain activities are retained centrally, where not directly related to the businesses, such as group hedging and own debt activities in Group Treasury and certain other costs that are mainly related to deferred tax assets and costs relating to our legal entity transformation program.

#### **Group Treasury**

Group Treasury manages balance sheet structural risk (e.g., interest rate, structural foreign exchange and collateral risks), as well as the risks associated with our liquidity, capital and funding portfolios. Group Treasury serves all five business divisions, and its risk management is integrated into the Group risk governance framework.

# Our environment

#### Market environment

#### Global economic developments in 20231

The global economy was resilient in 2023, in spite of the steep interest rate rises by major central banks designed to curb inflation from the multi-decade highs reached in 2022.

Global growth slowed only slightly, to 3.2%, in 2023, down from 3.4% in 2022. This partly reflected the strength of the US economy, where growth withstood higher interest rates, tightening bank lending standards, and mediocre real income growth. US GDP growth increased to 2.5% in 2023, up from 1.9% in 2022, as job security and relatively strong balance sheets encouraged higher spending by middle-income consumers. Economies in Europe also expanded in 2023, though at a slower pace. Growth in the European Slowed to 0.5% in 2023, down from 3.4% in 2022, as the European Central Bank (the ECB) repeatedly raised interest rates. Growth in the Swiss economy slowed to 0.7% in 2023, down from 2.7% in 2022. UK GDP growth slowed to 0.1% in 2023, down from 4.3% in 2022, as high inflation and interest rate rises also limited growth.

Growth in China increased to 5.2% in 2023, compared with 3% in 2022, when its economy was slowed by pandemic restrictions that were in place until late in that year. However, cautious spending by domestic consumers meant that the rebound in growth was weaker than had been expected. Growth in India remained robust at 7% in 2023, down only slightly from 7.2% in 2022.

Inflation eased across developed economies, especially in the second half of 2023, as supply chains continued to recover from COVID-19 disruptions, energy prices were lower than 2022 and central bank interest rate rises increased the cost of borrowing. US consumer price inflation slowed to an annual 3.4% in December 2023, from 6.4% in January 2023. Inflation decelerated even more markedly in the Eurozone, to 2.9% year over year in December 2023, compared with 8.5% in January 2023. This trend enabled the Federal Reserve and the ECB to signal late in 2023 that monetary tightening had probably come to an end.

The MSCI All Country World Index returned a 22.2% gain in 2023, with close to half of that gain coming in the final two months of the year. The S&P 500 rose by 26.3%, lifted by optimism that innovations in artificial intelligence will boost profits and hopes that the Federal Reserve will cut rates swiftly in response to falling inflation. The FANG+ index, which tracks the 10 most traded US tech stocks, increased 96% over the year. The MSCI Japan was the best-performing major market in local currency terms in 2023, with a return of 28.6%, its highest in a decade. In Europe, the MSCI EMU returned 18.8%. Although the Swiss and UK markets lagged behind global stocks, both ended the year in positive territory, with returns of 5.3% and 7.7%, respectively. The weakest performance by a major market came from the MSCI China, which lost 10.7% amid disappointment over the pace of the economic recovery from pandemic restrictions and more limited-than-expected stimulus.

#### Economic and market outlook for 20241

Our baseline scenario for 2024 is for a soft landing in the US and subdued but positive growth in the Eurozone. We expect growth in China to enter a new normal of lower, but potentially higher-quality, growth.

We believe inflation will continue falling toward central bank targets, and, as a result, we believe policymakers will feel confident enough to lower interest rates starting around the middle of 2024. We expect cuts from the Federal Reserve, the ECB, the Swiss National Bank and the Bank of England. In contrast, with Japanese deflation coming to an end, we expect the Bank of Japan to raise rates into positive territory for the first time since late 2015.

With regard to growth, we expect the US to slow to a sustainable long-term rate of growth, due to declining housing affordability and the withdrawal of some government support measures that helped households during the COVID-19 pandemic. However, middle-income consumers still appear to have spending power, as well as relatively strong balance sheets, and we expect demand for labor to remain resilient. Overall, we expect US GDP growth to remain positive, at around 1.1% in 2024. We expect growth to be weak in the Eurozone, at 0.6%, due to the lagged effect of higher interest rates. We also expect UK GDP to increase by 0.6% in 2024, while GDP growth in Switzerland is expected to increase to 1.2% in 2024.

Geopolitical events and elections also have the potential to play an outsized role in 2024. The US presidential election, the ongoing Israel–Hamas and Russia–Ukraine wars, and the tension between the US and China could all affect markets globally. In addition, more than four billion people in more than 40 countries are set to go to the polls in 2024, including in the US, India and, potentially, the UK.

1 Based on sources: Haver Analytics, CEIC, National Statistic and UBS.

# Regulation and supervision

As a financial services provider based in Switzerland, the UBS Group is subject to consolidated supervision by the Swiss Financial Market Supervisory Authority (FINMA). The Group's entities are also regulated and supervised by authorities in each country where we conduct business. Through UBS AG, Credit Suisse AG, UBS Switzerland AG and Credit Suisse (Schweiz) AG, which are licensed as banks in Switzerland, UBS may engage in a full range of financial services activities in Switzerland and abroad, including personal banking, commercial banking, investment banking and asset management.

As UBS is a global systemically important bank (a G-SIB), as designated by the Financial Stability Board, and a systemically relevant bank (an SRB) in Switzerland, UBS Group entities are subject to stricter regulatory requirements and supervision than most other Swiss banks.

> Refer to the "Regulatory and legal developments" and "Risk factors" sections of this report for more information

#### **Regulation and supervision in Switzerland**

#### Supervision

UBS Group AG and its subsidiaries, including UBS AG, are subject to consolidated supervision by FINMA under the Swiss Banking Act and related ordinances, which impose standards for matters such as capital adequacy and risk diversification rules, liquidity, internal control systems, business conduct, and corporate governance. FINMA meets its statutory supervisory responsibilities through licensing, regulation, supervision and enforcement. It is responsible for prudential supervision and mandates audit firms to perform regulatory audits and other supervisory tasks on its behalf.

#### Capital adequacy and liquidity regulation

As an internationally active Swiss systemically important bank (an SIB), UBS is subject to capital and total loss-absorbing capacity (TLAC) requirements at both the group level, for UBS Group AG, and the parent bank level, for UBS AG and Credit Suisse AG, that are based on both risk-weighted assets (RWA) and the leverage ratio denominator (LRD) and are among the most stringent in the world. UBS Group AG, UBS AG, Credit Suisse AG, UBS Switzerland AG and Credit Suisse (Schweiz) AG are also subject to Swiss SIB liquidity requirements and to minimum long-term funding requirements.

- > Refer to the "Risk, capital, liquidity and funding, and balance sheet" section of this report for more information about the Swiss SRB framework and the Swiss too-big-to-fail (TBTF) requirements
- > Refer to "Liquidity coverage ratio" in the "Risk, capital, liquidity and funding, and balance sheet" section of this report for more information about liquidity coverage ratio requirements

#### **Regulation and supervision outside Switzerland**

#### Regulation and supervision in the US

In the US, UBS is subject to regulation and supervision by the Board of Governors of the Federal Reserve System (the Federal Reserve Board) under a number of laws. UBS Group AG, UBS AG and Credit Suisse AG are subject to the Bank Holding Company Act, pursuant to which the Federal Reserve Board has supervisory authority over the UBS Group's US operations.

In addition to being a financial holding company under the Bank Holding Company Act, UBS AG has US branches, which are authorized and supervised by the Office of the Comptroller of the Currency (the OCC). UBS AG is registered as a swap dealer with the Commodity Futures Trading Commission (the CFTC), and registered as a securities-based swap dealer with the Securities and Exchange Commission (the SEC).

UBS Americas Holding LLC, the intermediate holding company for our operations in the US outside of the UBS AG branch network, as required under the Dodd–Frank Act, is subject to requirements established by the Federal Reserve Board related to risk-based capital, liquidity, the Comprehensive Capital Analysis and Review (CCAR) stress testing and capital planning process, and resolution planning and governance.

UBS Bank USA, a Federal Deposit Insurance Corporation (FDIC)-insured depository institution subsidiary, is licensed and regulated by state regulators in Utah and is also supervised by the FDIC.

UBS Financial Services Inc., UBS Securities LLC and several other US subsidiaries of UBS are subject to regulation by a number of different government agencies and self-regulatory organizations, including the SEC, the Financial Industry Regulatory Authority, the CFTC, the Municipal Securities Rulemaking Board and national securities exchanges, depending on the nature of their business. Certain of our activities in the US are subject to regulation by the Consumer Financial Protection Bureau.

#### Regulation and supervision in the UK

Our regulated UK operations are mainly subject to the authority of the Prudential Regulation Authority (the PRA), which is part of the Bank of England, and the Financial Conduct Authority (the FCA). We are also subject to the rules of the London Stock Exchange and other securities and commodities exchanges of which UBS AG is a member.

UBS AG has a UK-registered branch, UBS AG London Branch, which serves as a global booking center for the Investment Bank. Our regulated subsidiaries that provide asset management services are authorized and regulated by the FCA. UBS Asset Management Life Ltd is authorized and regulated by the FCA and subject to the authority of the PRA.

#### Regulation and supervision in Germany and the EU

UBS Europe SE, headquartered in Germany, is subject to the direct supervision of the European Central Bank, as well as to continued conduct, consumer protection and anti-money-laundering-related supervision by the German Federal Financial Supervisory Authority (BaFin) and supervisory support by the German Bundesbank. The entity is subject to EU and German laws and regulations. UBS Europe SE maintains branches in Denmark, France, Italy, Luxembourg, the Netherlands, Poland, Spain, Sweden and Switzerland and is subject to conduct supervision by authorities in all those countries.

#### Regulation and supervision in Asia Pacific

We operate in numerous locations in Asia Pacific, including Singapore, the Hong Kong SAR, mainland China, Australia and Japan. The operations in these locations are subject to regulation and supervision by local financial regulators. Our Asia Pacific regional hubs are in Singapore and the Hong Kong SAR.

In Singapore, UBS AG Singapore Branch, UBS Securities Pte Ltd and UBS Asset Management (Singapore) Ltd are supervised by the Monetary Authority of Singapore and the Singapore Exchange.

In the Hong Kong SAR, UBS AG Hong Kong Branch is supervised by the Hong Kong Monetary Authority. UBS Securities Hong Kong Limited, UBS Securities Asia Limited and UBS Asset Management (Hong Kong) Limited are supervised by the Hong Kong Securities and Futures Commission. In addition, UBS Securities Hong Kong Limited is supervised by Hong Kong Exchanges and Clearing Limited.

In mainland China, we have multiple licenses to operate the business lines of UBS AG, and the various entities are subject to regulation by a number of different government agencies. The People's Bank of China oversees China's macro capital markets policies and ensures coordinated supervisory approaches by the National Administration of Financial Regulation (the China Banking and Insurance Regulatory Commission until May 2023), the China Securities Regulatory Commission and a number of exchanges.

In Australia, UBS AG Australia Branch is supervised by the Australian Prudential Regulation Authority, the Australian Securities and Investments Commission, the Australian Transaction Reports and Analysis Centre, the Reserve Bank of Australia, and the Australian Securities Exchange. UBS Securities Australia Limited and UBS Asset Management Limited are supervised by the Australian Securities and Investments Commission, the Australian Transaction Reports and Analysis Centre, and the Australian Securities Exchange.

In Japan, UBS Securities Japan Co., Ltd. is supervised by the Financial Services Agency and the Japan Exchange Group. UBS AG Tokyo Branch is supervised by the Financial Services Agency and the Bank of Japan. UBS SuMi TRUST Wealth Management Co., Ltd is supervised by the Financial Services Agency and the Japanese Ministry of Finance. UBS Asset Management (Japan) Ltd and UBS Japan Advisors Inc. are supervised by the Financial Services Agency.

#### **Financial crime prevention**

Combating money laundering and terrorist financing has been a major focus of many governments in recent years. Laws and regulations, including the Swiss Banking Act and the US Bank Secrecy Act, require effective policies, procedures and controls to detect, prevent and report money laundering and terrorist financing, and the verification of client identities. Failure to introduce and maintain adequate programs to prevent money laundering and terrorist financing can result in significant legal and reputational risk and fines.

We are also subject to laws and regulations prohibiting corrupt or illegal payments to government officials and other persons, including the US Foreign Corrupt Practices Act and the UK Bribery Act. We maintain policies, procedures and internal controls intended to comply with those regulations.

> Refer to "Non-financial risk" in the "Risk management and control" section of this report for more information

#### **Data protection**

We are subject to regulations concerning the use and protection of customer, employee, and other personal and confidential information. This includes provisions under Swiss law, the EU General Data Protection Regulation (the GDPR) and laws of other jurisdictions.

> Refer to the "Risk factors" section of this report for more information about regulatory change

#### **Recovery and resolution**

Swiss TBTF legislation requires each Swiss SRB to establish an emergency plan to maintain systemic functions in case of impending insolvency. In response to these Swiss requirements and similar ones in other jurisdictions, UBS has developed recovery plans and resolution strategies, as well as plans for restructuring or winding down businesses if the firm could not otherwise be stabilized.

In 2013, FINMA stated its preference for a single point of entry (an SPE) strategy for globally active SRBs, such as UBS, with a bail-in at the group holding company level. UBS has made structural, financial and operational changes to facilitate an SPE strategy and is confident that a resolution of the bank is operationally executable and legally enforceable. In 2023, UBS acquired the Credit Suisse Group and merged Credit Suisse Group AG into UBS Group AG. A bail-in remains operationally executable for the combined UBS Group and an SPE resolution strategy remains the preferred strategy for UBS.

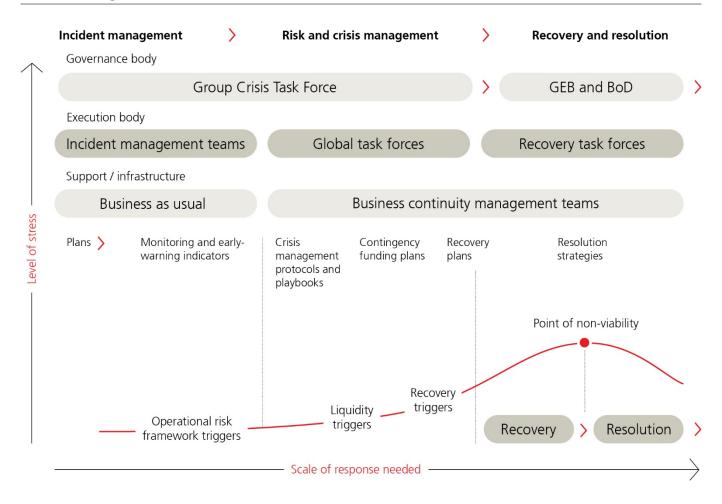
FINMA evaluates the recovery and resolution plans of Swiss SRBs on a regular basis. In its most recent assessment, which was published in April 2023 and based on year-end 2022 information, FINMA re-confirmed that UBS's Swiss emergency plan is effective, the recovery plan has been approved and that UBS fulfills all resolvability criteria. This assessment did not reflect the combined organization and the respective plans will need to be amended and approved for the new and combined Group. FINMA will review its resolvability assessment of the combined UBS Group as the integration progresses. A new, interim assessment is expected to be published by FINMA at the end of the second quarter of 2024.

#### Crisis management framework

The UBS Group's crisis management framework assigns responsibility and actions depending on the nature of the stress incident and the scale of the response needed.

- For incident, risk and crisis management, the Group Crisis Task Force works with incident management teams that provide monitoring and early-warning indicators at the local / regional level, without needing to activate protocols at the Group level. If a local response is insufficient, global task forces and crisis management teams provide decision-making guidance and coordination, including crisis management plans, protocols and playbooks, and contingency funding plans.
- The Group Executive Board (the GEB) and the Board of Directors (the BoD) would evaluate and decide upon the need to activate the Global Recovery Plan (the GRP) if a stress event reached a severity requiring activation based on the GRP's recovery risk indicators.
- FINMA has the authority to determine whether the point of non-viability (the PONV), as defined by Swiss law, has been reached and, as part of the resolution plan, has the power to order the bail-in of creditors to recapitalize and stabilize the Group, limit payments of dividends and interest, alter our legal structure, take actions to reduce business risk, and order a restructuring of the bank.

#### **UBS** crisis management framework



#### Global Recovery Plan

The GRP provides a tool to restore financial strength if UBS comes under severe capital or liquidity stress. Quantitative and qualitative triggers are monitored daily and are subject to predefined governance and escalation processes. Recovery options are linked to owners and checklists, with the objectives of preserving capital, raising capital or liquidity, or disposing of or winding down businesses.

#### Global Resolution Strategy

FINMA is required to produce a global resolution plan for UBS. The plan includes setting out measures that FINMA can take to resolve UBS in an orderly manner if the UBS Group enters resolution. The SPE bail-in strategy would involve writing down the UBS Group's remaining equity and additional tier 1 and tier 2 instruments, as well as the bailing in of the TLAC-eligible senior unsecured bonds at the UBS Group AG level. An internal recapitalization of undercapitalized subsidiaries would be executed simultaneously with losses transmitted to UBS AG or Credit Suisse AG, and, ultimately, UBS Group AG. Post-resolution restructuring measures could include disposals or wind-down of businesses and assets.

#### Local recovery and resolution plans

The Swiss emergency plans demonstrate how UBS's systemically important functions and critical operations in Switzerland can continue if the UBS Group cannot be restructured. This is achieved mainly by operating the Swiss-booked business in separate legal entities, including UBS Switzerland AG, and by maintaining sufficient capital and liquidity to ensure their continued operation.

The US resolution plans set out the steps that could be taken to resolve the US intermediate holding companies (the US IHCs), including UBS Americas Holding LLC, and their subsidiaries, if they suffered material financial distress and the UBS Group was unable or unwilling to provide financial support. As such and as required by US regulations, our US plan for UBS Americas Holding LLC contemplates that the US IHC will commence US bankruptcy proceedings. Prior to this, the plan envisages the US IHC downstreaming financial resources to their respective subsidiaries to facilitate an orderly wind-down or disposal of businesses.

UBS Europe SE updates a local recovery plan annually based on European Central Bank requirements, and resolution planning information and capabilities based on Single Resolution Board requirements. On the basis of such information, the Internal Resolution Team, composed of members of the Single Resolution Board, produces a resolution plan for UBS Europe SE.

Other local recovery and resolution plans exist for various UBS AG entities and jurisdictions.

#### **Regulatory trends**

In 2023, regulatory policy was strongly impacted by the banking turmoil in March, with financial stability concerns returning to the forefront, followed by renewed discussions around the effectiveness of too-big-to-fail / resolution frameworks and subsequent initial lessons drawn being discussed throughout the year. While the reviews by supranational standard-setters and in Switzerland generally upheld the appropriateness of the international regulatory and resolution frameworks, certain themes requiring further attention were identified with additional analyses ongoing.

The digitalization of banking and corresponding policy responses continued throughout 2023, with attention paid to systemic risks, market integrity, investor protection and cross-border aspects related to digital assets. Initial policy efforts started on decentralized finance. In the meantime, most major central banks increased their engagement related to central bank digital currencies. New capabilities and wider adoption of artificial intelligence (AI) have resulted in increased regulatory focus on the topic, particularly regarding sound governance frameworks, safety and fairness. The large-scale use of both traditional and non-traditional data by AI models has given rise to questions around the adequacy of existing data legislation and in some jurisdictions will likely result in enhanced protections. Separately, many jurisdictions continued to make data more available across sectors, with a focus on open finance.

Sustainable finance and climate-related financial risks remained a key focus for policymakers in 2023, where we observed noteworthy activity in the areas of corporate and product disclosures for climate-related financial risks, specifically relating to banks' governance, strategy and risk management, as well as efforts to standardize and harmonize regulations across different jurisdictions. Policymakers advanced guidelines related to nature and biodiversity topics by intensifying the focus on disclosures, risk management and quantification methodologies. Furthermore, we observed ongoing regulatory policy related to net-zero financing, while transition planning started to become an important focus topic for policymakers. On the topic of products regulation, regulatory initiatives continued to focus on carbon and carbon markets and addressing issues related to greenwashing. Lastly, we saw increased regulatory attention paid to solutions related to social impact investing and blended finance.

The national implementation of the Basel III requirements continued to be an important focus area. The authorities in Switzerland issued rules to implement the final standards into Swiss law, and US banking regulators launched a public consultation in 2023. Switzerland has confirmed the effective date for the revised rules as 1 January 2025. Although the EU is still targeting implementation by January 2025, the UK and the US have delayed the application until July 2025, with the US also including a three-year transition timeline. Differences in the implementation timelines and in the content of the provisions remain a challenge for globally active banks.

In addition, regulatory authorities continued to refine existing regulations, including efforts to strengthen the anti-money-laundering guidelines on beneficial ownership and work on enhancing third-party risk management, with operational resilience remaining a key issue. The focus on retail investor protection sharpened, in particular in asset management. In the US, retail investor protection features became a component of an ongoing broader equity market reform. In the UK, reviews of the Senior Managers and Certification Regime focused on determining whether the regime delivers against its original aim and how it can be improved. Finally, in light of increasing risks, non-bank financial intermediation remained a topic of concern with national and supranational policymakers.

We believe the continued adaptations made to our business model and our proactive management of regulatory change put us in a strong position to absorb upcoming changes to the regulatory environment. We trust that our strengthened position as a combined organization will allow us to cope with any potential challenges.

> Refer to the "Regulatory and legal developments" and the "Risk, capital, liquidity and funding, and balance sheet" sections of this report for more information

# Regulatory and legal developments

#### Developments related to the acquisition of the Credit Suisse Group and the banking turmoil in March 2023

#### Key developments in Switzerland

Based on the emergency ordinance issued by the Swiss Federal Council in connection with the acquisition of the Credit Suisse Group on 16 March 2023, as amended on 19 March 2023, (the Emergency Ordinance), UBS Group AG entered into a loss protection agreement (an LPA) with the Swiss Confederation, with an effective date of 12 June 2023. As part of this agreement, the Swiss Confederation would have borne up to CHF 9bn of losses, if realized, on a designated portfolio of Credit Suisse's non-core assets after the first CHF 5bn of losses, which would have been borne by UBS.

Under the Emergency Ordinance, UBS AG and Credit Suisse AG also had access to additional liquidity assistance loans, the Emergency Liquidity Assistance Plus (ELA+) loans, provided by the Swiss National Bank (the SNB) of up to CHF 100bn on a combined basis, with the loans under the facility having preferential rights in bankruptcy proceedings. The Credit Suisse Group was also allowed to borrow up to an additional CHF 100bn from the SNB backed by a Swiss federal default guarantee, the Public Liquidity Backstop (the PLB), with the loans having preferential rights in bankruptcy proceedings.

On 11 August 2023, UBS Group AG voluntarily terminated the LPA and the PLB. After reviewing all assets covered by the LPA since the closing of the Transaction in June 2023 and taking the appropriate fair value adjustments, UBS concluded that the LPA was no longer required. All loans under the PLB were fully repaid by the Credit Suisse Group as of the end of May 2023 and Credit Suisse AG fully repaid the outstanding ELA+ loans on 10 August 2023. As of 31 December 2023, Credit Suisse (Schweiz) AG had a total of CHF 38bn outstanding under the Emergency Liquidity Assistance facility, which is fully collateralized by Swiss mortgages.

In parallel with the measures taken by the Swiss Confederation in March 2023, the Swiss Financial Market Supervisory Authority (FINMA) also ordered a write-off of CHF 15.8bn principal amount of Credit Suisse Group AG's additional tier 1 (AT1) instruments.

In May 2023, the Swiss Federal Department of Finance mandated a group of experts on banking stability to assess the role of banks and the legal and regulatory framework related to the stability of the Swiss financial center. The corresponding report, published in September 2023, concluded that Swiss capital regulations are working as intended and that there is no need for a major revision. However, the report sees a need for reforms with regard to banking supervision and proposes that the relevant authorities be granted broader powers. Furthermore, the report suggests improvements regarding liquidity regulations, including a proposal to extend the supply of liquidity in the case of a crisis. The report also suggests that Swiss authorities should make improvements with regard to crisis preparation and management.

In June 2023, the Swiss Parliament formed a parliamentary inquiry committee that is mandated to investigate the legitimacy, expediency and effectiveness of the management of the competent authorities and bodies in the context of the events involving the Credit Suisse Group. The committee will report to the Swiss Parliament on the results of its investigation and will propose measures to remedy any identified deficiencies. We expect the results to be published in the fourth quarter of 2024. The conclusions by the inquiry committee may include potentially significant recommendations, which could result in more stringent regulation.

In December 2023, FINMA published a report on the case of Credit Suisse that analyzed the development of Credit Suisse in recent years and examined its supervisory work with the bank. In addition, FINMA noted in its report a number of lessons to be learned, calling for a stronger legal basis, specifically for instruments such as a Senior Managers Regime, the power to impose fines, and more stringent rules regarding corporate governance. Furthermore, FINMA explained that it will adapt its supervisory approach in certain areas and will step up its review of whether stabilization measures are ready to be implemented.

The findings of the group of experts and the lessons drawn by FINMA include recommendations that could result in more stringent regulation, and will be considered by the Swiss Federal Council in its next report on systemically important banks, which is to be presented by April 2024.

#### Key developments in the US

In May 2023, the Federal Reserve Board and the Federal Deposit Insurance Corporation (the FDIC) released reports that covered the circumstances leading to the closing of certain banking organizations following the events in the banking market in March 2023. The reports noted shortcomings in the supervisory agencies' execution of examination programs, including escalation of supervisory issues and staffing. They also raised concerns related to the regulatory framework, including the Federal Reserve's Tailoring Rule and other topics, such as interest rate risk management. UBS expects these developments to impact the regulatory environment in the US, where UBS has significant operations.

In November 2023, the FDIC approved a final rule to implement a special assessment to recover losses incurred by the Deposit Insurance Fund in connection with the failures of Silicon Valley Bank and Signature Bank in March 2023. The assessment is based on the estimated uninsured deposits of each depository institution at the end of 2022. The assessment will be collected over an eight-quarter period that started in January 2024. In the fourth quarter of 2023, UBS Bank USA recorded a charge for the full amount of its estimated assessment of USD 60m.

#### Key developments at the supranational level

In October 2023, the Basel Committee on Banking Supervision (the BCBS) released a report on the causes of the 2023 banking turmoil. The BCBS argues that while the distress of various banks in March 2023 reflected idiosyncratic factors, recurring themes can be grouped into three broad categories: bank risk-management practices and governance arrangements; strong and effective supervision; and robust regulatory standards.

Also in October 2023, the Financial Stability Board (the FSB) identified in a review several areas related to the effective operationalization and implementation of the international resolution framework that merit further attention as part of future work, but concluded that recent events demonstrate the soundness of the framework.

No concrete changes to the Basel standards or the FSB framework are proposed at this stage, but the follow-up work is particularly focused on strengthening supervisory effectiveness, liquidity risk, interest rate risk in the banking book and the effectiveness of the resolution frameworks.

#### Developments regarding capital and liquidity adequacy and TBTF frameworks

#### Developments related to liquidity adequacy

In September 2023, the Swiss Federal Council adopted a dispatch and draft legislation on the introduction of a public liquidity backstop for systemically important banks (SIBs), which was initially implemented as part of the Emergency Ordinance. The proposed legislative changes aim to establish the public liquidity backstop as part of ordinary law in order to enable the Swiss government and the SNB to support an SIB domiciled in Switzerland with liquidity in the process of resolution, in line with other financial centers. The introduction of the public liquidity backstop is intended to increase the confidence of market participants in the ability of SIBs to be successfully recapitalized and remain solvent in a crisis. Furthermore, the draft legislation provides that SIBs will pay the Swiss Confederation an annual fee to mitigate a potential impact on competition and to compensate the Swiss Confederation for its guarantee to the SNB of the public liquidity backstop, if required.

In addition to the public liquidity backstop, the proposed legislative changes would enact into ordinary law additional provisions contained in the Emergency Ordinance, including mandated clawback of variable compensation in the event that government support is provided to an SIB.

The legislative changes are expected to come into force by January 2025, at the earliest, as in November 2023, the Swiss Parliament suspended discussions on the public liquidity backstop until the presentation of the Swiss Federal Council's report on systemically important banks.

Furthermore, FINMA communicated in the third quarter of 2023 the liquidity requirements arising from the revisions to the Swiss Liquidity Ordinance, with the aim of strengthening the resilience of SIBs in Switzerland. The affected legal entities of the UBS Group are compliant with these requirements, which became effective on 1 January 2024.

#### Developments related to capital adequacy

In July 2023, US banking regulators, including the Federal Reserve Board, the FDIC and the Office of the Comptroller of the Currency (the OCC), issued a public consultation on a proposal that would implement the final components of the Basel III capital standards for US banking organizations and foreign-owned intermediate holding companies, such as UBS Americas Holding LLC and Credit Suisse Holdings (USA), Inc. Among other matters, the proposed rules would end the use of the internal model approach for credit risk by the largest banking organizations and would introduce instead a new standardized approach. In addition, the proposed rules for operational risks would replace the advanced measurement approach with a standardized measure. The proposal calls for a three-year transition period, starting on 1 July 2025, and full implementation by 1 July 2028. We currently estimate that the proposed rule changes would result in increased capital requirements for our US-based intermediate holding companies if implemented as proposed.

In November 2023, the Swiss Federal Council adopted amendments to the Capital Adequacy Ordinance (the CAO) for banks to incorporate the final Basel III standards adopted by the BCBS in Swiss law. The amended CAO will enter into force on 1 January 2025. The final degree of alignment between the Swiss implementation and those in other jurisdictions remains uncertain at this stage. Although EU legislators target implementation by January 2025, the implementation timelines in the UK and the US have been delayed until July 2025. The Swiss Federal Department of Finance will inform the Swiss Federal Council about the status of international implementation by the end of July 2024. We currently estimate that the revised Basel III framework will lead to a further net increase in risk-weighted assets of approximately USD 25bn, of which USD 10bn is in Non-core and Legacy. This estimate is based on static balances, before taking into account mitigating actions, as well as not reflecting the impact of the output floor, which is phased in over time.

#### Developments related to TBTF frameworks

In August 2023, the Federal Reserve Board and the FDIC issued joint proposals on long-term debt requirements and resolution planning guidance for large banks. The long-term debt proposal would require certain large bank-holding companies, intermediate holding companies and insured depositories with USD 100bn or more in total assets to maintain a minimum amount of long-term debt, intended to enhance the resilience and resolvability of such organizations. Large banking organizations would also be prohibited from certain activities that could complicate the resolution or would lead to contagion risks. If the proposals are implemented, UBS Bank USA would be subject to the long-term debt requirement, which would be incremental to the requirements already imposed upon its parent organization, UBS Americas Holding LLC. The resolution planning guidance proposed by US banking regulators would cover our US-based entities and calls for certain enhancements in the requirements of the submitted resolution plans.

In November 2023, the FSB published the 2023 list of global systemically important banks (G-SIBs). UBS has been moved from Bucket 1 to Bucket 2, corresponding to an increased FSB common equity tier 1 capital surcharge requirement of 1.5% from 1.0%, effective from 1 January 2025. Credit Suisse has been removed from the list. As UBS is subject to higher requirements under the Swiss CAO, the change does not affect the capital requirements applicable to UBS.

In February 2024, the FSB published its Peer Review of Switzerland, which examines Switzerland's implementation of the FSB's TBTF reforms for G-SIBs. The review states that although Swiss authorities have made important steps toward implementing an effective TBTF regime for G-SIBs, additional steps can be taken to further strengthen the Swiss TBTF framework. Recommendations include increasing supervisory resources, strengthening early intervention powers and enhancing the recovery and resolution regime.

#### Developments regarding climate-related financial risks and sustainable finance

In 2023, the Swiss National Council discussed the revision of the Act on the Reduction of CO<sub>2</sub> Emissions (the CO<sub>2</sub> Act), which contains measures to halve greenhouse gas emissions by 2030 compared with 1990. The proposal is based on supplementing the existing CO<sub>2</sub> Act with additional incentives to reduce emissions in different industry sectors of the economy. For the financial sector, it contains a provision mandating FINMA and the SNB to regularly assess climate-related financial risks in the financial sector and to report the results, as well as potential measures, to the Swiss government. FINMA is currently collecting the data from the financial sector in order to be able to carry out the assessment in 2024. It is expected that the proposal will be formally adopted by the Swiss Parliament in spring 2024.

In June 2023, the Swiss electorate voted in favor of the new Climate and Innovation Act (the CI Act). The CI Act defines a net-zero-by-2050 target for Switzerland, including interim targets for selected sectors of the Swiss economy covering scope 1 and 2 emissions. In addition, each Switzerland-domiciled company is required to set a net-zero target by 1 January 2025. The CI Act also contains provisions for public funding to replace aged heating systems in buildings and for application of innovative technologies within companies. Article 9 of the CI Act requires the financial sector to make an effective contribution to the transition to net zero and sets the general goal of the alignment of financial resources to climate-friendly outcomes. Specific measures to achieve the targets will be proposed in the CO<sub>2</sub> Act.

In December 2023, the Swiss Parliament added a provision on greenwashing to the Unfair Competition Act under which companies are required to make truthful and clear statements in relation to their climate impact that can be substantiated by objective and verifiable bases.

Also in December 2023, the Swiss Federal Council announced that it intends to further improve climate transparency for financial products and to further develop the voluntary Swiss Climate Scores (the SCS), which were introduced in 2022. The SCS provide investors with information about the extent to which their financial investments are compatible with climate goals. The updated SCS, which will apply from 1 January 2025, will continue to prescribe disclosures by financial institutions on climate alignment and climate change mitigation characteristics of financial products and will newly prescribe disclosure of exposures to renewable energy. UBS has committed to the voluntary use of the SCS.

In October 2023, the Federal Reserve Board, the OCC and the FDIC approved guidance on the principles for climate-related financial risk management. The final principles describe how climate-related risks can be addressed in the management of traditional financial risks. The principles cover six areas: governance; policies, procedures and limits; strategic planning; risk management; data, risk measurement and reporting; and scenario analysis. The guidance applies to our US-based operations. UBS is evaluating the guidance to ensure the principles are addressed by the relevant Group practices.

In June 2023, the International Sustainability Standards Board (the ISSB) finalized its first set of requirements for corporate disclosures regarding sustainability matters: IFRS S1 and IFRS S2. IFRS S1 addresses the disclosure of a company's sustainability-related risks and opportunities. IFRS S2 addresses the disclosures for the governance processes, controls and procedures an entity uses to monitor, manage and oversee climate-related risks and opportunities and the entity's strategy for managing risks and opportunities. The standards incorporate the recommendations of the Task Force on Climate-related Financial Disclosures (the TCFD). These ISSB standards have been available for use from January 2024 onward. UBS's implementation of the standards will depend, among other factors, on whether the standards are adopted in jurisdictions in which UBS files financial reports.

In October 2023, the EU finalized the first set of cross-sectoral European Sustainability Reporting Standards (the ESRS) under the Corporate Sustainability Reporting Directive. In addition to general disclosures and requirements, the ESRS set out disclosure requirements, which are subject to a materiality assessment that is contingent on external assurance, effectively allowing companies to focus on reporting sustainability factors that are material to their businesses. Companies that were previously subject to the Non-Financial Reporting Directive and large non-EU listed companies with more than 500 employees, including UBS, are required to begin reporting under the ESRS for the 2024 financial year, with the first reports to be published in 2025. The European Commission will develop and adopt additional sector-specific reporting standards by June 2026.

In March 2024, the US Securities and Exchange Commission (the SEC) released the final rules regarding climate-related disclosures for investors. The rules will require certain firms, including UBS, to disclose qualitative and quantitative information on the firm's exposures to climate-related risks and risk management practices. The rules are anticipated to be effective for filings for the 2025 financial year.

#### Other developments in Switzerland

In June 2023, the Swiss electorate voted in favor of the introduction of a minimum corporate tax rate of 15% applicable to companies with a consolidated turnover of more than EUR 750m, as stipulated by the Global Anti-Base Erosion Model Rules (Pillar Two) of the Organisation for Economic Co-operation and Development. In December 2023, the Swiss Federal Council decided on a partial adoption in Switzerland, by way of an ordinance, and, as a result, a domestic minimum top-up tax regime became effective from 1 January 2024, ensuring a Swiss local minimal tax burden of at least 15%. Switzerland will not implement any top-up tax regime in 2024 with respect to non-Swiss taxation below 15%. The Swiss Federal Council will further observe international developments and decide at a later stage if and when any top-up tax with respect to non-Swiss taxation below 15% will be introduced in Switzerland. UBS does not expect the implementation of global minimum taxation in Switzerland to materially impact its effective tax rate.

In August 2023, the Swiss Federal Council launched a consultation on a bill to strengthen the Swiss anti-money-laundering framework, with the aim of reinforcing the integrity and competitiveness of Switzerland as a financial and business location. The measures aim to comply with the international standards of the Financial Action Task Force (the FATF). Among other matters, key elements of the proposal include the introduction of a non-public register managed by the Federal Department of Justice and Police containing information about the beneficial owners of companies and other legal entities in Switzerland, as well as due diligence requirements for activities with an increased risk of money laundering. In the context of the Swiss anti-money-laundering framework, the FATF also acknowledged in October 2023 the progress made by Switzerland, especially with the revision of the Anti-Money Laundering Act adopted in March 2021.

In November 2023, the Swiss Federal Council adopted an amendment to the Financial Market Infrastructure Act that enacts a measure aimed at protecting the Swiss stock exchange infrastructure into Swiss law with effect from 1 January 2024. This ruling followed the EU's decision to withdraw equivalence for the Swiss stock exchange regulation in 2019. The protective measure enables EU firms to trade Swiss shares on the Swiss trading venues, even without EU equivalence. In the event of equivalence recognition by the EU, the measure may be deactivated at any time.

In the first quarter of 2023, the Swiss Federal Council implemented the remaining measures of the 9th and 10th sanctions packages imposed by the EU against Russia in December 2022 and February 2023, respectively. The measures include additional export restrictions and more detailed reporting obligations with regard to frozen assets.

In August 2023, the Swiss Federal Council adopted the EU's 11th package of sanctions against Russia, which was partially adopted by Switzerland in June 2023 by expanding the sanction lists. As part of the 11th sanctions package, the EU has created a specific legal basis for an instrument to prevent the evasion of sanctions. The Swiss Federal Council emphasized its determination to take effective action against the evasion of sanctions and will examine the implementation of this instrument in the event of its actual application by the EU. In addition, Switzerland joined the EU in imposing sanctions at Moldova's request and against Belarus, in view of its continued involvement in Russia's ongoing military aggression against Ukraine.

In September 2023, the Swiss Federal Council issued sanctions measures in connection with the delivery of Iranian drones to Russia. The sale, supply, export and transit of components used in the construction and production of drones is now prohibited. In January 2024, the Swiss Federal Council adopted the measures of the EU's 12th sanctions package relevant to Switzerland, following the expansion of the sanction lists by Switzerland in December 2023. The measures include import bans on certain goods that generate significant revenue for Russia, as well as certain bans in the financial and services sectors. In February 2024, the Federal Department of Economic Affairs, Education and Research adopted measures of the EU's 13th sanctions package, which target, among others, individuals, entities and organizations that are operating in Russia's military-industrial complex and that are involved in supplying defense equipment from the Democratic People's Republic of Korea, as well as officials from the occupied territories of Ukraine.

UBS's sanctions programs are designed to comply with sanctions across multiple jurisdictions, including those imposed by the United Nations, Switzerland, the EU, the UK and the US.

The revised Swiss Federal Data Protection Act and the corresponding Data Protection Ordinance entered into force on 1 September 2023. The revised law represents a fundamental reform that strengthens the rights of consumers regarding their data by enhancing the transparency and accountability rules for companies processing data, among other measures. In addition, it seeks to align Swiss data protection law with the EU General Data Protection Regulation, in order to ensure continued cross-border transmission of data with EU Member States.

#### Other developments in the US

In October 2023, the Federal Reserve Board, the FDIC and the OCC adopted revisions to their regulations implementing the Community Reinvestment Act (the CRA). The CRA encourages banks to meet the credit needs of the communities in which they do business, with a focus on low- and moderate-income communities. The final rule will implement separate evaluations for retail lending, retail services and products, community development financing, and community development services for banks with over USD 2bn in total assets. For large banks with over USD 10bn in total assets, the evaluation of retail services and products will cover digital delivery systems. The final rule also updates requirements on the reporting of exposures. The rule has an implementation date of 1 April 2024, with additional phase-in periods for general provisions and reporting that extend out to April 2027. UBS Bank USA expects a modest level of increased monitoring and reporting requirements.

In October 2022, the SEC adopted rules requiring US national securities exchanges, including the New York Stock Exchange (the NYSE) and Nasdaq, to adopt listing standards that require issuers to adopt and enforce a policy to recover from executive officers incentive compensation received based on attainment of a financial reporting measure in the event that the issuer is required to prepare an accounting restatement of financial statements due to material non-compliance with financial reporting requirements. The SEC approved the listing standards promulgated by the NYSE and Nasdaq in June 2023 and the clawback policy requirement came into effect as of 1 December 2023. Under the listing standards, an issuer must recover the amount of incentive-based compensation that would not have been received if it had been determined based on the restated financial information. UBS Group AG, UBS AG and Credit Suisse AG each have securities listed on US national securities exchanges and have adopted a policy to comply with the listing standards.

In September 2023, the new rules from the SEC to enhance and standardize disclosure requirements related to cybersecurity incidents and cybersecurity risk management, strategy and governance became effective. Among other changes, the rules require foreign private issuers, including UBS Group AG, UBS AG and Credit Suisse AG, to annually report material information regarding their cybersecurity risk management, strategy and governance on Form 20-F. The Form 20-F disclosures are applicable with annual reports for fiscal years ending on or after 15 December 2023.

#### Other developments in Europe

US securities markets will transition to one business day after the trade date (T+1) settlement of most transactions in May 2024. In October 2023, the European Securities and Markets Authority (ESMA) launched a call for evidence on shortening the standard settlement cycle for securities transactions from two business days after the trade date (T+2) to T+1. ESMA aims to perform an assessment of the costs and benefits linked to the potential reduction of the securities settlement cycle in the EU and intends to submit the results of its assessment to the European Commission and publish a final report in the fourth quarter of 2024, at the latest. The UK Treasury has also established an Accelerated Settlement Taskforce to consider whether the UK should follow the US and transition to a T+1 settlement. The UK task force is expected to publish its findings in 2024, with further work expected during 2024. UBS is implementing and testing required enhancements based on the US rules and will prepare for further implementation according to the evolving rules and market practice in the UK, the EU and Switzerland.

In May 2023, the European Commission presented draft legislative proposals aimed at empowering retail investors to make investment decisions that are aligned with their needs and preferences and ensuring that they are treated fairly and duly protected. The proposals also aim to encourage greater participation in EU capital markets and to enable a greater volume of funds to flow more easily into EU capital markets. The package revises EU capital markets rules, which, once agreed and in force, could have significant implications and require significant implementation efforts by UBS across business divisions.

In June 2023, legislators in the EU reached a provisional agreement on amendments to the Capital Requirements Regulation and the Capital Requirements Directive. The provisional agreement includes, alongside measures to implement the remaining elements of the Basel III standard, a framework that would require non-EU firms to establish a physical presence within the EU when providing certain banking services to EU-domiciled clients and counterparties (including deposit-taking and commercial lending), unless they are subject to an exemption. The changes will affect the cross-border provision of certain banking services and will require UBS to adapt its approaches to providing such services to clients in the EU. The requirement is expected to become effective in late 2026, with grandfathering provisions for contracts already in existence at the date of introduction.

In December 2023, the Swiss Confederation and the UK signed a mutual recognition agreement (an MRA) for financial services to facilitate cross-border financial activities. The MRA is supplemented by measures to enhance supervisory cooperation and coordination. The MRA envisages a memorandum of understanding between FINMA and the Bank of England on resolution arrangements, and it is expected to enable Swiss banks to provide cross-border investment services to high net worth UK-domiciled clients and to broadly allow UK and Swiss over-the-counter derivatives counterparties to choose whether to rely on Swiss or UK risk mitigation rules (except for physically settled foreign exchange swaps and forwards). The agreement is expected to apply from 2026, depending on the completion of parliamentary approval in both countries.

## Risk factors

Certain risks, including those described below, may affect our ability to execute our strategy or our business activities, financial condition, results of operations and prospects. We are inherently exposed to multiple risks, many of which may become apparent only with the benefit of hindsight. As a result, risks that we do not consider to be material, or of which we are not currently aware, could also adversely affect us. Within each category, the risks that we consider to be most material are presented first.

#### Strategy, management and operational risks

UBS's acquisition of Credit Suisse Group AG exposes us to heightened litigation risk and regulatory scrutiny and entails significant additional costs, liabilities and business integration risks that affect UBS AG

UBS acquired Credit Suisse Group AG under exceptional circumstances of volatile financial markets and the continued outflows and deteriorating overall financial position of Credit Suisse, in order to avert a failure of Credit Suisse and thus damage to the Swiss financial center and to global financial stability. The acquisition was effected through a merger of Credit Suisse Group AG with and into UBS Group AG, with UBS Group AG succeeding to all assets and all liabilities of Credit Suisse Group AG, becoming the direct or indirect shareholder of the former Credit Suisse Group AG's direct and indirect subsidiaries. Therefore, on a consolidated basis, all assets, risks and liabilities of the Credit Suisse Group became a part of UBS. This includes all ongoing and future litigation, regulatory and similar matters arising out of the business of the Credit Suisse Group, thereby materially increasing UBS's exposure to litigation and investigation risks, as described in further detail below.

We have incurred substantial transaction fees and costs in connection with the transaction and will continue to incur substantial integration and restructuring costs. In addition, we may not realize all of the expected cost reductions and other benefits of the transaction. We may not be able to successfully execute our strategic plans or to achieve the expected benefits of the acquisition of the Credit Suisse Group. The success of the transaction, including anticipated benefits and cost savings, will depend, in part, on the ability to successfully integrate the operations of both firms rapidly and effectively, while maintaining stability of operations and high levels of service to customers of the combined franchise.

Our ability to successfully integrate Credit Suisse will depend on a number of factors, some of which are outside of our control, including our ability to:

- combine the operations of the two firms in a manner that preserves client service, simplifies infrastructure and results in operating cost savings;
- reverse outflows of deposits and client invested assets at Credit Suisse, particularly in its Wealth Management and Switzerland and to attract additional deposits and other client assets to the combined firm;
- achieve cost reductions at the levels and in the timeframe we plan;
- enhance, integrate, and, where necessary, remediate risk management and financial control and other systems and frameworks, including to remediate the material weakness in Credit Suisse's internal controls over financial reporting;
- simplify the legal structure of the combined firm in an expedited manner, through the planned mergers of UBS AG and Credit Suisse AG and of UBS Switzerland AG and Credit Suisse (Schweiz) AG, as well as the creation of a single intermediate holding company (IHC) for the combined firm in the U.S., other entity mergers and consolidations and asset dispositions, including obtaining regulatory approvals and licenses required to implement such changes;
- retain staff and to reverse attrition of staff in certain of Credit Suisse's business areas;
- successfully execute the wind-down of the assets and liabilities in its Non-core and Legacy division and release capital
  and resources for other purposes; and
- resolve outstanding litigation, regulatory and similar matters, including matters relating to Credit Suisse, on terms that
  are not significantly adverse to the UBS Group, as well as to successfully remediate outstanding regulatory and
  supervisory matters and meet other regulatory commitments.

Further investigation and planning for integration is taking place, and risks that we do not currently consider to be material, or of which we are not currently aware, could also adversely affect us.

The level of success in the absorption of Credit Suisse, in the integration of the two groups and their businesses, particularly in the area of the Swiss domestic bank, as well as domestic and international wealth management business, and in the execution of the planned strategy regarding cost reduction and divestment of any non-core assets, and the level of resulting impairments and write-downs, may impact the operational results, share price and the credit rating of UBS entities. The past financial performance of each of UBS Group AG and Credit Suisse may not be indicative of their future financial performance. The combined group will be required to devote significant management attention and resources to integrating its business practices and support functions. The diversion of management's attention and any delays or difficulties encountered in connection with the transaction and the coordination of the two companies' operations could have an adverse effect on the business, financial results, financial condition or the share price of the combined group following the transaction. The coordination process may also result in additional and unforeseen expenses.

#### Our reputation is critical to our success

Our reputation is critical to the success of our strategic plans, business and prospects. Reputational damage is difficult to reverse, and improvements tend to be slow and difficult to measure. In the past, our reputation has been adversely affected by our losses during the financial crisis, investigations into our cross-border private banking services, criminal resolutions of LIBOR-related and foreign exchange matters, as well as other matters. We believe that reputational damage as a result of these events was an important factor in our loss of clients and client assets across our asset-gathering businesses. The Credit Suisse Group has more recently been subject to significant litigation and regulatory matters and to financial losses that adversely affected its reputation and the confidence of clients, which played a significant role in the failure of the Credit Suisse Group in March 2023. These events, or new events that cause reputational damage could have a material adverse effect on our results of operation and financial condition, as well as our ability to achieve our strategic goals and financial targets.

#### Operational risks affect our business

Our businesses depend on our ability to process a large number of transactions, many of which are complex, across multiple and diverse markets in different currencies, to comply with requirements of many different legal and regulatory regimes to which we are subject and to prevent, or promptly detect and stop, unauthorized, fictitious or fraudulent transactions. We also rely on access to, and on the functioning of, systems maintained by third parties, including clearing systems, exchanges, information processors and central counterparties. Any failure of our or third-party systems could have an adverse effect on us. These risks may be greater as we deploy newer technologies, such as blockchain, or processes, platforms or products that rely on these technologies. Our operational risk management and control systems and processes are designed to help ensure that the risks associated with our activities – including those arising from process error, failed execution, misconduct, unauthorized trading, fraud, system failures, financial crime, cyberattacks, breaches of information security, inadequate or ineffective access controls and failure of security and physical protection – are appropriately controlled. If our internal controls fail or prove ineffective in identifying and remedying these risks, we could suffer operational failures that might result in material losses, such as the substantial loss we incurred from the unauthorized trading incident announced in September 2011. The acquisition of the Credit Suisse Group may elevate these risks, particularly during the first phases of integration, as the firms have historically operated under different procedures, IT systems, risk policies and structures of governance.

As a significant proportion of our staff have been and will continue working from outside the office, we have faced, and will continue to face, new challenges and operational risks, including maintenance of supervisory and surveillance controls, as well as increased fraud and data security risks. While we have taken measures to manage these risks, these measures could prove not to be effective.

We use automation as part of our efforts to improve efficiency, reduce the risk of error and improve our client experience. We intend to expand the use of robotic processing, machine learning and artificial intelligence to further these goals. Use of these tools presents their own risks, including the need for effective design and testing; the quality of the data used for development and operation of machine learning and artificial intelligence tools may adversely affect their functioning and result in errors and other operational risks.

Financial services firms have increasingly been subject to breaches of security and to cyber- and other forms of attack, some of which are sophisticated and targeted attacks intended to gain access to confidential information or systems, disrupt service or steal or destroy data, which may result in business disruption or the corruption or loss of data at UBS's locations or those of third parties. Cyberattacks by hackers, terrorists, criminal organizations, nation states and extremists have also increased in frequency and sophistication. Current geopolitical tensions have also led to increased risk of cyberattack from foreign state actors. In particular, the Russia–Ukraine war and the imposition of significant sanctions on Russia by Switzerland, the US, the EU, the UK and others has resulted and may continue to result in an increase in the risk of cyberattacks. Such attacks may occur on our own systems or on the systems that are operated by external service providers, may be attempted through the introduction of ransomware, viruses or malware, phishing and other forms of social engineering, distributed denial of service attacks and other means. These attempts may occur directly, or using equipment or security passwords of our employees, third-party service providers or other users. Cybersecurity risks also have increased due to the widespread use of digital technologies, cloud computing and mobile devices to conduct financial business and transactions, as well as due to generative AI, which increases the capabilities of adversaries to mount sophisticated phishing attacks, for example, through the use of deepfake technologies, and presents new challenges to the protection of our systems and networks and the confidentiality and integrity of our data. During the first quarter of 2023, a third-party vendor, ION XTP, suffered a ransomware attack, which resulted in some disruption to our exchange-traded derivatives clearing activities, although we restored our services within 36 hours, using an available alternative solution. In addition to external attacks, we have experienced loss of client data from failure by employees and others to follow internal policies and procedures and from misappropriation of our data by employees and others.

We may not be able to anticipate, detect or recognize threats to our systems or data and our preventative measures may not be effective to prevent an attack or a security breach. In the event of a security breach, notwithstanding our preventative measures, we may not immediately detect a particular breach or attack. The acquisition of the Credit Suisse Group may elevate and intensify these risks as would-be attackers have a larger potential target in the combined bank and differences in systems, policies, and platforms could make threat detection more difficult. In addition, the implementation of the large-scale technological change program that is necessary to integrate the combined bank's systems at pace may also result in increased risks. Once a particular attack is detected, time may be required to investigate and assess the nature and extent of the attack, and to restore and test systems and data. If a successful attack occurs at a service provider, as we have recently experienced, we may be dependent on the service provider's ability to detect the attack, investigate and assess the attack and successfully restore the relevant systems and data. A successful breach or circumvention of security of our or a service provider's systems or data could have significant negative consequences for us, including disruption of our operations, misappropriation of confidential information concerning us or our clients, damage to our systems, financial losses for us or our clients, violations of data privacy and similar laws, litigation exposure and damage to our reputation. We may be subject to enforcement actions as regulatory focus on cybersecurity increases and regulators have announced new rules, guidance and initiatives on ransomware and other cybersecurity-related issues.

We are subject to complex and frequently changing laws and regulations governing the protection of client and personal data, such as the EU General Data Protection Regulation. Ensuring that we comply with applicable laws and regulations when we collect, use and transfer personal information requires substantial resources and may affect the ways in which we conduct our business. In the event that we fail to comply with applicable laws, we may be exposed to regulatory fines and penalties and other sanctions. We may also incur such penalties if our vendors or other service providers or clients or counterparties fail to comply with these laws or to maintain appropriate controls over protected data. In addition, any loss or exposure of client or other data may adversely damage our reputation and adversely affect our business.

A major focus of US and other countries' governmental policies relating to financial institutions in recent years has been on fighting money laundering and terrorist financing. We are required to maintain effective policies, procedures and controls to detect, prevent and report money laundering and terrorist financing, and to verify the identity of our clients under the laws of many of the countries in which we operate. We are also subject to laws and regulations related to corrupt and illegal payments to government officials by others, such as the US Foreign Corrupt Practices Act and the UK Bribery Act. We have implemented policies, procedures and internal controls that are designed to comply with such laws and regulations. Notwithstanding this, US regulators have found deficiencies in the design and operation of anti-money laundering programs in our US operations. We have undertaken a significant program to address these regulatory findings with the objective of fully meeting regulatory expectations for our programs. Failure to maintain and implement adequate programs to combat money laundering, terrorist financing or corruption, or any failure of our programs in these areas, could have serious consequences both from legal enforcement action and from damage to our reputation. Frequent changes in sanctions imposed and increasingly complex sanctions imposed on countries, entities and individuals, as exemplified by the breadth and scope of the sanctions imposed in relation to the war in Ukraine, increase our cost of monitoring and complying with sanctions requirements and increase the risk that we will not identify in a timely manner client activity that is subject to a sanction.

As a result of new and changed regulatory requirements and the changes we have made in our legal structure, the volume, frequency and complexity of our regulatory and other reporting has remained elevated. Regulators have also significantly increased expectations regarding our internal reporting and data aggregation, as well as management reporting. We have incurred, and continue to incur, significant costs to implement infrastructure to meet these requirements. Failure to meet external reporting requirements accurately and in a timely manner or failure to meet regulatory expectations of internal reporting, data aggregation and management reporting could result in enforcement action or other adverse consequences for us.

In addition, despite the contingency plans that we have in place, our ability to conduct business may be adversely affected by a disruption in the infrastructure that supports our businesses and the communities in which we operate. This may include a disruption due to natural disasters, pandemics, civil unrest, war or terrorism and involve electrical, communications, transportation or other services that we use or that are used by third parties with whom we conduct business.

#### We depend on our risk management and control processes to avoid or limit potential losses in our businesses

Controlled risk-taking is a major part of the business of a financial services firm. Some losses from risk-taking activities are inevitable, but to be successful over time, we must balance the risks we take against the returns generated. Therefore, we must diligently identify, assess, manage and control our risks, not only in normal market conditions but also as they might develop under more extreme, stressed conditions, when concentrations of exposures can lead to severe losses.

We have not always been able to prevent serious losses arising from risk management failures and extreme or sudden market events. We recorded substantial losses on fixed-income trading positions in the 2008 financial crisis, in the unauthorized trading incident in 2011 and, more recently, positions resulting from the default of a US prime brokerage client. In the recent past, the Credit Suisse Group has suffered very significant losses from the default of the US prime brokerage client, the losses in supply-chain finance funds managed by it, as well as other matters. As a result of these, Credit Suisse is subject to significant regulatory remediation obligations to address deficiencies in its risk management and controls systems, that continue following the merger.

We regularly revise and strengthen our risk management and control frameworks to seek to address identified shortcomings. Nonetheless, we could suffer further losses in the future if, for example:

- we do not fully identify the risks in our portfolio, in particular risk concentrations and correlated risks;
- our assessment of the risks identified, or our response to negative trends, proves to be untimely, inadequate, insufficient or incorrect;
- our risk models prove insufficient to predict the scale of financial risks the bank faces;
- markets move in ways that we do not expect in terms of their speed, direction, severity or correlation and our ability to manage risks in the resulting environment is, therefore, affected;
- third parties to whom we have credit exposure or whose securities we hold are severely affected by events and we suffer defaults and impairments beyond the level implied by our risk assessment; or
- collateral or other security provided by our counterparties and clients proves inadequate to cover their obligations at the time of default.

We also hold legacy risk positions, primarily in Non-core and Legacy, that, in many cases, are illiquid and may deteriorate in value. The acquisition of the Credit Suisse Group, and the planned integration of UBS AG with Credit Suisse AG, is increasing, materially, the portfolio of business that are outside of our risk appetite and subject to exit that will be managed in the Non-core and Legacy segment.

We also manage risk on behalf of our clients. The performance of assets we hold for our clients may be adversely affected by the same aforementioned factors. If clients suffer losses or the performance of their assets held with us is not in line with relevant benchmarks against which clients assess investment performance, we may suffer reduced fee income and a decline in assets under management, or withdrawal of mandates.

Investment positions, such as equity investments made as part of strategic initiatives and seed investments made at the inception of funds that we manage, may also be affected by market risk factors. These investments are often not liquid and generally are intended or required to be held beyond a normal trading horizon. Deteriorations in the fair value of these positions would have a negative effect on our earnings.

# We may be unable to identify or capture revenue or competitive opportunities, or retain and attract qualified employees

The financial services industry is characterized by intense competition, continuous innovation, restrictive, detailed, and sometimes fragmented regulation and ongoing consolidation. We face competition at the level of local markets and individual business lines, and from global financial institutions that are comparable to us in their size and breadth, as well as competition from new technology-based market entrants, which may not be subject to the same level of regulation. Barriers to entry in individual markets and pricing levels are being eroded by new technology. We expect these trends to continue and competition to increase. Our competitive strength and market position could be eroded if we are unable to identify market trends and developments, do not respond to such trends and developments by devising and implementing adequate business strategies, do not adequately develop or update our technology, including our digital channels and tools, or are unable to attract or retain the qualified people needed.

The amount and structure of our employee compensation is affected not only by our business results, but also by competitive factors and regulatory considerations.

In response to the demands of various stakeholders, including regulatory authorities and shareholders, and in order to better align the interests of our staff with other stakeholders, we have increased average deferral periods for stock awards, expanded forfeiture provisions and, to a more limited extent, introduced clawback provisions for certain awards linked to business performance. We have also introduced individual caps on the proportion of fixed to variable pay for the Executive Board (EB) members, as well as certain other employees. We will also be required to introduce and enforce provisions requiring UBS to recover from EB members and certain other executives a portion of performance-based incentive compensation in the event that UBS Group or another entity with securities listed on a US national securities exchange, is required to restate its financial statements as a result of a material error.

Constraints on the amount or structure of employee compensation, higher levels of deferral, performance conditions and other circumstances triggering the forfeiture of unvested awards may adversely affect our ability to retain and attract key employees, particularly where we compete with companies that are not subject to these constraints. The loss of key staff and the inability to attract qualified replacements could seriously compromise our ability to execute our strategy and to successfully improve our operating and control environment, and could affect our business performance. This risk is intensified by elevated levels of attrition among Credit Suisse employees. Swiss law requires that shareholders approve the compensation of the UBS Group AG Board of Directors (the Group Board) and the UBS Group AG Group Executive Board (GEB) each year. If UBS Group AG's shareholders fail to approve the compensation for the GEB or the Group Board, this could have an adverse effect on our ability to retain experienced directors and our senior management.

Our operating results, financial condition and ability to pay our obligations in the future may be affected by funding, dividends and other distributions received directly or indirectly from its subsidiaries, which may be subject to restrictions

UBS AG's ability to pay its obligations in the future will depend on the level of funding, dividends and other distributions, if any, received from UBS Switzerland AG and other subsidiaries. The ability of such subsidiaries to make loans or distributions, directly or indirectly, to UBS AG may be restricted as a result of several factors, including restrictions in financing agreements and the requirements of applicable law and regulatory, fiscal or other restrictions. In particular, UBS AG's direct and indirect subsidiaries, including UBS Switzerland AG, UBS Americas Holding LLC and UBS Europe SE, are subject to laws and regulations require the entities to maintain minimum levels of capital and liquidity, that restrict dividend payments, authorize regulatory bodies to block or reduce the flow of funds from those subsidiaries to UBS AG, or could affect their ability to repay any loans made to, or other investments in, such subsidiary by UBS AG or another member of the Group. For example, in the early stages of the COVID-19 pandemic, the European Central Bank ordered all banks under its supervision to cease dividend distributions and the Board of Governors of the Federal Reserve System limited capital distributions by bank holding companies and intermediate holding companies. Restrictions and regulatory actions could impede access to funds that UBS AG may need to meet its obligations. In addition, UBS AG's right to participate in a distribution of assets upon a subsidiary's liquidation or reorganization is subject to all prior claims of the subsidiary's creditors.

Furthermore, UBS AG may guarantee some of the payment obligations of certain of the Group's subsidiaries from time to time. These guarantees may require UBS AG to provide substantial funds or assets to subsidiaries or their creditors or counterparties at a time when UBS AG is in need of liquidity to fund its own obligations.

#### Market, credit and macroeconomic risks

#### Performance in the financial services industry is affected by market conditions and the macroeconomic climate

Our businesses are materially affected by market and macroeconomic conditions. A market downturn and weak macroeconomic conditions can be precipitated by a number of factors, including geopolitical events, such as international armed conflicts, war, or acts of terrorism, the imposition of sanctions, global trade or global supply chain disruptions, including energy shortages and food insecurity, changes in monetary or fiscal policy, changes in trade policies or international trade disputes, significant inflationary or deflationary price changes, disruptions in one or more concentrated economic sectors, natural disasters, pandemics or local and regional civil unrest. Such developments can have unpredictable and destabilizing effects.

Adverse changes in interest rates, credit spreads, securities prices, market volatility and liquidity, foreign exchange rates, commodity prices, and other market fluctuations, as well as changes in investor sentiment, can affect our earnings and ultimately our financial and capital positions. As financial markets are global and highly interconnected, local and regional events can have widespread effects well beyond the countries in which they occur. Any of these developments may adversely affect our business or financial results.

As a result of significant volatility in the market, our businesses may experience a decrease in client activity levels and market volumes, which would adversely affect our ability to generate transaction fees, commissions and margins, particularly in Global Wealth Management and the Investment Bank. A market downturn would likely reduce the volume and valuation of assets that we manage on behalf of clients, which would reduce recurring fee income that is charged based on invested assets, primarily in Global Wealth Management and Asset Management, and performance-based fees in Asset Management. Such a downturn could also cause a decline in the value of assets that we own and account for as investments or trading positions. In addition, reduced market liquidity or volatility may limit trading opportunities and therefore may reduce transaction-based income and may also impede our ability to manage risks.

Health emergencies, including pandemics and measures taken by governmental authorities to manage them, may have effects such as labor market displacements, supply chain disruptions, and inflationary pressures, and adversely affect global and regional economic conditions, resulting in contraction in the global economy, substantial volatility in the financial markets, crises in markets for goods and services, disruptions in real estate markets, increased unemployment, increased credit and counterparty risk, and operational challenges, as we saw with the COVID-19 pandemic. Such economic or market disruptions, including inflationary pressures, may lead to reduced levels of client activity and demand for our products and services, increased utilization of lending commitments, significantly increased client defaults, continued and increasing credit and valuation losses in our loan portfolios, loan commitments and other assets, and impairments of other financial assets. A fall in equity markets and a consequent decline in invested assets would also reduce recurring fee income in our Global Wealth Management and Asset Management businesses, as UBS experienced in the second quarter of 2022. These factors and other consequences of a health emergency may negatively affect our financial condition, including possible constraints on capital and liquidity, as well as a higher cost of capital, and possible downgrades to our credit ratings.

Geopolitical events: Terrorist activity and escalating armed conflict in the Middle East, as well as the continuing Russia—Ukraine war, may have significant impacts on global markets, exacerbate global inflationary pressures, and slow global growth. In addition, the ongoing conflicts may continue to cause significant population displacement, and lead to shortages of vital commodities, including energy shortages and food insecurity outside the areas immediately involved in armed conflict. Governmental responses to the armed conflicts, including, with respect to the Russia/Ukraine war, coordinated successive sets of sanctions on Russia and Belarus, and Russian and Belarusian entities and nationals, and the uncertainty as to whether the ongoing conflicts will widen and intensify, may continue to have significant adverse effects on the market and macroeconomic conditions, including in ways that cannot be anticipated. If individual countries impose restrictions on cross-border payments or trade, or other exchange or capital controls, or change their currency (for example, if one or more countries should leave the Eurozone, as a result of the imposition of sanctions on individuals, entities or countries, or escalation of trade restrictions and other actions between the US, or other countries, and China), we could suffer adverse effects on our business, losses from enforced default by counterparties, be unable to access our own assets or be unable to effectively manage our risks.

We could be materially affected if a crisis develops, regionally or globally, as a result of disruptions in markets due to macroeconomic or political developments, trade restrictions, or the failure of a major market participant. Over time, our strategic plans have become more heavily dependent on our ability to generate growth and revenue in emerging markets, including China, causing us to be more exposed to the risks associated with such markets.

Global Wealth Management derives revenues from all the principal regions, but has a greater concentration in Asia than many peers and a substantial presence in the US, unlike many European peers. The Investment Bank's business is more heavily weighted to Europe and Asia than our peers, while its derivatives business is more heavily weighted to structured products for wealth management clients, in particular with European and Asian underlyings. Our performance may therefore be more affected by political, economic and market developments in these regions and businesses than some other financial service providers.

The extent to which ongoing conflicts, current inflationary pressures and related adverse economic conditions affect our businesses, results of operations and financial condition, as well as our regulatory capital and liquidity ratios, will depend on future developments, including the effects of the current conditions on our clients, counterparties, employees and third-party service providers.

# Our credit risk exposure to clients, trading counterparties and other financial institutions would increase under adverse or other economic conditions

Credit risk is an integral part of many of our activities, including lending, underwriting and derivatives activities. Adverse economic or market conditions, or the imposition of sanctions or other restrictions on clients, counterparties or financial institutions, may lead to impairments and defaults on these credit exposures. Losses may be exacerbated by declines in the value of collateral securing loans and other exposures. In our prime brokerage, securities finance and Lombard lending businesses, we extend substantial amounts of credit against securities collateral, the value or liquidity of which may decline rapidly. Market closures and the imposition of exchange controls, sanctions or other measures may limit our ability to settle existing transactions or to realize on collateral, which may result in unexpected increases in exposures. Our Swiss mortgage and corporate lending portfolios are a large part of our overall lending. We are therefore exposed to the risk of adverse economic developments in Switzerland, including property valuations in the housing market, the strength of the Swiss franc and its effect on Swiss exports, return to negative interest rates applied by the Swiss National Bank, economic conditions within the Eurozone or the EU, and the evolution of agreements between Switzerland and the EU or EEA, which represent Switzerland's largest export market. We have exposures related to real estate in various countries, including a substantial Swiss mortgage portfolio. Although we believe this portfolio is prudently managed, we could nevertheless be exposed to losses if a substantial deterioration in the Swiss real estate market were to occur.

As we experienced in 2020, under the International Financial Reporting Standards (IFRS) 9 expected credit loss (ECL) regime, credit loss expenses may increase rapidly at the onset of an economic downturn as a result of higher levels of credit impairments (stage 3), as well as higher ECL from stages 1 and 2. Substantial increases in ECL could exceed expected loss for regulatory capital purposes and adversely affect our common equity tier 1 (CET1) capital and regulatory capital ratios.

#### Interest rate trends and changes could negatively affect our financial results

UBS's businesses are sensitive to changes in interest rate trends. A prolonged period of low or negative interest rates, particularly in Switzerland and the Eurozone, adversely affected the net interest income generated by UBS's Personal & Corporate Banking and Global Wealth Management businesses prior to 2022. Actions that UBS took to mitigate adverse effects on income, such as the introduction of selective deposit fees or minimum lending rates, contributed to outflows of customer deposits (a key source of funding for UBS), net new money outflows and a declining market share in its Swiss lending business.

During 2022, interest rates increased sharply in the US and most other markets, including a shift from negative to positive central bank policy rates in the Eurozone and Switzerland, as central banks responded to higher inflation. Higher interest rates generally benefit UBS's net interest income. However, as returns on alternatives to deposits increase with rising interest rates, such as returns on money market funds, UBS experienced outflows from customer deposits and shifts of deposits from lower-interest account types to accounts bearing higher interest rates, such as savings and certificates of deposit, starting with effects in the US, where rates had rapidly increased. In addition, higher for longer rates, such as those experienced in 2023, have led similar shifts in euro and Swiss Franc deposits. Sustained higher interest rates also may adversely affect our credit counterparties. Customer deposit outflows could require UBS to obtain alternative funding, which would likely be more costly than customer deposits.

#### Currency fluctuation may have an adverse effect on our profits, balance sheet and regulatory capital

We are subject to currency fluctuation risks as a substantial portion of our assets and liabilities are denominated in currencies other than our UBS AG presentation currency, the US dollar. In order to hedge our CET1 capital ratio, our CET1 capital must have foreign currency exposure, which leads to currency sensitivity. As a consequence, it is not possible to simultaneously fully hedge both CET1 capital and the CET1 capital ratio. Accordingly, changes in foreign exchange rates may adversely affect our profits, balance sheet, and capital, leverage and liquidity coverage ratios.

#### **Regulatory and legal risks**

#### Material legal and regulatory risks arise in the conduct of our business

As a global financial services firm operating in more than 50 countries, we are subject to many different legal, tax and regulatory regimes, including extensive regulatory oversight, and are exposed to significant liability risk. We are subject to a large number of claims, disputes, legal proceedings and government investigations, and we expect that our ongoing business activities will continue to give rise to such matters in the future. In addition, as noted above, UBS Group inherited claims against Credit Suisse entities as part of the acquisition, including matters that may be material to the operating results of the combined group such as the ongoing supply chain finance funds (SCFF) matter. This will affect UBS AG upon the planned merger with Credit Suisse AG. The extent of our financial exposure to these and other matters is material and could substantially exceed the level of provisions that we have established. We are not able to predict the financial and non-financial consequences these matters may have when resolved.

We may be subject to adverse preliminary determinations or court decisions that may negatively affect public perception and our reputation, result in prudential actions from regulators, and cause us to record additional provisions for such matters even when we believe we have substantial defenses and expect to ultimately achieve a more favorable outcome. This risk is illustrated by the award of aggregate penalties and damages of EUR 4.5bn by the court of first instance in France. This award was reduced to an aggregate of EUR 1.8bn by the Court of Appeal, and in a further appeal, the French Supreme Court referred the case back to the Paris Court of Appeal to reconsider the amount after a new trial.

Litigation, regulatory and similar matters may also result in non-monetary penalties and consequences. Among other things, a guilty plea to, or conviction of, a crime (including as a result of termination of the Deferred Prosecution Agreement Credit Suisse entered into with the United States Department of Justice in 2021 to resolve its Mozambique matter) could have material consequences for UBS.

Resolution of regulatory proceedings has required us to obtain waivers of regulatory disqualifications to maintain certain operations, may entitle regulatory authorities to limit, suspend or terminate licenses and regulatory authorizations, and may permit financial market utilities to limit, suspend or terminate our participation in them. Failure to obtain such waivers, or any limitation, suspension or termination of licenses, authorizations or participations, could have material adverse consequences for us.

Our settlements with governmental authorities in connection with foreign exchange, London Interbank Offered Rates (LIBOR) and other benchmark interest rates starkly illustrate the significantly increased level of financial and reputational risk now associated with regulatory matters in major jurisdictions. In connection with investigations related to LIBOR and other benchmark rates and to foreign exchange and precious metals, very large fines and disgorgement amounts were assessed against us, and we were required to enter guilty pleas despite our full cooperation with the authorities in the investigations, and despite our receipt of conditional leniency or conditional immunity from anti-trust authorities in a number of jurisdictions, including the US and Switzerland.

For a number of years, we have been, and we continue to be, subject to a very high level of regulatory scrutiny and to certain regulatory measures that constrain our strategic flexibility. We believe we have remediated the deficiencies that led to significant losses in the past and made substantial changes in our controls and conduct risk frameworks to address the issues highlighted by the LIBOR-related, foreign exchange and precious metals regulatory resolutions. We have also undertaken extensive efforts to implement new regulatory requirements and meet heightened expectations.

Credit Suisse and UBS have become the target of lawsuits, and may become the target of further litigation, in connection with the merger transaction and/or the regulatory and other actions taken in connection with the merger transaction, all of which could result in substantial costs.

We continue to be in active dialogue with regulators concerning the actions we are taking to improve our operational risk management, risk control, anti-money laundering, data management and other frameworks, and otherwise seek to meet supervisory expectations, but there can be no assurance that our efforts will have the desired effects. As a result of this history, our level of risk with respect to regulatory enforcement may be greater than that of some of our peers.

#### Substantial changes in regulation may adversely affect our businesses and our ability to execute our strategic plans

Since the financial crisis of 2008, we have been subject to significant regulatory requirements, including recovery and resolution planning, changes in capital and prudential standards, changes in taxation regimes as a result of changes in governmental administrations, new and revised market standards and fiduciary duties, as well as new and developing environmental, social and governance (ESG) standards and requirements. Notwithstanding attempts by regulators to align their efforts, the measures adopted or proposed for banking regulation differ significantly across the major jurisdictions, making it increasingly difficult to manage a global institution. Regulatory reviews of the events leading to the failures of US banks and the acquisition of Credit Suisse by UBS Group in 2023, as well as regulatory measures to complete the implementation of the Basel 3 standards, may increase capital, liquidity and other requirements applicable to banks, including UBS AG. In addition, Swiss regulatory changes with regard to such matters as capital and liquidity have often proceeded more quickly than those in other major jurisdictions, and Switzerland's requirements for major international banks are among the strictest of the major financial centers. This could put Swiss banks, such as UBS AG, at a disadvantage when competing with peer financial institutions subject to more lenient regulation or with unregulated non-bank competitors.

Our implementation of additional regulatory requirements and changes in supervisory standards, as well as our compliance with existing laws and regulations, continue to receive heightened scrutiny from supervisors. If we do not meet supervisory expectations in relation to these or other matters, or if additional supervisory or regulatory issues arise, we would likely be subject to further regulatory scrutiny, as well as measures that may further constrain our strategic flexibility.

Resolvability and resolution and recovery planning: We have moved significant operations into subsidiaries to improve resolvability and meet other regulatory requirements, and this has resulted in substantial implementation costs, increased our capital and funding costs and reduced operational flexibility. For example, we have transferred all of our US subsidiaries under a US intermediate holding company to meet US regulatory requirements, and have transferred substantially all the operations of Personal & Corporate Banking and Global Wealth Management booked in Switzerland to UBS Switzerland AG to improve resolvability.

These changes create operational, capital, liquidity, funding and tax inefficiencies. Our operations in subsidiaries are subject to local capital, liquidity, stable funding, capital planning and stress testing requirements. These requirements have resulted in increased capital and liquidity requirements in affected subsidiaries, which limit our operational flexibility and negatively affect our ability to benefit from synergies between business units and to distribute earnings to the Group.

Under the Swiss too-big-to-fail (TBTF) framework, we are required to put in place viable emergency plans to preserve the operation of systemically important functions in the event of a failure. Moreover, under this framework and similar regulations in the US, the UK, the EU and other jurisdictions in which we operate, we are required to prepare credible recovery and resolution plans detailing the measures that would be taken to recover in a significant adverse event or in the event of winding down the Group or the operations in a host country through resolution or insolvency proceedings. If a recovery or resolution plan that we produce is determined by the relevant authority to be inadequate or not credible, relevant regulation may permit the authority to place limitations on the scope or size of our business in that jurisdiction, or oblige us to hold higher amounts of capital or liquidity or to change our legal structure or business in order to remove the relevant impediments to resolution.

The authorities in Switzerland and internationally are working on lessons learned from the Credit Suisse and the US regional bank failures, which might result in additional requirements regarding resolution planning and early intervention tools for authorities.

Capital and prudential standards: As an internationally active Swiss systemically relevant bank (an SRB), we are subject to capital and total loss-absorbing capacity (TLAC) requirements that are among the most stringent in the world. Moreover, many of our subsidiaries must comply with minimum capital, liquidity and similar requirements and, as a result, UBS Group AG and UBS AG have contributed a significant portion of their capital and provide substantial liquidity to these subsidiaries. These funds are available to meet funding and collateral needs in the relevant entities, but are generally not readily available for use by the Group as a whole.

We expect our risk-weighted assets (RWA) to further increase as the effective date for additional capital standards promulgated by the Basel Committee on Banking Supervision (the BCBS) draws nearer. In connection with the acquisition of the Credit Suisse Group, FINMA has permitted Credit Suisse entities to continue to apply certain prior interpretations and has provided supervisory rulings on the treatment of certain items for RWA or capital purposes. In general, these interpretations require that UBS phase out the treatment over the next several years. In addition, FINMA has agreed that additional capital requirement applicable to Swiss systemically relevant banks, which is based on market share in Switzerland and leverage ratio denominator (LRD), will not increase as a result of acquisition of the Credit Suisse Group before the end of 2025. The phase-out or end of these periods will likely increase our overall capital requirements upon the planned merger with Credit Suisse AG, which increase may be substantial.

Increases in capital and liquidity standards could significantly curtail our ability to pursue strategic opportunities.

Market regulation and fiduciary standards: Our wealth and asset management businesses operate in an environment of increasing regulatory scrutiny and changing standards with respect to fiduciary and other standards of care and the focus on mitigating or eliminating conflicts of interest between a manager or advisor and the client, which require effective implementation across the global systems and processes of investment managers and other industry participants. For example, we have made material changes to our business processes, policies and the terms on which we interact with these clients in order to comply with SEC Regulation Best Interest, which is intended to enhance and clarify the duties of brokers and investment advisers to retail customers, the Volcker Rule, which limits our ability to engage in proprietary trading, as well as changes in European and Swiss market conduct regulation. Future changes in the regulation of our duties to customers may require us to make further changes to our businesses, which would result in additional expense and may adversely affect our business. We may also become subject to other similar regulations substantively limiting the types of activities in which we may engage or the way we conduct our operations.

In many instances, we provide services on a cross-border basis, and we are therefore sensitive to barriers restricting market access for third-country firms. In particular, efforts in the EU to harmonize the regime for third-country firms to access the European market may have the effect of creating new barriers that adversely affect our ability to conduct business in these jurisdictions from Switzerland. In addition, a number of jurisdictions are increasingly regulating cross-border activities based on determinations of equivalence of home country regulation, substituted compliance or similar principles of comity. A negative determination with respect to Swiss equivalence could limit our access to the market in those jurisdictions and may negatively influence our ability to act as a global firm. For example, the EU declined to extend its equivalence determination for Swiss exchanges, which lapsed as of 30 June 2019.

UBS AG Group experienced cross-border outflows over a number of years as a result of heightened focus by fiscal authorities on cross-border investment and fiscal amnesty programs, in anticipation of the implementation in Switzerland of the global automatic exchange of tax information, and as a result of the measures UBS AG Group has implemented in response to these changes. Further changes in local tax laws or regulations and their enforcement, additional cross-border tax information exchange regimes, national tax amnesty or enforcement programs or similar actions may affect our clients' ability or willingness to do business with us and could result in additional cross-border outflows.

If we experience financial difficulties, FINMA has the power to open restructuring or liquidation proceedings or impose protective measures in relation to UBS Group AG, UBS AG or UBS Switzerland AG, and such proceedings or measures may have a material adverse effect on our shareholders and creditors

Under the Swiss Banking Act, FINMA is able to exercise broad statutory powers with respect to Swiss banks and Swiss parent companies of financial groups, such as UBS Group AG, UBS AG and UBS Switzerland AG, if there is justified concern that the entity is over-indebted, has serious liquidity problems or, after the expiration of any relevant deadline, no longer fulfills capital adequacy requirements. Such powers include ordering protective measures, instituting restructuring proceedings (and exercising any Swiss resolution powers in connection therewith), and instituting liquidation proceedings, all of which may have a material adverse effect on shareholders and creditors or may prevent UBS Group AG, UBS AG or UBS Switzerland AG from paying dividends or making payments on debt obligations.

UBS would have limited ability to challenge any such protective measures, and creditors and shareholders would also have limited ability under Swiss law or in Swiss courts to reject them, seek their suspension, or challenge their imposition, including measures that require or result in the deferment of payments.

If restructuring proceedings are opened with respect to UBS Group AG, UBS AG or UBS Switzerland AG, the resolution powers that FINMA may exercise include the power to: (i) transfer all or some of the assets, debt and other liabilities, and contracts of the entity subject to proceedings to another entity; (ii) stay for a maximum of two business days (a) the termination of, or the exercise of rights to terminate, netting rights, (b) rights to enforce or dispose of certain types of collateral or (c) rights to transfer claims, liabilities or certain collateral, under contracts to which the entity subject to proceedings is a party; and / or (iii) partially or fully write down the equity capital and regulatory capital instruments and, if such regulatory capital is fully written down, write down or convert into equity the other debt instruments of the entity subject to proceedings. Shareholders and creditors would have no right to reject, or to seek the suspension of, any restructuring plan pursuant to which such resolution powers are exercised. They would have only limited rights to challenge any decision to exercise resolution powers or to have that decision reviewed by a judicial or administrative process or otherwise.

Upon full or partial write-down of the equity and regulatory capital instruments of the entity subject to restructuring proceedings, the relevant shareholders and creditors would receive no payment in respect of the equity and debt that is written down, the write-down would be permanent, and the investors would likely not, at such time or at any time thereafter, receive any shares or other participation rights, or be entitled to any write-up or any other compensation in the event of a potential subsequent recovery of the debtor. If FINMA orders the conversion of debt of the entity subject to restructuring proceedings into equity, the securities received by the investors may be worth significantly less than the original debt and may have a significantly different risk profile. In addition, creditors receiving equity would be effectively subordinated to all creditors of the restructured entity in the event of a subsequent winding up, liquidation or dissolution of the restructured entity, which would increase the risk that investors would lose all or some of their investment.

FINMA has significant discretion in the exercise of its powers in connection with restructuring proceedings. Furthermore, certain categories of debt obligations, such as certain types of deposits, are subject to preferential treatment. As a result, holders of obligations of an entity subject to a Swiss restructuring proceeding may have their obligations written down or converted into equity even though obligations ranking on par with such obligations are not written down or converted.

# Developments in sustainability, climate, environmental and social standards and regulations may affect our business and impact our ability to fully realize our goals

We have set ambitious goals for ESG matters. These goals include our ambitions for environmental sustainability in our operations, including carbon emissions, in the business we do with clients and in products that we offer. They also include goals or aspirations for diversity in our workforce and supply chain, and support for the United Nations Sustainable Development Goals. There is substantial uncertainty as to the scope of actions that may be required of us, governments and others to achieve the goals we have set, and many of our goals and objectives are only achievable with a combination of government and private action. National and international standards and expectations, industry and scientific practices, and regulatory taxonomies and disclosure obligations addressing these matters are relatively immature and are rapidly evolving. In addition, there are significant limitations in the data available to measure our climate and other goals. Although we have defined and disclosed our goals based on the standards existing at the time of disclosure, there can be no assurance (i) that the various ESG regulatory and disclosure regimes under which we operate will not come into conflict with one another, (ii) that the current standards will not be interpreted differently than our understanding or change in a manner that substantially increases the cost or effort for us to achieve such goals or (iii) that additional data or methods, whether voluntary or required by regulation, may substantially change our calculation of our goals and ambitions. It is possible that such goals may prove to be considerably more difficult or even impossible to achieve. The evolving standards may also require us to substantially change the stated goals and ambitions. If we are not able to achieve the goals we have set, or can only do so at significant expense to our business, we may fail to meet regulatory expectations, incur damage to our reputation or be exposed to an increased risk of litigation or other adverse action.

While ESG regulatory regimes and international standards are being developed, including to require consideration of ESG risks in investment decisions, some jurisdictions, notably in the US, have developed rules restricting the consideration of ESG factors in investment and business decisions. Under these anti-ESG rules, companies that are perceived as boycotting or discriminating against certain industries may be restricted from doing business with certain governmental entities. Our businesses may be adversely affected if UBS is considered as discriminating against companies based on ESG considerations, or if further anti-ESG rules are developed or broadened.

#### Material weakness of Credit Suisse controls over financial reporting

The Credit Suisse Group delayed its reporting for the year ending 2022 stating that it had identified material weaknesses in its internal controls over financial reporting as a result of which the Credit Suisse Group management had concluded that, as of 31 December 2022, its internal controls over financial reporting were not effective, and for the same reasons, it reached the same conclusion regarding 31 December 2021. A material weakness is a deficiency or a combination of deficiencies in internal controls over financial reporting such that there is a reasonable possibility that a material misstatement of a registrant's financial statements will not be prevented or detected on a timely basis. There is a risk that a material error may not be detected by UBS Group AG's internal control structure that could result in a material misstatement to Credit Suisse's reported financial results, which are consolidated with UBS Group AG's results. Since the acquisition, UBS Group AG has undertaken a review of the processes and systems giving rise to the material weaknesses and the remediation program undertaken. This review is ongoing, and UBS expects to adopt and implement further controls and procedures following the completion of such review and discussions with regulators. Based on this assessment, management believes that, as of 31 December 2023, UBS's internal control over financial reporting was effective. Management has excluded Credit Suisse, which UBS Group AG acquired in 2023, from the scope of its assessment of internal control over financial reporting, as permitted by SEC guidance for acquired businesses. This may affect the UBS AG Group upon the planned merger with Credit Suisse AG.

# Our financial results may be negatively affected by changes to assumptions and valuations, as well as changes to accounting standards

We prepare our consolidated financial statements in accordance with IFRS. The application of these accounting standards requires the use of judgment based on estimates and assumptions that may involve significant uncertainty at the time they are made. This is the case, for example, with respect to the measurement of fair value of financial instruments, the recognition of deferred tax assets (DTAs), the assessment of the impairment of goodwill, expected credit losses and estimation of provisions for litigation, regulatory and similar matters. Such judgments, including the underlying estimates and assumptions, which encompass historical experience, expectations of the future and other factors, are regularly evaluated to determine their continuing relevance based on current conditions. Using different assumptions could cause the reported results to differ. Changes in assumptions, or failure to make the changes necessary to reflect evolving market conditions, may have a significant effect on the financial statements in the periods when changes occur. Estimates of provisions may be subject to a wide range of potential outcomes and significant uncertainty. For example, the broad range of potential outcomes in our legal proceedings in France and in a number of Credit Suisse's legal proceedings increase the uncertainty associated with assessing the appropriate provision. If the estimates and assumptions in future periods deviate from the current outlook, our financial results may also be negatively affected.

Changes to IFRS or interpretations thereof may cause future reported results and financial position to differ from current expectations, or historical results to differ from those previously reported due to the adoption of accounting standards on a retrospective basis. Such changes may also affect our regulatory capital and ratios. For example, the introduction of the ECL regime under IFRS 9 in 2018 fundamentally changed how credit risk arising from loans, loan commitments, guarantees and certain revocable facilities is accounted for. Under the ECL regime, credit loss expenses may increase rapidly at the onset of an economic downturn as a result of higher levels of credit impairments (stage 3), as well as higher ECL from stages 1 and 2, only gradually diminishing once the economic outlook improves. As we observed in 2020, this effect may be more pronounced in a deteriorating economic environment. Substantial increases in ECL could exceed expected loss for regulatory capital purposes and adversely affect our CET1 capital and regulatory capital ratios.

#### We may be unable to maintain our capital strength

Capital strength enables us to grow our businesses and absorb increases in regulatory and capital requirements. Our ability to maintain our capital ratios is subject to numerous risks, including the financial results of our businesses, the effect of changes to capital standards, methodologies and interpretations that may adversely affect the calculation of our capital ratios, the imposition of risk add-ons or capital buffers, and the application of additional capital, liquidity and similar requirements to subsidiaries. Our capital and leverage ratios are driven primarily by RWA, LRD and eligible capital, all of which may fluctuate based on a number of factors, some of which are outside of our control. The results of our businesses may be adversely affected by events arising from other risk factors described herein. In some cases, such as litigation and regulatory risk and operational risk events, losses may be sudden and large.

Our eligible capital may be reduced by losses recognized within net profit or other comprehensive income. Eligible capital may also be reduced for other reasons, including acquisitions that change the level of goodwill, changes in temporary differences related to DTAs included in capital, adverse currency movements affecting the value of equity, prudential adjustments that may be required due to the valuation uncertainty associated with certain types of positions, and changes in the value of certain pension fund assets and liabilities or in the interest rate and other assumptions used to calculate the changes in our net defined benefit obligation recognized in other comprehensive income.

RWA are driven by our business activities, by changes in the risk profile of our exposures, by changes in our foreign currency exposures and foreign exchange rates, and by regulation. For instance, substantial market volatility, a widening of credit spreads, adverse currency movements, increased counterparty risk, deterioration in the economic environment or increased operational risk could result in an increase in RWA. Changes in the calculation of RWA, the imposition of additional supplemental RWA charges or multipliers applied to certain exposures and other methodology changes, as well as the finalization of the Basel III framework and Fundamental Review of the Trading Book promulgated by the BCBS, which are expected to increase our RWA.

The leverage ratio is a balance sheet-driven measure and therefore limits balance sheet-intensive activities, such as lending, more than activities that are less balance sheet intensive, and it may constrain our business even if we satisfy other risk-based capital requirements. Our LRD is driven by, among other things, the level of client activity, including deposits and loans, foreign exchange rates, interest rates, other market factors and changes in required liquidity. Many of these factors are wholly or partly outside of our control.

# The effect of taxes on our financial results is significantly influenced by tax law changes and reassessments of our deferred tax assets and, also, operating losses of certain entities with no associated tax benefit

Our effective tax rate is highly sensitive to our performance, our expectation of future profitability and any potential increases or decreases in statutory tax rates, such as any potential increase or decrease in the US federal corporate tax rate. Furthermore, based on prior years' tax losses and deductible temporary differences, we have recognized DTAs reflecting the probable recoverable level based on future taxable profit as informed by our business plans. If our performance is expected to produce diminished taxable profit in future years, particularly in the US, we may be required to write down all or a portion of the currently recognized DTAs through the income statement in excess of anticipated amortization. This would have the effect of increasing our effective tax rate in the year in which any write-downs are taken. Conversely, if we expect the performance of entities in which we have unrecognized tax losses to improve, particularly in the US or the UK, we could potentially recognize additional DTAs. The effect of doing so would be to reduce our effective tax rate in years in which additional DTAs are recognized and to increase our effective tax rate in future years. Our effective tax rate is also sensitive to any future reductions in statutory tax rates, particularly in the US, which would cause the expected future tax benefit from items such as tax loss carry-forwards in the affected locations to diminish in value. This, in turn, would cause a write-down of the associated DTAs. Conversely, an increase in US corporate tax rates would result in an increase in the Group's DTAs.

We generally revalue our DTAs in the fourth quarter of the financial year based on a reassessment of future profitability taking into account our updated business plans. We consider the performance of our businesses and the accuracy of historical forecasts, tax rates and other factors in evaluating the recoverability of our DTAs, including the remaining tax loss carry-forward period and our assessment of expected future taxable profits over the life of DTAs. Estimating future profitability is inherently subjective and is particularly sensitive to future economic, market and other conditions, which are difficult to predict.

Our results in past years have demonstrated that changes in the recognition of DTAs can have a very significant effect on our reported results. Any future change in the manner in which UBS AG remeasures DTAs could affect UBS AG's effective tax rate, particularly in the year in which the change is made.

Our full-year effective tax rate would be impacted if aggregate tax expenses in respect of profits from branches and subsidiaries without loss coverage differ from what is expected, or if certain branches and subsidiaries incur operating losses that we cannot benefit from through the income statement. In particular, operating losses at entities or branches that cannot offset for tax purposes taxable profits in other Group entities, and which do not result in additional DTA recognition, would increase our effective tax rate. In addition, tax laws or the tax authorities in countries where we have undertaken legal structure changes may cause entities to be subject to taxation as permanent establishments or may prevent the transfer of tax losses incurred in one legal entity to newly organized or reorganized subsidiaries or affiliates or may impose limitations on the utilization of tax losses that relate to businesses formerly conducted by the transferor. Were this to occur in situations where there were also limited planning opportunities to utilize the tax losses in the originating entity, the DTAs associated with such tax losses may be required to be written down through the income statement.

Changes in tax law may materially affect our effective tax rate, and, in some cases, may substantially affect the profitability of certain activities. In addition, statutory and regulatory changes, as well as changes to the way in which courts and tax authorities interpret tax laws, including assertions that we are required to pay taxes in a jurisdiction as a result of activities connected to that jurisdiction constituting a permanent establishment or similar theory, and changes in our assessment of uncertain tax positions, could cause the amount of taxes we ultimately pay to materially differ from the amount accrued.

#### We may incur material future tax liabilities in connection with the Credit Suisse Group's merger with the UBS Group

In the past, the Credit Suisse Group has made significant impairments of the tax value of its participations in subsidiaries below their tax acquisition costs. Following the acquisition of the Credit Suisse Group by UBS Group AG, tax acquisition costs of certain participations held by Credit Suisse Group AG and its subsidiaries will be transferred to the UBS AG Group as a result of further company mergers and restructurings. UBS AG and its subsidiaries may become subject to additional Swiss tax on future reversals of such impairments for Swiss tax purposes. Reversals of prior impairments may occur to the extent that the net asset value of the previously impaired subsidiary increases, e.g., as a result of an increase in retained earnings. Although it is difficult to quantify this additional future tax exposure, as various potential mitigants (e.g., transfers of assets and liabilities, business activities, subsidiary investments, as well as other restructuring measures within the combined Group in the course of the integration) exist, it may be material.

#### Liquidity and funding risk

#### Liquidity and funding management are critical to our ongoing performance

The viability of our business depends on the availability of funding sources, and our success depends on our ability to obtain funding at times, in amounts, for tenors and at rates that enable us to efficiently support our asset base in all market conditions. Our funding sources have generally been stable, but could change in the future because of, among other things, general market disruptions or widening credit spreads, which could also influence the cost of funding. A substantial part of our liquidity and funding requirements are met using short-term unsecured funding sources, including retail and wholesale deposits and the regular issuance of money market securities. A change in the availability of short-term funding could occur quickly.

The addition of loss-absorbing debt as a component of capital requirements, the regulatory requirements to maintain minimum TLAC at UBS's holding company and at certain of its subsidiaries, as well as the power of resolution authorities to bail in TLAC instruments and other debt obligations, and uncertainty as to how such powers will be exercised, caused and may still cause further increase of our cost of funding, and could potentially increase the total amount of funding required, in the absence of other changes in our business.

Reductions in our credit ratings may adversely affect the market value of the securities and other obligations and increase our funding costs, in particular with regard to funding from wholesale unsecured sources, and could affect the availability of certain kinds of funding. In addition, as experienced in connection with Moody's Investors Service Ltd. downgrade of UBS AG's long-term debt rating in June 2012, rating downgrades can require us to post additional collateral or make additional cash payments under trading agreements. Our credit ratings, together with our capital strength and reputation, also contribute to maintaining client and counterparty confidence, and it is possible that rating changes could influence the performance of some of our businesses. The acquisition of the Credit Suisse Group has elevated these risks and may cause these risks to intensify. Upon the close the acquisition in June 2023, Fitch Ratings Ireland Limited downgraded the Long-Term Issuer Default Ratings (IDRs) of UBS AG to "A+" from "AA-". Fitch Ratings Ltd also upgraded Credit Suisse AG's Long-Term IDR to "A+" from "BBB+".

The requirement to maintain a liquidity coverage ratio of high-quality liquid assets to estimated stressed short-term net cash outflows, and other similar liquidity and funding requirements, oblige us to maintain high levels of overall liquidity, limit our ability to optimize interest income and expense, make certain lines of business less attractive and reduce our overall ability to generate profits. The liquidity coverage ratio and net stable funding ratio requirements are intended to ensure that we are not overly reliant on short-term funding and that we have sufficient long-term funding for illiquid assets. The relevant calculations make assumptions about the relative likelihood and amount of outflows of funding and available sources of additional funding in market-wide and firm-specific stress situations. In an actual stress situation, however, our funding outflows could exceed the assumed amounts. Further, UBS AG is subject to increased liquidity requirements related to too-big-to-fail (TBTF) measures under the direction of FINMA, which became effective on 1 January 2024.

# Financial and operating performance

Management report

# Accounting and financial reporting

#### **Critical accounting estimates and judgments**

In preparing our financial statements in accordance with IFRS Accounting Standards, as issued by the International Accounting Standards Board (the IASB), we apply judgment and make estimates and assumptions that may involve significant uncertainty at the time they are made. We regularly reassess those estimates and assumptions, which encompass historical experience, expectations of the future and other pertinent factors, to determine their continuing relevance based on current conditions, and update them as necessary. Changes in estimates and assumptions may have significant effects on the financial statements. Furthermore, actual results may differ significantly from our estimates, which could result in significant losses to the Group, beyond what we expected or provided for.

Key areas involving a high degree of judgment and areas where estimates and assumptions are significant to the consolidated financial statements include the following (note references below are found in the "Consolidated financial statements" section of this report):

- expected credit loss measurement (refer to "Note 19 Expected credit loss measurement");
- fair value measurement (refer to "Note 20 Fair value measurement");
- income taxes (refer to "Note 8 Income taxes");
- provisions and contingent liabilities (refer to "Note 17 Provisions and contingent liabilities");
- post-employment benefit plans (refer to "Note 26 Post-employment benefit plans");
- goodwill (refer to Note 12 Goodwill and intangible assets"); and
- consolidation of structured entities (refer to "Note 28 Interests in subsidiaries and other entities").
  - > Refer to "Note 1 Summary of material accounting policies" in the "Consolidated financial statements" section of this report and to the "Risk factors" section of this report for more information

# **UBS AG consolidated performance**

#### Income statement

	For the year ended			% change from
USD m	31.12.23	31.12.22	31.12.21	31.12.22
Net interest income	4,566	6,517	6,605	(30)
Other net income from financial instruments measured at fair value through profit or loss	9,934	7,493	5,844	33
Net fee and commission income	18,610	19,023	22,438	(2)
Other income	566	1,882	941	(70)
Total revenues	33,675	34,915	35,828	(4)
Credit loss expense / (release)	143	29	(148)	386
Personnel expenses	15,655	15,080	15,661	4
General and administrative expenses	11,118	9,001	9,476	24
Depreciation, amortization and impairment of non-financial assets	2,238	1,845	1,875	21
Operating expenses	29,011	25,927	27,012	12
Operating profit / (loss) before tax	4,521	8,960	8,964	(50)
Tax expense / (benefit)	1,206	1,844	1,903	(35)
Net profit / (loss)	3,315	7,116	7,061	(53)
Net profit / (loss) attributable to non-controlling interests	25	32	29	(22)
Net profit / (loss) attributable to shareholders	3,290	7,084	7,032	(54)
Comprehensive income				
Total comprehensive income	4,625	2,719	4,826	70
Total comprehensive income attributable to non-controlling interests	27	18	13	49
Total comprehensive income attributable to shareholders	4,598	2,701	4,813	70

#### Integration-related expenses by business division and Group Items

	For the year ended
USD m	31.12.23
Global Wealth Management	423
Personal & Corporate Banking	123
Asset Management	51
Investment Bank	281
Non-core and Legacy <sup>1</sup>	225
Group Items <sup>1</sup>	289
Total net integration-related expenses	1,392
of which: personnel expenses	626
of which: general and administrative expenses	491
of which depreciation, amortization and impairment of non-financial assets	274
1. Decided and the second and the se	16 5 51 111 1 1 111

<sup>1</sup> During 2023, Non-core and Legacy (previously reported within Group Functions) became a separate reportable segment and Group Functions has been renamed Group Items. Prior periods have been restated to reflect these changes.

## 2023 compared with 2022

#### Results

In 2023, net profit attributable to shareholders decreased by USD 3,794m, or 54%, to USD 3,290m, which included a net tax expense of USD 1,206m.

Operating profit before tax decreased by USD 4,439m, or 50%, to USD 4,521m, reflecting higher operating expenses, lower total revenues and higher net credit loss expenses. Operating expenses increased by USD 3,084m, or 12%, to USD 29,011m and included USD 1,392m of integration-related expenses. This increase was mainly driven by a USD 2,117m increase in general and administrative expenses. Personnel expenses increased by USD 575m and depreciation, amortization and impairment of non-financial assets increased by USD 393m. Net credit loss expenses were USD 143m, compared with USD 29m in 2022. Total revenues decreased by USD 1,240m, or 4%, to USD 33,675m, mainly driven by other income, which decreased by USD 1,316m, largely attributable to the prior year including a gain of USD 848m in Asset Management on the sale of our shareholding in our Japanese real estate joint venture, Mitsubishi Corp.-UBS Realty Inc. Total combined net interest income and other net income from financial instruments measured at fair value through profit and loss increased by USD 489m, partly offset by a USD 413m decrease in net fee and commission income.

Integration-related expenses primarily included higher consulting fees and higher real estate costs in general, as well as administrative expenses and higher personnel expenses, which were mainly due to salaries and variable compensation, related to the integration of Credit Suisse. Integration-related expenses reflected in depreciation, amortization and impairment of non-financial assets were mainly in relation to leasehold improvements and internally developed software.

Integration-related expenses are defined as expenses that are temporary, incremental and directly related to the integration of Credit Suisse into UBS, including costs of internal staff and contractors substantially dedicated to integration activities, retention awards, redundancy costs, incremental expenses from the shortening of useful lives of property, equipment and software, and impairment charges relating to these assets. Classification as integration-related expenses does not affect the timing of recognition and measurement of those expenses or the presentation thereof in the income statement.

#### **Total revenues**

#### Net interest income and other net income from financial instruments measured at fair value through profit or loss

Total combined net interest income and other net income from financial instruments measured at fair value through profit or loss increased by USD 489m to USD 14,500m.

Personal & Corporate Banking increased by USD 955m to USD 3,641m, predominantly driven by an increase in net interest income, mainly driven by higher deposit margins, which resulted from higher interest rates, and higher loan revenues, partly offset by lower deposit fees. The prior year included a benefit from the Swiss National Bank deposit exemption.

Global Wealth Management increased by USD 250m to USD 6,607m, predominantly due to higher net interest income, mainly driven by higher deposit margins, resulting from higher interest rates, partly offset by the effects of shifts to lower-margin deposit products.

The Investment Bank decreased by USD 773m to USD 4,997m, mainly reflecting a USD 1,127m decrease in revenues in Derivatives & Solutions, largely driven by Equity Derivatives, Rates and Foreign Exchange, due to lower levels of both volatility and client activity. This decrease was partly offset by a USD 185m increase in Financing, reflecting higher client balances. In addition, there was a USD 142m increase in Global Banking, mainly due to higher revenues in both Risk Management and Leveraged Capital Markets, reflecting an improvement in mark-to-market.

> Refer to "Note 3 Net interest income and other net income from financial instruments measured at fair value through profit or loss" in the "Consolidated financial statements" section of this report for more information

Net interest income and other net income from financial instruments measured at fair value through profit or loss

	For	the year ended		% change from
USD m	31.12.23	31.12.22	31.12.21	31.12.22
Net interest income from financial instruments measured at amortized cost and fair value through other				
comprehensive income	2,801	5,108	5,168	(45)
Net interest income from financial instruments measured at fair value through profit or loss and other	1,765	1,410	1,437	25
Other net income from financial instruments measured at fair value through profit or loss	9,934	7,493	5,844	33
Total	14,500	14,011	12,449	3
Global Wealth Management	6,607	6,357	5,341	4
of which: net interest income	<i>5,436</i>	<i>5,274</i>	4,244	3
of which: transaction-based income from foreign exchange and other intermediary activity 1	1,171	1,082	1,097	8
Personal & Corporate Banking	3,641	2,686	2,557	36
of which: net interest income	<i>3,128</i>	2, 192	2,120	43
of which: transaction-based income from foreign exchange and other intermediary activity 1	<i>513</i>	495	437	4
Asset Management	(35)	(23)	(13)	51
Investment Bank <sup>2</sup>	4,997	5,770	5,074	(13)
Global Banking	<i>329</i>	187	596	76
Global Markets	4,667	5,582	4,478	(16)
Non-core and Legacy	44	118	7	(63)
Group Items	(755)	(896)	(516)	(16)

1 Mainly includes spread-related income in connection with client-driven transactions, foreign currency translation effects and income and expenses from precious metals, which are included in the income statement line Other net income from financial instruments measured at fair value through profit or loss. The amounts reported on this line are one component of Transaction-based income in the management discussion and analysis of Global Wealth Management and Personal & Corporate Banking" sections of this report, respectively. 2 Investment Bank information is provided at the business line level rather than by financial statement reporting line in order to reflect the underlying business activities, which is consistent with the structure of the management discussion and analysis in the "Investment Bank" section of this report.

#### Net fee and commission income

Net fee and commission income decreased by USD 413m to USD 18,610m.

Investment fund fees decreased by USD 212m to USD 4,730m, driven by Global Wealth Management and Asset Management, mainly reflecting negative market performance.

Net brokerage fees decreased by USD 206m to USD 3,079m, driven by lower levels of client activity in Global Wealth Management and lower market volumes of cash equities in Execution Services in the Investment Bank.

M&A and corporate finance fees decreased by USD 135m to USD 669m, primarily reflecting lower revenues from merger and acquisition transactions in Global Banking in the Investment Bank.

> Refer to "Note 4 Net fee and commission income" in the "Consolidated financial statements" section of this report for more information

#### Other income

Other income decreased by USD 1,316m to USD 566m, largely due to USD 255m of losses relating to our investment in SIX Group. These losses reflected UBS AG's share of impairments taken by SIX Group on its investment in Worldline and on goodwill related to its Bolsas y Mercados Españoles (BME) subsidiary. In contrast, 2022 included gains from disposals of associates and subsidiaries, largely reflecting a gain of USD 848m in Asset Management on the sale of our shareholding in our Japanese real estate joint venture, Mitsubishi Corp.-UBS Realty Inc. In addition, 2022 included gains in Global Wealth Management of USD 133m on the sale of our domestic wealth management business in Spain, USD 86m on the sale of UBS Swiss Financial Advisers AG and USD 41m on the sale of our US alternative investments administration business

- > Refer to "Note 5 Other income" in the "Consolidated financial statements" section of this report for more information
- > Refer to "Note 29 Changes in organization and acquisitions and disposals of subsidiaries and businesses" in the "Consolidated financial statements" section of this report for more information about the gains from disposals of associates and subsidiaries

#### Credit loss expense / release

Total net credit loss expenses were USD 143m, compared with USD 29m in 2022, reflecting net expenses of USD 23m related to stage 1 and 2 positions and USD 120m related to credit-impaired stage 3 positions.

- Refer to "Note 9 Financial assets at amortized cost and other positions in scope of expected credit loss measurement" and "Note 19 Expected credit loss measurement" in the "Consolidated financial statements" section of this report for more information about credit loss expenses / releases
- > Refer to the "Risk factors" section of this report for more information

Credit 1033 expense / (release)	Performing positions	Credit-impaired positions	
USD m	Stages 1 and 2	Stage 3	Total
For the year ended 31.12.23			
Global Wealth Management	(2)	27	25
Personal & Corporate Banking	13	37	50
Asset Management	0	(1)	(1)
Investment Bank	11	56	67
Non-core and Legacy	0	1	1
Group Items <sup>1</sup>	1	0	1
Total	23	120	143
For the year ended 31.12.22 <sup>2</sup>			
Global Wealth Management	(5)	5	0
Personal & Corporate Banking	27	12	39
Asset Management	0	0	0
Investment Bank	6	(18)	(12)
Non-core and Legacy	0	2	2
Group Items <sup>1</sup>	0	0	0
Total	29	0	29
For the year ended 31.12.21			
Global Wealth Management	(28)	(1)	(29)
Personal & Corporate Banking	(62)	(24)	(86)
Asset Management	0	1	1
Investment Bank	(34)	0	(34)
Non-core and Legacy	0	0	0
Group Items <sup>1</sup>	0	0	0
Total	(123)	(25)	(148)

<sup>1</sup> Starting with the third quarter of 2023, Non-core and Legacy became a separate reportable segment and Group Functions has been renamed Group Items. Prior periods have been restated to reflect these changes. 2 Certain prior-period figures as of or for the quarter ended 30 June 2023 have been restated due to effects of measurement period adjustments in relation to the acquisition of the Credit Suisse Group. Refer to "Note 2 Accounting for the acquisition of the Credit Suisse Group" for more information.

#### **Operating expenses**

#### Personnel expenses

Personnel expenses increased by USD 575m to USD 15,655m and included integration-related expenses of USD 626m. Salaries increased by USD 370m as a result of the integration and also due to salary adjustments, as well as the impact of foreign currency translation effects. Social security costs also increased by USD 105m.

> Refer to "Note 6 Personnel expenses," "Note 26 Post-employment benefit plans" and "Note 27 Employee benefits: variable compensation" in the "Consolidated financial statements" section of this report for more information

#### General and administrative expenses

General and administrative expenses increased by USD 2,117m to USD 11,118m, which included integration-related expenses of USD 491m, largely reflected in higher consulting and real estate costs. In addition, there was a USD 939m increase in shared services costs charged by other subsidiaries of UBS Group AG, as well as a USD 468m increase in expenses for litigation, regulatory and similar matters, driven by a USD 665m increase in provisions recognized in the first quarter of 2023 related to the US residential mortgage-backed securities litigation matter. Technology costs increased by USD 56m.

We believe that the industry continues to operate in an environment in which expenses associated with litigation, regulatory and similar matters will remain elevated for the foreseeable future, and we continue to be exposed to a number of significant claims and regulatory matters. The outcome of many of these matters, the timing of a resolution, and the potential effects of resolutions on our future business, financial results or financial condition are extremely difficult to predict.

> Refer to "Note 7 General and administrative expenses" and "Note 17 Provisions and contingent liabilities" in the "Consolidated financial statements" section of this report for more information

#### Depreciation, amortization and impairment of non-financial assets

Depreciation, amortization and impairment of non-financial assets increased by USD 393m to USD 2,238m and included integration-related expenses of USD 274m, primarily relating to a USD 214m impairment of software projects in progress resulting from a reprioritization of software development activity in the context of the integration of Credit Suisse. Excluding the aforementioned effects, depreciation of internally developed software increased by USD 143m, reflecting a higher level of capitalized costs.

**Operating expenses** 

	F	For the year ended		
USD m	31.12.23	31.12.22	31.12.21	31.12.22
Personnel expenses	15,655	15,080	15,661	4
of which: salaries	<i>5,898</i>	<i>5,528</i>	<i>5,723</i>	7
of which: variable compensation	7,669	7,636	7,973	0
of which: performance awards	2,841	2,910	2,916	(2)
of which: financial advisors!	4,549	4,508	4,860	1
of which: other	<i>279</i>	217	196	29
of which: other personnel expenses <sup>2</sup>	2,088	1,916	1,965	9
General and administrative expenses	11,118	9,001	9,476	24
of which: net expenses for litigation, regulatory and similar matters	816	348	910	135
of which: other general and administrative expenses	<i>10,302</i>	8,653	8,566	19
Depreciation, amortization and impairment of non-financial assets	2,238	1,845	1,875	21
Total operating expenses	29,011	25,927	27,012	12

<sup>1</sup> Consists of cash and deferred compensation awards and is based on compensable revenues and firm tenure using a formulaic approach. It also includes expenses related to compensation commitments with financial advisors entered into at the time of recruitment that are subject to vesting requirements. 2 Consists of expenses related to contractors, social security, post-employment benefit plans, and other personnel expenses. Refer to "Note 6 Personnel expenses" in the "Consolidated financial statements" section of this report for more information.

#### Tax

Income tax expenses of USD 1,206m were recognized for UBS AG in 2023, representing an effective tax rate of 26.7%, compared with USD 1,844m for 2022, which represented an effective tax rate of 20.6%. The income tax expenses for 2023 included Swiss tax expenses of USD 849m and non-Swiss tax expenses of USD 356m.

The Swiss tax expenses included current tax expenses of USD 810m in respect of taxable profits of UBS Switzerland AG and other Swiss entities and deferred tax expenses of USD 39m.

The non-Swiss tax expenses included current tax expenses of USD 618m that related to expenses of USD 100m in respect of US corporate alternative minimum tax (CAMT) and USD 518m in respect of other taxable profits of non-Swiss subsidiaries and branches. These were partly offset by a net deferred tax benefit of USD 262m that primarily related to a benefit of USD 274m in respect of an increase in deferred tax assets (DTAs) that resulted from an increase in the expected value of future tax deductions for deferred compensation awards due to an increase in the Group's share price during the year. In addition, the net deferred tax benefit included a benefit of USD 100m in respect of the recognition of DTAs for tax credits carried forward in respect of CAMT. These benefits were partly offset by a net deferred tax expense of USD 112m that primarily related to the amortization of DTAs previously recognized in relation to tax losses carried forward.

Excluding any potential effects from the remeasurement of DTAs in connection with the business planning process and any material jurisdictional statutory tax rate changes that could be enacted, we expect a tax rate for 2024 of around 24%.

- > Refer to "Note 8 Income taxes" in the "Consolidated financial statements" section of this report for more information
- Refer to the "Risk factors" section of this report for more information

#### Total comprehensive income attributable to shareholders

In 2023, total comprehensive income attributable to shareholders was USD 4,598m, reflecting net profit of USD 3,290m and other comprehensive income (OCI), net of tax, of USD 1,308m.

OCI related to cash flow hedges was USD 1,400m, mainly reflecting net losses on hedging instruments that were reclassified from OCI to the income statement.

Foreign currency translation OCI was USD 849m, mainly due to the significant strengthening of the Swiss franc (10%) and the euro (3%) against the US dollar.

OCI related to own credit on financial liabilities designated at fair value was negative USD 790m, primarily due to a tightening of our own credit spreads.

Defined benefit plan OCI, net of tax, was negative USD 136m. Total net pre-tax OCI related to the Swiss pension plan was negative USD 56m. This reflected losses of USD 1,901m from the defined benefit obligation (DBO) remeasurement, largely offset by an increase in the plan assets of USD 513m and a decrease in the effect of the asset ceiling under IFRS Accounting Standards of USD 1,332m. Total pre-tax OCI related to our non-Swiss pension plans was negative USD 47m, mostly driven by the UK pension plan, which recorded negative net pre-tax OCI of USD 31m. The negative OCI in the UK pension plan reflected a loss from the remeasurement of the DBO of USD 96m, partly offset by a positive return on plan assets of USD 65m.

- > Refer to "Statement of comprehensive income" in the "Consolidated financial statements" section of this report for more information
- > Refer to "Note 20 Fair value measurement" in the "Consolidated financial statements" section of this report for more information about own credit on financial liabilities designated at fair value
- > Refer to "Note 25 Hedge accounting" in the "Consolidated financial statements" section of this report for more information about cash flow hedges of forecast transactions
- > Refer to "Note 26 Post-employment benefit plans" in the "Consolidated financial statements" section of this report for more information about OCI related to defined benefit plans

#### **Sensitivity to interest rate movements**

As of 31 December 2023, we estimated that a parallel shift in yield curves by +100 basis points could lead to a combined increase in annual net interest income from our banking book of approximately USD 1.2bn in the first year after such a shift. Of this increase, approximately USD 0.8bn, USD 0.2bn and USD 0.1bn would result from changes in Swiss franc, US dollar and euro interest rates, respectively. A parallel shift in yield curves by –100 basis points could lead to a combined decrease in annual net interest income of approximately USD 1.2bn in the first year after such a shift, showing similar currency contributions as for the aforementioned increase in rates.

These estimates are based on a hypothetical scenario of an immediate change in interest rates, equal across all currencies and relative to implied forward rates as of 31 December 2023 applied to our banking book. These estimates further assume no change to balance sheet size and product mix, stable foreign exchange rates, and no specific management action. These estimates do not represent a forecast of net interest income variability.

#### **Seasonal characteristics**

Our revenues may show seasonal patterns, notably in the Investment Bank and transaction-based revenues for Global Wealth Management, and typically reflect the highest client activity levels in the first quarter, with lower levels throughout the rest of the year, especially during the summer months and the end-of-year holiday season.

#### **Key figures**

Below we provide an overview of selected key figures of UBS AG consolidated. For further information about key figures related to capital management, refer to the "Capital, liquidity and funding, and balance sheet" section of this report.

#### Cost / income ratio

The cost / income ratio was 86.2%, compared with 74.3%, mainly reflecting an increase in operating expenses and a decrease in total revenues.

#### Return on common equity tier 1 capital

The annualized return on our common equity tier 1 (CET1) capital was 7.6%, compared with 16.8%, reflecting a USD 3,794m decrease in net profit attributable to shareholders and a USD 1.3bn increase in average CET1 capital.

#### CET1 capital

CET1 capital increased by USD 1.2bn to USD 44.1bn as of 31 December 2023, mainly as a result of operating profit before tax of USD 4.5bn, with associated current tax expenses of USD 1.4bn, positive foreign currency translation effects of USD 0.9bn, and a net increase of USD 0.2bn in eligible DTAs on temporary differences, partly offset by dividend accruals of USD 3.0bn.

#### Risk-weighted assets

Risk-weighted assets (RWA) increased by USD 16.2bn to USD 334.0bn, primarily driven by increases of USD 12.7bn due to asset size and other movements and USD 8.0bn due to currency effects, partly offset by a decrease of USD 4.6bn due to model updates and methodology changes.

#### CET1 capital ratio

Our CET1 capital ratio decreased to 13.2% from 13.5%, reflecting a USD 16.2bn increase in RWA, partly offset by the aforementioned increase in CET1 capital.

#### Leverage ratio denominator

The leverage ratio denominator (the LRD) increased by USD 74.8bn to USD 1,104.4bn, primarily driven by increases from asset size and other movements of USD 37.5bn and currency effects of USD 37.3bn.

#### CFT1 leverage ratio

Our CET1 leverage ratio decreased to 4.0% from 4.2%, due to the aforementioned increase in the LRD, partly offset by the increase in CET1 capital.

#### Personnel

The number of personnel employed was 53,925 (workforce count) as of 31 December 2023, a net decrease of 1,013 compared with 31 December 2022. The number of internal personnel employed as of 31 December 2023 was 47,590 (full-time equivalents), a net decrease of 38 compared with 31 December 2022. The number of core external staff was 6,335 (workforce count), a net decrease of 974 compared with 31 December 2022.

Equity,	CET1	capital	and	returns
---------	------	---------	-----	---------

	As of or	As of or for the year ended		
SD m, except where indicated	31.12.23	31.12.22	31.12.21	
Net profit				
Net profit attributable to shareholders	3,290	7,084	7,032	
Equity				
Equity attributable to shareholders	55,234	56,598	58,102	
Less: goodwill and intangible assets	6,265	6,267	6,378	
Tangible equity attributable to shareholders	48,969	50,331	51,724	
Less: other CET1 deductions	4,839	7,402	10,130	
CET1 capital	44,130	42,929	41,594	
Return on equity				
Return on equity (%)	6.0	12.6	12.3	
Return on tangible equity (%)	6.7	14.2	13.9	
Return on CET1 capital (%)	7.6	16.8	17.6	

# Global Wealth Management

#### Global Wealth Management<sup>1</sup>

	As of or for the y	As of or for the year ended	
USD m, except where indicated	31.12.23	31.12.22	31.12.22
Results			
Net interest income	5,436	5,274	3
Recurring net fee income <sup>2</sup>	10,143	10,282	(1
Transaction-based income <sup>2</sup>	3,079	3,137	(2
Other income	(28)	270	
Total revenues	18,631	18,963	(2
Credit loss expense / (release)	25	0	
Operating expenses	14,900	14,069	6
Business division operating profit / (loss) before tax	3,705	4,894	(24)
Performance measures and other information			
Pre-tax profit growth (year-on-year, %) <sup>2</sup>	(24.3)	4.0	
Cost / income ratio (%) <sup>2</sup>	80.0	74.2	
Financial advisor compensation <sup>3</sup>	4,548	4,508	1
Net new money (USD bn) <sup>2</sup>	75.0	40.5	
Invested assets (USD bn) <sup>2</sup>	3,187	2,815	13
Loans, gross (USD bn) <sup>4</sup>	218.3	225.0	(3)
Customer deposits (USD bn) <sup>4</sup>	355.3	348.2	2
Impaired loan portfolio as a percentage of total loan portfolio, gross (%) <sup>2,5</sup>	0.3	0.3	

<sup>1</sup> Comparatives may differ as a result of adjustments following organizational changes, restatements due to the retrospective adoption of new accounting standards or changes in accounting policies, and events after the reporting period. 2 Refer to "Alternative performance measures" in the appendix to this report for the definition and calculation method. 3 Relates to licensed professionals with the ability to provide investment advice to clients in the Americas. Consists of cash and deferred compensation awards and is based on compensable revenues and firm tenure using a formulaic approach. It also includes expenses related to compensation commitments with financial advisors entered into at the time of recruitment that are subject to vesting requirements. Recruitment loans to financial advisors were USD 1,754m as of 31 December 2023. 4 Loans and Customer deposits in this table include customer brokerage receivables and payables, respectively, which are presented in a separate reporting line on the balance sheet. 5 Refer to the "Risk management and control" section of this report for more information about (credit-)impaired exposures. Excludes loans to financial advisors.

## 2023 compared with 2022

#### **Results**

Profit before tax decreased by USD 1,189m, or 24%, to USD 3,705m, mainly driven by higher operating expenses and lower total revenues.

#### Total revenues

Total revenues decreased by USD 332m, or 2%, to USD 18,631m, with decreases in other income, recurring net fee income and transaction-based income, partly offset by increases in net interest income.

Net interest income increased by USD 162m, or 3%, to USD 5,436m, mainly driven by higher deposit margins, resulting from higher interest rates, partly offset by the effects of shifts to lower-margin deposit products.

Recurring net fee income decreased by USD 139m, or 1%, to USD 10,143m, primarily driven by negative market performance.

Transaction-based income decreased by USD 58m, or 2%, to USD 3,079m, mainly driven by lower levels of client activity, particularly in Americas and Asia Pacific.

Other income was negative USD 28m, compared with positive other income of USD 270m, as 2023 included losses of USD 64m related to our investment in SIX Group. The prior year included a USD 133m gain from the sale of our domestic wealth management business in Spain, an USD 86m gain from the sale of UBS Swiss Financial Advisers AG and a USD 41m gain from the sale of our US alternative investments administration business.

#### Credit loss expense / release

Net credit loss expenses were USD 25m, primarily related to stage 3 positions, compared with net expenses of USD 0m in 2022.

#### Operating expenses

Operating expenses increased by USD 831m, or 6%, to USD 14,900m, mostly driven by integration-related expenses associated with the acquisition of the Credit Suisse Group, higher technology expenses and adverse foreign currency effects. These increases were partly offset by lower provisions for litigation, regulatory and similar matters. In addition, 2023 included a charge of USD 60m for the special assessment by the US Federal Deposit Insurance Corporation to recover losses incurred by the Deposit Insurance Fund in connection with the failures of Silicon Valley Bank and Signature Bank.

#### Pre-tax profit growth

Pre-tax profit growth was negative 24.3%, compared with positive 4.0% in 2022.

#### Cost / income ratio

The cost / income ratio increased to 80.0% from 74.2%, reflecting both higher operating expenses and lower total revenues.

#### Invested assets

Invested assets increased by USD 372bn, or 13%, to USD 3,187bn, mainly driven by positive market performance of USD 279bn, net new money inflows of USD 75.0bn and positive foreign currency effects of USD 31bn.

#### Loans

Loans decreased by USD 6.7bn to USD 218.3bn, mainly driven by net new loan outflows of USD 12.6bn, partly offset by positive foreign currency effects.

> Refer to the "Risk management and control" section of this report for more information

#### Customer deposits

Customer deposits increased by USD 7.1bn to USD 355.3bn, mainly driven by positive foreign currency effects and net inflows into fixed-term deposit products. This was partly offset by continued shifts into money market funds and US-government securities.

# Personal & Corporate Banking

Personal & Corporate Banking – in Swiss francs<sup>1</sup>

	As of or for the y	ear ended	% change from
CHF m, except where indicated	31.12.23	31.12.22	31.12.22
Results			
Net interest income	2,804	2,088	34
Recurring net fee income <sup>2</sup>	851	812	5
Transaction-based income <sup>2</sup>	1,179	1,155	2
Other income	(83)	47	
Total revenues	4,751	4,101	16
Credit loss expense / (release)	46	36	27
Operating expenses	2,589	2,359	10
Business division operating profit / (loss) before tax	2,116	1,706	24
Performance measures and other information Pre-tax profit growth (year-on-year, %) <sup>2</sup>	24.1	7.8	
	24.1	7.0	
Cost / income ratio (%) <sup>2</sup>	54.5	57.5	
Net interest margin (bps) <sup>2</sup>	192	147	
Fee and trading income for Corporate & Institutional Clients <sup>2</sup>	847	810	4
Investment products for Personal Banking (CHF bn) <sup>2</sup>	24.4	21.6	13
Net new investment products for Personal Banking (CHF bn) <sup>2</sup>	1.81	1.99	(9)
Active Digital Banking clients in Personal Banking (%) <sup>2,3</sup>	77.9	74.3	
Active Mobile Banking clients in Personal Banking (%) <sup>2</sup>	65.0	56.5	
Active Digital Banking clients in Corporate & Institutional Clients (%) <sup>2</sup>	81.2	80.0	
Loans, gross (CHF bn)	146.8	143.0	3
Customer deposits (CHF bn)	169.6	168.0	1
Impaired loan portfolio as a percentage of total loan portfolio, gross (%) <sup>2,4</sup>	0.9	0.8	

<sup>1</sup> Comparatives may differ as a result of adjustments following organizational changes, restatements due to the retrospective adoption of new accounting standards or changes in accounting policies, and events after the reporting period. 2 Refer to "Alternative performance measures" in the appendix to this report for the definition and calculation method. 3 In 2023, 88.6% of clients of Personal Banking were "activated users" of Digital Banking (i.e., clients who had logged into Digital Banking at least once in the course of their relationship with UBS). 4 Refer to the "Risk management and control" section of this report for more information about (credit-)impaired exposures.

## 2023 compared with 2022

#### **Results**

Profit before tax increased by CHF 410m, or 24%, to CHF 2,116m, mainly reflecting higher total revenues, partly offset by higher operating expenses.

#### Total revenues

Total revenues increased by CHF 650m, or 16%, to CHF 4,751m, reflecting increases across almost all income lines, predominantly in net interest income.

Net interest income increased by CHF 716m to CHF 2,804m, mainly driven by higher deposit margins, which resulted from higher interest rates, and higher loan revenues, partly offset by lower deposit fees. The prior year included a benefit from the Swiss National Bank deposit exemption.

Recurring net fee income increased by CHF 39m to CHF 851m, mainly reflecting higher revenues from account and custody fees.

Transaction-based income increased by CHF 24m to CHF 1,179m, mainly driven by higher income from Corporate & Institutional Clients.

Other income was negative CHF 83m, compared with positive other income of CHF 47m, mainly reflecting losses of CHF 161m related to our investment in SIX Group.

#### Credit loss expense / release

Net credit loss expenses were CHF 46m, primarily related to stage 3 positions, compared with net expenses of CHF 36m in 2022.

#### Operating expenses

Operating expenses increased by CHF 230m, or 10%, to CHF 2,589m, mainly driven by integration-related expenses associated with the acquisition of the Credit Suisse Group, as well as higher technology expenses and accruals for variable compensation.

#### Cost / income ratio

The cost / income ratio decreased to 54.5% from 57.5%, as an increase in total revenues more than offset an increase in operating expenses.

Personal & Corporate Banking - in US dollars1

	As of or for the ye	As of or for the year ended	
USD m, except where indicated	31.12.23	31.12.22	% change from 31.12.22
Results			
Net interest income	3,128	2,192	43
Recurring net fee income <sup>2</sup>	949	852	11
Transaction-based income <sup>2</sup>	1,314	1,212	8
Other income	(105)	48	
Total revenues	5,285	4,304	23
Credit loss expense / (release)	50	39	30
Operating expenses	2,889	2,475	17
Business division operating profit / (loss) before tax	2,346	1,790	31
Pre-tax profit growth (year-on-year, %) <sup>2</sup>	31.1	3.7	
Performance measures and other information			
Cost / income ratio (%) <sup>2</sup>	54.7	57.5	
Net interest margin (bps) <sup>2</sup>	194	146	
Fee and trading income for Corporate & Institutional Clients <sup>2</sup>	943	851	11
Investment products for Personal Banking (USD bn) <sup>2</sup>	29.0	23.4	24
Net new investment products for Personal Banking (USD bn) <sup>2</sup> Active Digital Banking clients in Personal Banking (9/123	2.00	2.11	(5)
Active Digital Banking clients in Personal Banking (%) <sup>2,3</sup>	77.9	74.3	
Active Mobile Banking clients in Personal Banking (%) <sup>2</sup>	65.0	56.5	
	81.2	80.0	
Active Digital Banking clients in Corporate & Institutional Clients (%) <sup>2</sup>	01.2		
Active Digital Banking clients in Corporate & Institutional Clients (%) <sup>2</sup> Loans, gross (USD bn)	174.4	154.7	13
		154.7 181.8	13 11

<sup>1</sup> Comparatives may differ as a result of adjustments following organizational changes, restatements due to the retrospective adoption of new accounting standards or changes in accounting policies, and events after the reporting period. 2 Refer to "Alternative performance measures" in the appendix to this report for the definition and calculation method. 3 In 2023, 88.6% of clients of Personal Banking were "activated users" of Digital Banking (i.e., clients who had logged into Digital Banking at least once in the course of their relationship with UBS). 4 Refer to the "Risk management and control" section of this report for more information about (credit-) impaired exposures.

# Asset Management

#### Asset Management<sup>1</sup>

	As of or for the year ended	d % change from
USD m, except where indicated	<b>31.12.23</b> 31.1	2.22 31.12.2
Results		
Net management fees <sup>2</sup>	1,976 2	2,049 (4
Performance fees	70	64
Net gain from disposals	23	848
Total revenues	<b>2,069</b> 2	2,961 (30
Credit loss expense / (release)	(1)	0
Operating expenses	<b>1,706</b> 1	,565
Business division operating profit / (loss) before tax	<b>364</b> 1	,396 (74
Performance measures and other information		
Pre-tax profit growth (year-on-year, %) <sup>3</sup>	(73.9)	36.5
Cost / income ratio (%) <sup>3</sup>	82.4	52.9
Gross margin on invested assets (bps) <sup>3,4</sup>	18	27
Information by business line / asset class		
Net new money (USD bn) <sup>3</sup>		
Equities	0.2	12.8)
Fixed Income	29.5	36.5
of which: money market	<i>23.6</i>	26.3
Multi-asset & Solutions	3.3	(1.3)
Hedge Fund Businesses	(3.9)	2.3
Real Estate & Private Markets	2.7	0.2
Total net new money excluding associates	31.8	24.8
of which: net new money excluding money market	8.1	(1.6)
Associates <sup>5</sup>	0.5	7.7
Total net new money <sup>4</sup>	32.3	32.5
Invested assets (USD bn) <sup>3</sup>		
Equities	539	456 18
Fixed Income	323	456 18 296 9
of which: money market	131	119 1
Multi-asset & Solutions	180	155 16
Hedge Fund Businesses	54	55 (3
Real Estate & Private Markets	102	102 (
Total invested assets excluding associates	<b>1,199</b> 1	,064 13
of which: passive strategies	<i>540</i>	443 2.
Associates <sup>5</sup>	24	24 (
Total invested assets <sup>4</sup>	<b>1,222</b> 1	,088 12
Information by region		
Invested assets (USD bn) <sup>3</sup>		
Americas	350	298 17
Asia Pacific <sup>4</sup>	153	173 (11
Europe, Middle East and Africa (excluding Switzerland)	314	263 19
Switzerland	405	354 1.
Total invested assets <sup>4</sup>	<b>1,222</b> 1	,088 12
Information by channel		
Invested assets (USD bn) <sup>3</sup>		
Third-party institutional	659	606
Third-party wholesale	126	116
UBS's wealth management businesses	414	342 2
Associates <sup>5</sup>	24	24 (
Total invested assets <sup>4</sup>	<b>1,222</b> 1	,088 12

<sup>1</sup> Comparatives may differ as a result of adjustments following organizational changes, restatements due to the retrospective adoption of new accounting standards or changes in accounting policies, and events after the reporting period. 2 Net management fees include transaction fees, fund administration revenues (including net interest and trading income from lending activities and foreign-exchange hedging as part of the fund services offering), distribution fees, incremental fund-related expenses, gains or losses from seed money and co-investments, funding costs, the negative pass-through impact of third-party performance fees, and other items that are not Asset Management's performance fees. 3 Refer to "Alternative performance measures" in the appendix to this report for the definition and calculation method. 4 Starting with the second quarter of 2023, net new money and invested assets include net new money and invested assets from associates, to better reflect the business strategy. Comparative figures have been restated to reflect this change. 5 The invested assets and net new money amounts reported for associates are prepared in accordance with their local regulatory requirements and practices.

## 2023 compared with 2022

#### **Results**

Profit before tax decreased by USD 1,032m, or 74%, to USD 364m, primarily due to 2022 including a gain of USD 848m from the sale of our shareholding in the Mitsubishi Corp.-UBS Realty Inc. joint venture.

#### Total revenues

Total revenues decreased by USD 892m, or 30%, to USD 2,069m, primarily due to 2022 including the aforementioned gain of USD 848m.

Net management fees decreased by USD 73m, or 4%, to USD 1,976m, mainly reflecting negative market performance and the impact of continued margin compression, partly offset by positive foreign currency effects.

Performance fees increased by USD 6m, or 9%, to USD 70m.

#### Operating expenses

Operating expenses increased by USD 141m, or 9%, to USD 1,706m, mainly reflecting integration-related expenses and adverse foreign currency effects, as well as increases in technology expenses, control function expenses, and outsourcing costs, partly offset by lower personnel expenses.

#### Cost / income ratio

The cost / income ratio increased to 82.4% from 52.9%, reflecting both lower total revenues and higher operating expenses.

#### Invested assets

Invested assets increased by USD 134bn, or 12%, to USD 1,222bn, reflecting positive market performance of USD 97bn, net new money generation of USD 32bn and foreign currency effects of USD 31bn, partly offset by a reduction of USD 26bn, mainly related to the sale of UBS Hana Asset Management Co., Ltd. Excluding money market flows, net new money (excluding associates) was USD 8bn.

## Investment Bank

#### Investment Bank<sup>1</sup>

	As of or for the ye	As of or for the year ended	
USD m, except where indicated	31.12.23	31.12.22	31.12.22
Results			
Advisory	604	733	(18)
Capital Markets	1,001	854	17
Global Banking	1,605	1,587	1
Execution Services	1,561	1,643	(5)
Derivatives & Solutions	2,612	3,665	(29)
Financing	1,981	1,822	9
Global Markets	6,154	7,129	(14)
of which: Equities	4,459	4,970	(10,
of which: Foreign Exchange, Rates and Credit	1,694	2,160	(22)
Total revenues	7,759	8,717	(11)
Credit loss expense / (release)	67	(12)	
Operating expenses	7,588	6,890	10
Business division operating profit / (loss) before tax	104	1,839	(94)
Performance measures and other information	(2.2)	45.5.4	
Pre-tax profit growth (year-on-year, %) <sup>2</sup>	(94.3)	(29.0)	
Cost / income ratio (%) <sup>2</sup>	97.8	79.0	
Average VaR (1-day, 95% confidence, 5 years of historical data)	14	10	36

<sup>1</sup> Comparatives may differ as a result of adjustments following organizational changes, restatements due to the retrospective adoption of new accounting standards or changes in accounting policies, and events after the reporting period. 2 Refer to "Alternative performance measures" in the appendix to this report for the definition and calculation method.

### 2023 compared with 2022

#### **Results**

Profit before tax decreased by USD 1,735m, or 94%, to USD 104m, mainly reflecting lower total revenues and higher operating expenses.

#### Total revenues

Total revenues decreased by USD 958m, or 11%, to USD 7,759m, reflecting lower revenues in Global Markets, partly offset by higher revenues in Global Banking.

#### Global Banking

Global Banking revenues increased by USD 18m, or 1%, to USD 1,605m, as higher Capital Markets revenues were almost entirely offset by lower Advisory revenues. Fee-pool-comparable revenues<sup>1</sup> decreased 13%, compared with a 16% decrease in the overall global fee pool.<sup>2</sup>

Advisory revenues decreased by USD 129m, or 18%, to USD 604m, mostly due to lower merger and acquisition transaction revenues, which decreased by USD 125m, or 19%, compared with a 25% decrease in the relevant global fee pool.<sup>2</sup>

Capital Markets revenues increased by USD 147m, or 17%, to USD 1,001m, mainly due to prior-year mark-to-market losses of USD 86m in Leveraged Capital Markets, which did not recur, and lower mark-to-market losses on a portfolio of instruments used to hedge credit exposure in the Investment Bank's lending and leveraged loan portfolios. Capital Markets fee-pool-comparable revenues<sup>1</sup> decreased 8% year on year, compared with a 7% decrease in the overall global fee pool.<sup>2</sup>

#### Global Markets

Global Markets revenues decreased by USD 975m, or 14%, to USD 6,154m, driven by lower Derivatives & Solutions and Execution Services revenues, partly offset by higher Financing revenues.

Execution Services revenues decreased by USD 82m, or 5%, to USD 1,561m, due to lower market volumes in Cash Equities, partly offset by higher revenues from foreign exchange products that are traded over electronic platforms.

Derivatives & Solutions revenues decreased by USD 1,053m, or 29%, to USD 2,612m, mostly driven by Equity Derivatives, Rates and Foreign Exchange, due to lower levels of both volatility and client activity.

Financing revenues increased by USD 159m, or 9%, to USD 1,981m, reflecting higher client balances.

#### **Equities**

Global Markets Equities revenues decreased by USD 511m, or 10%, to USD 4,459m, mainly driven by lower Equity Derivatives and Cash Equities revenues.

#### Foreign Exchange, Rates and Credit

Global Markets Foreign Exchange, Rates and Credit revenues decreased by USD 466m, or 22%, to USD 1,694m, primarily driven by lower Foreign Exchange and Rates revenues.

#### Credit loss expense / release

Net credit loss expenses were USD 67m, primarily related to stage 3 positions, compared with net releases of USD 12m.

#### Operating expenses

Operating expenses increased by USD 698m, or 10%, to USD 7,588m, mainly driven by integration-related expenses associated with the acquisition of the Credit Suisse Group and higher technology expenses.

#### Cost / income ratio

The cost / income ratio increased to 97.8% from 79.0%, reflecting both lower total revenues and higher operating expenses.

<sup>1</sup> UBS fee-pool-comparable revenues consist of revenues from: merger-and-acquisition-related transactions; Equity Capital Markets, excluding derivatives; Leveraged Capital Markets, excluding the impact of mark-to-market movements on loan portfolios; and Debt Capital Markets, excluding revenues related to debt underwriting of UBS instruments.

2 Source: Dealogic, as of 29 December 2023.

# Non-core and Legacy

#### Non-core and Legacy<sup>1</sup>

	As of or for the	As of or for the year ended	
USD m	31.12.23	31.12.22	31.12.22
Results			
Total revenues	59	237	(75)
Credit loss expense / (release)	1	2	
Operating expenses	1,010	104	867
Operating profit / (loss) before tax	(952)	131	

<sup>1</sup> Starting with the third quarter of 2023, Non-core and Legacy represents a separate reportable segment, which includes Non-core and Legacy Portfolio previously reported within Group Functions. Prior periods have been revised to reflect this presentational change. Additionally, a small amount of exposure of pre-integration UBS business divisions was included in Non-core and Legacy starting with the third quarter of 2023, as it was assessed as not strategic in light of the acquisition of the Credit Suisse Group.

## 2023 compared with 2022

#### **Results**

Loss before tax was USD 952m, compared with a profit before tax of USD 131m.

#### Total revenues

Total revenues decreased by USD 178m, or 75%, to USD 59m, mainly due to a USD 112m decrease in valuation gains on our portfolios of auction rate securities, US real estate finance and residential mortgage-backed securities, as well as a USD 36m write-down on legacy inflation-linked assets due to a leasehold reform bill. In addition, 2022 included income of USD 62m related to a legacy litigation settlement.

#### Operating expenses

Operating expenses increased by USD 906m to USD 1,010m, largely reflecting an increase of USD 665m in provisions related to the US residential mortgage-backed securities litigation matter, integration-related expenses of USD 225m and a USD 24m increase in personnel expenses.

## Group Items

#### Group Items<sup>1</sup>

	As of or for the	year ended	% change from
USD m	31.12.23	31.12.22	31.12.22
Results			
Total revenues	(128)	(267)	(52)
Credit loss expense / (release)	1	0	
Operating expenses	919	823	12
Operating profit / (loss) before tax	(1,048)	(1,091)	(4)

<sup>1</sup> Starting with the third quarter of 2023, Group Functions has been renamed Group Items, and Non-core and Legacy Portfolio, which was previously reported within Group Functions, was included in Non-core and Legacy, which represents a separate reportable segment. Prior periods have been revised to reflect these presentational changes.

## 2023 compared with 2022

#### **Results**

Loss before tax was USD 1,048m, compared with a loss of USD 1,091m.

Income from Group hedging and own debt, including hedge accounting ineffectiveness, was net positive USD 2m, compared with net negative income of USD 471m. Income related to centralized Group Treasury risk management was positive USD 107m, compared with negative USD 41m in 2022.

In addition, 2023 included integration-related expenses of USD 289m associated with the acquisition of the Credit Suisse Group, an increase of USD 273m in funding costs related to deferred tax assets and a USD 17m decrease in net gains on properties held for sale.

# Risk, capital, liquidity and funding, and balance sheet

Management report

## Audited information according to IFRS 7 and IAS 1

Risk and capital disclosures provided in line with the requirements of IFRS 7, *Financial Instruments: Disclosures*, and IAS 1, *Presentation of Financial Statements*, form part of the financial statements included in the "Consolidated financial statements" section of this report and are audited by the independent registered public accounting firm Ernst & Young Ltd, Basel. This information is marked as "Audited" within this section of the report.

## Signposts

The Audited I signpost that is displayed at the beginning of a section, table or chart indicates that those items have been audited. A triangle symbol  $- \triangle -$  indicates the end of the audited section, table or chart.

# Risk management and control

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# Risk management and control

## Overview of risks arising from our business activities

#### Key risks by business division and Group Items

<b>Business divisions and Group Items</b>	Key financial risks arising from business activities
Global Wealth Management	<b>Credit risk</b> from collateralized lending primarily against securities, private equity and hedge fund interest, investors' uncalled capital commitments, and residential and commercial real estate, as well as from derivatives trading.
	<b>Market risk</b> from municipal securities and taxable fixed-income securities. Interest rate risk in the banking book related to Global Wealth Management is transferred to and managed by Group Treasury.
Personal & Corporate Banking	Credit risk from mortgages (owner-occupied and income-producing), secured and unsecured corporate lending, commodity trade finance, trade and export finance, and lending to banks and other regulated clients, as well as a small amount of derivatives trading activity.
	Minimal contribution to <b>market risk</b> . Interest rate risk in the banking book related to Personal & Corporate Banking is transferred to and managed by Group Treasury.
Asset Management	Credit risk and market risk on client assets invested in Asset Management funds can impact management and performance fees and cause heightened fund outflows, liquidity risk and losses on our seed capital and co-investments.
	Small amounts of credit and market risk for on-balance sheet items.
Investment Bank	<b>Credit risk</b> from lending (take-and-hold, as well as temporary loan underwriting activities), derivatives trading and securities financing.
	Market risk from primary underwriting activities and secondary trading.
Non-core and Legacy	<b>Credit risk</b> and <b>market risk</b> arise from exposures in auction rate preferred securities, public finance loans and derivatives, as well as residual exposures to securitized products.
Group Items	<b>Credit</b> and <b>market risk</b> arising from management of UBS AG's balance sheet, capital, profit or loss and liquidity portfolios.
	Structural risk arising from asset and liability management and liquidity and funding risk (managed by Group Treasury).

**Non-financial risks** consist of compliance risks (including employment and conduct risks), financial crime, operational risk (including model risks and cyberand information-security risks), legal risks and reputational risks. These are an inevitable consequence of being in business and can arise as a result of our past and current business activities across all business divisions and Group Items.

> Refer to "Risk categories" in this section for more information about other financial and non-financial risks relevant to UBS AG

#### **Key risk developments**

Upon legal close of the acquisition of the Credit Suisse Group by UBS Group, UBS has applied prudent risk management practices to the material risks of the combined organization, and continued to apply these practices at the UBS AG entity level. UBS AG's risk management and control practices and frameworks remained in line with those of the UBS Group. UBS AG's risk governance continued to operate along our three lines of defense.

2023 was a challenging year for the global economy and most markets, stage 3 net expenses of USD 120m were recognized in a number of defaulted positions across our business divisions and a USD 0.5bn increase in credit-impaired exposure to USD 3.0bn was observed. Overall, we saw a USD 48bn increase in banking product exposure driven by Group Items and Personal & Corporate Banking while exposure in Global Wealth Management decreased. Traded product exposures saw an increase of USD 1.4bn across our business divisions. Market risk remained at low levels, as a result of our continued focus on managing tail risks.

# Risk categories

UBS AG categorizes the risk exposures of the business divisions and Group Items in line with the UBS Group as outlined in the table below. The risk appetite framework is designed to capture all risk categories.

> Refer to "Risk appetite framework" in this section for more information

	Risk managed by	Independent oversight by
inancial risks		
Audited   Credit risk: the risk of loss resulting from the failure of a client or counterparty to meet its contractual obligations toward UBS AG. This includes settlement risk, loan underwriting risk and step-in risk.	Business divisions	Risk Control
<b>Settlement risk:</b> the risk of loss resulting from transactions that involve exchange of value (e.g., security versus cash) where we must deliver without first being able to determine with certainty that we will receive the consideration.		
<b>Loan underwriting risk:</b> the risk of loss arising during the holding period of financing transactions that are intended for further distribution.		
<b>Step-in risk:</b> the risk that UBS AG may decide to provide financial support to an unconsolidated entity that is facing stress in the absence of, or in excess of, any contractual obligations to provide such support.		
Audited   Market risk (traded and non-traded): the risk of loss resulting from adverse movements in market variables. Market variables include observable variables, such as interest rates, foreign exchange rates, equity prices, credit spreads and commodity (including precious metal) prices, as well as variables that may be unobservable or only indirectly observable, such as volatilities and correlations. Market risk includes issuer risk and investment risk.	Business divisions and Group Treasury	Risk Control
<b>Issuer risk:</b> the risk of loss that would occur if an issuer to which we are exposed through tradable securities or derivatives referencing the issuer was subject to a credit-related event.		
Investment risk: issuer risk associated with positions held as financial investments. ▲		
<b>Country risk:</b> the risk of loss resulting from country-specific events. This includes the risk of sovereign default and also transfer risk, which involves a country's authorities preventing or restricting the payment of an obligation, as well as systemic risk events arising from country-specific political or macroeconomic developments.	Business divisions	Risk Control
Sustainability and climate risk: the risk that UBS AG negatively impacts, or is impacted by, climate change, natural capital, human rights, and other environmental, social and governance matters. Climate risks can arise from either changing climate conditions (physical risks) or from efforts to mitigate climate change (transition risks). Sustainability and climate risks may manifest as credit, market, liquidity, business and non-financial risks for UBS AG, resulting in potential adverse financial, liability and reputational impacts. These risks extend to the value of investments and may also affect the value of collateral (e.g., real estate).	Business divisions	Risk Control
<b>Treasury risk:</b> the risks associated with asset and liability management and our liquidity and funding positions, as well as structural exposures including pension risks.	Group Treasury	Risk Control
Audited   Liquidity risk: the risk that the firm will not be able to efficiently meet both expected and unexpected current and forecast cash flows and collateral needs without affecting either daily operations or the financial condition of the firm.		
Audited I <i>Funding risk:</i> the risk that the firm will be unable, on an ongoing basis, to borrow funds in the market on an unsecured (or even secured) basis at an acceptable price to fund actual or proposed commitments, i.e., the risk that UBS AG's funding capacity is not sufficient to support the firm's current business and desired strategy.		
Interest rate risk in the banking book: the risk to the firm's capital and earnings arising from the adverse effects of interest rate movements on the firm's banking book positions. The risk is transferred from the originating business divisions, i.e., Global Wealth Management and Personal & Corporate Banking, to Group Treasury to risk manage this centrally and benefit from firm-wide netting while leaving the business units with margin management.		
<b>Structural foreign exchange risk:</b> the risk of decreases in our capital due to changes in foreign exchange rates with an adverse translation effect on capital held in currencies other than the US dollar.		
<b>Pension risk:</b> the risk of a negative impact on our capital as a result of deteriorating funded status from decreases in the fair value of assets held in defined benefit pension funds and / or changes in the value of defined benefit pension obligations due to changes in actuarial assumptions (e.g., discount rate, life expectancy, rate of pension increase) and / or changes to plan designs.	Group Treasury and Human Resources	Risk Control and Finance
<b>Business risk:</b> the potential negative impact on earnings from lower-than-expected business volumes and / or margins, to the extent they are not offset by a decrease in expenses. For example, changes in	Business divisions	Risk Control and Finance

	Risk managed by	Independent oversight by
Non-financial risks		
<b>Compliance risk:</b> the risk of failure to comply with laws, rules and regulations, internal policies and procedures, and the firm's Code of Conduct and Ethics.	Business divisions	Group Compliance, Regulatory & Governance (GCRG)
<b>Employment risk:</b> the risks arising from acts inconsistent with laws, rules, regulations or the firm's human resources policies governing employment practices, discrimination, compensation and employee-related taxes and benefits.		Human Resources
<b>Conduct risk:</b> the risk that the conduct of the firm or its individuals unfairly impacts clients or counterparties, undermines the integrity of the financial system or impairs effective competition to the detriment of consumers.		GCRG
<b>Financial crime risk:</b> the risk of failure to prevent financial crime (including money laundering, terrorist financing, sanctions or embargo violations, internal and external fraud, bribery, and corruption).	Business divisions and Financial Crime Prevention	GCRG
<b>Operational risk:</b> the risk resulting from inadequate or failed internal processes, people or systems, or from external causes (deliberate, accidental or natural).	Business divisions	GCRG
<b>Cybersecurity and information security risk:</b> the risk of a malicious internal or external act, or a failure of IT hardware or software, or human error, leading to a material impact on confidentiality, integrity or availability of UBS AG's data or information systems.	Business divisions and the Group Operations and Technology Office	GCRG
<b>Model risk:</b> the risk of adverse consequences (e.g., financial loss, due to legal matters, operational loss, biased business decisions, or reputational damage) resulting from decisions based on incorrect / inadequate or misused model outputs and reports.	Model owner	Risk Control
<b>Legal risk:</b> the risk of: (i) being held liable for a breach of applicable laws, rules or regulations; (ii) being held liable for a breach of contractual or other legal obligations; (iii) an inability or failure to enforce or protect contractual rights or non-contractual rights sufficiently to protect UBS AG's interests; and (iv) being party to a claim or investigated by an external regulator or authority in respect of any of the above (and the risk of loss of attorney–client privilege in the context of any such claim).	Business divisions	Legal
<b>Reputational risk:</b> the risk of an unfavorable perception of UBS AG or a decline in the firm's reputation from the point of view of clients, shareholders, regulators, employees or the general public, which may lead to potential financial loss and / or loss of market share.	All businesses and functions	All control functions

## Top and emerging risks

The top and emerging risks disclosed below reflect those that we currently think have the potential to materialize within one year and which could significantly affect UBS AG. Investors should also carefully review all information set out in the "Risk factors" section of this report, where we discuss these and other material risks that we consider could have an effect on our ability to execute our strategy and may affect our business activities, financial condition, results of operations and business prospects.

- UBS AG remains watchful of a range of geopolitical developments and political changes in a number of countries, as well as international tensions arising from the Russia–Ukraine war, conflicts in the Middle East and US–China trade relations. Geopolitical tensions will continue to create uncertainty and complicate the energy price outlook. UBS AG is closely watching elections in several key markets in 2024.
- Inflation has abated to some extent in major Western economies, though there are still concerns regarding future developments, and central banks' monetary policy is in the spotlight. The potential for "higher-for-longer" interest rates raises the prospect of a global recession, particularly as the growth of China's economy has been muted. This combination of factors translates into a more uncertain and volatile environment, which increases the risk of financial market disruption.
- UBS AG is exposed to a number of macroeconomic issues, as well as general market conditions. As noted in "Market, credit and macroeconomic risks" in the "Risk factors" section of this report, these external pressures may have a significant adverse effect on our business activities and related financial results, primarily through reduced margins and revenues, asset impairments and other valuation adjustments. Accordingly, these macroeconomic factors are considered in the development of stress-testing scenarios for our ongoing risk management activities.
- UBS AG is monitoring the downturn in the commercial real estate sector. Adverse effects on valuations from higher interest rates and structural decline in demand for office and retail space may trigger broader impacts given bank and non-bank lenders' material balance sheet exposure to the sector.
- We are exposed to substantial changes in the regulation of our businesses that could have a material adverse effect on our business, as discussed in the "Regulatory and legal developments" section of this report and in "Regulatory and legal risks" in the "Risk factors" section of this report.

- As a global financial services firm, we are subject to many different legal, tax and regulatory regimes and extensive regulatory oversight. We are exposed to significant liability risk, and we are subject to various claims, disputes, legal proceedings and government investigations, as noted in "Regulatory and legal risks" in the "Risk factors" section of this report. Information about litigation, regulatory and similar matters we consider significant is disclosed in "Note 17 Provisions and contingent liabilities" in the "Consolidated financial statements" section of this report.
- Global geopolitical trends increase the likelihood of external state-driven cyber activity. Alongside a general trend toward more sophisticated forms of ransomware and other cyber threats, there is a risk of business disruption or the corruption or loss of data. Additionally, as a result of the dynamic and material nature of recent geopolitical and environmental events and the operational complexity of all our businesses, we are continually exposed to operational resilience scenarios such as process error, failed execution, system failures and fraud.
- Conduct risks are inherent in our businesses. Achieving fair outcomes for our clients, upholding market integrity and cultivating the highest standards of employee conduct are of critical importance to us. Management of conduct risks is an integral part of our risk management framework.
- Financial crime (including money laundering, terrorist financing, sanctions violations, fraud, bribery and corruption) presents significant risk. Heightened regulatory expectations and attention require investment in people and systems, while emerging technologies and changing geopolitical risks further increase the complexity of identifying and preventing financial crime.
  - > Refer to "Non-financial risk" in this section and "Strategy, management and operational risks" in the "Risk factors" section of this report for more information
- Sustainability and climate risks continue to be in the focus of regulators and stakeholders, with further emphasis put
  on measurement of nature-related risk and management of greenwashing risks in 2023. To address these emerging
  risks, UBS has enhanced its nature-related risk methodology and established guidelines for sustainable lending, bonds
  and greenhouse gas emissions trading to address potential greenwashing risks.
  - > Refer to "Sustainability and climate risk" in the "Risk management and control" section of the UBS Group Annual Report 2023, available under "Annual reporting" at *ubs.com/investors*, for more information
  - Property of the UBS Group Sustainability Report 2023, available under "Annual reporting" at ubs.com/investors, for a full description of our sustainability and climate risk policy framework
- In addition, industry guidelines and regulations are emerging simultaneously in various jurisdictions, leading to an increased risk of divergence, which in turn increases the risk that UBS may not comply with all relevant regulations.
  - Refer to the "Non-financial risk" section of this report and "Sustainability and climate risk" in the "Risk management and control" section of the UBS Group Annual Report 2023, available under "Annual reporting" at ubs.com/investors
- New risks continue to emerge. For example, client demand for distributed ledger technology, blockchain-based assets and virtual currencies creates new risks, to which we currently have limited exposure and for which relevant control frameworks are continuously enhanced and implemented.

## Risk governance

The risk governance of UBS AG is modeled on that of UBS Group AG, with the same three lines of defense and equal governance structure in terms of key roles and responsibility for risk management.

> Refer to "Risk governance" in the "Risk management and control" section of the UBS Group Annual Report 2023, available under "Annual reporting" at *ubs.com/investors*, for more information about our risk governance and the three lines of defense

## Risk appetite framework

UBS AG manages its risk appetite in line with the UBS Group framework, covering financial and non-financial risk types, via a complementary set of qualitative and quantitative risk appetite statements. The UBS Group framework is reviewed and recalibrated annually and presented to the Board of Directors (the BoD) for approval.

Our risk appetite is defined at the aggregate Group level and reflects the risk that we are willing to accept or wish to avoid. It is set via complementary qualitative and quantitative risk appetite statements defined at a firm-wide level and is embedded throughout our business divisions and legal entities by Group, business division and legal entity policies, limits and authorities. Our risk appetite is reviewed and recalibrated annually, with the aim of ensuring that risk-taking at every level of the organization is in line with our strategic priorities, our capital and liquidity plans, our *Pillars, Principles and Behaviors*, and minimum regulatory requirements. The "Risk appetite framework" chart below shows the key elements of the framework, which is described in detail in this section.

Qualitative risk appetite statements aim to ensure we maintain the desired risk culture. Quantitative risk appetite objectives are designed to enhance the Group's, including UBS AG's, resilience against the effects of potential severe adverse economic or geopolitical events. These risk appetite objectives cover minimum capital and leverage ratios, solvency, earnings, liquidity and funding, and are subject to periodic review, including the yearly business planning process. These objectives are complemented by a standardized set of quantitative firm-wide non-financial risk appetite objectives. Non-financial risk events exceeding predetermined risk tolerances, expressed as percentages of UBS AG's total operating income, must be escalated as per the firm-wide escalation framework.

The quantitative risk appetite objectives are supported by a comprehensive suite of risk limits set at a portfolio level to monitor specific portfolios and to identify potential risk concentrations.

Our risk appetite framework is governed by a single overarching policy and conforms to the Financial Stability Board's Principles for an Effective Risk Appetite Framework.

#### Risk appetite framework

# Risk appetite statements Risk principles, governance, roles and responsibilities Risk management and control principles Code of Conduct and Ethics Total Reward Principles Organization regulations / policies Risk measurement frameworks Authorities and limits Risk reporting and disclosure, including internal, regulatory and external reporting

#### Risk principles and risk culture

Maintaining a strong risk culture is a prerequisite for success in today's highly complex operating environment and a source of sustainable competitive advantage.

Our risk appetite framework combines all the important elements of our risk culture, expressed in our *Pillars, Principles and Behaviors*, our risk management and control principles, our Code of Conduct and Ethics, and our Total Reward Principles. They help to create a solid foundation for promoting risk awareness, leading to appropriate risk-taking and the establishing of robust risk management and control processes. These principles are supported by a range of initiatives covering employees at all levels, for example the *UBS House View on Leadership*, which is a set of explicit expectations that establishes consistent leadership standards across UBS, and our Principles of Good Supervision, which establish clear expectations of managers and employees regarding supervisory responsibilities, specifically: to take responsibility; to know and organize their business; to know their employees and what they do; to create a good risk culture; and to respond to and resolve issues.

- > Refer to "Employees" in the "How we create value for our stakeholders" section in the UBS Group Annual Report 2023 for more information about our Pillars. Principles and Behaviors
- > Refer to the Code of Conduct and Ethics of UBS at ubs.com/code for more information

#### Risk management and control principles

	•
Protection of financial strength	Protecting UBS AG's financial strength by controlling our risk exposure and avoiding potential risk concentrations at individual exposure levels, at specific portfolio levels and at an aggregate firm-wide level across all risk types.
Protection of reputation	Protecting our reputation through a sound risk culture characterized by a holistic and integrated view of risk, performance and reward, and through full compliance with our standards and principles, particularly our Code of Conduct and Ethics.
Business management accountability	Maintaining management accountability, whereby business management owns all risks assumed throughout UBS AG and is responsible for the continuous and active management of all risk exposures to provide for balanced risk and return.
Independent controls	Independent control functions that monitor the effectiveness of the businesses' risk management and oversee risk-taking activities.
Risk disclosure	Disclosure of risks to senior management, the BoD, investors, regulators, credit rating agencies and other stakeholders with an appropriate level of comprehensiveness and transparency.

Whistleblowing policies and procedures exist to encourage an environment where staff are comfortable raising concerns. There are multiple channels via which individuals may, either openly or anonymously, escalate suspected breaches of laws, regulations, rules and other legal requirements, our Code of Conduct and Ethics, policies or relevant professional standards. We are committed to ensuring there is appropriate training and communication to staff and legal entity representatives, including information about new regulatory requirements.

Mandatory training programs cover various compliance-related and risk-related topics, including operational risk and anti-money laundering. Additional specialized training is provided depending on employees' specific roles and responsibilities, e.g., credit risk and market risk training for those working in trading areas.

#### Quantitative risk appetite objectives

Our quantitative risk appetite objectives aim to ensure that our aggregate risk exposure remains within desired risk capacity, based on capital and business plans. The specific definition of risk capacity for each objective is aimed at ensuring we have sufficient capital, earnings, funding and liquidity to protect our businesses and exceed minimum regulatory requirements under a severe stress event. The risk appetite objectives are evaluated during the annual business planning process and approved by the BoD. The comparison of risk exposure with risk capacity is a key consideration in decisions on potential adjustments to the business strategy, risk profile, and the level of capital returns to shareholders.

In the annual business planning process, UBS's business strategy, including that of UBS AG, is reviewed, the risk profile that our operations and activities result in is assessed, and that risk profile is stressed. We use both scenario-based stress tests and economic capital risk measurement techniques to assess the effects of severe stress events at a firm-wide level. These complementary frameworks capture exposures to material risks across our business divisions and Group Items.

For 2023, the following risk appetite objectives were applied to UBS AG.

> Refer to "Risk measurement" in this section for more information about our stress-testing and economic capital measures

#### Quantitative risk appetite objectives

#### Minimum capital objectives

CET1 capital is sufficient to meet minimum RWA-based capital requirements even if a severe stress event were to occur.

#### **Earnings objectives**

Losses do not exceed average historic earnings even if a severe stress event were to occur.

#### Quantitative risk appetite objectives

CET1 capital is sufficient to meet minimum leverage-ratio-based capital requirements even if a severe stress event were to occur.

Minimum leverage ratio objectives

#### Liquidity objectives

Ensure that the firm has sufficient liquidity to survive a severe three-month idiosyncratic and market-wide liquidity stress event without government support, allowing for discrete management actions.

#### Solvency objectives

CET1 capital plus contingent capital is sufficient to ensure that the probability of loss for the firm's debt holders is consistent with the firm's target credit rating.

#### **Funding objectives**

Ensure that the firm has sufficient long-term funding to maintain franchise assets at a constant level under stressed market conditions for up to one year without government support, allowing for discrete management actions.

#### Risk capacity

#### **Projected earnings**

adjusted to reflect business risk

#### Capital

adjusted to reflect stress impact on capitalrelevant elements

# Risk exposure

#### **Economic capital measures**

earnings-at-risk, capital-at-risk, risk-based capital

#### Stress measures

combined stress test

Credit risk

Country risk

Liquidity and funding risk

Market risk<sup>1</sup>

Non-financial risk

Structural foreignexchange risk

Pension risk

# Granular limit framework

1 Includes interest rate risk. Refer to "Risk categories" in this section for more information.

Our risk capacity is underpinned by performance targets and capital guidance as per our business plan. When determining our risk capacity in case of a severe stress event, we estimate projected earnings under stress, factoring in lower expected income and expenses. We also consider capital impacts under stress from deferred tax assets, pension plan assets and liabilities, and accruals for capital returns to shareholders.

Risk appetite objectives define the aggregate risk exposure acceptable at the firm-wide level, given our risk capacity. The maximum acceptable risk exposure is supported by a full set of risk limits, which are cascaded to businesses and portfolios. These limits aim to ensure that our risks remain in line with risk appetite.

Risk appetite statements at the business division level are derived from the firm-wide risk appetite. They may also include division-specific strategic goals related to that division's activities and risks. Risk appetite statements are also set for certain legal entities, which must be consistent with the firm-wide risk appetite framework and approved in accordance with Group and legal entity regulations. Differences may exist that reflect the specific nature, size, complexity and regulations applicable to the relevant legal entity.

# Internal risk reporting

Comprehensive and transparent reporting of risks is central to our risk governance framework's control and oversight responsibilities and required by our risk management and control principles. Accordingly, risks are reported at a frequency and level of detail commensurate with the extent and variability of the risk and the needs of the various governance bodies, regulators and risk authority holders.

The UBS AG Risk Report (formerly the Group Risk Report) provides a detailed qualitative and quantitative monthly overview of developments in financial and non-financial risks at the firm-wide level. The UBS AG Risk Report is distributed internally to the BoD and the Executive Board (EB), and senior members of Risk Control and Group Internal Audit (GIA). Risk reports are also produced for significant UBS AG entities (entities subject to enhanced standards of corporate governance) and significant branches.

Granular divisional risk reports are provided to the respective business division CROs and business division Presidents. This monthly reporting is supplemented with daily or weekly reports, at various levels of granularity, covering market and credit risks for the business divisions to enable risk officers and senior management to monitor and control the Group's risk profile, including that of UBS AG.

Our internal risk reporting covers financial and non-financial risks and is supported by risk data and measurement systems that are also used for external disclosure and regulatory reporting. Dedicated units within Risk Control assume responsibility for measurement, analysis and reporting of risk and for overseeing the quality and integrity of risk-related data. Our risk data and measurement systems are subject to periodic review by GIA, following a risk-based audit approach.

# Model risk management

#### Introduction

We rely on models to inform risk management and control decisions, to measure risks or exposures, value instruments or positions, conduct stress testing, assess adequacy of capital, and manage clients' assets and our own assets. Models may also be used to measure and monitor compliance with rules and regulations, for surveillance activities, or to meet financial or regulatory reporting requirements.

Model risk is defined as the risk of adverse consequences (e.g., financial losses or reputational damage) resulting from incorrect or misused models.

#### **Model governance framework**

Our model governance framework establishes requirements for identifying, measuring, monitoring, reporting, controlling and mitigating model risk. All the models that we use are subject to governance and controls throughout their life cycles, with rigor, depth and frequency determined by the model's materiality and complexity. This is designed to ensure that risks arising from model use are identified, understood, managed, monitored, controlled and reported on both a model-specific and an aggregated level. Before they can be granted approval for use, all our models are independently validated.

Once validated and approved for use, a model is subject to ongoing model monitoring and regular model confirmation, ensuring that the model is only used if it continues to be found fit for purpose. All models are subject to periodic model re-validation.

Our model risk governance framework follows our overarching risk governance framework, with the three lines of defense (LoD) assigned as follows.

- First LoD: individuals responsible for development, maintenance and appropriate use of the models, within business units and Group functions.
- Second LoD: individuals responsible for independent review of and effective challenge to the models, the Model Risk Management & Control function headed by the Chief Model Risk Officer.
- Third LoD: Group Internal Audit

An important difference as compared with how LoD are usually defined in financial and non-financial risk is that some models are owned by traditionally second LoD functions, such as Risk Control, Finance or Compliance.

#### Model risk appetite framework and statement

The model risk appetite framework sets out the model risk appetite statement, defines the relevant metrics and lays out how appropriate adherence is assessed.

#### **Model oversight**

Model oversight committees and forums ensure that model risk is overseen at different levels of the organization, appropriate model risk management and control actions are taken and, where necessary, escalated to the next level.

The Group Model Governance Committee is our most senior oversight and escalation body for all models in scope of our model governance framework. It is co-chaired by the Group CRO and the Group CFO and is responsible for: (i) reviewing and approving changes to the framework; (ii) approving the model risk appetite statement; (iii) overseeing adherence to the UBS model risk governance framework; and (iv) monitoring model risk at a firm-wide level.

# Risk measurement

Audited I We apply a variety of methodologies and measurements to quantify the risks of our portfolios and potential risk concentrations. Risks that are not fully reflected within standard measures are subject to additional controls, which may include preapproval of specific transactions and the application of specific restrictions. Models to quantify risk are generally developed by dedicated units within control functions and are subject to independent validation.

> Refer to "Credit risk," "Market risk" and "Non-financial risk" in this section for more information about model confirmation procedures

The text below describes the scenario-based stress testing and economic capital measures of UBS AG on a consolidated basis during 2023.

#### Stress testing

We perform stress testing to estimate losses that could result from extreme yet plausible macroeconomic and geopolitical stress events to identify, better understand and manage our potential vulnerabilities and risk concentrations. Stress testing has a key role in our limits framework at the firm-wide, business division, legal entity and portfolio levels. Stress-test results are regularly reported to the BoD and the EB. As described in "Risk appetite framework," stress testing, along with economic capital measures, has a central role in our risk appetite and business planning processes.

Our stress-testing framework has three pillars: (i) combined stress tests; (ii) an extensive set of portfolio- and risk-type-specific stress tests; and (iii) reverse stress testing.

The combined stress-testing (CST) framework is scenario-based and aims to quantify overall firm-wide losses that could result from various potential global systemic events. The framework captures all material risks, as covered in "Risk categories." Scenarios are forward-looking and encompass macroeconomic and geopolitical stress events calibrated to different levels of severity. We implement each scenario through the expected evolution of market indicators and economic variables under that scenario and then estimate the overall loss and capital implications were the scenario to occur. Following the existing UBS AG scenario governance, at least once a year, the Risk Committee approves the most relevant scenario, known as the binding scenario, for use as the main scenario for regular CST reporting and for monitoring risk exposure against our minimum capital, earnings and leverage ratio objectives in our risk appetite framework.

We provide detailed stress loss analyses to the Swiss Financial Market Supervisory Authority (FINMA) and regulators of our legal entities in accordance with their requirements.

The Enterprise-wide Stress Forum (the ESF) aims to ensure the consistency and adequacy of the assumptions and scenarios used for firm-wide stress measures. As part of its responsibilities, the ESF, with input from the Think Tank, a panel of senior representatives from the business divisions, Risk Control and Economic Research, seeks to ensure that the set of stress scenarios adequately reflects current and potential developments in the macroeconomic and geopolitical environment, current and planned business activities, and actual or potential risk concentrations and vulnerabilities in our portfolios.

Each scenario captures a wide range of macroeconomic variables, including GDP, equity prices, interest rates, foreign exchange rates, commodity prices, property prices and unemployment. We use assumed changes in these macroeconomic and market variables in each scenario to stress the key risk drivers of our portfolios. We also capture the business risk resulting from lower fee, interest and trading income net of lower expenses. These effects are measured for all businesses and material risk types to calculate the aggregate estimated effect of the scenario on profit or loss, other comprehensive income, risk-weighted assets, the leverage ratio denominator and, ultimately, capital and leverage ratios. The assumed changes in macroeconomic variables are updated periodically to account for changes in the current and possible future market environment.

In 2023, the binding scenario for CST was the internal stagflationary geopolitical crisis scenario. This scenario assumes that a geopolitical event leads to economic regionalization and fears of prolonged stagflation. Central banks signal a firm commitment to price stability and continue to tighten monetary policy, triggering a broad rise in interest rates and impacting economic activity and asset values.

As part of the CST framework, we routinely monitored three additional stress scenarios throughout 2023:

- The global crisis scenario assumes a fall in global trade, which particularly hits China and leads to a hard landing.
   Combined with political, solvency and liquidity concerns, this results in a sharp sell-off of emerging markets sovereign debt and some emerging markets default. The macroeconomic and market impacts amplify concerns about peripheral European sovereign debt, causing Greece and Cyprus to default.
- The global depression scenario explores a global risk-off market with a combination of political, solvency and liquidity concerns around emerging markets sovereign debt, causing several large emerging markets to default. Several European economies also default, and some leave the Eurozone. A negative feedback loop between collapsing demand, declining asset values and commodity prices, and disruption in the banking system leads to a deep and prolonged recession across the globe.
- The US monetary crisis scenario explores a loss of confidence in the US, which leads to a sell-off of US dollar-denominated assets, sparking an abrupt and substantial depreciation of the US dollar. The US economy is hit hard, financial markets enter a period of high volatility and other industrialized countries replicate the cyclical pattern of the US. Regional inflation trends diverge as the US experiences significant inflationary pressures while other developed markets experience deflation.

Portfolio-specific stress tests are measures tailored to the risks of specific portfolios. Our portfolio stress loss measures are derived from data on past events, but also include forward-looking elements (e.g., we derive the expected market movements in our liquidity-adjusted stress metric using a combination of historical market behavior, based on an analysis of historical events, and forward-looking analysis, including consideration of defined scenarios that have never occurred). Results of portfolio-specific stress tests may be subject to limits to explicitly control risk-taking or may be monitored without limits to identify vulnerabilities.

Reverse stress testing starts from a defined stress outcome (e.g., a specified loss amount, reputational damage, a liquidity shortfall or a breach of minimum capital ratios) and works backward to identify macroeconomic scenarios and / or idiosyncratic events that could result in such an outcome. As such, reverse stress testing is intended to complement scenario-based stress tests by assuming "what if" outcomes that could extend beyond the range normally considered, and thereby potentially challenge assumptions regarding severity and plausibility.

We also routinely analyze the effect of increases or decreases in interest rates and changes in the structure of yield curves.

Within Group Treasury, we also perform stress testing to determine the optimal asset and liability structure, enabling us to maintain an appropriately balanced liquidity and funding position under various scenarios. These scenarios differ from those outlined above, because they focus on specific situations that could generate liquidity and funding stress, as opposed to the scenarios used in the CST framework, which focus on the effect on profit or loss and capital.

- > Refer to "Credit risk" and "Market risk" in this section for more information about stress loss measures
- Page 1 Refer to the "Capital, liquidity and funding, and balance sheet" section of this report for more information about stress testing
- > Refer to "Note 19 Expected credit loss measurement" in the "Consolidated financial statements" section of this report for more information about scenarios used for expected credit loss measurement

#### **Economic capital measures**

We complement the scenario-based CST measures with economic capital stress measures to calculate and aggregate risks using statistical techniques to derive stress events at chosen confidence levels.

This framework is used to derive a loss distribution, considering effects on both income and expenses, based on the simulation of historically observed financial and economic risk factors in combination with the firm's actual earnings and relevant risk exposures. From that, we determine earnings-at-risk (EaR), measuring the potential shortfall in earnings (i.e., the deviation from forecast earnings) at a 95% confidence level and evaluated over a one-year horizon. EaR is used for the assessment of the earnings objectives in our risk appetite framework.

We extend the EaR measure, incorporating the effects of gains and losses recognized through other comprehensive income, to derive a distribution of potential effects of stress events on common equity tier 1 capital. From this distribution, we derive our capital-at-risk (CaR) buffer measure at a 95% confidence level to assess our capital and leverage ratio risk appetite objectives, and derive our CaR solvency measure at a 99.9% confidence level to assess our solvency risk appetite objective.

We use the CaR solvency measure as a basis for deriving the contributions of the business divisions to risk-based capital (RBC). RBC measures the potential capital impairment from an extreme stress event at a 99.9% confidence level.

## **Portfolio and position limits**

UBS maintains a comprehensive set of risk limits across its major risk portfolios. These portfolio limits are set based on our risk appetite and periodically reviewed and adjusted as part of the business planning process.

Firm-wide stress and statistical metrics are complemented by more granular portfolio and position limits, triggers and targets. Combining these measures provides a comprehensive framework for control of the key risks of our business divisions, as well as significant legal entities.

UBS AG applies limits to a variety of exposures at the portfolio level, using statistical and stress-based measures, such as value-at-risk, liquidity-adjusted stress, loan underwriting limits, economic value sensitivity and portfolio default simulations for loan books. These are complemented with a set of controls for net interest income sensitivity, mark-to-market losses on available-for-sale portfolios, and the effect of foreign exchange movements on capital and capital ratios.

Portfolio measures are supplemented with counterparty- and position-level controls. Risk measures for position controls are based on market risk sensitivities and counterparty-level credit risk exposures. Market risk sensitivities include sensitivities to changes in general market risk factors (e.g., equity indices, foreign exchange rates and interest rates) and sensitivities to issuer-specific factors (e.g., changes in an issuer's credit spread or default risk). We monitor numerous market and treasury risk controls on a daily basis. Counterparty measures capture the current and potential future exposure to an individual counterparty, considering collateral and legally enforceable netting agreements.

- > Refer to "Credit risk" in this section for more information about counterparty limits
- > Refer to "Risk appetite framework" in this section for more information about the risk appetite framework

#### **Risk concentrations**

Audited I Risk concentrations may exist where one or several positions within or across different risk categories could result in significant losses relative to UBS AG's financial strength. Identifying such risk concentrations and assessing their potential impact is a critical component of our risk management and control process.

For financial risks, we consider a number of elements, such as shared characteristics of positions, the size of the portfolio and the sensitivity of positions to changes in the underlying risk factors. Also important in our assessment is the liquidity of the markets where the positions are traded, as well as the availability and effectiveness of hedges or other potential risk-mitigating factors. This includes an assessment of, for example, the provider of the hedge and market liquidity where the hedge might be traded. Particular attention is given to identification of wrong-way risk and risk on risk. Wrong-way risk is defined as a positive correlation between the size of the exposure and the likelihood of a loss. Risk on risk is when a position and its risk mitigation can be impacted by the same event.

For non-financial risks, risk concentrations may result from, for example, a single operational risk issue that is large on its own (i.e., it has the potential to produce a single high-impact loss or a number of losses that together are high impact) or related risk issues that may link together to create a high impact.

Risk concentrations are subject to increased oversight by Group Risk Control and Group Compliance, Regulatory & Governance, and assessed to determine whether they should be reduced or mitigated, depending on the available means to do so. It is possible that material losses could occur on financial or non-financial risks, particularly if the correlations that emerge in a stressed environment differ markedly from those envisaged by risk models.

- > Refer to "Credit risk" and "Market risk" in this section for more information about the composition of our portfolios
- > Refer to the "Risk factors" section of this report for more information

# Credit risk

#### Audited | Main sources of credit risk

- Global Wealth Management credit risk arises from collateralized lending primarily against securities, private equity and hedge fund interest, investors' uncalled capital commitments, and residential and commercial real estate, as well as from derivatives trading.
- A substantial portion of lending exposure arises from Personal & Corporate Banking, which offers mortgage loans, secured mainly by owner-occupied properties and income-producing real estate, as well as corporate loans, and therefore depends on the performance of the Swiss economy and real estate market.
- The Investment Bank's credit exposure arises mainly from lending, derivatives trading and securities financing.
   Derivatives trading and securities financing are mainly investment grade. Loan underwriting activity can be lower rated and give rise to temporary concentrated exposure.
- Credit risk within Non-core and Legacy relates to exposures in auction rate preferred securities, public finance loans and derivatives, and residual exposures to securitized products. ▲

#### Credit loss expense / release

Total net credit loss expenses were USD 143m in 2023, reflecting net credit loss expenses of USD 23m related to stage 1 and 2 positions and net credit loss expenses of USD 120m related to credit-impaired (stage 3) positions.

Stage 3 net expenses of USD 120m were recognized across a number of defaulted positions, with net expenses of USD 56m in the Investment Bank, USD 37m in Personal & Corporate Banking and USD 27m in Global Wealth Management.

> Refer to "Note 1 Summary of material accounting policies," "Note 9 Financial assets at amortized cost and other positions in scope of expected credit loss measurement" and "Note 19 Expected credit loss measurement" in the "Consolidated financial statements" section of this report for more information about IFRS 9 and expected credit losses

Credit loss expense / (release)

	Performing positions	Credit-impaired positions	
USD m	Stages 1 and 2	Stage 3	Tota
For the year ended 31.12.23	·	•	
Global Wealth Management	(2)	27	25
Personal & Corporate Banking	13	37	50
Asset Management	0	(1)	(1)
Investment Bank	11	56	67
Non-core and Legacy	0	1	1
Group Items <sup>1</sup>	1	0	1
Total	23	120	143
For the year ended 31.12.22			
Global Wealth Management	(5)	5	0
Personal & Corporate Banking	27	12	39
Asset Management	0	0	0
Investment Bank	6	(18)	(12)
Non-core and Legacy	0	2	2
Group Items <sup>1</sup>	0	0	0
Total	29	0	29
For the year ended 31.12.21			
Global Wealth Management	(28)	(1)	(29)
Personal & Corporate Banking	(62)	(24)	(86)
Asset Management	0	1	1
Investment Bank	(34)	0	(34)
Non-core and Legacy	0	0	0
Group Items <sup>1</sup>	0	0	0
Total	(123)	(25)	(148)

<sup>1</sup> Starting with the third quarter of 2023, Non-core and Legacy became a separate reportable segment and Group Functions has been renamed Group Items. Prior periods have been restated to reflect these changes.

## Audited | Overview of measurement, monitoring and management techniques

- Credit risk from transactions with individual counterparties is based on our estimates of probability of default (PD), exposure at default (EAD) and loss given default (LGD). Limits are established for individual counterparties and groups of related counterparties covering banking and traded products, and for settlement amounts. Risk authorities are approved by the Board of Directors and are delegated to the Group CEO, the Group Chief Risk Officer (the CRO) and divisional CROs, based on risk exposure amounts, internal credit rating and potential for losses.
- Limits apply not only to the current outstanding amount but also to contingent commitments and the potential future exposure of traded products.

- The Investment Bank monitoring, measurement and limit framework distinguishes between exposures intended to be held to maturity (take-and-hold exposures) and those intended for distribution or risk transfer (temporary exposures).
- We use models to derive portfolio credit risk measures of expected loss, statistical loss and stress loss at firm-wide and business division levels, and to establish portfolio limits.
- Credit risk concentrations can arise if clients are engaged in similar activities, located in the same geographical region or have comparable economic characteristics, e.g., if their ability to meet contractual obligations would be similarly affected by changes in economic, political or other conditions. To avoid credit risk concentrations, we establish limits / operational controls that constrain risk concentrations at portfolio, sub-portfolio or counterparty levels for sector exposure, country risk and specific product exposures.

#### Credit risk profile of UBS AG

The exposures detailed in this section are based on management's view of credit risk, which differs in certain respects from the ECL measurement requirements of IFRS Accounting Standards.

Internally, credit risk exposures are put into two broad categories: banking products and traded products. Banking products include drawn loans, guarantees and loan commitments, amounts due from banks, balances at central banks, and other financial assets at amortized cost. Traded products include over-the-counter (OTC) derivatives, exchange-traded derivatives (ETDs) and securities financing transactions (SFTs), consisting of securities borrowing and lending, and repurchase and reverse repurchase agreements.

Banking and traded products exposure in our business divisions and Group Items

			-	31.12.23			
	Global	Personal &					
	Wealth	Corporate	Asset	Investment	Non-core	Group	
USD m	Management	Banking	Management	Bank	and Legacy	Items	Total
Banking products <sup>1,2</sup>							
Gross exposure	314,747	254,646	1,331	69,505	3,621	93,730	737,579
of which: loans and advances to customers (on-balance sheet)	213,377	174,425		13,657	<i>168</i>	4,941	406,568
of which: guarantees and loan commitments (off-balance sheet)	<i>12,323</i>	28,385	. 0	15,744	1,728	19,049	77,229
Traded products <sup>2,3</sup>							
Gross exposure	8,789	952	0		34,712		44,454
of which: over-the-counter derivatives	6,668	938	0		8,124		<i>15,730</i>
of which: securities financing transactions	0	0	0		<i>16,792</i>		<i>16,792</i>
of which: exchange-traded derivatives	2,122	14	0		9,796		11,932
Other credit lines, gross <sup>4</sup>	13,438	27,574	0	4,714	0	1,694	47,421
Total credit-impaired exposure, gross (stage 3) <sup>1</sup>	925	1,698	0	331	12	1	2,966
Total allowances and provisions for expected credit losses	224	783	0	225	6	6	1,244
of which: stage 1	<i>74</i>	171	0	<i>57</i>	0	6	308
of which: stage 2	<i>52</i>	165	. 0	<i>56</i>	0	0	272
of which: stage 3	97	448	0	112	6	0	664
				31.12.22			
	Global	Personal &					
	Wealth	Corporate	Asset	Investment	Non-core	Group	
USD m	Management	Banking	Management	Bank	and Legacy	Items	Total
Banking products <sup>1,2</sup>							
Gross exposure	334,715	236,613	1,453	76,593	804	39,786	689,963
of which: loans and advances to customers (on-balance sheet)	219,385	154,748		<i>12,754</i>	0	<i>3,924</i>	390,810
of which: guarantees and loan commitments (off-balance sheet)	13,147	28,610	0	12,920	0	7,486	62,163
Traded products <sup>2,3</sup>							
Gross exposure	8,328	320	0 0		34,370		43,018
of which: over-the-counter derivatives	6,416	304	0		11,218		17,938
of which: securities financing transactions	0	0	0		<i>17,055</i>		17,055
of which: exchange-traded derivatives	1,912	15	0		6,097		8,024
Other credit lines, gross <sup>4</sup>	12,084	23,092	0	6,105	0	2,397	43,677
Total credit-impaired exposure, gross (stage 3) <sup>1</sup>	757	1,380	0	312	0	6	2,455
Total allowances and provisions for expected credit losses	215	701	0	168	0	7	1,091
of which: stage 1	68	138	' 0	48	0	5	260
of which: stage 2	57	156	0	54	0	0	267
of which: stage 3	90	406	0	64	0	<i>3</i>	564

<sup>1</sup> IFRS 9 gross exposure for banking products includes the following financial assets in scope of expected credit loss measurement: balances at central banks, amounts due from banks, loans and advances to customers, other financial assets at amortized cost, guarantees and irrevocable loan commitments. 2 Internal management view of credit risk, which differs in certain respects from IFRS Accounting Standards. 3 As counterparty risk for traded products is managed at counterparty level, no further split between exposures in the Investment Bank, Non-core and Legacy, and Group Items is provided. 4 Unconditionally revocable committed credit lines.

#### **Banking products**

- > Refer to "Note 1 Summary of material accounting policies" in the "Consolidated financial statements" section of this report for more information about our accounting policy for allowances and provisions for ECL
- Refer to "Note 9 Financial assets at amortized cost and other positions in scope of expected credit loss measurement" and "Note 19 Expected credit loss measurement" in the "Consolidated financial statements" section of this report for more information about ECL measurement requirements under IFRS Accounting Standards
- > Refer to "Note 13 Other assets" in the "Consolidated financial statements" section of this report for more details

#### Global Wealth Management

Gross banking products exposure within Global Wealth Management decreased by USD 20bn to USD 315bn.

Our Global Wealth Management loan portfolio is mainly secured by securities (Lombard loans) and by residential real estate. Most of our USD 139bn of Lombard loans, including traded products collateralized by securities, were of high quality, with 91% rated as investment grade based on our internal ratings. Moreover, Lombard loans are typically uncommitted, short-term in nature and can be canceled immediately if the collateral quality deteriorates and margin calls are not met. Lending values in the Lombard book are derived by applying discounts to the pledged collateral's market value in line with a possible adverse change in market value over a given close-out period and confidence level. Less liquid or more volatile collateral will typically have larger haircuts. In 2023, the Lombard book, including traded products, decreased approximately 10%, mainly driven by the US, from a larger amount of clients paying down as a result of the repricing of loans at current rates, and Asia Pacific, where deleveraging already started in the second half of 2021 and had slowed by the end of 2023. The share of non-standard Lombard loans, for example those with less liquid or concentrated collateral, slightly increased to 7% from 5% of the total Lombard book.

The mortgage book (residential and commercial real estate) increased by approximately 9%, mainly driven by higher volumes of mortgage loans within the Swiss and the US residential and commercial real estate portfolios.

Other financings represent approximately 8% of the total banking products exposures and are consolidated in a corporate and other portfolio that increased 17% in 2023, mainly through the private equity subscription facilities portfolio in the US.

> Refer to "Lending secured by real estate" and "Lombard lending" in this section for further information on these types of lending

#### Collateralization of Loans and advances to customers<sup>1</sup>

	Global Wealth Ma	anagement	Personal & Corporate Banking		
USD m, except where indicated	31.12.23	31.12.22	31.12.23	31.12.22	
Secured by collateral	210,243	216,993	157,278	138,854	
Residential real estate	67,910	62,200	126,199	110,500	
Commercial / industrial real estate	5,045	4,955	22,632	19,795	
Cash	24,797	30,514	2,750	3,039	
Equity and debt instruments	96,371	107,253	2,626	2,228	
Other collateral <sup>2</sup>	16,121	12,071	3,071	3,293	
Subject to guarantees	92	144	2,706	2,758	
Uncollateralized and not subject to guarantees	3,042	2,247	14,441	13,136	
Total loans and advances to customers, gross	213,377	219,385	174,425	154,748	
Allowances	(147)	(138)	(634)	(559)	
Total loans and advances to customers, net of allowances	213,230	219,247	173,791	154,189	
Collateralized loans and advances to customers in % of total loans and advances to customers, gross (%)	98.5	98.9	90.2	89.7	

<sup>1</sup> Collateral arrangements generally incorporate a range of collateral, including cash, securities, real estate and other collateral. For the purpose of this disclosure, UBS applies a risk-based approach that generally prioritizes collateral according to its liquidity profile. 2 Includes but is not limited to life insurance contracts, rights in respect of subscription or capital commitments from fund partners, inventory, gold and other commodities.

#### Personal & Corporate Banking

Gross banking products exposure within Personal & Corporate Banking increased to USD 255bn, compared with USD 237bn in 2022. Net banking products exposure (excluding exposure reallocated from Group Treasury) increased to USD 205bn (CHF 173bn), of which approximately 65% was classified as investment grade, broadly unchanged from 2022. Around 48% of the exposure is categorized in the lowest LGD bucket, i.e., 0–25%, unchanged compared with 2022.

Personal & Corporate Banking's gross loan portfolio was USD 174bn (CHF 147bn) compared with USD 155bn (CHF 143bn) in 2022. This portfolio is predominantly denominated in Swiss francs and the increase in US dollar terms was largely due to the effect of the Swiss franc appreciating. As of 31 December 2023, 90% of this portfolio was secured by collateral, mainly residential and commercial property. Of the total unsecured amount, 86% related to cash flow-based lending to corporate counterparties and 3% related to lending to public authorities. Based on our internal ratings, 57% of the unsecured loan portfolio was rated as investment grade, compared with 53% in 2022.

Our Swiss corporate banking products take-and-hold portfolio, which was USD 38bn (CHF 32bn) and increased by USD 2bn compared with 2022, consists of loans, guarantees and loan commitments to multi-national and domestic counterparties. The small and medium-sized entity (SME) portfolio, in particular, is well diversified across industries. However, such companies are reliant on the domestic economy and the economies to which they export, in particular the EU and the US.

Our commodity trade finance portfolio focuses on energy and base-metal trading companies, where the related commodity price risk is hedged to a large extent by the commodity trader. The majority of limits in this business are uncommitted, transactional and short-term in nature. Our portfolio size was USD 6bn (CHF 5bn) as of 31 December 2023, compared with USD 7bn (CHF 7bn) in 2022, with a considerable part of the exposure correlating with commodity prices.

Our exposure to banks consists primarily of contingent claims and was USD 4bn (CHF 3bn), compared with USD 5bn (CHF 5bn) in 2022.

Despite volatile energy prices, raised higher interest rates, a strong Swiss franc, and the effect of the sanctions imposed on Russia and Russian entities, and conflicts in the Middle East, stage 3 credit losses in 2023 were only slightly higher compared with 2022. The delinquency ratio was 0.1% for the corporate portfolio, compared with 0.2% at the end of 2022

#### > Refer to "Credit risk models" in this section for more information about loss given default, rating grades and rating agency mappings

#### Swiss mortgage loan portfolio

UBS AG's Swiss mortgage loan portfolio secured by residential and commercial real estate in Switzerland continues to be its largest loan portfolio. These mortgage loans (excluding loans on self-used commercial real estate), totaling USD 193bn (CHF 162bn), mainly originate from Personal & Corporate Banking, but also from Global Wealth Management Region Switzerland. Of these mortgage loans, USD 174bn (CHF 146bn) related to residential properties that the borrower was either occupying or renting out, with full recourse to the borrower. Of this USD 174bn (CHF 146bn), USD 125bn (CHF 105bn) is related to properties occupied by the borrower, with an average LTV ratio of 50%, compared with 51% as of 31 December 2022. The average LTV for newly originated loans for this portfolio was 64%, compared with 63% in 2022. The remaining USD 49bn (CHF 41bn) of the Swiss residential mortgage loan portfolio related to properties rented out by the borrower and the average LTV of that portfolio was 50%, compared with 51% as of 31 December 2022. The average LTV for newly originated Swiss residential mortgage loans for properties rented out by the borrower was 50%, compared with 54% in 2022.

As illustrated in the "Swiss mortgages: distribution of exposure across exposure segments and loan-to-value (LTV) buckets" table below, 99.9% of the aggregate amount of Swiss residential mortgage loans would continue to be covered by the real estate collateral even if the value assigned to that collateral were to decrease 20%, and more than 99% would remain covered by the real estate collateral even if the value assigned to that collateral were to decrease 30%.

Personal & Corporate Banking: distribution of banking products exposure across internal UBS ratings and loss given default (LGD) buckets<sup>1</sup>

USD m, except where indicated			31.12	.23			31.12.22	
			LGD bu	ckets		Weighted		Weighted
Internal UBS rating <sup>2</sup>	Exposure	0–25%	26–50%	51–75%	76–100%	average LGD (%)	Exposure	average LGD (%)
Investment grade	134,095	72,290	47,689	9,707	4,408	28	123,358	28
Sub-investment grade	70,081	26,759	28,328	11,360	3,634	34	62,219	35
of which: 6–9	<i>63,357</i>	24,467	<i>25,390</i>	10,285	<i>3,215</i>	34	56,774	35
of which: 10–13	6,724	<i>2,293</i>	2,938	1,074	419	<i>36</i>	5,445	36
Defaulted / Credit-impaired	1,698	17	1,389	276	15	42	1,380	42
Total exposure before deduction of allowances and provisions	205,873	99,067	77,406	21,343	8,058	30	186,957	30
Less: allowances and provisions	(742)						(664)	
Net banking products exposure <sup>1</sup>	205,131						186,293	

<sup>1</sup> Excluding balances at central banks and Group Treasury reallocations. 2 The ratings of the major credit rating agencies, and their mapping to our internal rating scale, are shown in the "Internal UBS rating scale and mapping of external ratings" table in this section.

#### Personal & Corporate Banking: loans uncollateralized and not subject to guarantees, by industry sector

	31.1:	2.23	31.12	.22
	USD m	%	USD m	%
Construction	153	1.1	172	1.3
Financial institutions	3,842	26.6	3,980	30.3
Hotels and restaurants	148	1.0	135	1.0
Manufacturing	2,029	14.0	1,715	13.1
Private households	1,641	11.4	1,473	11.2
Public authorities	382	2.6	416	3.2
Real estate and rentals	1,013	7.0	547	4.2
Retail and wholesale	1,801	12.5	2,230	17.0
Services	3,129	21.7	2,242	17.1
Other	303	2.1	226	1.7
Exposure, gross	14,441	100.0	13,136	100.0

#### Swiss mortgages: distribution of exposure across exposure segments and loan-to-value (LTV) buckets<sup>1</sup>

USD bn, except where indicated					31.12	.23				31.12.22
					LTV buckets					
Exposure segment	≤30	≤30%	31–50%	51–60%	61–70%	71–80%	81–100%	>100%	Total	Total
Residential mortgages	Exposure	103.9	42.7	10.3	4.2	1.1	0.2	0.1	162.4	144.0
	as a % of row total	64	26	6	3	1	0	0	100	100
Income-producing real estate	Exposure	17.0	6.5	1.3	0.5	0.1	0.0	0.0	25.5	21.9
	as a % of row total	67	26	5	2	0	0	0	100	100
Corporates	Exposure	7.9	2.9	0.7	0.4	0.2	0.1	0.0	12.2	10.6
	as a % of row total	65	24	6	3	1	1	0	100	100
Other segments	Exposure	0.8	0.3	0.1	0.0	0.0	0.0	0.0	1.1	1.0
	as a % of row total	67	23	6	2	1	1	0	100	100
Mortgage-covered exposure	Exposure	129.5	52.4	12.4	5.1	1.4	0.3	0.1	201.1	177.5
	as a % of total	64	26	6	3	1	0	0	100	100
Mortgage-covered exposure 31.12.22 <sup>2</sup>	Exposure	113.2	46.7	11.4	4.7	1.2	0.3	0.1	177.5	
	as a % of total	64	26	6	3	1	0	0	100	

<sup>1</sup> The amount of each mortgage loan is allocated across the LTV buckets to indicate the portion at risk at the various value levels shown; for example, a loan of 75 with an LTV ratio of 75% (i.e., a collateral value of 100) would result in allocations of 30 in the less-than-or-equal-to-30% LTV bucket, 20 in the 31–50% bucket, 10 in the 51–60% bucket, 10 in the 61–70% bucket and 5 in the 71–80% bucket. 2 Comparative period has been restated to reflect a change in the measure used to disclose Swiss mortgages exposures.

#### **Investment Bank**

The Investment Bank's lending activities are largely associated with corporate and non-bank financial institutions. The business is broadly diversified across industry sectors, but concentrated in North America.

Gross banking products exposure decreased to USD 70bn as of 31 December 2023, compared with USD 77bn as of 31 December 2022, mostly driven by balances at central banks allocated to the business division. Excluding balances at central banks and Group Treasury reallocations, gross banking products exposure increased to USD 37bn from USD 32bn in 2022, mostly driven by an increase in irrevocable loan commitments. Based on our internal ratings, 49% of this gross banking products exposure was classified as investment grade. The vast majority of the gross banking products exposure had an estimated LGD below 50%.

In the Investment Bank, mandated temporary loan underwriting exposure as of the end of 2023 was USD 2.1bn, compared with USD 2.6bn at the end of the prior year. USD 50m of commitments had not yet been distributed as originally planned as of 31 December 2023. Loan underwriting exposures are classified as held for trading, with fair values reflecting market conditions at the end of 2023.

) Refer to "Credit risk models" in this section for more information about LGD, rating grades and rating agency mappings

# Investment Bank: distribution of banking products exposure across internal UBS ratings and loss given default (LGD)

USD m, except where indicated		31.12.23						
			LGD bu	ıckets		Weighted		Weighted
nternal UBS rating <sup>2</sup>	Exposure	0–25%	26–50%	51–75%	76–100%	average LGD (%)	Exposure	average LGD (%)
Investment grade	17,954	4,448	8,652	2,424	2,430	39	15,878	37
Sub-investment grade	18,306	4,838	7,215	6,023	229	22	15,529	23
of which: 6–9	11,644	2,689	2,883	5,874	198	<i>15</i>	9,181	17
of which: 10–13	6,662	2,149	4,332	149	31	<i>33</i>	6,348	32
Defaulted / Credit-impaired	331	286	28	14	4	24	312	21
Banking products exposure <sup>1</sup>	36,591	9,572	15,895	8,461	2,663	30	31,719	30

<sup>1</sup> Excluding balances at central banks and Group Treasury reallocations. 2 The ratings of the major credit rating agencies, and their mapping to our internal rating scale, are shown in the "Internal UBS rating scale and mapping of external ratings" table in this section.

#### Investment Bank: banking products exposure, by geographical region<sup>1</sup>

	31.1	31.12.23		2.22
	USD m	%	USD m	%
Asia Pacific	4,618	12.6	4,766	15.0
Latin America	745	2.0	1,209	3.8
Middle East and Africa	249	0.7	183	0.6
North America	19,901	54.4	15,409	48.6
Switzerland	135	0.4	461	1.5
Rest of Europe	10,943	29.9	9,692	30.6
Exposure <sup>1</sup>	36,591	100.0	31,719	100.0

<sup>1</sup> Excluding balances at central banks and Group Treasury reallocations.

#### Investment Bank: banking products exposure, by industry sector<sup>1</sup>

	31.12.23	31.12.23		
	USD m	%	USD m	%
Banks	5,092	13.9	4,409	13.9
Chemicals	587	1.6	583	1.8
Electricity, gas, water supply	359	1.0	363	1.1
Financial institutions, excluding banks	15,562	42.5	14,595	46.0
Manufacturing	1,889	5.2	1,361	4.3
Mining	894	2.4	878	2.8
Public authorities	258	0.7	259	0.8
Real estate and construction	1,718	4.7	1,685	5.3
Retail and wholesale	2,945	8.0	1,654	5.2
Technology and communications	2,033	5.6	2,324	7.3
Transport and storage	341	0.9	499	1.6
Other	4,913	13.4	3,109	9.8
Exposure <sup>1</sup>	36,591	100.0	31,719	100.0

<sup>1</sup> Excluding balances at central banks and Group Treasury reallocations.

#### Non-core and Legacy

Gross banking products exposure increased by USD 3bn to USD 4bn in 2023 due to smaller amounts of assets of UBS AG business divisions that were assessed as not strategic in light of the acquisition of the Credit Suisse Group.

- > Refer to "Balance sheet assets" in the "Capital, liquidity and funding, and balance sheet" section of this report for more information
- > Refer to the "Our Business" in the "Our strategy, business model and environment" section of this report for more information
- > Refer to the "Non-core and Legacy" in the "Financial and operating performance" section of this report for more information about Non-core and Legacy scope differences between the UBS Group AG and UBS AG

#### **Group Items**

Gross banking products exposure within Group Items, which arises primarily in connection with treasury activities, increased by USD 54bn to USD 94bn, mainly from Group Treasury reflecting higher levels of high-quality liquid assets (HQLA) held, funding provided to Credit Suisse and an increase in sponsored repo clearing.

- > Refer to "Balance sheet assets" in the "Capital, liquidity and funding, and balance sheet" section of this report for more information
- > Refer to the "Group items" section of this report for more information

#### **Traded products**

Audited I Counterparty credit risk (CCR) arising from traded products, which include OTC derivatives, ETD exposures and SFTs, originating in the Investment Bank, Non-core and Legacy, and Group Treasury, is generally managed on a close-out basis. This takes into account possible effects of market movements on the exposure and any associated collateral over the time it would take to close out our positions. Limits are applied to the potential future exposure per counterparty, with the size of the limit dependent on the counterparty's creditworthiness (as determined by Risk Control). Limit frameworks are also used to control overall exposure to specific sectors. Such portfolio limits are monitored and reported to senior management.

Trading in OTC derivatives is conducted through central counterparties where practicable. Where central counterparties are not used, we have clearly defined policies and processes for trading on a bilateral basis. Trading is typically conducted under bilateral International Swaps and Derivatives Association or similar master netting agreements, which generally allow for close-out and netting of transactions in case of default, subject to applicable law. For certain counterparties, initial margin is taken to cover some or all of the calculated close-out exposure. This is in addition to the variation margin taken to settle changes in market value of transactions. For most major market participant counterparties, two-way collateral agreements under which either party can be required to provide collateral in the form of cash or marketable securities are used when the exposure exceeds specified levels. Non-cash collateral typically consists of well-rated government debt or other collateral acceptable to Risk Control and permitted by applicable regulations. Regulations on margining uncleared OTC derivatives have generally expanded the scope of bilateral derivatives activity subject to initial margining and increased the amounts of initial margin received from, and posted to, certain bilateral trading counterparties, resulting in lower close-out risk over time.

In the tables below, OTC derivatives exposures are generally presented as net positive replacement values after the application of legally enforceable netting agreements and the deduction of cash and marketable securities held as collateral. SFT exposures are reported taking into account collateral received, and ETD exposures take into account collateral margin calls.

- > Refer to "Note 10 Derivative instruments" in the "Consolidated financial statements" section of this report for more information about OTC derivatives settled through central counterparties
- > Refer to "Note 21 Offsetting financial assets and financial liabilities" in the "Consolidated financial statements" section of this report for more information about the effect of netting and collateral arrangements on derivative exposures

Investment Bank, Non-core and Legacy, and Group Treasury: traded products exposure

USD m	OTC derivatives	SFTs	ETDs	Total	Total
		31.12.23			31.12.22
Total exposure, before deduction of credit valuation adjustments and hedges	8,124	16,792	9,796	34,712	34,370
Less: credit valuation adjustments and allowances	(24)	(1)	0	(24)	(35)
Less: credit protection bought (credit default swaps, notional)	(83)	0	0	(83)	(109)
Net exposure after credit valuation adjustments, allowances and hedges	8,017	16,792	9,796	34,605	34,226

Investment Bank, Non-core and Legacy, and Group Treasury: distribution of net OTC derivatives and SFT exposure across internal UBS ratings and loss given default (LGD) buckets

USD m, except where indicated			31.1	12.23			31.12.22	
		LGD buckets				Weighted		Weighted
Internal UBS rating <sup>1</sup>	Exposure	0–25%	26–50%	51–75%	76–100%	average LGD (%)	Exposure	average LGD (%)
Net OTC derivatives exposure								
Investment grade	7,307	152	5,681	285	1,189	48	10,757	48
Sub-investment grade	711	43	203	15	450	77	318	72
of which: 6–9	<i>701</i>	<i>39</i>	203	<i>12</i>	448	<i>77</i>	285	76
of which: 10–12	3	2	0	0	1	<i>53</i>	28	41
of which: 13 and defaulted	6	3	0	<i>3</i>	0	<i>31</i>	5	23
Total net OTC derivatives exposure, after credit valuation adjustments and hedges	8,017	195	5,884	299	1,639	51	11,075	49
Net SFT exposure								
Investment grade	16,631	200	15,245	597	590	41	16,682	40
Sub-investment grade	162	0	43	28	91	80	373	71
Total net SFT exposure	16,792	200	15,288	624	680	42	17,055	41

<sup>1</sup> The ratings of the major credit rating agencies, and their mapping to our internal rating scale, are shown in the "Internal UBS rating scale and mapping of external ratings" table in this section.

# Investment Bank, Non-core and Legacy, and Group Treasury: net OTC derivatives and SFT exposure, by geographical region

	No	Net OTC derivatives exposure					Net SFT exposure				
	31.12.23	31.12.23		31.12.22			31.12.22				
	USD m	%	USD m	%	USD m	%	USD m	%			
Asia Pacific	970	12.1	1,249	11.3	2,510	14.9	4,906	28.8			
Latin America	93	1.2	117	1.1	0	0.0	34	0.2			
Middle East and Africa	232	2.9	615	5.6	414	2.5	483	2.8			
North America	3,118	38.9	2,200	19.9	3,044	18.1	3,177	18.6			
Switzerland	900	11.2	1,055	9.5	499	3.0	466	2.7			
Rest of Europe	2,704	33.7	5,839	52.7	10,324	61.5	7,988	46.8			
Exposure	8,017	100.0	11,075	100.0	16,792	100.0	17,055	100.0			

#### Investment Bank, Non-core and Legacy, and Group Treasury: net OTC derivatives and SFT exposure, by industry sector

	N	Net OTC derivatives exposure					Net SFT exposure			
	31.12.23	31.12.23			31.12.23		31.12.22			
	USD m	%	USD m	%	USD m	%	USD m	%		
Banks	1,544	19.3	1,288	11.6	1,200	7.1	869	5.1		
Chemicals	17	0.2	71	0.6	0	0.0	0	0.0		
Electricity, gas, water supply	111	1.4	118	1.1	0	0.0	0	0.0		
Financial institutions, excluding banks	5,721	71.4	8,614	77.8	15,093	89.9	14,865	87.2		
Manufacturing	29	0.4	97	0.9	0	0.0	0	0.0		
Mining	0	0.0	20	0.2	0	0.0	0	0.0		
Public authorities	441	5.5	655	5.9	496	3.0	1,320	7.7		
Retail and wholesale	18	0.2	29	0.3	0	0.0	0	0.0		
Transport, storage and communication	74	0.9	115	1.0	3	0.0	0	0.0		
Other	63	0.8	69	0.6	0	0.0	0	0.0		
Exposure	8,017	100.0	11,075	100.0	16,792	100.0	17,055	100.0		

#### **Credit risk mitigation**

Audited I UBS AG actively manages credit risk in its portfolios by taking collateral against exposures and by utilizing credit hedging.

#### Lending secured by real estate

Audited I UBS AG uses a scoring model as part of a standardized front-to-back process for credit decisions on originating or modifying Swiss mortgage loans. The model's two key factors are the LTV ratio and an affordability calculation.

The calculation of affordability takes into account interest payments, minimum amortization requirements and potential property maintenance costs in relation to gross income or rental income for rental properties. The interest rate is set at 5% per annum in the context of the current environment.

For residential properties occupied by the borrower, the maximum LTV for the standard approval process is 80%. For IPRE, the maximum LTV allowed within the standard approval process ranges from 30% to 75%, depending on the type and age of the property, and the amount of renovation work needed.

Audited I The value assigned to each property is based on the lowest value determined from model-derived valuations, the purchase price, an asset value for income-producing real estate (IPRE), and, in some cases, an additional external valuation.

Separate models provided by a market-leading external vendor are used to derive property valuations for owner-occupied residential properties (ORPs) and IPRE. We estimate the current value of an ORP using a regression model (a hedonic model) based on statistical comparison against current transaction data. The value of a property is derived from the characteristics of the real estate itself, as well as those of its location. In addition to the initial valuation, values for ORPs are updated regularly over the lifetime of the loan using region-specific real estate price indices or hedonic valuation. The price indices are sourced from an external vendor and subject to internal validation and benchmarking. UBS AG uses these valuations regularly to compute indexed LTV for all ORPs. A portfolio-specific monitoring system considers these along with other risk measures (e.g., rating and behavioral information) to identify higher-risk loans.

For IPRE, the capitalization rate model is used to determine the property valuation by discounting estimated sustainable future income using a capitalization rate based on various attributes. These attributes consider regional and specific property characteristics, such as market and location data (e.g., vacancy rates), benchmarks (e.g., for running costs), and certain other standardized input parameters (e.g., property condition). Updated information regarding rental income from IPRE is requested from the client at least once every three years. Our portfolio-specific monitoring system alerts us to changes in rental income and other risk measures (e.g., LTV, rating, behavioral information).

To take market developments into account for these models, the external vendor regularly updates the parameters and / or refines the architecture for each model. Model changes and parameter updates are subject to the same validation procedures as our internally developed models.

Audited I UBS AG similarly applies underwriting guidelines for our Global Wealth Management Region Americas mortgage loan portfolio, taking into account loan affordability and collateral sufficiency. LTV standards are defined for the various mortgage types, such as residential mortgages or investment properties, based on associated risk factors, such as property type, loan size, and purpose. The maximum LTV allowed within the standard approval process ranges from 45 to 80%. In addition to LTV, other credit risk metrics, such as debt-to-income ratios, credit scores and required client reserves, are also part of our underwriting guidelines.

A risk limit framework is applied to the Global Wealth Management Region Americas mortgage loan portfolio. Limits are set to govern exposures within LTV categories, geographic concentrations, portfolio growth and high-risk mortgage segments, such as interest-only loans. These limits are monitored by a specialized credit risk monitoring team and reported to senior management. Supplementing this limit framework is a real estate lending policy and procedures framework, set up to govern real estate lending activities. Quality assurance and quality control programs monitor compliance with mortgage underwriting and documentation requirements.

For UBS AG's mortgage loan portfolio in the Global Wealth Management regions of EMEA and Asia Pacific, global underwriting guidelines with regional variations are applied to allow for regulatory and market differentials. As in other regions, the underwriting guidelines take into account affordability and collateral sufficiency. Affordability is assessed at a stressed interest rate using, for residential real estate, the borrowers' sustainable income and declared liabilities, and for commercial real estate the quality and sustainability of rental income. For interest-only loans, a declared and evidenced repayment strategy must be in place. The applicable LTV for each mortgage is based on the quality and liquidity of the property and assessed against valuations from bank-appointed third-party valuers. Maximum LTV varies from 30% to 70%, depending on the type and location of the property, as well as other factors. Collateral sufficiency is often further supported by personal guarantees from related third parties. The overall portfolio is centrally assessed against a number of stress scenarios to ensure that exposures remain within predefined stress limits.

> Refer to "Swiss mortgage loan portfolio" in this section for more information about LTV in our Swiss mortgage portfolio

#### Lombard lending

Audited I Lombard loans are secured by pledges of marketable securities, guarantees and other forms of collateral. Eligible financial securities are primarily liquid and actively traded transferable securities (such as bonds and equities), and other transferable securities, such as approved structured products for which regular prices are available and the issuer of the security provides a market. To a lesser degree, less liquid collateral is also used.

Lending values are derived by applying discounts (haircuts) to the pledged collateral's market value. Haircuts for marketable securities are calculated to cover a possible adverse change in market value over a given close-out period and confidence level. Less liquid or more volatile collateral will typically have larger haircuts.

Concentration and correlation risks across collateral posted are assessed at a counterparty level, and at a divisional level across counterparties. Targeted firm-wide reviews of concentration are performed. Concentration of collateral in single securities, issuers or issuer groups, industry sectors, countries, regions or currencies may result in higher risk and reduced liquidity. In such cases, the lending value of the collateral, margin call and close-out levels are adjusted accordingly.

Exposures and collateral market values are monitored daily, with the aim of ensuring that the credit exposure is always within the established risk tolerance. A shortfall occurs when the lending value drops below the exposure; if it exceeds a defined trigger level, a margin call is initiated, requiring the client to provide additional collateral, reduce the exposure or take other action to bring exposure in line with the agreed lending value of the collateral. If a shortfall is not corrected within the required period, a close-out is initiated, through which collateral is liquidated, open derivative positions are closed and guarantees are called.

Stress testing of collateralized exposures to simulate market events that reduce market collateral value, increase exposure of traded products, or do both, is conducted. For certain classes of counterparties, limits on such calculated stress exposures are applied and controlled at a counterparty level. Also, portfolio limits are applied across certain businesses or collateral types.

> Refer to "Stress loss" in this section for more information about our stress testing

#### Credit hedging

Audited I UBS AG uses single-name credit default swaps (CDSs), credit-index CDSs, bespoke protection and other instruments to actively manage credit risk. The aim is to reduce concentrations of risk from specific counterparties, sectors or portfolios and, for CCR, the profit or loss effect arising from changes in credit valuation adjustments.

We have strict guidelines with regard to taking credit hedges into account for credit risk mitigation purposes. For example, when monitoring exposures against counterparty limits, we do not usually apply certain credit risk mitigants, such as proxy hedges (credit protection on a correlated but different name) or credit-index CDSs, to reduce counterparty exposures. Buying credit protection also creates credit exposure with regard to the protection provider. We monitor and limit exposures to credit protection providers, and also monitor the effectiveness of credit hedges as part of our overall credit exposures to the relevant counterparties, which are typically collateralized. For credit protection purchased to hedge the lending portfolio, this includes monitoring mismatches between the maturity of credit protection purchased and the maturity of the associated loan. Such mismatches result in basis risk and may reduce the effectiveness of the credit protection. Mismatches are routinely reported to credit officers and mitigating actions are taken when necessary.

> Refer to "Note 10 Derivative instruments" in the "Consolidated financial statements" section of this report for more information

#### Mitigation of settlement risk

To mitigate settlement risk, actual settlement volumes are reduced by using multi-lateral and bi-lateral agreements with counterparties, including payment netting. In relation to the exchange of cash or securities, transactions can be settled on a delivery-versus-payment basis.

Foreign exchange transactions are our most significant source of settlement risk. We are a member of Continuous Linked Settlement (CLS), an industry utility that provides a multi-lateral framework to settle transactions on a payment-versus-payment basis, thus reducing foreign-exchange-related settlement risk relative to the volume of business. However, mitigation of settlement risk through CLS and other means does not fully eliminate credit risk in foreign exchange transactions resulting from changes in exchange rates prior to settlement, which is managed as part of our overall credit risk management of OTC derivatives.

#### **Credit risk models**

#### Basel III – A-IRB credit risk models

Audited I UBS AG has developed tools and models to estimate future credit losses that may be implicit in our current portfolio.

Exposures to individual counterparties are measured using three generally accepted parameters: PD, EAD and LGD. For a given credit facility, the product of these three parameters results in the expected loss (the EL). These parameters are the basis for the majority of our internal measures of credit risk, and key inputs for regulatory capital calculation under the advanced internal ratings-based (A-IRB) approach of the Basel III framework. We also use models to derive the portfolio credit risk measures of EL, statistical loss and stress loss.

> Refer to the 31 December 2023 Pillar 3 Report, available under "Pillar 3 disclosures" at *ubs.com/investors*, for more information about the regulatory capital calculation under the advanced internal ratings-based approach

# Key features of UBS AG's main credit risk models

	Double in some	Malay asset alasses	Model	Number of		Number of years of loss
Doob a billion of	Portfolio in scope	Major asset classes	approach	main models	Main drivers	data
Probability of	Coversions and central banks	Central governments and central banks	Corporal	1	Political, institutional and economic indicators	. 10
default	Sovereigns and central banks		Scorecard	I	including qualitative factors	>15
	Banks and other financial	Banks & Securities dealer,	C	2	Financial data including balance sheet ratios, profit	. 15
	institutions	Corporates: other lending	Scorecard	3	and loss data and qualitative factors	>15
					Financial data and ratios constructed from it (such as	
	- 1				net asset value, volatility of returns), qualitative	
	Funds	Corporates: other lending		3	factors	>15
	Large corporates and		Scorecard,		Financial data including balance sheet ratios and	
	internationals	Corporates: other lending	market data	2	profit and loss, market data and qualitative factors	>15
					Financial data including balance sheet ratios and	
	Enterprises in Switzerland	Corporates: other lending	Scorecard	1	profit and loss, and behavioral data	>25
		Corporates: specialized			Financial data including balance sheet ratios and	
	Commodity traders	lending	Scorecard	1	profit and loss, as well as non-financial criteria	>20
	Owner-occupied mortgages &	Retail: residential			Behavioral data, affordability relative to income,	
	other wealth-management	mortgages, Corporates:			property type, loan-to-value, assets and qualitative	
	financing	other lending	Scorecard	3	factors	>10
		Retail: residential			Loan-to-value, debt-service-coverage, financial data	
	Income producing real estate	mortgages, Corporates:			(for large corporates only), behavioral data and	
	mortgages	specialized lending	Scorecard	1	qualitative factors	>25
	3.3	!	Simulation			
			approach			
	Lombard lending and	Retail: other retail,	based on			
	concentrated equity based	Corporates: other lending			Lending value ratio, collateral asset class, historical	
	lending (CEL)	(CEL)	returns	2	asset returns, counterparty factors	>10
	ienang (ezz)	Retail: qualifying		<del>-</del>	asset returns, counterparty ractors	
		revolving retail and other				
		retail, Corporates: other				
	Credit cards in Switzerland	lending	Scorecard	1	Client type and characteristics and behavioral data	>15
	Crear cards in Switzenand	Corporates: other	Scorecard		Financial data including balance sheet ratios and	
		lending,	Scorecard,		profit and loss, market data and qualitative factors.	
		Public sector entities and	pooled rating		Separate models for Commercial Real Estate loans,	
		Multilateral development	approach,		Debt REITs, Mortgage originators, Public sector	
		banks, Corporates:	rating		entities and Multilateral development	
	Other portfolios	specialized lending	template	6	banks/Supranationals	>15
	Other portionos	specialized lending	template		Counterparty and facility specific, including industry	/13
					segment, region, collateral, seniority, legal	
	Investment Pank all		Statistical		environment, bankruptcy procedures and macro-	
Logo alvon defecult	Investment Bank – all	A cross the asset classes		2	economic factors	. 20
Loss given default	counterparties	Across the asset classes	model	3	economic ractors	>20
		Retail: residential				
		mortgages, Corporates:				
		other lending,	6			
	Swiss corporate and mortgage	Corporates: specialized	Statistical	2	Collateral type and client segment, Loan-to-value,	4.0
	lending portfolios	lending	model	2	time since last valuation, location indicator	>10
	International residential	Retail: residential				
	mortgages & other wealth-	mortgages, Corporates:	Statistical	_		
	management financing	other lending	model	2	Loan-to-value, market value shock	>10
			Simulation			
			approach			
	Lombard lending and	Retail: other retail,	based on			
	concentrated equity based	Corporates: other lending	historical		Loan-to-value, collateral asset class and liquidity,	
	lending (CEL)	(CEL)	returns	2	historical asset returns, counterparty factors	>10
		Retail: qualifying				
		revolving retail and other				
		retail, Corporates: other	Statistical			
	Credit cards in Switzerland	lending	model	1	Collateral, accrued interests, client characteristics	>15
		•	Statistical		Facility type and product type, commitment type,	
Exposure at default	Banking products	Across the asset classes	model	4	headroom, and client characteristics	>10
_ poolit at adjustit	5 F CO	3.222 23500 0.03503			Product specific market drivers, e.g. interest rates.	, 10
					Separate models for OTC/ETD and SFT that generate	
			Statistical		the simulation of risk factors used for the credit	
	Traded products	Across the asset classes	model	າ	exposure measure	n/a
	maded products	י יכוסטט נוור מסטבנ רומסטבט	model		exposure measure	11/a

#### Internal UBS rating scale and mapping of external ratings

			Moody's Investors		
Internal UBS rating	1-year PD range in %	Description	Service mapping	S&P mapping	Fitch mapping
0 and 1	0.00–0.02	Investment grade	Aaa	AAA	AAA
2	<i>0.02–0.05</i>		Aa1 to Aa3	AA+ to AA-	AA+ to AA-
3	0.05–0.12		A1 to A3	A+ to A-	A+ to A-
4	0.12–0.25		Baa1 to Baa2	BBB+ to BBB	BBB+ to BBB
5	<i>0.25–0.50</i>		Baa3	BBB-	BBB-
6	0.50–0.80	Sub-investment grade	Ba1	BB+	BB+
7	0.80–1.30		Ba2	BB	BB
8	<i>1.30–2.10</i>		Ba3	BB-	BB-
9	<i>2.10–3.50</i>		B1	B+	B+
10	<i>3.50–6.00</i>		B2	В	В
11	6.00–10.00		B3	B	B
12	10.00–17.00		Caa1 to Caa2	CCC+ to CCC	CCC+ to CCC
13	>17		Caa3 to C	CCC- to C	CCC- to C
Counterparty is in default	Default	Defaulted		D	D

#### Probability of default

PD estimates the likelihood of a counterparty defaulting on its contractual obligations over the next 12 months, and is assessed using rating tools tailored to the various categories of counterparties. The "Key features of UBS AG's main credit risk models" table above gives an overview of the approaches used for our main asset classes and presents the main drivers of the PD.

The ratings of major credit rating agencies, and their mapping to the UBS masterscale and internal PD bands, are shown in the "Internal UBS rating scale and mapping of external ratings" table above. For Moody's and S&P, the mapping is based on the long-term average of one-year default rates available from these rating agencies, with Fitch ratings being mapped to the equivalent S&P ratings. For each external rating category, the average default rate is compared with our internal PD bands to derive a periodically reviewed mapping to our internal rating scale.

## Exposure at default

EAD is the amount we expect to be owed by a counterparty at the time of possible default. We derive EAD from current exposure to the counterparty and possible future exposure development.

The EAD of an on-balance sheet loan is its notional amount, while for off-balance sheet commitments that are not drawn, credit conversion factors (CCFs) are used in order to obtain an expected on-balance sheet amount.

For traded products, we derive EAD by modeling the range of possible exposure outcomes at various points in time using a simulation based on a scenario-consistent technique. UBS AG assesses the net amount that may be owed to it or that it may owe to others, taking into account the effect of market movements over the potential time it would take to close out positions.

Exposures where there is a material correlation between the factors driving the credit quality of the counterparty and those driving the potential future value of UBS AG's traded products exposure (wrong-way risk) are assessed, and specific controls to mitigate such risks have been established.

#### Loss given default

LGD is the magnitude of the likely loss if there is a default. Our LGD estimates, which consider downturn conditions, include loss of principal, interest and other amounts less recovered amounts. UBS AG determines LGD based on the likely recovery rate of claims against defaulted counterparties, which depends on the type of counterparty and any credit mitigation due to collateral or guarantees. UBS AG's estimates are supported by internal loss data and external information, where available. If collateral is held, such as marketable securities or a mortgage on a property, LTV ratios are typically a key parameter in determining LGD. For risk-weighted asset (RWA) calculation, floors are applied to LGD in line with regulation.

#### Expected loss

UBS AG uses the concept of expected loss to quantify future credit losses that may be implicit in our current portfolio. The expected loss for a given credit facility is a product of the three components described above, i.e., PD, EAD and LGD. We aggregate the expected loss for individual counterparties to derive expected portfolio credit losses.

#### IFRS 9 - ECL credit risk models

#### Expected credit loss

Expected credit loss (ECL) is defined as the difference between contractual cash flows and those UBS AG expects to receive, discounted at the effective interest rate (EIR). For loan commitments and other credit facilities in scope of ECL requirements, expected cash shortfalls are determined by considering expected future drawdowns. Rather than focusing on an average through-the-cycle (TTC) expected annual loss, the purpose of ECL is to estimate the amount of losses inherent in a portfolio based on current conditions and future outlook (a point-in-time (PIT) measure), whereby such a forecast has to include all information available without undue cost and effort, and address multiple scenarios where there is perceived non-linearity between changes in economic conditions and their effect on credit losses. From a credit risk modeling perspective, ECL parameters are generally derivations of the factors assessed for regulatory Basel III EL.

#### Comparison of Basel III EL and IFRS 9 ECL credit risk models

The IFRS 9 ECL concept has a number of key differences from our Basel III credit risk models, both in the loss estimation process and the result thereof. Most notably, regulatory Basel III EL parameters are TTC / downturn estimates, which might include a margin of conservatism, while IFRS 9 ECL parameters are typically PIT, reflecting current economic conditions and future outlook. The table below summarizes the main differences. Stage 1 and 2 ECL expenses in 2023 were USD 23m and respective allowances and provisions as of 31 December 2023 were USD 580m. This included ECL allowances and provisions of USD 522m related to positions under the Basel III advanced internal ratings-based (A-IRB) approach. Basel III EL for non-defaulted positions increased by USD 96m to USD 1,052m.

> Refer to "Note 1 Summary of material accounting policies" in the "Consolidated financial statements" section of this report for more information about our accounting policy for allowances and provisions for ECL including key definitions relevant for the ECL calculation under IFRS 9

The table below shows the main differences between the two expected loss measures.

	Basel III EL (advanced internal ratings-based approach)	IFRS 9 ECL
Scope	The Basel III A-IRB approach applies to most credit risk exposures. It includes transactions measured at amortized cost, at fair value through profit or loss and at fair value through OCI, including loan commitments and financial guarantees.	The IFRS 9 ECL calculation mainly applies to financial assets measured at amortized cost and debt instruments measured at fair value through OCI, as well as loan commitments and financial guarantees not at fair value through profit or loss.
12-month versus lifetime expected loss	The Basel III A-IRB approach takes into account expected losses resulting from expected default events occurring within the next 12 months.	In the absence of a significant increase in credit risk (an SICR), a maximum 12-month ECL is recognized to reflect lifetime cash shortfalls that will result if a default event occurs in the 12 months after the reporting date (or a shorter period if the expected lifetime is less). Once an SICR event has occurred, a lifetime ECL is recognized considering expected default events over the life of the transaction.
Exposure at default (EAD)	EAD is the amount we expect a counterparty to owe us at the time of a possible default. For banking products, EAD equals the book value as of the reporting date; for traded products, the vast majority of EAD is modeled. For lending, EAD is expected to remain constant over a 12-month period. For loan commitments, a credit conversion factor is applied to model expected future drawdowns over the 12-month period, irrespective of the actual maturity of a particular transaction. The credit conversion factor includes downturn adjustments.	EAD is generally calculated on the basis of the cash flows that are expected to be outstanding at the individual points in time during the life of the transaction. For loan commitments, a credit conversion factor is applied to model expected future drawdowns over the life of the transaction without including downturn assumptions. In both cases, the time period is capped at 12 months, unless an SICR has occurred.
Probability of default (PD)	PD estimates are determined on a through-the-cycle (TTC) basis. They represent historical average PDs, taking into account observed losses over a prolonged historical period, and therefore are less sensitive to movements in the underlying economy.	PD estimates will be determined on a point-in-time (PIT) basis, based on current conditions and incorporating forecasts for future economic conditions at the reporting date.
Loss given default (LGD)	LGD includes prudential adjustments, such as downturn LGD assumptions and floors. Similar to PD, LGD is determined on a TTC basis.	LGD should reflect the losses that are reasonably expected and prudential adjustments should therefore not be applied. Similar to PD, LGD is determined on the basis of a PIT approach.
Use of scenarios	n/a	Multiple forward-looking scenarios have to be taken into account to determine a probability-weighted ECL.

#### Further key aspects of credit risk models

#### Stress loss

We complement our statistical modeling approach with scenario-based stress loss measures. Stress tests are run regularly to monitor potential effects of extreme, but nevertheless plausible, events on our portfolios, under which key credit risk parameters are assumed to deteriorate substantially. Where we consider it appropriate, we apply limits on this basis.

Stress scenarios and methodologies are tailored to portfolios' natures, ranging from regionally focused to global systemic events, and varying in time horizon.

> Refer to "Stress testing" in this section for more information about our stress testing framework

#### Credit risk model confirmation

UBS AG's approach to model confirmation involves both quantitative methods, such as monitoring compositional changes in portfolios and results of backtesting, and qualitative assessments, such as feedback from users on model output as a practical indicator of a model's performance and reliability. In addition, changes in market, regulatory and business practices are assessed.

Material changes in portfolio composition may invalidate the conceptual soundness of a model. We therefore perform regular analyses of the evolution of portfolios to identify such changes in the structure and credit quality of portfolios.

> Refer to "Model risk management" in this section for more information

#### **Backtesting**

UBS AG monitors the performance of models by backtesting and benchmarking them, with model outcomes compared with actual results, based on our internal experience and externally observed results. To assess the predictive power of credit exposure models for traded products, such as OTC derivatives and ETD products, we statistically compare predicted future exposure distributions at different forecast horizons with realized values.

For PD, we derive a predicted distribution of the number of defaults. The observed number of defaults is compared with the upper tail of the predicted distribution. If the observed number of defaults is higher than a given upper tail quantile, we conclude there is evidence that the model may underpredict the number of defaults. Based on historical long-run average default rates and, if required, additional margin of conservatism, we also derive PD calibration targets and a lower boundary. As a general rule, follow-up actions, such as a recalibration of the rating tool, are defined if the portfolio average PD lies below the derived lower boundary.

For LGD, backtesting statistically tests whether the mean difference between the observed and predicted LGD is zero. If the test fails, there is evidence that our predicted LGD is too low. In such cases, and where these differences are outside expectations, follow-up actions, such as a recalibration of the models, are taken.

CCFs, used for the calculation of EAD for undrawn facilities, are dependent on several credit facility contractual dimensions. We compare the predicted amount drawn with observed historical use of such facilities by defaulted counterparties. If any statistically significant deviation is observed, follow-up actions, such as an update of the relevant CCFs, are performed.

#### Changes to models and model parameters during the period

As part of our continuous efforts to enhance models to reflect market developments and newly available data, we updated several models in 2023.

In Personal & Corporate Banking and Global Wealth Management models, we recalibrated the risk parameters for the income-producing real estate mortgages in Switzerland and implemented a model update for the Swiss corporate PD model. In addition, we recalibrated the PD and LGD models for the commodity trade finance business within Personal & Corporate Banking and updated the LGD model for corporate clients and financial institutions. In Global Wealth Management, we also implemented a model update for the standard Lombard model.

In the Investment Bank, new PD models, corporations, insurance companies and managed funds went live. In addition, certain RWA multipliers were recalibrated as a result of improvements to models.

Where required, changes to models and model parameters were approved by FINMA before being made.

> Refer to "Risk-weighted assets" in the "Capital, liquidity and funding, and balance sheet" section of this report for more information about the effect of the changes to models and model parameters on credit risk RWA

#### Future credit risk-related regulatory capital developments

In December 2017, the Basel Committee on Banking Supervision (the BCBS) announced the finalization of the Basel III framework. In November 2023, the Swiss Federal Council published the national implementation of the final Basel III standards, which is expected to enter into force by January 2025. The updated framework makes a number of revisions to the internal ratings-based (IRB) approaches, namely: (i) removing the option of using the A-IRB approach for certain asset classes (including large and medium-sized corporate clients, and banks and other financial institutions); (ii) placing floors on certain model inputs under the IRB approach, e.g., PD and LGD; and (iii) introducing various requirements to reduce RWA variability (e.g., for LGD). In addition, revisions to the credit valuation adjustment (CVA) framework were published in November 2023, including the removal of the advanced CVA approach. UBS has a close dialogue with FINMA to discuss in detail the implementation objectives and prepare for a smooth transition of the capital regime for credit risk.

- > Refer to "Capital management objectives, planning and activities" in the "Capital, liquidity and funding, and balance sheet" section of this report for more information about the development of RWA
- > Refer to "Risk measurement" in this section for more information about our approach to model confirmation procedures
- > Refer to the "Regulatory and legal developments" and "Risk factors" sections of this report for more information

#### **Credit policies for distressed assets**

#### Non-performing

Audited In line with the regulatory definition, we report a claim as non-performing when: (i) it is more than 90 days past due; (ii) it is subject to restructuring proceedings, where preferential conditions concerning interest rates, subordination, tenor, etc. have been granted in order to avoid default of the counterparty (forbearance); (iii) the counterparty is subject to bankruptcy / enforced liquidation proceedings in any form, even if there is sufficient collateral to cover the due payment; or (iv) there is other evidence that payment obligations will not be fully met without recourse to collateral.

#### Default and credit-impaired

UBS AG uses a single definition of default for classifying assets and determining the PD of its obligors for risk modeling purposes. The definition of default is based on quantitative and qualitative criteria. A counterparty is classified as defaulted when material payments of interest, principal or fees are overdue for more than 90 days, or more than 180 days for certain exposures in relation to loans to private and commercial clients in Personal & Corporate Banking and to private clients of Global Wealth Management Region Switzerland. UBS AG does not consider the general 90-day presumption for default recognition appropriate for those portfolios, given the cure rates, which show that strict application of the 90-day criterion would not accurately reflect the inherent credit risk. Counterparties are also classified as defaulted when: bankruptcy, insolvency proceedings or enforced liquidation have commenced; obligations have been restructured on preferential terms (forbearance); or there is other evidence that payment obligations will not be fully met without recourse to collateral. The latter may be the case even if, to date, all contractual payments have been made when due. If one claim against a counterparty is defaulted on, generally all claims against the counterparty are treated as defaulted.

An instrument is classified as credit impaired if the counterparty is classified as defaulted and / or the instrument is identified as purchased credit impaired (PCI). An instrument is PCI if it has been purchased at a deep discount to its carrying amount following a risk event of the issuer or originated with a defaulted counterparty. Once a financial asset is classified as defaulted / credit impaired (except PCI), it is reported as a stage 3 instrument and remains as such unless all past due amounts have been rectified, additional payments have been made on time, the position is not classified as credit-restructured, and there is general evidence of credit recovery. A three-month probation period is applied before a transfer back to stages 1 or 2 can be triggered. However, most instruments remain in stage 3 for a longer period.

## Forbearance (credit restructuring)

Audited If payment default is imminent or default has already occurred, we may grant concessions to borrowers in financial difficulties that we would otherwise not consider in the normal course of business, such as offering preferential interest rates, extending maturity, modifying the schedule of repayments, debt / equity swap, subordination, etc. When a forbearance measure takes place, each case is considered individually and the exposure is generally classified as defaulted. Forbearance classification remains until the loan is repaid or written off, non-preferential conditions are granted that supersede the preferential conditions, or the counterparty has recovered and the preferential conditions no longer exceed our risk tolerance.

Contractual adjustments when there is no evidence of imminent payment default, or where changes to terms and conditions are within our usual risk tolerance, are not considered to be forborne.

#### Loss history statistics

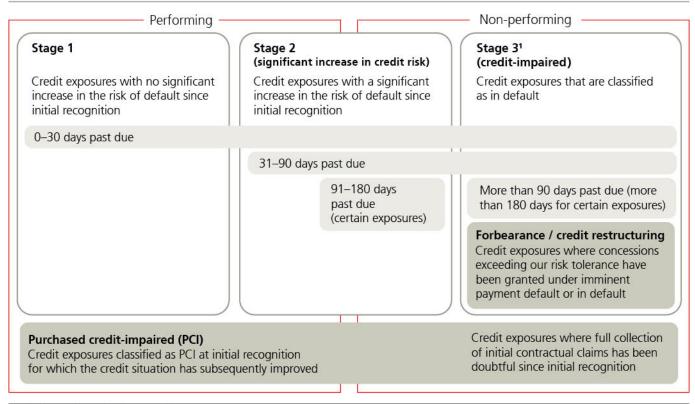
An instrument is classified as credit impaired if the counterparty has defaulted. This also includes credit-impaired exposures for which no loss has occurred or for which no allowance has been recognized (e.g., we expect to fully recover the exposures via collateral held).

Coverage ratios are calculated by taking ECL allowances and provisions divided by the gross carrying amount of the exposures. Core loan exposure is defined as the sum of Loans and advances to customers and Loans to financial advisors.

The total combined on- and off-balance sheet coverage ratio was at 22 basis points as of 31 December 2023, 1 basis point lower than on 31 December 2022. The combined stage 1 and 2 ratio of 10 basis points was unchanged compared with 31 December 2022; the stage 3 ratio was 22%, materially unchanged compared with 31 December 2022.

- > The majority of the credit-impaired exposure relates to loans and advances in our Swiss domestic business. Refer to "Note 9 Financial assets at amortized cost and other positions in scope of expected credit loss measurement" and "Note 19 Expected credit loss measurement" in the "Consolidated financial statements" section of this report for more information about ECL measurement and the calculation of the coverage ratio
- > Refer to "Note 13 Other assets" in the "Consolidated financial statements" section of this report for more details

#### **Exposure categorization**



<sup>1</sup> Excluding purchased credit-impaired instruments.

#### Loss history statistics

USD m, except where indicated	31.12.23	31.12.22 <sup>1</sup>	31.12.21 <sup>1</sup>	31.12.20 <sup>1</sup>	31.12.19 <sup>1</sup>
Banking products, core exposure and off-balance sheet, gross <sup>2</sup>	562,095	509,0243	517,866 <sup>3</sup>	497,313 <sup>3</sup>	423,771 <sup>3</sup>
of which: amounts due from banks and loans and advances to customers (gross)	434,780	402,801	414,099	396,049	340,003
Credit-impaired exposure, gross (stage 3)	2,966	2,455	2,610	3,778	3,113
of which: credit-impaired amounts due from banks and loans and advances to customers (stage 3)	2,586	2,012	2,150	2,945	2,309
Non-performing amounts due from banks and loans and advances to customers	2,793	2,333	2,387	3,176	2,466
ECL allowances and provisions for credit losses <sup>4</sup>	1,244	1,091	1,165	1,468	1,029
of which: core loan exposure (all stages)	1,172	1,043	1,132	1,426	987
of which: amounts due from banks and loans and advances to customers (all stages)	942	789	<i>857</i>	1,076	770
of which: amounts due from banks and loans and advances to customers (stage 3)	<i>377</i>	474	<i>572</i>	703	559
Write-offs (stage 3)	77	95	137	356	142
of which: write-offs for amounts due from banks and loans and advances to customers	62	74	118	348	122
Credit loss expense / (release) <sup>5</sup>	143	29	(148)	694	78
Ratios					
Credit-impaired amounts due from banks and loans and advances to customers as a percentage of amounts					
due from banks and loans and advances to customers (gross)	0.6	0.5	0.5	0.7	0.7
Non-performing amounts due from banks and loans and advances to customers as a percentage of amounts					
due from banks and loans and advances to customer (gross)	0.6	0.6	0.6	0.8	0.7
ECL allowances for amounts due from banks and loans and advances to customers as a percentage of amounts					
due from banks and loans and advances to customer (gross)	0.2	0.2	0.2	0.3	0.2
Write-offs as a percentage of average amounts due from banks and loans and advances to customers (gross)					
outstanding during the period	0.0	0.0	0.0	0.1	0.0

<sup>1</sup> Prior-period numbers are based on pre-acquisition UBS values. 2 Includes amounts due from banks, core loan exposure (Loans and advances to customers and Loans to financial advisors) and off balance sheet items defined as guarantees and loan commitments. 3 Comparatives have been restated to include amounts due from banks. 4 Includes provisions for ECL of guarantees and loan commitments and allowances for securities financing transactions. 5 Includes credit loss expense / (release) for other financial assets at amortized cost, guarantees, loan commitments, and securities financing transactions.

# Market risk

#### Audited | Main sources of market risk

Market risks arise from both trading and non-trading business activities.

- Trading market risks are mainly connected with primary debt and equity underwriting and securities and derivatives trading for market-making and client facilitation in our Investment Bank, as well as the remaining positions in Noncore and Legacy and our municipal securities trading business in Global Wealth Management.
- Non-trading market risks arise predominantly in the form of interest rate and foreign exchange risks connected with personal banking and lending in our wealth management businesses, the Swiss business of our Personal & Corporate Banking business division, the Investment Bank's lending business, and treasury activities.
- Group Treasury assumes market risks in the process of managing interest rate risk, structural foreign exchange risk and the Group's liquidity and funding profile, including high-quality liquid assets (HQLA).
- Equity and debt investments can also give rise to market risks, as can some aspects of employee benefits, such as defined benefit pension schemes. ▲

#### Audited | Overview of measurement, monitoring and management techniques

- Market risk limits are set for the Group, the business divisions and Group Treasury at granular levels in the various business lines, reflecting the nature and magnitude of the market risks.
- Management value-at-risk (VaR) measures exposures under the market risk framework, including trading market risks and some non-trading market risks. Non-trading market risks not included in VaR are also covered in the risks controlled by Market and Treasury Risk Control functions.
- Our primary portfolio measures of market risk are liquidity-adjusted stress loss and VaR. Both are subject to limits that are approved by the Board of Directors (the BoD).
- These measures are complemented by concentration and granular limits for general and specific market risk factors.
   Our trading businesses are subject to multiple market risk limits, which take into account the extent of market liquidity and volatility, available operational capacity, valuation uncertainty, and, for our single-name exposures, issuer credit quality.
- Trading market risks are managed at portfolio level. As risk factor sensitivities change due to new transactions, transaction expiries or changes in market levels, risk factors are dynamically rehedged to remain within limits. We do not generally seek to distinguish in the trading portfolio between specific positions and associated hedges.

- Issuer risk is controlled by limits applied at the business division level based on jump-to-zero measures, which estimate
  maximum default exposure (the default event loss assuming zero recovery).
- Non-trading foreign exchange risks are managed under market risk limits, with the exception of Group Treasury management of consolidated capital activity.

Our CRO Treasury function applies a holistic risk framework, setting the appetite for treasury-related risk-taking activities across UBS AG. Key elements of the framework include an overarching economic value sensitivity limit, set by the BoD, and the sensitivity of net interest income to changes in interest rates targets, set by the CEO. Limits are also set by the BoD to balance the effect of foreign exchange movements on our common equity tier 1 (CET1) capital and CET1 capital ratio. Non-trading interest rate and foreign exchange risks are included in firm-wide statistical and stress-testing metrics, which flow into our risk appetite framework.

Equity and debt investments are subject to a range of risk controls, including preapproval of new investments by business management and Risk Control and regular monitoring and reporting. They are also included in firm-wide statistical and stress-testing metrics.

- > Refer to "Currency management" in the "Capital, liquidity and funding, and balance sheet" section of this report for more information about Group Treasury's management of foreign exchange risks
- > Refer to the "Capital, liquidity and funding, and balance sheet" section of this report for more information about the sensitivity of our CET1 capital and CET1 capital ratio to currency movements

#### **Market risk stress loss**

The measurement and management of market risks include an extensive set of stress tests and scenario analyses, continuously evaluated to ensure that losses resulting from an extreme yet plausible event do not exceed our risk appetite.

#### Liquidity-adjusted stress

Liquidity-adjusted stress is UBS AG's primary stress loss measure for firm-wide market risk. The framework captures the economic losses that could arise under specified stress scenarios. Shocks are applied to positions based on expected market movements in the liquidity-adjusted holding periods resulting from the specified scenario.

The holding periods used for liquidity-adjusted stress are calibrated to reflect the time needed to reduce or hedge the risk of positions in each major risk factor in a stressed environment. UBS AG applies minimum holding periods, regardless of observed liquidity levels, as identification of and reaction to a crisis may not always be immediate.

The expected market movements are derived using historical market behavior (based on analysis of historical events) and forward-looking analysis including consideration of defined scenarios that have not occurred in the past.

Stress-based limits apply at several levels of the organizational hierarchy. Liquidity-adjusted stress is also the core market risk component of our combined stress test framework and therefore integral to our overall risk appetite framework.

- > Refer to "Risk appetite framework" in this section for more information
- > Refer to "Stress testing" in this section for more information about our stress testing framework

#### Value-at-risk

#### VaR definition

Audited I VaR is a statistical measure of market risk, quantifying the potential market risk losses over a set time horizon (holding period) at an established level of confidence. VaR assumes no change in UBS AG's trading positions over the set time horizon.

UBS AG calculates VaR daily. The profit or loss distribution from which VaR is estimated is derived from our internally developed VaR model, which simulates returns over the holding period for risk factors our trading positions are sensitive to, and subsequently quantifies the profit / loss effect of these risk factor returns on our trading positions. Systematic commodity, credit, equity, foreign exchange rate and interest rate risk factor returns are based on a pure historical simulation approach. UBS AG uses an unweighted five-year look-back window. Modeling idiosyncratic and specific risks for equity and credit risk factors using historical simulation is challenging, due to the limited availability of continuous good-quality historical data. UBS AG relies upon factor models to distinguish systematic and idiosyncratic returns. UBS AG simulates idiosyncratic returns through a Monte Carlo simulation, aggregating the sum of systematic and residual returns in such a way that systematic and residual risk are consistently captured. When modeling risk factor returns, we consider the stationarity properties of the historical time series of risk factor changes. Depending on the stationarity properties of the risk factors within a given factor class, the factor returns are modeled using absolute returns, proportional or logarithmic returns. Risk factor return distributions are updated fortnightly.

Risk factor returns are converted into profit or loss values via sensitivities and full revaluation grids sourced from front-office systems, enabling us to capture material non-linear effects.

UBS AG uses a single VaR model for internal management purposes and for determining market risk risk-weighted assets (RWA), although the two cases consider different confidence levels and time horizons. For internal management purposes, risk limits are established and exposures measured using VaR at a 95% confidence level with a 1-day holding period, aligned to the way we consider the risks associated with our trading activities. The regulatory measure of market risk used to underpin the market risk capital requirement under Basel III involves a measure equivalent to a 99% confidence level using a 10-day holding period. To calculate a 10-day holding period VaR, we use 10-day risk factor returns.

Additionally, the portfolio populations for management and regulatory VaR are slightly different. The one for regulatory VaR meets regulatory requirements for inclusion in regulatory VaR. Management VaR includes a broader range of positions. For example, regulatory VaR excludes credit spread risks from the securitization portfolio, which are treated instead under the securitization approach for regulatory purposes.

We also use stressed VaR (SVaR) for the calculation of market risk RWA. SVaR uses broadly the same methodology as regulatory VaR and is calculated using the same population, holding period (10-day) and confidence level (99%). For SVaR, UBS AG identifies the most significant one-year period of financial stress from a historical dataset covering the period from 1 January 2007 to the present. SVaR is computed weekly at a minimum.

> Refer to the 31 December 2023 Pillar 3 Report, available under "Pillar 3 disclosures" at *ubs.com/investors*, for more information about the regulatory capital calculation under the advanced internal ratings-based approach

#### Management VaR for the period

UBS AG continued to maintain management VaR at low levels, with average VaR increasing to USD 15m from USD 11m in 2023, mainly driven by the Investment Bank's Global Markets business.

Audited I
Management value-at-risk (1-day, 95% confidence, 5 years of historical data) of UBS AG business divisions and Group Items by general market risk type<sup>1</sup>

	For the year ended 31.12.23								
USD m					Equity	Interest rates	Credit spreads	Foreign exchange	Commodities
	Min.		3	9	3	1	1		
		Max.			19	21	19	10	10
			Average		9	12	6	2	3
				31.12.23	11	18	7	2	3
Total management VaR	7	25	15	19	/	Average (per	business divi	ision and risk ty	rpe)
Global Wealth Management	1	2	1	2	0	1	2	0	0
Personal & Corporate Banking	0	0	0	0	0	0	0	0	0
Asset Management	0	0	0	0	0	0	0	0	0
Investment Bank	5	23	14	18	9	<i>12</i>	<i>5</i>	2	3
Non-core and Legacy	1	2	1	1	0	1	1	0	0
Group Items	3	6	4	4	1	<i>3</i>	<i>3</i>	1	0
Diversification effect <sup>2,3</sup>			(6)	(6)	(1)	(4)	(4)	(1)	0

				For th	e year ended	d 31.12.22 <sup>4</sup>			
USD m					Equity	Interest rates	Credit spreads	Foreign exchange	Commodities
	Min.				2	8	4	2	2
		Max.			17	18	9	11	7
			Average		6	10	5	3	3
				31.12.22	6	10	4	3	3
Total management VaR	6	18	11	9	F	Average (per business division and risk type)			
Global Wealth Management	1	2	1	1	0	1	1	0	0
Personal & Corporate Banking	0	0	0	0	0	0	0	0	0
Asset Management	0	0	0	0	0	0	0	0	0
Investment Bank	6	17	10	8	6	9	5	3	3
Group Functions (including Non-core and Legacy Portfolio)	3	5	4	5	1	4	3	1	0
Diversification effect <sup>2,3</sup>			(5)	(5)	(1)	(3)	(4)	(1)	0

<sup>1</sup> Statistics at individual levels may not be summed to deduce the corresponding aggregate figures. The minima and maxima for each level may occur on different days, and, likewise, the value-at-risk (VaR) for each business line or risk type, being driven by the extreme loss tail of the corresponding distribution of simulated profits and losses for that business line or risk type, may well be driven by different days in the historical time series, rendering invalid the simple summation of figures to arrive at the aggregate total. 2 The difference between the sum of the standalone VaR for the business divisions and Group Items and the total VaR. 3 As the minima and maxima for different business divisions and Group Items occur on different days, it is not meaningful to calculate a portfolio diversification effect. 4 Prior-period numbers are based on preacquisition UBS values as the risk profile compared with UBS AG does not materially differ.

#### VaR limitations

Audited | Actual realized market risk losses may differ from those implied by VaR for a variety of reasons.

- VaR is calibrated to a specified level of confidence and may not indicate potential losses beyond this confidence level.
- The 1-day time horizon used for VaR for internal management purposes (10-day for regulatory VaR) may not fully capture market risk of positions that cannot be closed out or hedged within the specified period.
- In some cases, VaR calculations approximate the effect of changes in risk factors on the values of positions and portfolios.
- Effects of extreme market movements are subject to estimation errors, which may result from non-linear risk sensitivities, and the potential for actual volatility and correlation levels to differ from assumptions implicit in VaR calculations.
- The choice of a longer historical window means sudden increases in market volatility will tend not to increase VaR as quickly as the use of shorter historical observation periods, but such increases will affect VaR for a longer period of time. Similarly, after periods of increased volatility, as markets stabilize, VaR predictions will remain more conservative for a period of time influenced by the length of the historical observation period.

SVaR is subject to the limitations noted for VaR above, but the use of one-year datasets avoids the smoothing effect of longer datasets used for VaR. In addition, the ability to select a one-year period outside of recent market history allows for a wider variety of potential loss events. Therefore, although the significant period of stress during the 2007–2009 financial crisis is no longer contained in the look-back window used for management and regulatory VaR, SVaR continues to use that data. This approach aims to reduce the procyclicality of the regulatory capital requirements for market risks.

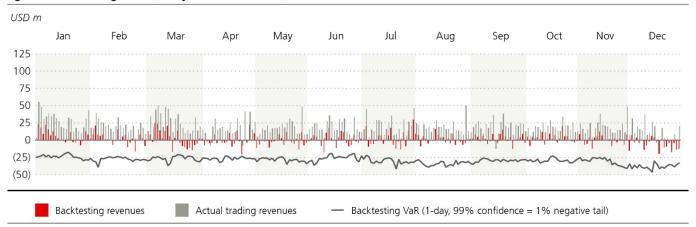
UBS AG recognizes that no single measure can encompass all risks associated with a position or portfolio. We use a set of metrics with both overlapping and complementary characteristics to create a holistic framework that aims to ensure material completeness of risk identification and measurement. As a statistical aggregate risk measure, VaR supplements our comprehensive stress testing framework.

We also have a framework to identify and quantify potential risks not fully captured by our VaR model and refer to such risks as risks not in VaR. The framework underpins these potential risks with additional regulatory capital.

#### Backtesting of VaR

VaR backtesting is a performance measurement process in which a 1-day VaR prediction is compared with the realized 1-day profit or loss (P&L). We compute backtesting VaR using a 99% confidence level and 1-day holding period for the regulatory VaR population. Since 99% VaR is defined as a risk measure that operates on the lower tail of the P&L distribution, 99% backtesting VaR is a negative number. Backtesting revenues exclude non-trading revenues, such as valuation reserves, fees and commissions, and revenues from intraday trading, so as to provide a like-for-like comparison. A backtesting exception occurs when backtesting revenues are lower than the previous day's backtesting VaR.

# UBS Group excluding Credit Suisse: development of regulatory backtesting revenues and actual trading revenues against backtesting VaR<sup>4</sup> (1-day, 99% confidence)



<sup>1</sup> The chart is based on UBS Group excluding Credit Suisse as the risk profile compared with UBS AG does not materially differ. 2 Excludes non-trading revenues, such as valuation reserves, commissions and fees, and revenues from intraday trading. 3 Includes backtesting revenues and revenues from intraday trading. 4 Based on Basel III regulatory VaR, excludes CVA positions and their eligible hedges, which are subject to the standalone CVA charge.

Statistically, given the 99% confidence level, two or three backtesting exceptions a year can be expected. More than four exceptions could indicate that the VaR model is not performing appropriately, as could too few exceptions over a long period. However, as noted for VaR limitations above, a sudden increase (or decrease) in market volatility relative to the volatility observed in the look-back window could lead to a higher (or lower) number of exceptions. Therefore, backtesting exceptions are investigated, as are exceptional positive backtesting revenues, with the results reported to senior business management and regulators.

The number of negative backtesting exceptions within a 250-business-day window decreased to zero from one by the end of 2023. The Swiss Financial Market Supervisory Authority (FINMA) VaR multiplier derived from backtesting exceptions for market risk RWA was unchanged compared with the prior year, at 3.0.

#### VaR model confirmation

In addition to the for-regulatory-purposes backtesting described above, we conduct extended backtesting for internal model confirmation purposes. This includes observing model performance across the entire P&L distribution (not just the tails) and at multiple levels within the business division hierarchies.

> Refer to "Risk measurement" in this section for more information about our approach to model confirmation procedures

#### VaR model developments in 2023

Audited I No material changes were made to the UBS AG VaR model in 2023.

#### Future market risk-related regulatory capital developments

In January 2019, the Basel Committee on Banking Supervision (the BCBS) published the final standards on the minimum capital requirements for market risk (the Fundamental Review of the Trading Book). In December 2022, the Swiss State Secretariat for International Finance changed the expected date on which the final Basel III guidelines are to enter into force, from 1 July 2024 to 1 January 2025. As a result, the Swiss implementation timeline would be aligned to the currently expected implementation timeline in the EU. In November 2023, the Swiss Federal Council adopted amendments to the Capital Adequacy Ordinance (the CAO) for banks to incorporate the final Basel III standards adopted by the BCBS in Swiss law. The Federal Department of Finance (FDF) will inform the Federal Council again about the status of international implementation by the end of July 2024.

Key elements of the revised market risk framework include: (i) changes to the internal model-based approach, including changes to the model approval and performance measurement process; (ii) changes to the standardized approach with the aim of it being a credible fallback method for an internal model-based approach; and (iii) a revised boundary between the trading book and the banking book. UBS maintains a close dialogue with FINMA to discuss the implementation objectives in more detail and to provide a smooth transition of the capital regime for market risk.

In September 2021, FINMA mandated UBS to hold an RWA add-on for the omission of time decay in regulatory VaR and SVaR. The add-on reflects the outcome of discussions with FINMA regarding our regulatory VaR model, which started in late 2019. The integration of time decay into the regulatory VaR model went live in January 2024.

- > Refer to "Risk-weighted assets" in the "Capital, liquidity and funding, and balance sheet" section of this report for more information about the development of RWA including the regulatory add-on
- > Refer to "Risk measurement" in this section for more information about our approach to model confirmation procedures
- > Refer to the "Regulatory and legal developments" and "Risk factors" sections of this report for more information

#### Interest rate risk in the banking book

#### Sources of interest rate risk in the banking book

Audited I IRRBB arises from balance sheet positions such as amounts due from banks, Loans and advances to customers, Financial assets at fair value not held for trading, Financial assets measured at amortized cost, Customer deposits, Debt issued measured at amortized cost, and derivatives, including those subject to hedge accounting. Fair value changes to these positions may affect other comprehensive income (OCI) or the income statement, depending on their accounting treatment.

UBS AG's largest banking book interest rate exposures arise from customer deposits and lending products in Global Wealth Management and Personal & Corporate Banking, as well as from debt issuance, liquidity buffers and interest rate hedges in Group Treasury. The inherent interest rate risks stemming from Global Wealth Management and Personal & Corporate Banking are generally transferred to Group Treasury, to manage them centrally together with our modeled interest rate duration assigned to equity, goodwill and real estate. This makes the netting of interest rate risks across different sources possible, while leaving the originating businesses with commercial margin and volume management. The residual interest rate risk is mainly hedged with interest rate swaps, to the vast majority of which we apply hedge accounting. Short-term exposures and HQLA classified as Financial assets at fair value not held for trading are hedged with derivatives accounted for on a mark-to-market basis. Long-term fixed-rate debt issued and HQLA hedged with external interest rate swaps are designated in fair value hedge accounting relationships.

#### Risk management and governance

IRRBB is measured using several metrics, the most relevant of which are the following.

- EVE sensitivity to yield curve moves is calculated as changes in the present value of future cash flows irrespective of accounting treatment. These yield curve moves are also the key risk factors for statistical and stress-based measures, e.g., VaR and stress scenarios, as well as the regulatory interest rate scenarios. These are measured and reported daily. The regulatory IRRBB EVE exposure is the most adverse regulatory interest rate scenario that is netted across currencies. It excludes the sensitivity from additional tier 1 (AT1) capital instruments (as per specific FINMA requirements) and the modeled interest rate duration assigned to equity, goodwill and real estate. UBS AG also applies granular internal interest rate shock scenarios to its banking book positions to monitor its specific risk profile.
- Net interest income (NII) sensitivities to yield curve moves are calculated as changes of baseline NII over a set time horizon, which we internally compute by assuming interest rates in all currencies develop according to their marketimplied forward rates and assuming constant business volumes and product mix and no specific management actions. The sensitivities are measured and reported monthly.

UBS AG actively manages IRRBB, with the aim of reducing the volatility of NII subject to limits and triggers for EVE and NII exposure at consolidated and significant legal entity levels.

The Group Asset and Liability Committee (the ALCO) and, where relevant, ALCOs at a legal entity level perform independent oversight over the management of IRRBB, which is also subject to Group Internal Audit and model governance.

#### > Refer to "Risk measurement" in this section for more information

#### Key modeling assumptions

The cash flows from customer deposits and lending products used in calculation of EVE sensitivity exclude commercial margins and other spread components, are aggregated by daily time buckets and are discounted using risk-free rates. Our external issuances are discounted using UBS's senior debt curve, and capital instruments are modeled to the first call date. NII sensitivity, which includes commercial margins, is calculated over a one-year time horizon, assuming constant balance sheet structure and volumes, and considers embedded interest rate options.

The average repricing maturity of non-maturing deposits and loans is determined via target replication portfolios designed to protect product margins. Optimal replicating portfolios are determined at granular currency- and product-specific levels by simulating and applying a real-world market rate model to historically calibrated client rate and volume models.

UBS AG uses an econometric prepayment model to forecast prepayment rates on US mortgage loans in UBS Bank USA and agency mortgage-backed securities (MBSs) held in various liquidity portfolios of UBS Americas Holding LLC consolidated. These prepayment rates are used to forecast both mortgage loan and MBS balances under various macroeconomic scenarios. The prepayment model is used for a variety of purposes, including risk management and regulatory stress testing. Swiss mortgages and fixed-term deposits generally do not carry similar optionality, due to prepayment and early redemption penalties.

#### Effect of interest rate changes on shareholders' equity and CET1 capital

The "Accounting and capital effect of changes in interest rates" table below shows the effects on shareholders' equity and CET1 capital of gains and losses from changes in interest rates in the main banking book positions. We use derivatives to hedge interest rate risks in the banking book and these reflect changes in interest rates as an immediate fair value gain or loss, recognized either in the income statement or through OCI. Where hedged items are accrual accounted, we aim to minimize accounting asymmetries by applying hedge accounting to reflect the economic hedge relationship.

In a rising rate scenario, we would have an initial decrease in shareholders' equity as a result of fair value losses on our derivatives recognized in OCI while we would expect higher NII over time as rates increase. The effect on CET1 capital would be much lower as gains and losses on interest rate swaps designated as cash flow hedges are not recognized for regulatory capital purposes.

#### Accounting and capital effect of changes in interest rates<sup>1</sup>

		Recognition	Sharehold	ders' equity	CET1 capital	
	Timing	Income statement / OCI	Gains	Losses	Gains	Losses
Loans and deposits at amortized cost <sup>2,3</sup>	Gradual	Income statement	•	•	•	•
Other financial assets and liabilities measured at amortized cost <sup>2</sup>	Gradual	Income statement	•	•	•	•
Debt issued measured at amortized cost <sup>2,3</sup>	Gradual	Income statement	•	•	•	•
Receivables and payables from securities financing transactions <sup>2</sup>	Gradual	Income statement	•	•	•	•
Financial assets at fair value not held for trading	Immediate	Income statement	•	•	•	•
Financial assets at fair value through other comprehensive income	Immediate	OCI	•	•		•
Derivatives designated as cash flow hedges	Immediate	OCI <sup>4</sup>	•	•		
Derivatives designated as fair value hedges <sup>5</sup>	Immediate	Income statement	•	•	•	•
Derivatives transacted as economic hedges	Immediate	Income statement	•	•	•	•

<sup>1</sup> Refer to the "Reconciliation of equity under IFRS Accounting Standards to Swiss SRB common equity tier 1 capital" table in the "Capital, liquidity and funding, and balance sheet" section of this report for more information about the differences between shareholders' equity and CET1 capital. 2 For fixed-rate financial instruments, changes in interest rates affect the income statement when these instruments roll over and reprice. 3 For hedge-accounted items, a fair value adjustment is applied in line with the treatment of the hedging derivatives. 4 Excluding hedge ineffectiveness that is recognized in the income statement in accordance with IFRS Accounting Standards. 5 The fair value of the derivatives is offset by the fair value adjustment of the hedge designation and accounted for through OCI, which is included in CET1.

#### Economic value of equity sensitivity

Audited I The EVE sensitivity in the banking book to a +1-basis-point parallel shift in yield curves was negative USD 28.1m as of 31 December 2023, compared with negative USD 25.0m as of 31 December 2022. This excludes the sensitivity of USD 4.8m from AT1 capital instruments (as per specific FINMA requirements) in contrast to general BCBS guidance.

The majority of our interest rate risk in the banking book is a reflection of the net asset duration that we run to offset our modeled sensitivity of net USD 22.4m (31 December 2022: USD 19.6m) assigned to our equity, goodwill and real estate, with the aim of generating a stable NII contribution. Of this, USD 15.8m and USD 5.6m are attributable to the US dollar and the Swiss franc portfolios, respectively (31 December 2022: USD 14.0m and USD 4.8m, respectively).

In addition to the sensitivity mentioned above, we calculate the six interest rate shock scenarios prescribed by FINMA. The "Parallel up" scenario, assuming all positions were fair valued, was the most severe and would have resulted in a change in EVE of negative USD 5.3bn, or 9.3%, of our tier 1 capital (31 December 2022: negative USD 4.6bn, or 8.4%), which is well below the 15% threshold as per the BCBS supervisory outlier test for high levels of interest rate risk in the banking book.

The immediate effect on UBS AG's tier 1 capital in the "Parallel up" scenario as of 31 December 2023 would have been a decrease of USD 0.5bn, or 0.9% (31 December 2022: USD 0.4bn, or 0.7%), reflecting the fact that the vast majority of our banking book is accrual accounted or subject to hedge accounting. The "Parallel up" scenario would subsequently have a positive effect on NII, assuming a constant balance sheet.

UBS AG also applies granular internal interest rate shock scenarios to its banking book positions to monitor the banking book's specific risk profile.

### Net interest income sensitivity

The main NII sensitivity in the banking book resides in Global Wealth Management and Personal & Corporate Banking. We assign a target duration to our investment of equity portfolio, and Group Treasury actively manages the residual IRRBB. This sensitivity is assessed using a number of scenarios assuming parallel and non-parallel shifts in yield curves, with various degrees of severity, and we have set and monitor thresholds for the NII sensitivity to immediate parallel shocks of –200 and +200 basis points under the assumption of constant balance sheet volume and structure.

> Refer to the "UBS AG consolidated performance" section for more information about sensitivity to interest rate movements

#### Interest rate risk - banking book

					31.12.23			
USD m			Effect on EVE1 – BCBS					
Scenarios	CHF	EUR	GBP	USD	Other	Total	Additional tier 1 (AT1) capital instruments	Total
+1 bp	(4.3)	(0.7)	0.0	(23.1)	0.1	(28.1)	4.8	(23.3)
Parallel up <sup>2</sup>	(608.9)	(142.9)	2.2	(4,522.3)	(15.0)	(5,287.0)	888.3	(4,398.7)
Parallel down <sup>2</sup>	686.1	150.0	(11.8)	4,593.2	17.1	5,434.5	(1,028.0)	4,406.6
Steepener <sup>3</sup>	(335.2)	(16.0)	(13.1)	(973.6)	(23.0)	(1,361.0)	95.9	(1,265.1)
Flattener <sup>4</sup>	214.1	(6.8)	12.3	(94.1)	17.5	142.9	104.7	247.6
Short-term up <sup>5</sup>	(38.5)	(48.4)	13.4	(1,909.8)	7.1	(1,976.3)	477.4	(1,498.9)
Short-term down <sup>6</sup>	42.9	49.8	(14.3)	2,036.8	(10.0)	2,105.3	(498.9)	1,606.4

					31.12.22			
USD m			Effect on EVE <sup>1</sup> – BCBS					
Scenarios	CHF	EUR	GBP	USD	Other	Total	Additional tier 1 (AT1) capital instruments	Total
+1 bp	(4.1)	(0.6)	0.1	(20.4)	(0.1)	(25.0)	3.4	(21.5)
Parallel up <sup>2</sup>	(576.5)	(111.6)	33.4	(3,936.5)	(26.3)	(4,617.2)	652.5	(3,964.7)
Parallel down <sup>2</sup>	644.2	142.2	(45.7)	4,066.1	21.9	4,828.5	(702.8)	4,125.7
Steepener <sup>3</sup>	(256.7)	(93.2)	(28.2)	(1,026.7)	(3.3)	(1,408.2)	(47.3)	(1,455.5)
Flattener <sup>4</sup>	144.7	75.4	32.7	95.4	(2.6)	345.8	191.1	536.9
Short-term up <sup>5</sup>	(84.1)	37.1	42.4	(1,514.7)	(13.9)	(1,532.9)	440.8	(1,092.2)
Short-term down <sup>6</sup>	88.1	(36.1)	(42.6)	1,654.0	13.4	1,676.6	(457.8)	1,218.8

<sup>1</sup> Economic value of equity. 2 Rates across all tenors move by ±150 bps for Swiss franc, ±200 bps for euro and US dollar, and ±250 bps for pound sterling. 3 Short-term rates decrease and long-term rates increase more than long-term rates. 6 Short-term rates decrease more than long-term rates.

#### Other market risk exposures

#### Own credit

We are exposed to changes in UBS AG's own credit reflected in the valuation of financial liabilities designated at fair value when our own credit risk would be considered by market participants, except for fully collateralized liabilities or other obligations for which it is established market practice to not include an own-credit component.

> Refer to "Note 20 Fair value measurement" in the "Consolidated financial statements" section of this report for more information about own credit

#### Structural foreign exchange risk

Upon consolidation, assets and liabilities held in foreign operations are translated into US dollars at the closing foreign exchange rate on the balance sheet date. Value changes (in US dollars) of non-US dollar assets or liabilities due to foreign exchange movements are recognized in OCI and therefore affect shareholders' equity and CET1 capital.

Group Treasury uses strategies to manage this foreign currency exposure, including matched funding of assets and liabilities and net investment hedging.

- > Refer to the "Capital, liquidity and funding, and balance sheet" section of this report for more information about our exposure to and management of structural foreign exchange risk
- > Refer to "Note 10 Derivative instruments" in the "Consolidated financial statements" section of this report for more information about our hedges of net investments in foreign operations

#### Equity investments and investment fund units

Audited I UBS AG makes direct investments in a variety of entities and buys equity holdings in both listed and unlisted companies, with the aim of supporting our business activities and delivering strategic value to UBS. This includes investments in exchange and clearing house memberships, as well as minority investments in early-stage fintechs and technology companies via UBS Next. We may also make investments in funds that we manage in order to fund or seed them at inception or to demonstrate that our interests align with those of investors. We also buy, and are sometimes required by agreement to buy, securities and units from funds that we have sold to clients.

The fair value of equity investments tends to be influenced by factors specific to the individual investments. Equity investments are generally intended to be held for the medium or long term and may be subject to lock-up agreements. For these reasons, we generally do not control these exposures by using market risk measures applied to trading activities. However, such equity investments are subject to a different range of controls, including preapproval of new investments by business management and Risk Control, portfolio and concentration limits, and regular monitoring and reporting to senior management. They are also included in our firm-wide statistical and stress-testing metrics, which flow into our risk appetite framework.

As of 31 December 2023, we held equity investments and investment fund units totaling USD 2.9bn, of which USD 1.9bn was classified as Financial assets at fair value not held for trading and USD 1.0bn as Investments in associates.

- > Refer to "Note 20 Fair value measurement" and "Note 28 Interests in subsidiaries and other entities" in the "Consolidated financial statements" section of this report for more information
- > Refer to "Note 1 Summary of material accounting policies" in the "Consolidated financial statements" section of this report for more information about the classification of financial instruments

#### Debt investments

Audited I Debt investments classified as Financial assets measured at fair value through other comprehensive income as of 31 December 2023 were measured at fair value with changes in fair value recorded through Equity, and can broadly be categorized as money market instruments and debt securities primarily held for statutory, regulatory or liquidity reasons.

The risk control framework applied to debt instruments classified as Financial assets measured at fair value through other comprehensive income depends on the nature of the instruments and the purpose for which we hold them. Our exposures may be included in market risk limits or be subject to specific monitoring and interest rate sensitivity analysis. They are also included in our firm-wide statistical and stress-testing metrics, which flow into our risk appetite framework.

Debt instruments classified as Financial assets measured at fair value through other comprehensive income had a fair value of USD 2.2bn as of 31 December 2023, compared with USD 2.2bn as of 31 December 2022.

- > Refer to "Note 20 Fair value measurement" in the "Consolidated financial statements" section of this report for more information
- > Refer to "Economic value of equity sensitivity" in this section for more information
- > Refer to "Note 1 Summary of material accounting policies" in the "Consolidated financial statements" section of this report for more information about the classification of financial instruments

#### Pension risk

We provide a number of pension plans for past and current employees, some classified as defined benefit pension plans under IFRS Accounting Standards, which can have a material effect on our equity under IFRS Accounting Standards and CET1 capital.

Pension risk is the risk that defined benefit plans' funded status might decrease, negatively affecting our capital. This can result from falls in the value of a plan's assets or in the investment returns, increases in defined benefit obligations, or combinations of the above.

Important risk factors affecting the fair value of pension plans' assets include equity market returns, interest rates, bond yields, and real estate prices. Important risk factors affecting the present value of expected future benefit payments include high-grade bond yields, interest rates, inflation rates, and life expectancy.

Pension risk is included in our firm-wide statistical and stress-testing metrics, which flow into our risk appetite framework. The potential effects are thus captured in the post-stress capital ratio calculations.

> Refer to "Note 1 Summary of material accounting policies" and "Note 26 Post-employment benefit plans" in the "Consolidated financial statements" section of this report for more information about defined benefit plans

# Country risk

#### **Country risk framework**

Country risk includes all country-specific events occurring in a sovereign jurisdiction that may lead to impairment of UBS AG's exposures. It may take the form of: (i) sovereign risk, which is the ability and willingness of a government to honor its financial commitments; (ii) transfer risk, which arises if a counterparty or issuer cannot acquire foreign currencies following a moratorium by a central bank on foreign exchange transfers; or (iii) "other" country risk. "Other" country risk may manifest itself through, on the one hand, increased and multiple counterparty and issuer default risk (systemic risk) and, on the other hand, events that may affect a country's standing, such as adverse shocks affecting political stability or institutional and / or legal frameworks. UBS AG has a well-established risk control framework to assess the risk profiles of all countries where we have exposure.

We assign a country rating to each country, which reflects our view of its creditworthiness and of the probability of a country risk event occurring. Country ratings are mapped to statistically derived default probabilities, described under "Probability of default" in this section. We use this internal analysis to set the credit ratings of governments and central banks, estimate the probability of a transfer event occurring, and establish rules on how aspects of country risk should be incorporated in counterparty ratings of non-sovereign entities domiciled in the respective country.

Country ratings are also used to define UBS AG's risk appetite regarding foreign countries. A country risk limit (i.e., maximum aggregate exposure) applies to exposures to counterparties or issuers of securities and financial investments in the given foreign country. UBS AG may limit the extension of credit, transactions in traded products or positions in securities based on a country risk ceiling even if its exposure to a counterparty is otherwise acceptable.

For internal measurement and control of country risk, UBS AG also considers the financial effect of market disruptions arising prior to, during and after a country crisis. These may take the form of a severe deterioration in a country's debt, equity or other asset markets, or a sharp depreciation of its currency. We use stress testing to assess potential financial effects of severe country or sovereign crises. This involves the developing of plausible stress scenarios for combined stress testing and the identification of countries that may potentially be subject to a crisis event, determining potential losses and making assumptions about recovery rates depending on the types of credit transactions involved and their economic importance to the affected countries.

#### **Country risk exposure**

#### Country risk exposure measure

The presentation of country risk follows our internal risk view, where the basis for measuring exposures depends on the product category in which we classify the exposures. In addition to the classification of exposures into banking products and traded products, covered in "Credit risk profile of UBS AG" in this section, in the trading inventory UBS AG classifies issuer risk on securities such as bonds and equities, as well as risk relating to underlying reference assets for derivative positions.

The trading inventory is managed on a net basis, and the value of long positions is netted against that of short positions with the same underlying issuer. Net exposures are, however, floored at zero per issuer in the figures presented in the following tables. As a result, potentially offsetting benefits of certain hedges and short positions across issuers are not recognized.

We do not recognize any expected recovery values when reporting country exposures as exposure before hedges, except for risk-reducing effects of master netting agreements and collateral held in either cash or portfolios of diversified marketable securities, which we deduct from the potential exposure values. Within banking products and traded products, risk-reducing effects of credit protection are generally taken into account on a notional basis when determining the net of hedge exposures.

#### Country risk exposure allocation

In general, exposures are shown against the country of domicile of the contractual counterparty or the issuer of the security. For some counterparties whose economic substance in terms of assets or source of revenues is primarily located in a different country, the exposure is allocated to the risk domicile of those assets or revenues.

We apply a specific approach for banking products exposures to branches of banks that are located in a country other than the legal entity's domicile. In such cases, exposures are recorded in full against the country of domicile of the counterparty and additionally in full against the country where the branch is located.

In the case of derivatives, we show the counterparty's risk potential exposure against the counterparty's country of risk (presented within traded products). In addition, risk associated with an instantaneous fall in value of underlying reference assets to zero (assuming no recovery) is shown against the country of risk of the issuer of the reference asset (presented within trading inventory). This approach allows us to capture both counterparty and, where applicable, issuer elements of risk arising from derivatives and applies comprehensively for all derivatives, including single-name credit default swaps (CDSs) and other credit derivatives.

CDSs are primarily bought and sold in relation to our trading businesses, and, to a much lesser degree, used to hedge credit valuation adjustments. Holding CDSs for credit default protection does not necessarily protect the buyer of protection against losses, as contracts only pay out under certain scenarios. The effectiveness of our CDS protection as a hedge of default risk is influenced by several factors, including the contractual terms under which a given CDS was written. Generally, only the occurrence of credit events as defined by the CDS contract's terms (which may include, among other events, failure to pay, restructuring or bankruptcy) results in payments under the purchased credit protection contracts. For CDS contracts on sovereign obligations, repudiation can also be deemed as a default event. The determination as to whether a credit event has occurred is made by the relevant International Swaps and Derivatives Association (ISDA) determination committees (composed of various ISDA member firms) based on the terms of the CDS and the facts and circumstances surrounding the event.

#### Top 20 country risk exposures

The table below shows UBS AG's 20 largest country exposures by product type, excluding our home country, as of 31 December 2023 compared with 31 December 2022.

Compared with the prior year, UBS AG's net exposure to the US increased by USD 26.7bn, driven by central bank exposures due to treasury activities, as well as loans to corporates. Net exposure to the UK increased by USD 8.7bn, driven by central bank exposures due to treasury activities.

Based on the sovereign rating categories, as of 31 December 2023, 88% of UBS AG's emerging market country exposure was rated investment grade, compared with 87% as of 31 December 2022.

#### Israe

As of 31 December 2023, UBS AG's direct country risk exposure to Israel was USD 289m, mainly from lending and collateralized OTC derivatives exposure within the Investment Bank. UBS AG's direct exposure to Gulf Cooperation Council countries was USD 2.5bn. The direct exposure to Egypt, Jordan and Lebanon is limited, and UBS AG has no direct exposure to Iran, Iraq or Syria.

#### Russia

UBS AG's direct country risk exposure to Russia contributed USD 66m to our total emerging market exposure of USD 22.0bn as of 31 December 2023, compared with a contribution of USD 98m as of 31 December 2022. This includes nostro accounts balances, and issuer risk on trading inventory within the Investment Bank.

UBS AG had no material direct country risk exposures to Belarus or to Ukraine as of 31 December 2023 and no material reliance on Russian, Belarusian or Ukrainian collateral.

Top 20 country risk net exposures, by product type

Total top 20 <sup>3</sup>	313,962	285,483	163,142	130,250	78,903	92,741	71,918	62,491
Finland	1,185	1,185	44	62	341	432	800	691
Monaco	1,204	1,021	1,191	1,001	13	20	0	0
Spain	1,316	1,032	669	630	321	201	325	200
Austria	1,323	1,526	137	285	572	450	615	792
Italy	1,459	1,492	751	628	470	703	238	161
Norway	2,114	2,417	58	80	530	1,137	1,526	1,200
Hong Kong SAR	2,776	3,666	884	938	885	1,843	1,007	885
Sweden	3,259	2,283	225	158	1,545	1,322	1,490	803
Netherlands	3,804	5,964	812	1,074	2,051	3,767	941	1,123
Luxembourg	3,947	3,423	3,212	2,717	566	280	169	427
South Korea	4,312	3,896	437	388	647	1,042	3,228	2,466
China	4,993	4,709	1,015	1,347	835	1,379	3,144	1,983
Australia	8,446	8,895	1,964	1,365	4,443	5,834	2,038	1,696
Canada	8,722	7,832	550	274	2,741	3,730	5,431	3,827
France	9,125	10,641	1,466	2,056	3,206	3,980	4,453	4,605
Singapore	10,310	12,137	2,122	3,038	3,362	3,767	4,827	5,332
Japan	18,328	22,221	13,300	13,251	4,457	8,559	571	410
Germany	20,864	20,115	7,212	8,255	7,533	6,959	6,118	4,901
United Kingdom	40,836	32,104	22,248	10,828	16,922	19,786	1,666	1,490
United States	165,639	138,924	104,845	81,875	27,463	27,550	33,331	29,499
	31.12.23	31.12.222	31.12.23	31.12.222	31.12.23	31.12.222	31.12.23	31.12.222
	Net of hec	Net of hedges <sup>1</sup>		Net of hedges <sup>1</sup>		dges	Net long per issuer	
USD m	Total		Banking pr (loans, guaran commitm	tees, loan	and securities after master nettir and net of c	financing) ig agreements	(securities and potential benefits / remaining exposure from derivatives)	
					oducts rom derivatives	Trading inve	nton	

<sup>1</sup> Before deduction of IFRS 9 ECL allowances and provisions. 2 Comparative period has been restated to reflect a change in the measure used to disclose country risk exposures. 3 Excluding Switzerland, supranationals and global funds.

#### Emerging markets<sup>1</sup> net exposure<sup>2</sup>, by internal UBS country rating category

USD m	31.12.23	31.12.223
Investment grade	19,328	21,900
Sub-investment grade	2,697	3,173
Total	22,025	25,073

<sup>1</sup> UBS AG classifies countries as emerging markets based on per capita GDP, historical real GDP growth, alignment with international institutions (such as BIS, World Bank, IMF, MSCI) and other factors. 2 Net of credit hedges (for banking products and for traded products); net long per issuer (for trading inventory). Before deduction of IFRS 9 ECL allowances and provisions. 3 Comparative period has been restated to reflect a change in the measure used to disclose country risk exposures.

# Sustainability and climate risk

Our climate strategy and governance are determined and overseen at the UBS Group level. Similarly, we identify and manage climate risks, including climate-related financial risks, in our own operations, balance sheet, client assets and supply chain on the UBS Group level.

Climate-related metrics for UBS AG are presented in the UBS Group Annual Report 2023.

- > Refer to "Sustainability and climate risk" in the "Risk management and control" section of the UBS Group Annual Report 2023, available under "Annual reporting" at *ubs.com/investors*, for more information
- > Refer to the "Our sustainability and impact strategy" section of the UBS Group Sustainability Report 2023, available under "Annual reporting" at *ubs.com/investors*, for more information

## Non-financial risk

Non-financial risk is the risk of undue monetary loss and / or non-monetary adverse consequences resulting from inadequate or failed internal processes, people and / or systems, failure to comply with laws and regulations and internal policies and procedures, or external events (deliberate, accidental or natural) that have an impact on UBS, its clients or its markets.

#### **Key developments**

We have identified nine non-financial risk themes as being currently key to us. These are:

- governance and legal structure integration;
- financial and regulatory reporting;
- operational resilience, stability and cybersecurity;
- data life cycle;
- investor protection and market interaction;
- strategic growth initiatives and cross-divisional interaction;
- the evolving nature of anti-money laundering (AML), know your client (KYC), sanctions, anti-bribery and corruption (ABC), and fraud;
- employee conduct, capacity and culture; and
- environmental, social and governance (ESG) risks.

UBS continues to actively manage the non-financial risks emerging from the acquisition of the Credit Suisse Group, including the current operation of dual corporate structures, and the scale, pace and complexity of the required integration activities. These activities continue to be managed by the program run by our Group Integration Office. The integration of Credit Suisse requires data to be migrated into the UBS environment and we aim to ensure that we have robust controls to preserve data integrity, quality and availability to mitigate data migration risks and to meet regulatory expectations.

Through this period of change, we place an increased focus on maintaining and enhancing our control environment and continue to cooperate with regulators in relation to the submission and execution of implementation plans to meet regulatory expectations, including remediation requirements applicable to Credit Suisse AG. In addition, the Group is closely monitoring non-financial risk indicators to detect any potential for adverse impacts on the control environment.

There is an increased risk of cyber-related operational disruption to business activities at our locations and / or those of third-party suppliers due to operating an enlarged group of entities. This is combined with the increasingly dynamic threat environment, which is intensified by current geopolitical factors and evidenced by the increased volumes and sophistication of cyberattacks against financial institutions globally.

Cyberattacks on third-party vendors have affected our operations in the past and continue to be a source of residual risk to our business. We remain on heightened alert to respond to and mitigate elevated cyber- and information-security threats. During the first quarter of 2023, a third-party vendor, ION XTP, suffered a ransomware attack, which resulted in some disruption to our exchange-traded derivatives clearing activities, although we restored our services within 36 hours, using an available alternative solution. Following a post-incident review, we are improving our frameworks for managing third parties that support our important business services and are taking actions to enhance our cyber-risk assessments and controls over third-party vendors. We continue to invest in improving our technology infrastructure and information-security governance to improve our defense, detection and response capabilities against cyberattacks.

In addition, we are working to enhance our operational resilience to address these heightened risks and to meet regulatory deadlines through 2026. We are implementing a global framework designed to drive enhancements in operational resilience across all business divisions and relevant jurisdictions, as well as working with the third parties, including vendors, that are of critical importance to our operations to assess their operational resilience against our standards.

The increasing interest in data-driven advisory processes, and use of artificial intelligence (AI) and machine learning, is opening up new questions related to the fairness of AI algorithms, data life-cycle management, data ethics, data privacy and security, and records management. In addition, new risks continue to emerge, such as those that result from the demand from our clients for distributed ledger technology, blockchain-based assets and cryptocurrencies; however, we currently have limited exposure to such risks, and relevant control frameworks for them are implemented and reviewed on a regular basis as they evolve.

Competition to find new business opportunities, products and services across the financial services sector, both for firms and for customers, is increasing, particularly during periods of market volatility and economic uncertainty. Thus, suitability risk, product selection, cross-divisional service offerings, quality of advice and price transparency remain areas of heightened focus for UBS and for the industry as a whole.

Evolving ESG regulations and major legislation, such as the Consumer Duty regulation in the United Kingdom, the Swiss Financial Services Act (FIDLEG) in Switzerland, Regulation Best Interest (Reg BI) in the US and the Markets in Financial Instruments Directive II (MiFID II) in the EU, all significantly affect the industry and have required adjustments to control processes.

Cross-border risk (including unintended permanent establishment) remains an area of regulatory attention for global financial institutions, including a focus on market access, such as third-country market access into the European Economic Area, and taxation of US persons. We maintain a series of controls designed to address these risks, and we are increasing the number of controls that are automated.

Financial crime, including money laundering, terrorist financing, sanctions violations, fraud, bribery and corruption, continues to present a major risk, as technological innovation and geopolitical developments increase the complexity of doing business and heightened regulatory attention continues. An effective financial crime prevention program therefore remains essential, and we continue to focus on strategic enhancements to our global AML, KYC and sanctions programs. Money laundering and financial fraud techniques are becoming increasingly sophisticated, and geopolitical volatility makes the sanctions landscape more complex. The extensive and continuously evolving sanctions arising from the Russia–Ukraine war require constant attention to prevent circumvention risks, while the conflicts in the Middle East may increase terrorist-financing risks.

In the US, UBS AG entered into a Consent Order with the Office of the Comptroller of the Currency (the OCC) in May 2018 relating to our US branch AML and KYC programs. In response, we have introduced significant improvements to our framework for the purpose of ensuring sustainable remediation of US-relevant Bank Secrecy Act / AML issues across all our US legal entities.

Achieving fair outcomes for our clients, upholding market integrity and cultivating the highest standards of employee conduct are of critical importance to us. We maintain a conduct risk framework across our activities, which is designed to align our standards and conduct with these objectives and to retain momentum on fostering a strong culture.

In September 2022, the US Securities and Exchange Commission (the SEC) and the Commodity Futures Trading Commission (the CFTC) issued settlement orders relating to communications recordkeeping requirements in our US broker-dealers and our registered swap dealers. In response to shortcomings identified in that context, we continued work on a global remediation program started in 2022.

#### Non-financial risk framework

We follow a Group-wide non-financial risk framework that establishes requirements for identifying, managing, assessing and mitigating operational, compliance and financial crime risks to achieve an agreed balance between risk and return. It is built on the following pillars:

- classifying inherent risks through 19 non-financial risk taxonomies, which define the universe of material non-financial risks that can arise as a consequence of our business activities and external factors;
- performing control assurance activities, including self-assessing the design and operating effectiveness of controls, first- and second-line-of-defense control reviews and independent control testing;
- defining the non-financial risk appetite (including a financial risk appetite statement at the Group, UBS AG and business division levels for non-financial risk events) through quantitative metrics and thresholds and qualitative measures, and assessing risk exposure against appetite;
- assessing inherent and residual risk through risk assessment processes and determining whether additional remediation plans are required to address identified deficiencies; and
- proactively and sustainably remediating identified control deficiencies.

Divisional Presidents are accountable for the effectiveness of non-financial risk management and for the robustness of the front-to-back control environment within their business divisions, and legal-entity-responsible executives are in charge of non-financial risk management within their legal entities. Group function heads are accountable for supporting the divisional Presidents and legal-entity-responsible executives of our legal entities in the discharge of this responsibility, by confirming completeness and effectiveness of the control environment and non-financial risk management within their Group functions. Collectively, divisional Presidents, central Group function heads and legal-entity-responsible executives are in charge of implementing the non-financial risk framework.

Compliance & Operational Risk Control (C&ORC) is responsible for providing an independent and objective view of the adequacy of non-financial risk management across the Group, and ensuring that compliance risk, financial crime risk and operational risk are understood, owned and managed in accordance with our risk appetite. C&ORC business- or functionaligned teams sit within the Group Compliance, Regulatory & Governance function, reporting to the Group Chief Compliance and Governance Officer, who is a member of the Group Executive Board.

The non-financial risk framework forms the common basis for managing and assessing compliance risk, financial crime risk and operational risk, and there are additional C&ORC activities intended to ensure we are able to demonstrate compliance with applicable laws, rules and regulations.

In 2023, we successfully executed on the framework enhancements designed in 2022, with, for example, several cycles of risk appetite assessments performed on the basis of the Group-wide non-financial risk appetite statements across all taxonomies. We focused on improving effectiveness by simplifying and digitalizing the non-financial risk framework and respective processes.

All functions within UBS are required to periodically assess the design and operating effectiveness of key internal non-financial risk controls. The output of these reviews supports the assessment and testing scope of internal controls over financial reporting as required by the Sarbanes–Oxley Act, Section 404 (SOX 404).

Key control deficiencies identified during the internal control and risk assessment processes must be reported in the non-financial risk inventory, and sustainable remediation must be defined and executed. These control deficiencies are assigned to owners at senior management level and the remediation progress is reflected in the respective managers' annual performance measurement and objectives. To assist with prioritizing the most material control deficiencies and measuring aggregated risk exposure, irrespective of origin, a common rating methodology is applied across all three lines of defense, as well as by external audit.

#### Cybersecurity

Cybersecurity for UBS AG is integrated into the UBS Group risk control framework.

#### Risk management and strategy

Cyber- and information security risk is the risk that a malicious internal or external act, or a failure of IT hardware or software, or human error may have a material impact on confidentiality, integrity, or availability of UBS's data or information systems.

Cybersecurity is a key operational risk facing UBS and we devote considerable resources to establishing and maintaining processes for assessing, identifying and managing cybersecurity risk through our global workforce and cyber-operations centers around the world.

> Refer to "Risk governance" in this section for information about our approach to risk management, including our risk governance framework

#### Governance

In line with our overall non-financial risk management framework, we take a cross-functional approach to addressing cybersecurity risk, with the Group Operations and Technology Office (GOTO), business divisions, Group Compliance, Regulatory & Governance (GCRG), Group Risk Control, Group Legal, and Group Internal Audit all playing key roles. Our risk control framework follows the three-lines-of-defense model. GOTO establishes the policies and procedures designed to safeguard our information systems and the information those systems collect and process. The business divisions, together with GOTO, are then responsible for implementing those policies and procedures as part of the first line of defense. Group Compliance, Regulatory & Governance (GCRG) leads the second line of defense, by convening and consulting with additional control functions to provide independent oversight, and challenges the first line's cybersecurity framework and implementation. As the third line of defense, Group Internal Audit conducts independent reviews and validates the first-line and second-line processes and functions.

The Cyber- and Information Security Committee (the CIS-C) is the primary decision-making body with oversight of and accountability for the Group-wide cyber- and information security (CIS) program. The committee is jointly chaired by the Group Chief Operations and Technology Officer and the Group Chief Compliance and Governance Officer. The Head Group Internal Audit is a standing guest. The committee meets on a monthly basis and serves as a platform for interaction across all business divisions, Group functions and the three lines of defense for the identification and effective governance of CIS strategy, risks and regulatory obligations. The CIS-C governance structure is intended to streamline decision-making and, where necessary, escalation to the Board of Directors (the BoD) and Group Executive Board (GEB), who maintain overall responsibility for overseeing UBS.

Because Credit Suisse and UBS still have separate digital platforms, Credit Suisse maintained much of its pre-acquisition cyber- and information security governance during 2023, but was increasingly aligned to the UBS CIS risk governance framework. Credit Suisse's CIS program is led by the Credit Suisse Chief Information Security Officer, who reports to the Credit Suisse Chief Technology Officer and the UBS Group Chief Information Security Officer (the Group CISO). In addition, the Credit Suisse Chief Technology Officer and Credit Suisse Chief Operations Officer report to the Group Chief Operations and Technology Officer.

> Refer to "Cybersecurity governance" in "Board of Directors" in the "Corporate governance" section of this report for more information

#### Our cyber- and information security program

Our CIS program is led by the Group CISO, who reports both to the Group Chief Operations and Technology Officer and the Group Chief Compliance and Governance Officer. The CIS program is designed to identify, prevent, detect and respond to CIS events, with the goal of maintaining the integrity and availability of our technology infrastructure and the confidentiality and integrity of our information. Our Group CISO, senior management within GOTO, as well as management personnel overseeing the CIS program, all have substantial relevant expertise in the areas of cyber- and information security. Our CIS program includes the following elements:

- Threat intelligence: We systematically gather threat information and monitor threat alerts from external sources. Our cyber-threat intelligence team analyzes such information and uses it to enhance existing defense capabilities, to respond to identified threats and to adjust our cybersecurity strategy where needed.
- Preventative and detection controls: We use layered firm-wide controls to prevent and detect cyberattacks. Defenses include system hardening, firewalls, intrusion prevention and detection systems, and other controls. External network connections are identified and recorded in an inventory. Access rights are defined for information assets, and IT systems and applications enforce authentication. We maintain access controls and approval processes designed to prevent unauthorized access.
- Cyber-defense and incident response capabilities: The Cybersecurity Operations Center is responsible for providing 24/7/365 real-time monitoring, detection and response capabilities for cybersecurity threats and attacks. Incidents assessed as having the potential to adversely affect our critical operations are subject to mandatory management notification. If assessed as potentially significant, cybersecurity and data incidents are managed under our crisis management framework.
- Education and training: All UBS staff, including the external workforce, receive appropriate CIS awareness training, commensurate with their roles and responsibilities.
- Third-party risk: Vulnerabilities in the cyber-risk environment of third parties represent a particular threat to our CIS and our ability to maintain our business services. We follow a risk-based approach to assess and mitigate cybersecurity risks related to third parties. Third-party services and processes are monitored and checked on an ongoing basis, with appropriate supervision from the CIS-C. This is a key component of our third-party risk management program, notwithstanding the challenges we face in imposing the same levels of protection to the systems and data of third parties that we rely on ourselves.
- Monitoring and testing: Effective incident response and problem management processes are complemented by vulnerability assessments, penetration and testing engagements based on specific threat scenarios that simulate tactics, techniques and procedures that might be used against our systems, as mandated by our policy regulations. This includes testing by internal and external red teams. Actual security-related events are directly correlated with threat scenarios to monitor and detect potential threats, such as network-intrusion and malware-driven events. Our deployed security measures are designed with the objective to isolate and contain threats that are detected to allow for effective incident response and analysis.

#### Our cybersecurity assessment framework

Our cybersecurity assessment framework includes internal and external cybersecurity risk assessments for applications and bank processes alongside a structured risk assessment process of third-party service providers. These processes are designed, along with our security capabilities, to support business objectives and priorities.

We conduct assessments to evaluate and test our cybersecurity program, and provide guidance on operating and improving the CIS program, including the design and operational effectiveness of the security and resiliency of our information systems. Our assessments, along with our threat intelligence capabilities, are used to assess and prioritize programs to improve our security, our incident response capabilities and our operational resilience. As the cyber-threat landscape evolves at an increasing pace, we seek to enhance our cybersecurity controls to meet developing threats. We have ongoing programs that are intended to increase our cybersecurity maturity across various dimensions, including governance, identification, protection and detection, as well as cyberattack response and recovery, and risk from third-party service providers.

We recognize that we will never be able to completely eliminate the risk of a future cyberattack, but, by using a risk-based approach, we work toward reducing the likelihood of a successful attack and toward mitigation of the potential business impact of such an attack.

The BoD, its Risk Committee and the GEB receive regular presentations and reports throughout the year from our Group Chief Operations and Technology Officer and our Group CISO on internal and external cybersecurity developments, threats and risks. In addition, on a quarterly basis, the BoD receives reports on the performance of cybersecurity risk appetite metrics, including metrics on vulnerabilities and third-party cybersecurity risks and incidents, and is notified promptly if a Board-level cybersecurity risk limit is breached. The Risk Committee of the BoD and the GEB also receive regular updates on CIS strategy, risks and alignment with regulatory requirements.

#### Operational resilience and incident response

Our business continuity and resilience framework is designed to limit the disruption cybersecurity events cause to our business activities. In accordance with the firm's cyber-incident response framework, the CIS-C, including the incident response team, tracks, documents, responds to and analyzes cybersecurity threats and incidents, including those experienced by the firm's third-party service providers that may impact the firm. Additionally, we maintain established procedures for responding to, and escalating, cybersecurity and other system availability incidents. These are regularly practiced, including tabletop exercises up to and including the GEB and BoD levels.

Our cybersecurity and data confidentiality contingency plans include event playbooks and escalation procedures designed to support a structured assessment of potential incidents and timely escalation and reporting of incidents based on the assessed potential impact. Incidents assessed to have the potential to adversely affect our critical operations are subject to mandatory management notification. If assessed as potentially significant, cybersecurity and data incidents are managed under our crisis management framework, which provides pre-established cross-functional task forces to manage the incident, ensure appropriate and timely regulatory, market and client communications and robust oversight by management, with escalation frameworks to inform and ensure oversight by the GEB and the BoD.

> Refer to "Crisis management framework" in the "Regulation and supervision" section of this report for more information about our crisis management framework

#### Advanced measurement approach model

The non-financial risk framework outlined above underpins the calculation of regulatory capital for operational risk, which enables us to quantify operational risk and define effective risk-mitigating management incentives as part of the related operational risk capital allocation approach to the business divisions.

We measure Group operational risk exposure and calculate operational risk regulatory capital using the advanced measurement approach (AMA) in accordance with Swiss Financial Market Supervisory Authority (FINMA) and international requirements. In 2023, we introduced an aggregation of the AMAs for UBS AG and Credit Suisse AG to report on total operational-risk-related risk-weighted assets (RWA) for the UBS Group. The related diversification effect, agreed with FINMA, resulted in a USD 10bn reduction for reported RWA from the second quarter of 2023 onward, of which USD 4.9bn was recognized for UBS AG.

An entity-specific AMA model has been applied for UBS Switzerland AG, while for other regulated entities the basic indicators or standardized approaches are adopted for regulatory capital in agreement with local regulators. Also, the methodology of the UBS AMA is leveraged for entity-specific internal capital adequacy assessment processes.

Currently, the model includes 18 AMA units of measure (UoM), which are aligned with our non-financial risk taxonomy. Frequency and severity distributions are calibrated for each of the model's UoM. The modeled distribution functions for both frequency and severity are used to generate the annual loss distribution. The resulting 99.9% quantile of the overall annual operational risk loss distribution across all UoM determines the required regulatory capital. Currently, we do not reflect mitigation through insurance or any other risk transfer mechanism in our AMA model.

#### **AMA** model calibration and review

A key assumption when calibrating data-driven frequency and severity distributions is that historical losses form a reasonable proxy for future events. In line with regulatory expectations, the AMA methodology utilizes both historical internal losses and external losses suffered by the broader industry for model calibration purposes.

Initial model outputs driven by the loss history are reviewed and adjusted to reflect fast-changing external developments, such as new regulations, geopolitical change, volatile market and economic conditions, and internal factors (e.g., changes in business strategy and control framework enhancements). The resulting baseline data-driven frequency and severity distributions are reviewed by subject matter experts and where necessary adjusted based on a review of qualitative information about the business environment and internal control factors, as well as expert judgment, with the aim of forecasting losses.

Our model is reviewed regularly to maintain risk sensitivity and recalibrated at least annually. Any changes to regulatory capital as a result of a recalibration or methodology changes are presented to FINMA for approval prior to use for disclosure purposes.

The Group- and entity-specific AMA models are subject to an independent validation performed by Model Risk Management & Control in line with the Group's model risk management framework.

The AMA is expected to be replaced by the standardized approach for regulatory capital determination purposes in line with the relevant Basel Committee for Banking Supervision Basel III capital regulations. UBS is interacting closely with the relevant Swiss authorities to discuss the implementation details and related implementation timeline.

# Capital, liquidity and funding, and balance sheet

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## Capital management

## Capital management objectives, planning and activities

#### **Capital management objectives**

Audited I An adequate level of common equity tier 1 (CET1) capital and total loss-absorbing capacity (TLAC) meeting both internal assessment and regulatory requirements is a prerequisite for conducting our business activities.

We are therefore committed to maintaining a strong CET1 capital and TLAC position at all times, in order to meet regulatory capital requirements and our target capital ratios, and to support the growth of our businesses.

As of 31 December 2023, CET1 capital ratio was 13.2% and CET1 leverage ratio 4.0%, each above the requirements for Swiss systemically relevant banks (SRBs) and the Basel Committee on Banking Supervision (the BCBS) requirements. We believe that our capital strength, consistent with our capital guidance, is a source of confidence for our stakeholders, contributes to our sound credit ratings and is one of the foundations of our success.

- > Refer to "We may be unable to maintain our capital strength" in the "Risk factors" section of this report for more information about capital ratio-related risks
- > Refer to "Capital and capital ratios of our significant regulated subsidiaries" in this section for more information
- > Refer to "Economic capital measures" in the "Risk management and control" section of this report for more information about capital-at-risk

## Swiss SRB total loss-absorbing capacity framework

The disclosures in this section are provided for UBS AG on a consolidated basis and focus on key developments during the reporting period and information in accordance with the Basel III framework, as applicable to Swiss SRBs.

Additional regulatory disclosures for UBS AG on a consolidated basis are provided in the 31 December 2023 Pillar 3 Report, available under "Pillar 3 disclosures" at ubs.com/investors.

Capital and other regulatory information for UBS Group AG consolidated in accordance with the Basel III framework, as applicable to Swiss SRBs, is provided in the UBS Group Annual Report 2023, available under "Annual reporting" at ubs.com/investors.

#### **Regulatory framework**

The Basel III framework came into effect in Switzerland on 1 January 2013 and is embedded in the Swiss Capital Adequacy Ordinance (the CAO). The CAO also includes the too-big-to-fail provisions applicable to Swiss SRBs.

Under the Swiss SRB framework, going and gone concern requirements represent the UBS AG's TLAC requirement. TLAC encompasses regulatory capital, such as CET1, loss-absorbing additional tier 1 (AT1) and tier 2 capital instruments, and liabilities that can be written down or converted into equity in case of resolution or for the purpose of restructuring measures.

#### Capital and other instruments contributing to total loss-absorbing capacity

In addition to CET1 capital, the following instruments contribute to loss-absorbing capacity:

- loss-absorbing AT1 capital instruments (high- and low-trigger);
- non-Basel III-compliant tier 2 capital instruments, and
- TLAC-eligible unsecured debt instruments.

Under the Swiss SRB rules, going concern capital includes CET1 and high-trigger loss-absorbing AT1 capital instruments. Existing outstanding low-trigger loss-absorbing AT1 capital instruments are available to meet the going concern capital requirements until their first call date. As of their first call date, these instruments are eligible to meet the gone concern requirements.

Outstanding high- and low-trigger loss-absorbing tier 2 capital instruments, non-Basel III-compliant tier 2 capital instruments and TLAC-eligible unsecured debt instruments are eligible to meet gone concern requirements until one year before maturity. A maximum of 25% of the gone concern requirements can be met with instruments that have a remaining maturity of between one and two years (i.e., are in the last year of eligibility). However, once at least 75% of the gone concern requirement has been met with instruments that have a remaining maturity of greater than two years, all instruments that have a remaining maturity of between one and two years remain eligible to be included in the total gone concern capital.

> Refer to "Bondholder information," available at *ubs.com/investors*, for more information about the eligibility and key features and terms and conditions of capital instruments

#### Total loss-absorbing capacity and leverage ratio requirements

#### Going concern capital requirements

Under the Swiss SRB requirements, total going concern minimum requirements for all Swiss SRBs are a capital ratio requirement of 12.86% of RWA and a leverage ratio requirement of 4.5%. In addition to these minimum requirements, an add-on reflecting the degree of systemic importance is applied, based on market share and LRD. The applicable market share add-on and LRD requirements for UBS AG were both unchanged at 0.72% of RWA and 0.25% of LRD, resulting in add-ons of 1.44% of RWA and 0.50% of LRD.

The Swiss countercyclical capital buffer, at a maximum level of 2.5% on risk-weighted positions that are directly or indirectly backed by residential properties in Switzerland, increased the minimum CET1 capital requirement by 32 basis points as of 31 December 2023. We also continued to apply countercyclical buffer requirements introduced in other BCBS member jurisdictions, which resulted in an additional buffer requirement of 13 basis points as of 31 December 2023. Overall, countercyclical capital buffers contributed 45 basis points to the minimum CET1 capital requirement as of 31 December 2023.

The total going concern capital requirements applicable are 14.75% of RWA (including countercyclical buffer requirements) and 5.00% of LRD. Furthermore, of the total going concern capital requirement of 14.75% of RWA, at least 10.45% must be met with CET1 capital, while a maximum of 4.3% can be met with high-trigger loss-absorbing AT1 capital instruments (and our existing outstanding low-trigger AT1 capital instruments, which qualify until their first call date as mentioned above).

Similarly, of the total going concern leverage ratio requirement of 5.00%, at least 3.5% must be met with CET1 capital, while a maximum of 1.5% can be met with high-trigger loss-absorbing AT1 capital instruments (and our existing outstanding low-trigger AT1 capital instruments, which qualify until their first call date as mentioned above).

#### Gone concern loss-absorbing capacity requirements

As an internationally active Swiss SRB, UBS AG is also subject to gone concern loss-absorbing capacity requirements. The gone concern requirements also include add-ons for market share and LRD.

In November 2022, the Swiss Federal Council adopted amendments to the Banking Act and the Banking Ordinance, which entered into force as of 1 January 2023. The amendments replaced the resolvability discount on the gone concern capital requirements for systemically important banks (SIBs), including UBS, with reduced base gone concern capital requirements equivalent to 75% of the total going concern requirements (excluding countercyclical buffer requirements). In addition, as of July 2024, the Swiss Financial Market Supervisory Authority (FINMA) will have the authority to impose a surcharge of up to 25% of the total going concern requirements (excluding countercyclical buffer requirements) based on obstacles to an SIB's resolvability identified in future resolvability assessments. Our total gone concern requirements remained substantially unchanged in 2023.

Our gone concern requirements can be reduced when higher quality capital instruments (CET1 capital, low-trigger loss-absorbing AT1 or certain low-trigger tier 2 capital instruments) are used to meet gone concern requirements. As of 31 December 2023, UBS did not use any higher quality capital instruments to fulfill gone concern requirements.

From 1 January 2022 onward, the gone concern requirement after the potential reduction for the use of higher quality capital instruments has been floored at 10.0% and 3.75% for the RWA- and LRD-based requirements, respectively.

In this report, we refer to the RWA-based gone concern requirements as gone concern loss-absorbing capacity requirements and the RWA-based gone concern ratio is referred to as the gone concern loss-absorbing capacity ratio.

The table below provides the RWA- and LRD-based requirements and information as of 31 December 2023.

Ci CDI				
2MI22 2KE	s aoina ana	done concern	reduirements	and information

As of 31.12.23	RWA		LRD	
USD m, except where indicated	in %		in %	
Required going concern capital				
Total going concern capital	14.75 <sup>1</sup>	49,268	5.00 <sup>1</sup>	55,220
Common equity tier 1 capital	10.45	34,907	3.50 <sup>2</sup>	38,654
of which: minimum capital	4.50	15,029	1.50	16,566
of which: buffer capital	<i>5.50</i>	18,369	2.00	16,566 22,088
of which: countercyclical buffer	0.45	1,509		
Maximum additional tier 1 capital	4.30	14,361	1.50	16,566
of which: additional tier 1 capital	<i>3.50</i>	11,689	1.50	16,566
of which: additional tier 1 buffer capital	0.80	2,672		
Eligible going concern capital				
Total going concern capital	16.96	56,628	5.13	56,628
Common equity tier 1 capital	13.21	44,130	4.00	44,130
Total loss-absorbing additional tier 1 capital <sup>3</sup>	3.74	12,498	1.13	12,498
of which: high-trigger loss-absorbing additional tier 1 capital	3.38	11,286	1.02	11,286
of which: low-trigger loss-absorbing additional tier 1 capita <sup>β</sup>	0.36	1,212	0.11	1,212
Required gone concern capital				
Total gone concern loss-absorbing capacity <sup>4,5,6</sup>	10.73	35,819	3.75	41,415
of which: base requirement including add-ons for market share and LRD	10.73 <sup>7</sup>	35,819	3.75 <sup>7</sup>	41,415
Eligible gone concern capital				
Total gone concern loss-absorbing capacity	16.31	54,458	4.93	54,458
Total tier 2 capital	0.16	538	0.05	538
of which: non-Basel III-compliant tier 2 capital	0.16	538	0.05	538
TLAC-eligible unsecured debt	16.14	53,920	4.88	53,920
Total loss-absorbing capacity				
Required total loss-absorbing capacity	25.48	85,088	8.75	96,636
Eligible total loss-absorbing capacity	33.26	111,086	10.06	111,086
Risk-weighted assets / leverage ratio denominator				
Risk-weighted assets		333,979		

Leverage ratio denominator

1,104,408

1 Includes applicable add-ons of 1.44% for risk-weighted assets (RWA) and 0.50% for leverage ratio denominator (LRD). 2 Our minimum CET1 leverage ratio requirement of 3.5% consists of a 1.5% base requirement, a 1.5% base buffer capital requirement, a 0.25% LRD add-on requirement and a 0.25% market share add-on requirement based on our Swiss credit business. 3 Existing outstanding low-trigger additional tier 1 capital instruments qualify as going concern capital at the UBS AG consolidated level, as agreed with the Swiss Financial Market Supervisory Authority (FINMA), until their first call date. As of their first call date, these instruments are eligible to meet the gone concern requirements. 4 A maximum of 25% of the gone concern requirements can be met with instruments that have a remaining maturity of between one and two years. Once at least 75% of the minimum gone concern requirement has been met with instruments that have a remaining maturity of between one and two years remain eligible to be included in the total gone concern capital. 5 From 1 January 2023, the resolvability discount on the gone concern capital requirements for systemically important banks (SIBs) has been replaced with reduced base gone concern capital requirements equivalent to 75% of the total going concern requirements (excluding countercyclical buffer requirements). 6 As of July 2024, FINMA will have the authority to impose a surcharge of up to 25% of the total going concern capital requirements should obstacles to an SIB's resolvability be identified in future resolvability assessments. 7 Includes applicable add-ons of 1.08% for RWA and 0.38% for LRD.

# Total loss-absorbing capacity

Goodwill, net of tax1

Intangible assets, net of tax

Expected losses on advanced internal ratings-based portfolio less provisions

Unrealized (gains) / losses from cash flow hedges, net of tax

USD m, except where indicated	31.12.23	31.12.22
Eligible going concern capital		
Total going concern capital	56,628	54,770
Total tier 1 capital	56,628	54,770
Common equity tier 1 capital	44,130	42,929
Total loss-absorbing additional tier 1 capital	12,498	11,841
of which: high-trigger loss-absorbing additional tier 1 capital	11,286	10,654
of which: low-trigger loss-absorbing additional tier 1 capital	1,212	1,187
Eligible gone concern capital		
Total gone concern loss-absorbing capacity	54,458	46,991
Total tier 2 capital	538	2,958
of which: low-trigger loss-absorbing tier 2 capital	0	2,422
of which: non-Basel III-compliant tier 2 capital	538	536
TLAC-eligible unsecured debt	53,920	44,033
Total loss-absorbing capacity	444.000	
Total loss-absorbing capacity	111,086	101,761
Risk-weighted assets / leverage ratio denominator		
Risk-weighted assets	333,979	317,823
Leverage ratio denominator	1,104,408	1,029,561
Capital and loss-absorbing capacity ratios (%)		
Going concern capital ratio	17.0	17.2
of which: common equity tier 1 capital ratio	13.2	13.5
Gone concern loss-absorbing capacity ratio	16.3	14.8
Total loss-absorbing capacity ratio	33.3	32.0
Leverage ratios (%)		
Going concern leverage ratio	5.1	5.3
of which: common equity tier 1 leverage ratio	4.0	4.2
Gone concern leverage ratio  Total loss-absorbing capacity leverage ratio	4.9	4.6 9.9
Total loss-absorbing capacity levelage ratio	10.1	9.9
Audited		
Reconciliation of equity under IFRS Accounting Standards to Swiss SI	RB common equity tier 1 capital	
USD m	31.12.23	31.12.2
Total equity under IFRS Accounting Standards	55,569	56,940
Equity attributable to non-controlling interests	(335)	(342
Defined benefit plans, net of tax	(336)	(311
Deferred tax assets recognized for tax loss carry-forwards	(3,004)	(4,077
Deferred tax assets for unused tax credits		(4,077
	(97)	/200
Deferred tax assets on temporary differences, excess over threshold	(1,233)	(262

Own credit related to (gains) / losses on derivative infancial instruments that existed at the balance sheet date	(65)	(105)
Prudential valuation adjustments	(177)	(201)
Accruals for dividends to shareholders	(3,000)	(6,000)
Other	(39)	(51)
Total common equity tier 1 capital	44,130	42,929

1 Includes goodwill related to significant investments in financial institutions of USD 20m as of 31 December 2023 (31 December 2022: USD 20m) presented on the balance sheet line Investments in associates.

(5,754) (150)

(471)

4,234

(523)

(5,750)

(146)

(532)

313

Own credit related to (gains) / losses on financial liabilities measured at fair value that existed at the balance sheet date, net of tax

#### Total loss-absorbing capacity and movement

Total loss-absorbing capacity increased by USD 9.3bn to USD 111.1bn as of 31 December 2023.

#### Going concern capital and movement

Audited I CET1 capital mainly consists of: share capital; share premium, which primarily consists of additional paid-in capital related to shares issued; and retained earnings. A detailed reconciliation of equity under IFRS Accounting Standards to CET1 capital is provided in the "Reconciliation of equity under IFRS Accounting Standards to Swiss SRB common equity tier 1 capital" table.

CET1 capital increased by USD 1.2bn to USD 44.1bn as of 31 December 2023, mainly as a result of operating profit before tax of USD 4.5bn, with associated current tax expenses of USD 1.4bn, positive foreign currency translation effects of USD 0.9bn and a net increase of USD 0.2bn in eligible deferred tax assets on temporary differences, partly offset by dividend accruals of USD 3.0bn.

Loss-absorbing AT1 capital issued by the Group and on-lent to UBS AG increased by USD 0.7bn to USD 12.5bn, mainly driven by two issuances of AT1 capital instruments denominated in US dollars of USD 3.5bn and positive impacts from interest risk hedge, foreign currency translation and other effects. These increases were partly offset by a USD 2.5bn AT1 capital instrument that ceased to be eligible as going concern capital when UBS Group AG issued a notice of redemption of the instrument. In addition, high-trigger loss-absorbing AT1 capital instruments of USD 1.1bn equivalent previously on lent from the Group to UBS AG were transferred to Credit Suisse AG.

AT1 capital instruments issued from the beginning of the fourth quarter of 2023 are currently subject to write-down upon occurrence of a trigger event or a viability event. The notes provide, however, that, following approval of a minimum amount of conversion capital by UBS Group AG's shareholders at the 2024 Annual General Meeting, upon the occurrence of a trigger event or a viability event, the notes will be converted into UBS Group AG ordinary shares rather than being subject to a write-down. The corresponding on-lends to UBS AG contain the same provision.

#### Gone concern loss-absorbing capacity and movement

Audited I Total gone concern loss-absorbing capacity increased by USD 7.5bn to USD 54.5bn as of 31 December 2023 and included USD 53.9bn of TLAC-eligible unsecured debt issued by the Group and on-lent to UBS AG. ▲

The increase of USD 7.5bn mainly reflected new issuances of USD 13.4bn equivalent of TLAC-eligible unsecured debt instruments, as well as positive impacts from interest risk hedge, foreign currency translation and other effects. These increases were partly offset by the redemption of USD 4.0bn equivalent of TLAC-eligible unsecured debt instruments, amortization of a USD 0.8bn unsecured debt instrument that ceased to be TLAC-eligible as its residual time to maturity fell below one year, and a partial repurchase of two TLAC-eligible unsecured debt instruments under a tender offer (in light of the acquisition of the Credit Suisse Group, UBS announced on 22 March 2023 a tender offer to repurchase two TLAC-eligible unsecured debt instruments, both issued on 17 March 2023, with an initial nominal amount totaling EUR 2.8bn, at their respective re-offer prices; the nominal amounts of the two instruments bought back under the tender offer totaled an equivalent of USD 0.8bn). In addition, a USD 2.4bn low-trigger loss-absorbing tier 2 capital instrument ceased to be eligible as gone concern capital as it had less than one year to maturity.

#### Loss-absorbing capacity and leverage ratios

Our CET1 capital ratio decreased to 13.2% from 13.5%, reflecting a USD 16.2bn increase in RWA, partly offset by a USD 1.2bn increase in CET1 capital.

Our CET1 leverage ratio decreased to 4.0% from 4.2%, due to a USD 74.8bn increase in the LRD, partly offset by the aforementioned increase in CET1 capital.

Our gone concern loss-absorbing capacity ratio increased to 16.3% from 14.8%, due to an increase in gone concern loss-absorbing capacity of USD 7.5bn, partly offset by the aforementioned increase in RWA.

Our gone concern leverage ratio increased to 4.9% from 4.6%, driven by the aforementioned increase in gone concern loss-absorbing capacity, partly offset by the increase in the LRD.

#### Swiss SRB total loss-absorbing capacity movement

USD m	
Going concern capital	Swiss SRE
Common equity tier 1 capital as of 31.12.22	42,929
Operating profit before tax	4,521
Current tax (expense) / benefit	(1,429
Foreign currency translation effects, before tax	866
Eligible deferred tax assets on temporary differences	227
Accruals for proposed dividends to shareholders	(3,000
Other	16
Common equity tier 1 capital as of 31.12.23	44,130
Loss-absorbing additional tier 1 capital as of 31.12.22	11,841
Issuance of high-trigger loss-absorbing additional tier 1 capital	3,455
Call of high-trigger loss-absorbing additional tier 1 capital	(2,500
High-trigger loss-absorbing additional tier 1 capital transferred to Credit Suisse AG	(1,104
Interest rate risk hedge, foreign currency translation and other effects	806
Loss-absorbing additional tier 1 capital as of 31.12.23	12,498
Total going concern capital as of 31.12.22	54,770
Total going concern capital as of 31.12.23	56,628
Gone concern loss-absorbing capacity	
Tier 2 capital as of 31.12.22	2,958
Debt no longer eligible as gone concern loss-absorbing capacity due to residual tenor falling to below one year	(2,437
Interest rate risk hedge, foreign currency translation and other effects	(2,437
Tier 2 capital as of 31.12.23	538
TLAC-eligible unsecured debt as of 31.12.22	44,033
Issuance of TLAC-eligible unsecured debt	13,403
Call of TLAC-eligible unsecured debt	(3,976
Debt no longer eligible as gone concern loss-absorbing capacity due to residual tenor falling to below one year	(3,970)
Debt bought back under the tender offer	(792
Interest rate risk hedge, foreign currency translation and other effects	2,042
TLAC-eligible unsecured debt as of 31.12.23	53,920
Total gone concern loss-absorbing capacity as of 31.12.22	46,99
Total gone concern loss-absorbing capacity as of 31.12.23	54,458
Total york concern loss absorbing capacity as of 51.12.25	34,430
Total loss-absorbing capacity	
Total loss-absorbing capacity as of 31.12.22	101,76°
Total loss-absorbing capacity as of 31.12.23	111,086

#### **Additional information**

#### Active management of sensitivity to foreign exchange movements

Group Treasury is mandated to minimize adverse effects from changes in foreign currency rates on our CET1 capital and / or CET1 capital ratio of UBS AG consolidated. A significant portion of our CET1 capital and RWA is denominated in Swiss francs, euro, pounds sterling and other currencies. In order to hedge the CET1 capital ratio, CET1 capital needs to have foreign currency exposure, leading to foreign currency rates sensitivity of CET1 capital.

Consequently, it is not possible to simultaneously fully hedge CET1 capital and the CET1 capital ratio. As the proportion of RWA denominated in currencies other than the US dollar outweighs CET1 capital in such currencies, a significant appreciation of the US dollar against such currencies could benefit our capital ratios, while a significant depreciation of the US dollar against these currencies could adversely affect our capital ratios.

The UBS AG Asset and Liability Committee has mandated Group Treasury to adjust the currency mix of CET1 capital of UBS AG consolidated, within limits set by the Board of Directors, to balance the effect of foreign exchange movements on CET1 capital and the CET1 capital ratio. Limits are in place for the sensitivity of both CET1 capital and the CET1 capital ratio to an appreciation or depreciation of 10% in the value of the US dollar against other currencies.

#### Sensitivity to currency movements

#### Risk-weighted assets

We estimate that a 10% depreciation of the US dollar against other currencies would have increased our RWA by USD 15bn and our CET1 capital by USD 1.5bn as of 31 December 2023 (31 December 2022: USD 13bn and USD 1.4bn, respectively) and decreased our CET1 capital ratio by 12 basis points (31 December 2022: 12 basis points).

Conversely, a 10% appreciation of the US dollar against other currencies would have decreased our RWA by USD 13bn and our CET1 capital by USD 1.4bn (31 December 2022: USD 12bn and USD 1.2bn, respectively) and increased our CET1 capital ratio by 12 basis points (31 December 2022: 12 basis points).

#### Leverage ratio denominator

Our leverage ratio is also sensitive to foreign exchange movements as a result of the currency mix of our capital and LRD. When adjusting the currency mix in capital, potential effects on the going concern leverage ratio are taken into account and the sensitivity of the going concern leverage ratio to an appreciation or depreciation of 10% in the value of the US dollar against other currencies is actively monitored.

We estimate that a 10% depreciation of the US dollar against other currencies would have increased our LRD by USD 69bn as of 31 December 2023 (31 December 2022: USD 62bn) and decreased our CET1 leverage ratio by 10 basis points (31 December 2022: 11 basis points). Conversely, a 10% appreciation of the US dollar against other currencies would have decreased our LRD by USD 62bn (31 December 2022: USD 57bn) and increased our CET1 leverage ratio by 11 basis points (31 December 2022: 12 basis points).

The aforementioned sensitivities do not consider foreign currency translation effects related to defined benefit plans other than those related to the currency translation of the net equity of foreign operations.

Estimated effect on capital from litigation, regulatory and similar matters subject to provisions and contingent liabilities. We have estimated the loss in capital that we could incur as a result of the risks associated with the matters described in "Note 17 Provisions and contingent liabilities" in the "Consolidated financial statements" section of this report. We have employed for this purpose the advanced measurement approach (AMA) methodology that we use when determining the capital requirements associated with operational risks, based on a 99.9% confidence level over a 12-month horizon. The methodology takes into consideration UBS and industry experience for the AMA operational risk categories to which those matters correspond, as well as the external environment affecting risks of these types, in isolation from other areas. On this basis, we estimate the maximum loss in capital that we could incur over a 12-month period as a result of our risks associated with these operational risk categories at USD 4.0bn as of 31 December 2023. This estimate is not related to and does not take into account any provisions recognized for any of these matters and does not constitute a subjective assessment of our actual exposure in any of these matters.

- > Refer to "Non-financial risk" in the "Risk management and control" section of this report for more information
- > Refer to "Note 17 Provisions and contingent liabilities" in the "Consolidated financial statements" section of this report for more information

#### Capital and capital ratios of our significant regulated subsidiaries

UBS AG has contributed a significant portion of capital to, and provided substantial liquidity to its subsidiaries. Many of these subsidiaries are subject to regulations requiring compliance with minimum capital, liquidity and similar requirements. Regulatory capital components and capital ratios of our significant regulated subsidiaries determined under the regulatory framework of each subsidiary's home jurisdiction are provided in the "Financial and regulatory key figures for our significant regulated subsidiaries and sub-groups" section of the UBS Group Annual Report 2023, available under "Annual reporting" at *ubs.comlinvestors*. Supervisory authorities generally have discretion to impose higher requirements, or to otherwise limit the activities of subsidiaries. Supervisory authorities also may require entities to measure capital and leverage ratios on a stressed basis and may limit the ability of the entity to engage in new activities or take capital actions based on the results of those tests.

> Refer to the 31 December 2023 Pillar 3 Report, available under "Pillar 3 disclosures" at *ubs.com/investors*, for more capital and other regulatory information about our significant regulated subsidiaries and sub-groups

#### Joint liability of UBS AG and UBS Switzerland AG

In June 2015, upon the transfer of the Personal & Corporate Banking and Global Wealth Management businesses booked in Switzerland from UBS AG to UBS Switzerland AG, UBS AG and UBS Switzerland AG assumed joint liability for obligations transferred to UBS Switzerland AG and existing at UBS AG, respectively. Under certain circumstances, the Swiss Banking Act and FINMA's Banking Insolvency Ordinance authorize FINMA to modify, extinguish or convert to common equity liabilities of a bank in connection with a resolution or insolvency of such bank.

The joint liability amounts have declined as obligations matured, terminated or were novated following the transfer date. As of 31 December 2023, the liability of UBS Switzerland AG amounted to CHF 2.8bn (USD 3.3bn), a decrease of CHF 1.2bn (USD 1.0bn) compared with 31 December 2022. The respective liability of UBS AG has been substantially extinguished.

## Risk-weighted assets

#### **RWA** development in 2023

During 2023, RWA increased by USD 16.2bn to USD 334.0bn, primarily driven by increases of USD 12.7bn due to asset size and other movements and USD 8.0bn due to currency effects, partly offset by a decrease of USD 4.6bn due to model updates and methodology changes.

Refer to the 31 December 2023 Pillar 3 Report, available under "Pillar 3 disclosures" at ubs.com/investors, for more information about RWA movements and definitions of RWA movement key drivers on a UBS Group AG consolidated basis

Movement in risk-weighted assets by key driver

	Model updates				
USD bn	RWA as of 31.12.22	Currency effects	and methodology changes	Asset size and other <sup>1</sup>	RWA as of 31.12.23
Credit and counterparty credit risk <sup>2</sup>	200.4	7.6	0.4	11.7	220.1
Non-counterparty-related risk <sup>3</sup>	22.6	0.4		(0.3)	22.7
Market risk	13.5		(0.1)	1.3	14.7
Operational risk	81.4	•	(4.9)		76.5
Total	317.8	8.0	(4.6)	12.7	334.0

<sup>1</sup> Includes the Pillar 3 categories "Asset size," "Credit quality of counterparties," "Acquisitions and disposals" and "Other." For more information, refer to the 31 December 2023 Pillar 3 Report, available under "Pillar 3 disclosures" at ubs.com/investors. 2 Includes settlement risk, credit valuation adjustments, equity exposures in the banking book, investments in funds and securitization exposures in the banking book. 3 Non-counterparty-related risk includes deferred tax assets recognized for temporary differences, property, equipment, software and other items.

#### Credit and counterparty credit risk

Credit and counterparty credit risk RWA increased by USD 19.8bn to USD 220.1bn as of 31 December 2023. This increase was mainly driven by asset size and other movements of USD 11.7bn, currency effects of USD 7.6bn and model updates and methodology changes of USD 0.4bn.

Asset size and other movements increased RWA by USD 11.7bn, mainly driven by funding provided by Group Treasury to Credit Suisse and higher loans in Personal and Corporate Banking.

Model updates and methodology changes resulted in an RWA increase of USD 0.4bn, mainly driven by increases related to updates in private equity and hedge fund financing trades models, as well as securities financing transaction models, partly offset by decreases related to the recalibration of certain multipliers as a result of our improvements to models.

- > Refer to "Credit risk" in the "Risk management and control" section of this report for more information about credit and counterparty credit risk developments
- > Refer to the 31 December 2023 Pillar 3 Report, available under "Pillar 3 disclosures" at *ubs.com/investors*, for more information about credit and counterparty credit risk developments on a UBS Group AG consolidated basis

#### Market risk

Market risk RWA increased by USD 1.2bn to USD 14.7bn as of 31 December 2023, driven by an increase of USD 1.3bn from asset size and other movements in Global Markets in the Investment Bank, partly offset by a decrease of USD 0.1bn related to ongoing parameter updates of the value-at-risk (VaR) model. FINMA approved the integration of time decay into regulatory VaR and stressed VaR, which went live on 12 January 2024.

- > Refer to "Market risk" in the "Risk management and control" section of this report for more information about market risk developments
- > Refer to the 31 December 2023 Pillar 3 Report, available under "Pillar 3 disclosures" at *ubs.com/investors*, for more information about market risk developments on a UBS Group AG consolidated basis

#### Operational risk

Operational risk RWA decreased by USD 4.9bn to USD 76.5bn as of 31 December 2023. In the second quarter of 2023, we reflected diversification effects at the level of UBS Group AG consolidated, which were partly allocated to UBS AG consolidated in the third quarter of 2023.

> Refer to "Advanced measurement approach model" in the "Risk management and control" section of this report for more information about the AMA model

#### Risk-weighted assets, by business division and Group Items

		Personal &	Asset				
	Global Wealth	Corporate	Manage-	Investment	Non-core and	Group	Total
USD bn	Management	Banking	ment	Bank	Legacy <sup>1</sup>	Items <sup>1</sup>	RWA
				31.12.23			
Credit and counterparty credit risk <sup>2</sup>	71.1	74.7	2.5	58.5	1.5	11.9	220.1
Non-counterparty-related risk <sup>3</sup>	5.6	1.9	0.6	3.8	0.0	10.8	22.7
Market risk	1.6	0.0		11.1	1.6	0.5	14.7
Operational risk	30.2	10.3	3.8	13.1	15.8	3.3	76.5
Total	108.5	86.9	6.9	86.5	18.8	26.4	334.0
				31.12.22			
Credit and counterparty credit risk <sup>2</sup>	68.5	65.0	2.3	57.7	2.2	4.8	200.4
Non-counterparty-related risk <sup>3</sup>	5.9	1.9	0.6	3.7	0.0	10.5	22.6
Market risk	1.6	0.0		10.1	0.7	1.1	13.5
Operational risk	37.6	9.1	3.2	21.3	10.1		81.4
Total	113.6	76.0	6.0	92.8	13.0	16.4	317.8
			31.	12.23 vs 31.12.2	22		
Credit and counterparty credit risk <sup>2</sup>	2.6	9.8	0.2	0.7	(0.7)	7.1	19.8
Non-counterparty-related risk <sup>3</sup>	(0.3)	0.0	0.0	0.1	0.0	0.3	0.1
Market risk	0.0	0.0		1.0	0.9	(0.6)	1.2
Operational risk	(7.4)	1.1	0.6	(8.2)	5.6	3.3	(4.9)
Total	(5.1)	10.8	0.9	(6.3)	5.9	10.0	16.2

<sup>1</sup> Starting with the third quarter of 2023, Non-core and Legacy represents a separate reportable segment and Group Functions has been renamed Group Items. Prior periods have been revised to reflect these changes. 2 Includes settlement risk, credit valuation adjustments, equity exposures in the banking book, investments in funds and securitization exposures in the banking book. 3 Non-counterparty-related risk includes deferred tax assets recognized for temporary differences (31 December 2023: USD 11.3bn; 31 December 2022: USD 10.8bn), as well as property, equipment, software and other items (31 December 2023: USD 11.4bn; 31 December 2022: USD 11.8bn).

## Leverage ratio denominator

During 2023, the LRD increased by USD 74.8bn to USD 1,104.4bn, primarily driven by increases from asset size and other movements of USD 37.5bn and currency effects of USD 37.3bn.

Movement in leverage ratio denominator by key driver

•	LRD as of	Currency	Asset size and	LRD as of
USD bn	31.12.22	effects	other	31.12.23
On-balance sheet exposures (excluding derivatives and securities financing transactions) <sup>1</sup>	817.0	34.3	26.8	878.2
Derivatives	90.3	1.0	2.8	94.0
Securities financing transactions	98.6	0.9	6.6	106.1
Off-balance sheet items	34.6	1.1	1.4	37.2
Deduction items	(11.0)	0.0	(0.1)	(11.1)
Total	1,029.6	37.3	37.5	1,104.4

<sup>1</sup> The exposures exclude derivative financial instruments, cash collateral receivables on derivative instruments, receivables from securities financing transactions, and margin loans, as well as prime brokerage receivables and financial assets at fair value not held for trading, both related to securities financing transactions. These exposures are presented separately under Derivatives and Securities financing transactions in this table.

The LRD movements described below exclude currency effects.

On-balance sheet exposures (excluding derivatives and securities financing transactions) increased by USD 26.8bn, mainly driven by higher trading portfolio assets due to a client-driven increase in hedging activities and market-driven movements in the Investment Bank and higher lending balances, partly offset by lower cash and central bank balances.

Derivative exposures increased by USD 2.8bn, primarily in the Investment Bank, reflecting higher trading volumes across products and lower netting, partly offset by market-driven movements in foreign-currency and interest-rate contracts.

Securities financing transactions increased by USD 6.6bn, mainly due to higher collateral sourcing activities, partly offset by roll-offs of excess cash reinvestment in Group Treasury.

Off-balance sheet items increased by USD 1.4bn, mainly driven by higher loan commitment across various projects in the Investment Bank.

> Refer to "Balance sheet and off-balance sheet" in this section for more information about balance sheet movements

#### Leverage ratio denominator by business division and Group Items

		Personal &					
	Global Wealth	Corporate	Asset	Investment	Non-core and		
USD bn	Management	Banking	Management	Bank	Legacy <sup>1</sup>	Group Items <sup>1</sup>	Total
				31.12.23			
On-balance sheet exposures	337.4	238.7	3.6	203.8	4.0	90.7	878.2
Derivatives	6.0	1.8	0.0	84.0	1.4	0.8	94.0
Securities financing transactions	27.9	16.7	0.1	37.6	1.6	22.2	106.1
Off-balance sheet items	8.7	17.7	0.0	8.2	0.9	1.8	37.2
Items deducted from Swiss SRB tier 1 capital	(5.3)	(0.2)	(1.2)	(0.4)	0.0	(4.1)	(11.1)
Total	374.8	274.8	2.5	333.1	7.9	111.3	1,104.4
				31.12.22			
On-balance sheet exposures	364.9	223.5	3.6	189.7	2.9	32.4	817.0
Derivatives	5.4	1.5	0.0	80.0	2.5	0.9	90.3
Securities financing transactions		10.8	0.1	40.4	0.9	26.0	98.6
Off-balance sheet items	8.8	16.6	0.0	6.9	0.0	2.3	34.6
Items deducted from Swiss SRB tier 1 capital	(5.2)	(0.2)	(1.2)	(0.4)	0.0	(4.1)	(11.0)
Total	394.5	252.2	2.5	316.7	6.3	57.5	1,029.6
			31.	12.23 vs 31.12.2	22		
On-balance sheet exposures	(27.5)	15.3	0.0	14.0	1.1	58.3	61.1
Derivatives	0.6	0.4	0.0	3.9	(1.1)	(0.1)	3.8
Securities financing transactions	7.4	5.9	0.0	(2.8)	0.8	(3.8)	7.5
Off-balance sheet items	(0.2)	1.1	0.0	1.2	0.9	(0.5)	2.5
Items deducted from Swiss SRB tier 1 capital	(0.1)	0.0	0.0	0.0	0.0	0.0	(0.1)
Total	(19.7)	22.6	0.0	16.4	1.6	53.9	74.8

<sup>1</sup> Starting with the third quarter of 2023, Non-core and Legacy represents a separate reportable segment and Group Functions has been renamed Group Items. Prior periods have been revised to reflect these changes.

# Liquidity and funding management

We manage the structural risks of our balance sheet, including interest rate risk, structural foreign exchange risk and collateral risk, as well as liquidity and funding risk. This section provides information about liquidity and funding regulatory requirements, governance, management (including sources of liquidity and funding), contingency planning, and stress testing. The balances disclosed in this section represent year-end positions, unless indicated otherwise. Intra-period balances fluctuate in the ordinary course of business and may differ from year-end positions.

Following the acquisition of the Credit Suisse Group and the corresponding additional disclosure requirements according to FINMA Circular 2016/1 "Disclosure – banks", we disclose the liquidity coverage ratio (the LCR) and the net stable funding ratio (the NSFR) for UBS AG consolidated for the first time in this section.

#### Strategy, objectives and governance

Audited I Our management of liquidity and funding has the overall objective of protecting our business franchises and prudently managing our internal and regulatory liquidity and funding requirements. We measure liquidity and funding risk using internal and regulatory models and metrics. We define and implement internal stress testing across different time horizons, scenarios and currencies to ensure we have sufficient liquidity and funding, while remaining compliant with regulatory requirements, primarily expressed through the LCR and the NSFR. Our liquidity and funding strategy is proposed by Group Treasury and approved by the Asset and Liability Committee (ALCO) of UBS AG, which is a committee of the Group Executive Board (the GEB) that is overseen by the Risk Committee of the Board of Directors (the BoD).

Liquidity and funding limits and other indicators (including early-warning indicators) are set at UBS AG (consolidated) and, where appropriate, at legal entity and business division levels. Key limits (under the authority of the BoD) and indicators linked to these limits are reviewed and reconfirmed at least once a year by the BoD of UBS AG, the Executive Board of UBS AG, the ALCO of UBS AG and the Group Treasurer, taking into consideration the Group's business strategy and risk appetite. Treasury Risk Control provides independent oversight over liquidity and funding risk.  $\blacktriangle$ 

#### > Refer to the "Corporate governance" and "Risk management and control" sections of this report for more information

Group Treasury monitors and oversees the implementation and execution of our liquidity and funding strategy and manages liquidity and funding risk within the limits and other relevant indicators, thereby adhering to the internal risk appetite and regulatory requirements. This includes close control of both our cash and collateral, including our high-quality liquid assets (HQLA), and centralizes the Group's access to wholesale cash markets in Group Treasury. To complement our business-as-usual management, Group Treasury maintains a Contingency Funding Plan and contributes to plans for recovery and resolution to define procedures throughout the crisis continuum. Group Treasury reports on the liquidity and funding status and position, at least monthly, to the ALCO of UBS AG and the Risk Committee of the BoD.

#### Liquidity and funding stress testing

Audited I Our liquidity and funding risk management aims to ensure that the firm has sufficient liquidity and funding to survive a severe idiosyncratic and market-wide liquidity and funding stress event without government support, allowing for discrete management actions.

Group Treasury maintains a diversified, high-quality pool of unencumbered liquid assets under Treasury control. The liquid asset portfolio is managed dynamically, so as to operate at all times within the internal risk appetite and other relevant Group and subsidiary liquidity and funding requirements.

Our liquidity and funding stress testing covers two main stress scenarios: a combined (market and idiosyncratic) scenario and a structural market-wide scenario. We continuously refine stress-testing assumptions.

> Refer to "Risk measurement" in the "Risk management and control" section of this report for more information about stress testing

#### Combined (market and idiosyncratic) scenario

In this scenario, UBS faces the consequences of both a severely deteriorated macroeconomic and financial market environment and a UBS-specific event, resulting in an acute loss of liquidity over a relatively short period of time. This scenario represents severe yet plausible events encompassing both market-wide and idiosyncratic elements, in which, however, franchise client relationships are materially maintained.

The risk appetite objective of this stress test is to ensure that UBS keeps a cumulative liquidity surplus on each day in the three-month stress horizon. The liquidity gap is assessed by modeling the stressed liquidity value of the liquidity buffer and stressed liquidity inflows and outflows under the scenario.

#### Structural market-wide scenario

In this scenario, UBS is subject to a significant deterioration of macroeconomic and financial market conditions globally, resulting in a requirement for long-term funding to survive the liquidity drain and support the franchise of the business. Macroeconomic shocks result in deteriorated financial market conditions over the scenario horizon of one year. UBS is assumed to be affected equally relative to other global financial institutions.

The risk appetite objective of this stress test is to ensure that UBS maintains a positive cumulative behavioral liquidity gap across the 3-month, 6-month, 9-month and 12-month tenors. The liquidity gap is assessed by modeling the stressed liquidity value of the liquidity buffer, and stressed liquidity inflows and outflows under the scenario.

#### **Funding management**

Audited I Group Treasury monitors our funding position, including concentration risk, aiming to ensure that we maintain a well-balanced and diversified liability structure. Our funding management team looks to create the optimal liability structure to finance our businesses in a reliable and cost-efficient manner. Our funding activities are planned by analyzing the overall liquidity and funding requirements, taking into account the amount of stable funding that would be needed to support ongoing business activities through periods of difficult market conditions.

The funding strategy of UBS AG is set annually in the Funding Plan and is reviewed on an ongoing basis. The Funding Plan is developed by Group Treasury and approved by the ALCO of UBS AG.

• Refer to "Balance sheet and off-balance sheet" in this section for more information about the development of our short- and long-term debt during 2023

Global Wealth Management and Personal & Corporate Banking provide significant, cost-efficient and stable sources of funding. These include deposits and debt issued through the Swiss central mortgage institutions, which use a portion of our portfolio of Swiss residential mortgages as collateral to generate long-term funding. In addition, we have several short-, medium- and long-term funding programs under which we issue senior unsecured debt and structured notes, as well as short-term debt. These programs enable UBS to source funding from institutional and private investors who are active in Europe, the US and Asia Pacific. Collectively, these broad product offerings and funding sources, together with the global scope of our business activities, support our funding stability.

#### Internal funding and funds transfer pricing

We use our global liquidity and funding framework to govern the liquidity management of our branches and subsidiaries. Group Treasury meets internal demands for funding by channeling funds from entities generating surplus cash to those in need of financing, except in circumstances where transfer restrictions exist.

Funding costs and benefits are allocated to our business divisions according to our liquidity and funding risk management framework. Our internal funds transfer pricing system aims to incentivize that we have the right balance of assets and liabilities in currencies and tenors.

#### Credit ratings

Credit ratings can affect the cost and availability of funding, especially from wholesale unsecured sources. Our credit ratings can also influence the performance of some of our businesses and the levels of client and counterparty confidence. Rating agencies take into account a range of factors when assessing creditworthiness and setting credit ratings. These include the company's strategy, its business position and franchise value, stability and quality of earnings, capital adequacy, risk profile and management, liquidity management, diversification of funding sources, asset quality, and corporate governance. Credit ratings reflect the opinions of the rating agencies and can change at any time.

In evaluating our liquidity and funding requirements, we consider the potential effect of a reduction in our long-term credit ratings and a corresponding reduction in short-term ratings. If our credit ratings were to be downgraded, rating trigger clauses could result in an immediate cash settlement or the need to deliver additional collateral to counterparties from contractual obligations related to over-the-counter (OTC) derivative positions and other obligations. Based on our credit ratings as of 31 December 2023, in the event of a one-notch reduction in our long-term credit ratings of UBS AG and UBS Europe SE, we would have been required to provide USD 0.0bn in cash or other collateral. In the event of a two-notch reduction, it would have been USD 0.3bn and for a three-notch downgrade USD 0.6bn. In the two- and three-notch scenarios the collateral requirements predominantly relate to OTC derivative positions.

In March 2023, following the announcement of planned acquisition of the Credit Suisse Group, rating agencies took following actions regarding UBS AG's ratings: Fitch Ratings Ireland Limited (Fitch) placed its "AA—" Long-Term Issuer Default Rating (IDR) on Rating Watch Negative and Moody's Investors Service Limited (Moody's) changed the outlook on its Baseline Credit Assessment and Long-term Senior Debt ratings to Negative. Upon the close of UBS's acquisition of the Credit Suisse Group in June 2023, Fitch downgraded the Long-Term IDR of UBS AG to "A+" from "AA—" and changed the outlook to Stable, while Moody's maintained all the ratings. S&P Global Ratings Europe Limited (S&P) affirmed UBS AG's Long-term and Short-term issuer credit rating and outlook in March 2023 and, more recently, in February 2024.

> Refer to "Liquidity and funding management are critical to our ongoing performance" in the "Risk factors" section of this report for more information

#### Contingency Funding Plan

Audited I We maintain our Contingency Funding Plan as a preparation and action plan, aiming to ensure we maintain sufficient liquidity to meet payment obligations in a liquidity and funding stress. The plan specifies the processes, tools and responsibilities that we have available to effectively manage liquidity and funding through these periods. Our funding diversification and global scope help to protect our liquidity position in the event of a crisis. Our contingent funding sources include our HQLA portfolios, available Central Bank eligible non-HQLA collateral for liquidity facilities at several major central banks, contingent reductions of trading portfolio assets, and other actions available to the management.

#### Liquidity coverage ratio

The LCR measures the short-term resilience of a bank's liquidity profile by assessing whether sufficient HQLA are available to meet expected net cash outflows from a significant liquidity stress scenario, as defined by the relevant regulator.

For UBS AG, HQLA are low-risk unencumbered assets under the control of Group Treasury that are easily and immediately convertible into cash at little or no loss of value, in order to meet liquidity needs. Our HQLA predominantly consist of assets that qualify as Level 1 in the LCR framework, including cash, central bank reserves and government bonds. HQLA are held by UBS AG and its subsidiaries and may include amounts that are available to meet funding and collateral needs in certain jurisdictions but are not readily available for use by UBS AG consolidated as a whole. These limitations are typically the result of local regulatory requirements, including local LCR and large exposure requirements. Funds that are effectively restricted in subsidiaries and branches are excluded from the calculation of UBS AG consolidated HQLA. On this basis, USD 33.5bn of assets were excluded from our daily average UBS AG consolidated HQLA for the fourth quarter of 2023. Amounts held in excess of local liquidity requirements that are not subject to other restrictions are generally available for transfer within UBS AG consolidated.

Basel Committee on Banking Supervision (BCBS) standards require an LCR of at least 100%. In a period of financial stress, the Swiss Financial Market Supervisory Authority (FINMA) may allow banks to use their HQLA and let their LCR temporarily fall below the minimum threshold. We monitor the LCR in all significant currencies in order to manage any currency mismatches between HQLA and the net expected cash outflows in times of stress.

The daily average LCR of UBS AG consolidated for the fourth quarter of 2023 was 189.7%

> Refer to the 31 December 2023 Pillar 3 Report, available under "Pillar 3 disclosures" at *ubs.com/investors*, for more information about the LCR on a UBS Group AG consolidated basis

#### Liquidity coverage ratio

USD b	n, except where indicated	Average 4Q231
	juality liquid assets	254.5
	net cash outflows <sup>2</sup>	134.3
Liquid	ity coverage ratio (%) <sup>3</sup>	189.7

<sup>1</sup> Calculated based on an average of 63 data points in the fourth quarter of 2023. 2 Represents the net cash outflows expected over a stress period of 30 calendar days. 3 Calculated after the application of haircuts and inflow and outflow rates, as well as, where applicable, caps on Level 2 assets and cash inflows.

#### Too-big-to-fail liquidity requirements

The too-big-to-fail (TBTF) liquidity requirements communicated by FINMA in the third quarter of 2023 became effective on 1 January 2024. The affected legal entities of UBS AG consolidated are compliant with these requirements.

#### **Net stable funding ratio**

The NSFR framework is intended to limit overreliance on short-term wholesale funding, to encourage a better assessment of funding risk across all on- and off-balance sheet items and to promote funding stability. The NSFR has two components: available stable funding (ASF), as numerator, and required stable funding (RSF), as denominator. ASF is the portion of capital and liabilities expected to be available over the period of one year. RSF is a measure of the stable funding requirement of assets based on their maturity, encumbrance and other characteristics, as well as the potential for contingent calls on funding liquidity from off-balance sheet exposures. The BCBS NSFR regulatory framework requires a ratio of at least 100%.

As of 31 December 2023, the NSFR of UBS AG consolidated was 119.6%.

> Refer to the 31 December 2023 Pillar 3 Report, available under "Pillar 3 disclosures" at *ubs.com/investors*, for more information about the NSFR on a UBS Group AG consolidated basis

#### Net stable funding ratio

net stable fallang falls	
USD bn, except where indicated	31.12.23
Available stable funding (ASF)	602.6
Required stable funding (RSF)	503.8
Net stable funding ratio (%)	119.6

## Balance sheet and off-balance sheet

#### **Balance sheet**

The balances disclosed in this section represent year-end positions, unless indicated otherwise. Intra-period balances fluctuate in the ordinary course of business and may differ from year-end positions. Refer to the "Consolidated financial statements" section of this report for more information about the development of UBS AG's financial position.

#### Ralance sheet assets

As of 31 December 2023, balance sheet assets totaled USD 1,156.0bn, an increase of USD 50.6bn compared with 31 December 2022.

Lending assets increased by USD 29.1bn, mainly driven by currency effects of approximately USD 21.0bn. The movement not related to currency effects was mainly driven by funding provided by Group Treasury to Credit Suisse, as well as increases in Personal & Corporate Banking, primarily reflecting higher mortgage loans and real estate financing, partly offset by decreases in Lombard loans in Global Wealth Management. Trading portfolio assets increased by USD 27.1bn, mainly in Financing and Derivatives & Solutions in the Investment Bank, reflecting higher inventory held to hedge client positions and market-driven movements. Securities financing transactions at amortized cost increased by USD 6.3bn, mainly reflecting higher net cash reinvestment trades in Group Treasury.

These increases were partly offset by a USD 21.1bn decrease in Derivatives and cash collateral receivables on derivative instruments. The decrease was mainly in Derivatives & Solutions and Financing, predominantly reflecting decreases in foreign exchange contracts, where the contracts in place at the end of 2023 had lower fair values than the contracts in place at the end of 2022, as well as decreases in interest rate contracts, mainly resulting from valuation effects due to decreases in long-term interest rates. These decreases were partly offset by market-driven increases in equity contracts reflecting a rise in equity markets.

#### **Assets**

	As o	of	% change from
USD bn	31.12.23	31.12.22	31.12.22
Cash and balances at central banks	171.8	169.4	1
Lending <sup>1</sup>	433.8	404.7	7
Securities financing transactions at amortized cost	74.1	67.8	9
Trading assets	135.1	108.0	25
Derivatives and cash collateral receivables on derivative instruments	164.0	185.1	(11)
Brokerage receivables	20.9	17.6	19
Other financial assets measured at amortized cost	54.3	53.4	2
Other financial assets measured at fair value <sup>2</sup>	66.0	61.6	7
Non-financial assets	35.9	37.7	(5)
Total assets	1,156.0	1,105.4	5

<sup>1</sup> Consists of Loans and advances to customers and Amounts due from banks. 2 Consists of Financial assets at fair value not held for trading and Financial assets measured at fair value through other comprehensive income.

#### Asset encumbrance

The table below provides a breakdown of on- and off-balance sheet assets between encumbered assets, unencumbered assets and assets that cannot be pledged as collateral.

Assets are presented as Encumbered if they have been pledged as collateral against an existing liability or are otherwise not available for securing additional funding. Included within the latter category are assets protected under client asset segregation rules, financial assets for unit-linked investment contracts, and assets held in certain jurisdictions to comply with explicit minimum local asset maintenance requirements.

Assets that cannot be pledged as collateral represent assets that are not encumbered but by their nature are not considered available to secure funding or meet collateral needs.

All other assets are presented as Unencumbered. This category consists of cash and securities readily realizable in the normal course of business, which include high-quality liquid assets and unencumbered positions in the trading portfolio of UBS AG. In addition, unencumbered assets include loans and advances to customers and amounts due from banks. Unencumbered assets that are considered to be available to secure funding at the legal entity level may be subject to restrictions that limit the total amount of assets available to UBS AG as a whole.

> Refer to "Note 22 Restricted and transferred financial assets" in the "Consolidated financial statements" section of this report for more information

	Encum	bered			
USD bn	Assets pledged as collateral	Assets otherwise restricted and not available to secure funding	Unencumbered assets	Assets that cannot be pledged as collateral	Total UBS AG
Balance sheet					
Cash and balances at central banks	0.7	0.2	170.8		171.8
Amounts due from banks		2.5	25.6 <sup>2</sup>	0.1	28.2
Receivables from securities financing transactions measured at amortized cost				74.1	74.1
Cash collateral receivables on derivative instruments		4.7		27.6	32.3
Loans and advances to customers	28.1	0.0	377.5		405.6
Other financial assets measured at amortized cost	7.0 <sup>1</sup>	3.3	36.7	7.3	54.3
Total financial assets measured at amortized cost	35.9	10.8	610.6	109.1	766.4
Financial assets at fair value held for trading	76.6 <sup>1</sup>	0.2	58.4		135.1
Derivative financial instruments				131.7	131.7
Brokerage receivables				20.9	20.9
Financial assets at fair value not held for trading	3.1 <sup>1</sup>	17.8	37.3	5.5	63.8
Total financial assets measured at fair value through profit or loss	79.7	18.0	95.6	158.2	351.5
Financial assets measured at fair value through other comprehensive income		1.8	0.4		2.2
Non-financial assets		0.0	16.5	19.5	35.9
Total balance sheet assets as of 31 December 2023	115.5	30.7	723.0	286.7	1,156.0
Total balance sheet assets as of 31 December 2022	77.6	26.9	698.9	302.0	1,105.4
Off-balance sheet					
Fair value of securities accepted as collateral as of 31 December 2023	357.0	5.3	127.1		489.5
Fair value of securities accepted as collateral as of 31 December 2022	331.8	5.6	96.6		434.0
Total balance sheet assets and off-balance sheet securities accepted as collateral as of 31 December 2023	472.6	36.0	850.2	286.7	1,645.5
of which: high-quality liquid assets	•		261.7		
Total balance sheet assets and off-balance sheet securities accepted as collateral as of 31 December 2022	409.4	32.6	795.5	302.0	1,539.5
of which: high-quality liquid assets			239.8		

<sup>1</sup> Includes assets pledged as collateral that may be sold or repledged by counterparties. The respective amounts are disclosed in "Note 22 Restricted and transferred financial assets" in the "Consolidated financial statements" section of this report. 2 Mainly includes funding provided by Group Treasury to Credit Suisse.

#### Balance sheet liabilities

Total liabilities as of 31 December 2023 were USD 1,100.4bn, an increase of USD 51.9bn compared with 31 December 2022.

Customer deposits increased by USD 28.5bn, driven by currency effects of approximately USD 21.3bn and non-foreign-exchange-related increases of USD 7.2bn, mainly in Personal & Corporate Banking and Global Wealth Management as a result of net inflows into fixed-term deposit products, partly offset by lower demand and sweep deposits driven by continued shifts into money market funds and US-government securities. As of 31 December 2023, the ratio of customer deposits to outstanding loans and advances to customers was at 137% (31 December 2022: 135%).

Debt issued designated at fair value and long-term debt issued measured at amortized cost increased by USD 17.1bn. Debt issued designated at fair value increased by USD 14.5bn, reflecting net new issuances and market-driven increases due to the rise in equity markets. Long-term debt issued measured at amortized cost increased by USD 2.7bn, mainly driven by net new issuances of covered bonds and debt issued through the Swiss central mortgage institutions. Subordinated debt remained stable during 2023, with one low-trigger loss-absorbing tier 2 capital instrument of USD 2.4bn being no longer eligible as a capital instrument as the residual maturity was less than one year. Funding from UBS Group AG measured at amortized cost increased by USD 11.2bn, mainly reflecting higher on-lends eligible as TLAC.

#### > Refer to the "Capital management" section of this report for more information

Short-term borrowings increased by USD 12.7bn, mainly due to net new issuances of commercial paper and certificates of deposit in Group Treasury, as well as an increase in funding obtained from US Federal Home Loan Banks.

These increases were partly offset by a USD 15.7bn decrease in Derivatives and cash collateral payables on derivative instruments. The decrease was mainly in Derivatives & Solutions and Financing, reflecting the same drivers as on the asset side.

#### Equity

Equity attributable to shareholders decreased by USD 1,364m to USD 55,234m as of 31 December 2023.

This decrease was mainly driven by the 2022 dividend distribution of USD 6,000m to UBS Group AG, partly offset by total comprehensive income attributable to shareholders of USD 4,598m, reflecting net profit of USD 3,290m and other comprehensive income (OCI) of USD 1,308m. OCI mainly included cash flow hedge OCI of USD 1,400m, OCI related to foreign currency translation of USD 849m, negative OCI related to own credit on financial liabilities designated at fair value of USD 790m and negative defined benefit plan OCI of USD 136m.

In the second quarter of 2023, the share capital currency of UBS AG was changed from the Swiss franc to the US dollar, as approved by the shareholders at the 2023 Annual General Meeting. As a result, the nominal value per share was changed from CHF 0.10 to USD 0.10, resulting in a reclassification between share capital and capital contribution reserve (presented as share premium in the consolidated financial statements). Total equity reported was not affected by this change.

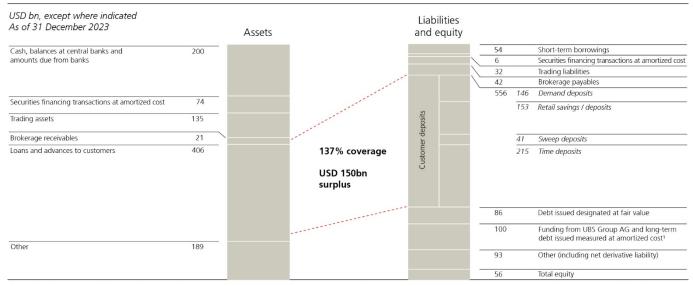
- > Refer to the "UBS AG consolidated performance" and "Consolidated financial statements" sections of this report for more information about OCI
- > Refer to the "Reconciliation of equity under IFRS Accounting Standards to Swiss SRB common equity tier 1 capital" table in this section for more information about the effects of OCI on common equity tier 1 capital

Liabilities and equity

	As of		% change from
USD bn	31.12.23	31.12.22	31.12.22
Short-term borrowings <sup>1</sup>	54.0	41.3	31
Securities financing transactions at amortized cost	5.8	4.2	38
Customer deposits	555.7	527.2	5
Funding from UBS Group AG measured at amortized cost  Debt issued designated at fair value and long-term debt issued measured at amortized cost <sup>2</sup>	67.3	56.1	20
Debt issued designated at fair value and long-term debt issued measured at amortized cost <sup>2</sup>	118.8	101.7	17
rrading liabilities	31./	29.5	7
Derivatives and cash collateral payables on derivative instruments	175.6	191.3	(8)
Brokerage payables	42.5	45.1	(6)
Other financial liabilities measured at amortized cost	12.7	10.4	22
Other financial liabilities designated at fair value	27.4	32.0	(15)
Non-financial liabilities	9.2	9.7	(5)
Total liabilities	1,100.4	1,048.5	5
Share capital	0.4	0.3	14
Share premium	24.6	24.6	0
Retained earnings	28.2	31.7	(11)
Other comprehensive income <sup>3</sup>	2.0	(0.1)	
Total equity attributable to shareholders	55.2	56.6	(2)
Equity attributable to non-controlling interests	0.3	0.3	(2)
Total equity	55.6	56.9	(2)
Total liabilities and equity	1,156.0	1,105.4	5

<sup>1</sup> Consists of short-term debt issued measured at amortized cost and amounts due to banks. 2 The classification of debt issued measured at amortized cost into short-term and long-term is based on original contractual maturity and therefore long-term debt also includes debt with a remaining time to maturity of less than one year. This classification does not consider any early redemption features. 3 Excludes other comprehensive income related to defined benefit plans and own credit, which is recorded directly in Retained earnings.

#### Asset funding UBS AG



<sup>1</sup> The classification of debt issued measured at amortized cost into short- and long-term is based on original contractual maturity and therefore long-term debt also includes debt with a remaining time to maturity of less than one year. This classification does not consider any early redemption features.

#### Liabilities by product and currency

					USD equ	iivalent		
	All curr	All currencies		of which: USD		of which: CHF		h: EUR
USD bn	31.12.23	31.12.22	31.12.23	31.12.22	31.12.23	31.12.22	31.12.23	31.12.22
Short-term borrowings	54.0	41.3	35.6	23.3	4.3	3.8	5.9	4.4
of which: amounts due to banks	16.7	11.6	8.1	4.2	<i>3.9</i>	3.7	0.7	1.1
of which: short-term debt issued <sup>1,2</sup>	<i>37.3</i>	29.7	27.6	19.0	0.3	0.1	<i>5.2</i>	3.3
Securities financing transactions at amortized cost	5.8	4.2	5.1	3.6	0.0	0.0	0.3	0.2
Customer deposits	555.7	527.2	236.4	228.0	216.0	199.2	51.5	53.6
of which: demand deposits	146.2	182.3	36.8	48.0	61.5	71.9	24.7	37.4
of which: retail savings / deposits	<i>152.7</i>	149.3	28.9	24.6	119.2	119.0	4.5	5.6
of which: sweep deposits	41.0	69.2	41.0	69.2	0.0	0.0	0.0	0.0
of which: time deposits	215.8	126.3	129.6	86.1	<i>35.4</i>	<i>8.3</i>	22.3	10.6
Funding from UBS Group AG measured at amortized cost	67.3	56.1	44.6	34.7	2.0	2.7	18.9	15.7
Debt issued designated at fair value and long-term debt issued measured at amortized cost <sup>2</sup>	118.8	101 7	75.2	63.0	18.8	14 6	14.4	13.7
Trading liabilities	31.7	29.5	12.0	12.1	1.0	0.8	8.9	8.1
Derivatives and cash collateral payables on derivative instruments	175.6	191.3	146.7	160.4	4.1	3.8	15.2	15.8
Brokerage payables	42.3	45.1	31.4	32.3	0.7	0.4	2.4	3.2
Other financial liabilities measured at amortized cost	12.7	10.4	7.6	5.7	1.9	1.6	1.0	0.9
Other financial liabilities designated at fair value	27.4	32.0	5.7	12.8	0.1	0.1	4.1	4.1
Non-financial liabilities	9.2	9.7	2.4	2.8	2.0	1.1	2.5	2.9
Total liabilities	1,100.4	1,048.5	602.7	578.6	251.0	228.1	125.0	122.7

<sup>1</sup> Short-term debt issued consists of certificates of deposit, commercial paper, acceptances and promissory notes, and other money market paper. 2 The classification of debt issued measured at amortized cost into short-term and long-term is based on original contractual maturity and therefore long-term debt also includes debt with a remaining time to maturity of less than one year. This classification does not consider any early redemption features.

#### **Off-balance sheet**

In the normal course of business, UBS AG enters into transactions where, pursuant to IFRS Accounting Standards, the maximum contractual exposure may not be recognized in whole or in part on its balance sheet. These transactions include derivative instruments, guarantees, loan commitments and similar arrangements.

When UBS AG incurs an obligation or becomes entitled to an asset through these arrangements, it recognizes them on the balance sheet. It should be noted that in certain instances the amount recognized on the balance sheet does not represent the full gain or loss potential inherent in such arrangements.

The following paragraphs provide more information about certain off-balance sheet arrangements. Additional off-balance sheet information is primarily provided in Notes 9, 10, 17, 19, 20h, 22 and 28 in the "Consolidated financial statements" section of this report.

#### Guarantees, loan commitments and similar arrangements

In the normal course of business, UBS AG issues various forms of guarantees, commitments to extend credit, standby and other letters of credit to support clients, forward starting transactions, note issuance facilities, and revolving underwriting facilities. With the exception of related premiums, generally these guarantees and similar obligations are kept as off-balance sheet items, unless a provision to cover probable losses or expected credit losses is required.

Guarantees represent irrevocable assurances that, subject to the satisfying of certain conditions, UBS AG will make payments if its clients fail to fulfill their obligations to third parties. As of 31 December 2023, the net exposure (i.e., gross values less sub-participations) from guarantees and similar instruments was USD 31.5bn, compared with USD 20.6bn as of 31 December 2022. The increase of USD 10.9bn, was mainly driven by sponsored repo clearing in Group Treasury. Fee income from issuing guarantees compared with total net fee and commission income is insignificant for both 2023 and 2022.

UBS AG also enters into commitments to extend credit in the form of credit lines available to secure the liquidity needs of clients. The majority of irrevocable loan commitments range in maturity from one month to three years. During 2023, irrevocable loan commitments increased by USD 4.0bn, mainly in the Investment Bank, and committed unconditionally revocable credit lines increased by USD 3.7bn, mainly driven by increases in facilities provided to clients in Personal & Corporate Banking, as well as currency effects. Forward starting reverse repurchase agreements increased by USD 6.6bn, in Group Treasury, reflecting fluctuations in levels of business division activity in short-dated securities financing transactions.

#### Off-balance sheet

	As of		% change from
USD bn	31.12.23	31.12.22	31.12.22
Guarantees <sup>1,2</sup>	31.5	20.6	53
Irrevocable loan commitments <sup>1</sup>	44.0	40.0	10
Committed unconditionally revocable credit lines	47.4	43.7	9
Forward starting reverse repurchase agreements	10.4	3.8	173

<sup>1</sup> Guarantees and irrevocable loan commitments are shown net of sub-participations. 2 Includes guarantees measured at fair value through profit or loss.

If customers fail to meet their obligations, the maximum exposure to credit risk of UBS AG is generally the contractual amount of these instruments. The risk is similar to the risk involved in extending loan facilities and is subject to the same risk management and control framework. In 2023, UBS AG recognized net credit loss releases of USD 13m related to irrevocable loan commitments, guarantees and other credit facilities in the scope of expected credit loss measurement, compared with net credit loss releases of USD 3m in 2022. Provisions recognized for irrevocable loan commitments, guarantees and other credit facilities in the scope of expected credit loss measurement were USD 188m as of 31 December 2023, compared with USD 201m as of 31 December 2022.

> Refer to "Note 9 Financial assets at amortized cost and other positions in scope of expected credit loss measurement" and "Note 19 Expected credit loss measurement" in the "Consolidated financial statements" section of this report for more information about provisions for expected credit losses

For certain obligations, UBS AG enters into partial sub-participations to mitigate various risks from guarantees and irrevocable loan commitments. A sub-participation is an agreement by another party to take a share of the loss in the event that the obligation is not fulfilled by the obligor and, where applicable, to fund a part of the credit facility. UBS AG retains the contractual relationship with the obligor, and the sub-participant has only an indirect relationship. Generally, UBS AG only enters into sub-participation agreements with banks to which it ascribes a credit rating equal to or better than that of the obligor.

UBS AG also provides representations, warranties and indemnifications to third parties in the normal course of business.

#### Support provided to non-consolidated investment funds

In 2023, UBS AG did not provide material support, financial or otherwise, to unconsolidated investment funds when it was not contractually obligated to do so, nor does it currently have an intention to do so.

#### Clearing house and exchange memberships

UBS AG is a member of numerous securities and derivative exchanges and clearing houses. In connection with some of these memberships, UBS AG may be required to pay a share of the financial obligations of another member who defaults, or UBS AG may be otherwise exposed to additional financial obligations. While the membership rules vary, obligations generally would arise only if the exchange or clearing house had exhausted its resources. UBS AG considers the probability of a material loss due to such obligations to be remote.

#### Deposit insurance

Swiss banking law and the deposit insurance system require Swiss banks and securities dealers to jointly guarantee an amount of up to CHF 8bn for privileged client deposits in the event that a Swiss bank or securities dealer becomes insolvent. As of 31 December 2023, FINMA estimates UBS AG's share in the deposit insurance system to be CHF 1.2bn. This represents a contingent payment obligation and exposes UBS AG to additional risk. As of 31 December 2023, UBS AG considered the probability of a material loss from its obligations to be remote.

UBS AG is also subject to, or is a member of, other deposit protection schemes in other countries. However, no contingent payment obligation existed as of 31 December 2023 from any other material scheme.

#### Material cash requirements

The material cash requirements of UBS AG as of 31 December 2023 are represented by the residual contractual maturities for non-derivative and non-trading financial liabilities included in the table presented in "Note 23b Maturity analysis of financial liabilities on an undiscounted basis" in the "Consolidated financial statements" section of this report. Included in the table are debt issued designated at fair value (USD 93.0bn), debt issued measured at amortized cost (USD 73.6bn) and funding from UBS Group AG measured at amortized cost (USD 86.1bn). The amounts represent estimated future interest and principal payments on an undiscounted basis.

In the normal course of business, UBS AG also issues or enters into various forms of guarantees, irrevocable loan commitments and other similar arrangements that may result in an outflow of cash in the future. The maturity profile of these obligations, which are presented off-balance sheet, are included in "Note 23b Maturity analysis of financial liabilities on an undiscounted basis" in the "Consolidated financial statements" section of this report.

#### **Cash flows**

As a global financial institution, our cash flows are complex and often may bear little relation to our net earnings and net assets. Consequently, we believe that a traditional cash flow analysis is less meaningful when evaluating our liquidity position than the liquidity, funding and capital management frameworks and measures described elsewhere in this section.

, Refer to the "Liquidity and funding management" section of this report for more information

#### Cash and cash equivalents

As of 31 December 2023, cash and cash equivalents totaled USD 190.5bn, a decrease of USD 4.7bn compared with 31 December 2022, driven by net cash outflows from operating and investing activities. These outflows were largely offset by net cash inflows from financing activities, as well as positive foreign exchange effects, mainly reflecting the depreciation of the US dollar against the Swiss franc in 2023.

#### Operating activities

Net cash outflows from operating activities were USD 28.2bn in 2023, compared with inflows of USD 10.6bn in 2022, reflecting changes in operating assets and liabilities of USD 28.1bn and other adjustments to remove the net impact of non-cash items, such as foreign currency effects. The net change in operating assets and liabilities includes funding of USD 15bn provided to Credit Suisse (included within amounts due from banks), as well as a USD 16.0bn movement in financial assets and liabilities at fair value held for trading and derivative financial instruments, USD 6.1bn from brokerage receivables and payables, and USD 5.0bn from receivables from securities financing transactions measured at amortized cost. These effects were partly offset by a USD 6.5bn increase in customer deposits and a USD 3.7bn decrease in loans and advances to customers.

#### Investing activities

Investing activities resulted in a net cash outflow of USD 4.9bn in 2023, compared with USD 12.3bn in 2022, primarily related to cash outflows of USD 3.8bn from net purchases of debt securities measured at amortized cost.

#### Financing activities

Financing activities resulted in a net cash inflow of USD 19.7bn in 2023, compared with an outflow of USD 5.3bn in 2022, mainly due to net issuance proceeds of USD 19.0bn from debt designated at fair value and long-term debt measured at amortized cost, as well as net issuances of short-term debt of USD 7.2bn. These inflows were partly offset by a dividend distribution to shareholders of USD 6.0bn.

, Refer to "Primary financial statements and share information" in the "Consolidated financial statements" section of this report for more information about cash flows

#### Statement of cash flows (condensed)

	For the year	ended
USD bn	31.12.23	31.12.22
Net cash flow from / (used in) operating activities	(28.2)	10.6
Net cash flow from / (used in) investing activities	(4.9)	(12.3)
Net cash flow from / (used in) financing activities	19.7	(5.3)
Effects of exchange rate differences on cash and cash equivalents	8.7	(5.6)
Net increase / (decrease) in cash and cash equivalents	(4.7)	(12.6)
Cash and cash equivalents at the end of the year	190.5	195.2

## Currency management

#### Strategy, objectives and governance

Group Treasury focuses on three main areas of currency risk management: (i) currency-matched funding and investment of non-US-dollar assets and liabilities; (ii) the sell-down of foreign currency IFRS Accounting Standards profits and losses; and (iii) selective hedging of anticipated non-US-dollar profits and losses to further mitigate the effect of structural imbalances in the balance sheet. Group Treasury also manages structural currency composition across three scopes: UBS Group AG consolidated, UBS AG consolidated, and Credit Suisse AG consolidated.

#### Currency-matched funding and investment of non-US-dollar assets and liabilities

For monetary balance sheet items and other investments, as far as is practical and efficient, UBS AG follows the principle of matching the currencies of its assets and liabilities for funding purposes. This avoids profits and losses arising from the translation of non-US-dollar assets and liabilities.

Net investment hedge accounting is applied to non-US-dollar core investments to balance the effect of foreign exchange movements on both common equity tier 1 (CET1) capital and the CET1 capital ratio.

- > Refer to "Note 1 Summary of material accounting policies" and "Note 25 Hedge accounting" in the "Consolidated financial statements" section of this report for more information
- > Refer to "Capital management" in this section for more information about UBS AG's active management of sensitivity to currency movements and the effect thereof on the key ratios

#### Sell-down of non-US-dollar reported profits and losses

Income statement items of foreign subsidiaries and branches of UBS AG with a functional currency other than the US dollar are translated into US dollars at average exchange rates. To reduce earnings volatility on the translation of previously recognized earnings in foreign currencies, Group Treasury centralizes the profits and losses (under IFRS Accounting Standards) arising in UBS AG and its branches and sells or buys the profit or loss for US dollars on a monthly basis. The foreign subsidiaries of UBS AG follow a similar monthly sell-down process into their own functional currencies. Retained earnings in subsidiaries and branches with a functional currency other than the US dollar are integrated and managed as part of UBS AG's net investment hedge accounting program.

# Corporate governance

Management report

# Audited information according to the Swiss law and applicable regulatory requirements and guidance

Disclosures provided are in line with the requirements of the Swiss Code of Obligations (tables containing such information are marked as "Audited" throughout this section), as well as other applicable regulations and guidance.

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## Corporate governance

UBS AG is incorporated and domiciled in Switzerland and operates under Art. 620 et seq. of the Swiss Code of Obligations and Swiss banking law as an *Aktiengesellschaft*, a corporation limited by shares. The addresses and telephone numbers of the two registered offices of UBS AG are: Bahnhofstrasse 45, CH-8001 Zurich, Switzerland, telephone +41-44-234 11 11; and Aeschenvorstadt 1, CH-4051 Basel, Switzerland, telephone +41-61-288 50 50. The corporate identification number is CHE-101.329.561.

The company was incorporated with unlimited duration on 29 June 1998, when Union Bank of Switzerland (founded in 1862) and Swiss Bank Corporation (founded in 1872) merged to form UBS AG. UBS AG is a regulated bank in Switzerland and is 100% owned by UBS Group AG, the ultimate parent of the UBS Group. UBS AG's purpose, in accordance with art. 2 of its Articles of Association, as amended on 4 April 2023, is the operation bank and its scope extends to a full range of financial services activities in Switzerland and abroad.

As a non-US company with securities listed on the New York Stock Exchange (the NYSE), UBS AG complies with the relevant corporate governance standards applicable to foreign private issuers listing debt securities. In addition, it also follows the standards established in the Swiss Code of Best Practice for Corporate Governance. The Organization Regulations of UBS AG, adopted by the Board of Directors of UBS AG (the BoD) based on Art. 716b of the Swiss Code of Obligations and Art. 25 and 27 of the Articles of Association of UBS AG (the AoA), constitute UBS AG's primary corporate governance guidelines.

### Operational structure

#### **Operational structure**

As of 31 December 2023, the operational structure of the UBS AG is composed of the Global Wealth Management, Personal & Corporate Banking, Asset Management, the Investment Bank, and Non-core and Legacy business divisions, as well as Group functions.

> Refer to the "Our businesses" section of this report for more information about our business divisions and Group functions

## Share capital structure

#### **Ordinary share capital**

In April 2023, the Annual General Meeting (the AGM) approved the conversion of the share capital currency of UBS AG from the Swiss franc to the US dollar. To obtain a Swiss franc nominal value per share equaling USD 0.10 after the conversion, the AGM also approved a CHF 28,860,895.32568 ordinary reduction of the share capital, and this reduction resulted in a corresponding allocation to the capital contribution reserve on UBS AG's standalone financial statements.

At year-end 2023, UBS AG had 3,858,408,466 issued shares, with a nominal value of USD 0.10 each, equating to a share capital of USD 385,840,846.60.

Under Swiss company law, shareholders must approve, in a general meeting of shareholders, any increase or reduction in the ordinary share capital, the creation of conditional share capital or the introduction of a capital band.

#### **Conditional share capital**

At year-end 2023, the following conditional share capital was available to the BoD.

- A maximum of USD 38,000,000, represented by up to 380,000,000 fully paid registered shares with a nominal value of USD 0.10 each, to be issued through the voluntary or mandatory exercise of conversion rights and / or warrants granted in connection with the issuance of bonds or similar financial instruments on national or international capital markets. This conditional capital allowance was approved at the Extraordinary General Meeting (the EGM) held on 26 November 2014, having originally been approved at the AGM of UBS AG on 14 April 2010. The BoD has not made use of such allowance.
  - > Refer to article 4a of the AoA for more information about the terms and conditions of the issue of shares out of existing conditional capital the AoA are available at *ubs.com/governance*

#### Capital band, conversion capital and reserve capital

As of 31 December 2023, UBS AG has not introduced a capital band, any conversion capital or any reserve capital.

#### **Shares**

UBS AG has a single class of shares, which are registered shares in the form of uncertificated securities (in the sense of the Swiss Code of Obligations) and intermediary-held securities (in the sense of the Swiss Federal Act on Intermediated Securities). Each registered share has a nominal value of USD 0.10 and carries one vote. UBS AG imposes no limitation on the rights to own its securities.

#### **Dividend distributions**

The decision to pay a dividend and the amount of any dividend depend on a variety of factors, including our profits, cash flow generation and capital ratios.

At the 2024 AGM, the BoD is proposing to the shareholder for approval a dividend of USD 3,000m for the 2023 financial year.

As of 31 December 2023, UBS AG had 3,858,408,466 issued shares with a nominal value of USD 0.10 each, equating to a share capital of USD 385,840,846.60. All shares carry voting rights, were fully paid in and eligible for dividends. There are no preferential rights associated with these shares, and no other classes of shares have been issued by UBS AG.

### Shareholders' participation rights

#### **Voting rights**

The sole direct shareholder of UBS AG is UBS Group AG, which holds 100% of UBS AG shares. These shares are entitled to voting rights without restriction.

#### **Statutory quorums**

Motions are decided at a general meeting by a majority of the votes represented, excluding blank and invalid ballots. For the approval of certain specific issues, the Swiss Code of Obligations requires a positive vote from a two-thirds majority of the votes represented at the given general meeting and from a majority of the nominal value of shares represented thereat. Such issues include creating shares with privileged voting rights, introducing restrictions on the transferability of registered shares, creating contingent capital or introducing a capital band, conversion capital or reserve capital and restricting or excluding shareholders' preemptive rights.

The AoA also require a two-thirds majority of votes represented for approval of any change to their provisions regarding the number of BoD members, any decision to remove one-quarter or more of the BoD members and any modification to the provision establishing this qualified guorum.

#### Convocation of general meetings of shareholders

The AGM must be held within six months of the close of the financial year (i.e., 31 December). In 2024, the AGM will take place on 23 April.

EGMs may be convened whenever the BoD or the auditors consider it necessary. Shareholders individually or jointly representing at least 10% of the share capital may at any time, including during an AGM, require, by way of a written statement, that an EGM be convened to address a specific issue they put forward.

### **Board of Directors**

The BoD, led by the Chairman, consists of at least 5 and no more than 12 members, as per our AoA.

The BoD, led by the Chairman, decides on the strategy of UBS AG upon recommendation by the President of its Executive Board (the EB) and exercises the ultimate supervision of management. Its ultimate responsibility for the success of UBS AG is exercised subject to the parameters set by the Group.

#### **Members of the Board of Directors**

Board of Directors	Position	Initial election	Step down	UBS business address
Colm Kelleher	Chairman of the BoD	2022		Bahnhofstrasse 45, 8001 Zurich, Switzerland
Lukas Gähwiler	Vice Chairman Member of the Risk Committee	2022		Bahnhofstrasse 45, 8001 Zurich, Switzerland
Jeremy Anderson	Chairperson of Audit Committee	2018		Bahnhofstrasse 45, 8001 Zurich, Switzerland
Claudia Böckstiegel	Member of the BoD	2021		Bahnhofstrasse 45, 8001 Zurich, Switzerland
William C. Dudley	Member of the Risk Committee	2019		Bahnhofstrasse 45, 8001 Zurich, Switzerland
Patrick Firmenich	Member of the Audit Committee	2021		Bahnhofstrasse 45, 8001 Zurich, Switzerland
Fred Hu	Member of the BoD	2018		Bahnhofstrasse 45, 8001 Zurich, Switzerland
Mark Hughes	Chairperson of the Risk Committee	2020		Bahnhofstrasse 45, 8001 Zurich, Switzerland
Nathalie Rachou	Member of the Risk Committee	2020		Bahnhofstrasse 45, 8001 Zurich, Switzerland
Julie G. Richardson	Chairperson of the Compensation Committee / Member of the Risk Committee	2017		Bahnhofstrasse 45, 8001 Zurich, Switzerland
Dieter Wemmer	Member of the Audit Committee / member of the Compensation Committee	2016	23.04.2024	Bahnhofstrasse 45, 8001 Zurich, Switzerland
Jeanette Wong	Member of the Audit Committee / member of the Compensation Committee	2019		Bahnhofstrasse 45, 8001 Zurich, Switzerland
Gail Kelly	Candidate to the UBS AG Board	Proposed for election at the 2024 AGM		Bahnhofstrasse 45, 8001 Zurich, Switzerland

<sup>&</sup>gt; Refer to the UBS Group Annual Report 2023, available under "Annual reporting" at *ubs.com/investors*, for the biographies of the members of the BoD

No current BoD member has either an employment contract or a significant business connection to UBS or any of its subsidiaries. No member of the BoD currently carries out operational management tasks within the Group. All members of the BoD are therefore non-executive members. Except for Lukas Gähwiler, no member of the BoD has carried out over the past three years operational management tasks within the Group. All members of the BoD are also members of UBS Group AG's Board of Directors, and committee membership is the same for both entities.

In 2023, the BoD had three permanent committees: the Audit Committee, the Compensation Committee and the Risk Committee.

#### **Elections and terms of office**

UBS AG's sole shareholder, UBS Group AG, annually elects each member of the BoD individually.

#### Organizational principles and structure

Following each AGM, the BoD meets to appoint one or more Vice Chairmen, the BoD committee members and the respective committee Chairpersons. At the same meeting, the BoD appoints the Company Secretary, who, pursuant to the Organization Regulations, acts as secretary to the BoD and its committees.

Pursuant to the AoA and the Organization Regulations, the BoD meets as often as business requires, but it must meet at least six times a year.

#### **BoD** committees

The committees listed below assist the BoD in fulfilling the performance of its responsibilities. Each committee meets as often as its business requires, but at least four times a year for the Audit Committee, the Compensation Committee and the Risk Committee.

#### **Audit Committee**

Throughout 2023, the Audit Committee consisted of the same four independent BoD members, Jeremy Anderson (Chairperson), Patrick Firmenich, Dieter Wemmer and Jeanette Wong. All Audit Committee members have accounting or related financial management expertise and, in compliance with the rules established pursuant to the 2002 US Sarbanes—Oxley Act, at least one member qualifies as a financial expert. The NYSE standards on corporate governance and Rule 10A-3 under the US Securities Exchange Act set more stringent independence requirements for members of audit committees than for the other members of the BoD. Throughout 2023, all members of the Audit Committee satisfied these requirements, in that they did not receive, directly or indirectly, any consulting, advisory or compensatory fees from any member of the Group other than in their capacity as a BoD member, did not hold, directly or indirectly, UBS AG shares in excess of 5% of the outstanding capital, and did not serve on the audit committees of more than two other public companies. The function of the Audit Committee is to support the Board in fulfilling its oversight duty relating to financial reporting and internal controls over financial reporting, the effectiveness of the external and internal audit functions, as well as the whistleblowing procedures. Management is responsible for the preparation, presentation and integrity of the financial statements, while the external auditors are responsible for auditing financial statements. The Audit Committee's responsibility is one of oversight and review.

#### Compensation Committee

Throughout 2023, the Compensation Committee consisted of the same three independent BoD members, Julie G. Richardson (Chairperson), Dieter Wemmer and Jeanette Wong. The function of the Compensation Committee is to support the Board in its duties to set guidelines on compensation and benefits, to oversee implementation thereof, to approve certain compensation and to scrutinize executive performance.

#### Risk Committee

In 2023, the Risk Committee consisted of four independent BoD members, Mark Hughes (Chairperson), William C. Dudley, Nathalie Rachou and Julie G. Richardson. After the AGM, the Vice Chairman, Lukas Gähwiler, joined the committee. The function of the Risk Committee is to oversee and support the Board in fulfilling its duty to set and supervise an appropriate risk management and control framework in the areas of:

- (i) financial and non-financial risks; and
- (ii) balance sheet, treasury and capital management, including funding, liquidity and equity attribution.

#### **Cybersecurity governance**

Cybersecurity as one of the inherently highest and most rapidly evolving non-financial risks is a key focus for the BoD. It is primarily covered by the Risk Committee through a combination of (i) regular reporting as part of the monthly risk reports and quarterly technology risk updates, and (ii) dedicated deep-dives on specific cybersecurity topics, including summaries and assessments of actual cybersecurity incidents in the industry, assessments of the firm's security posture and related continuous improvement measures. In addition, the BoD members receive periodic updates from the Group Chief Information Security Office on key cybersecurity threats and incidents across the globe and industries, and the Risk Committee regularly organizes education and training sessions, including cyber exercises, for all BoD members.

With respect to the BoD, Jeremy Anderson, Fred Hu, Mark Hughes and Julie G. Richardson all have expertise in technology and cybersecurity. Mr. Anderson is an IT expert, having started out as a software developer in the early 1980s, before working in IT consulting and developing a broad knowledge of systems integration and IT outsourcing services, as well as software development. He cemented his reputation as a tech specialist by becoming a founding sponsor of KPMG's Global Fintech Network in 2014. Mr. Hu has a Master's degree in engineering science from Tsinghua University and has vast experience advising and investing in leading firms in the technology sector in China and globally. Mr. Hughes gained substantial experience overseeing cybersecurity risk as the Group Chief Risk Officer at Royal Bank of Canada. Finally, Ms. Richardson has spent significant time with both incumbent and new technology companies, including being a board member of a digital knowledge management company, a leading cloud monitoring firm and a cyber insurance company.

The BoD is supported in overseeing risk at the executive management level by the cybersecurity expertise of Mike Dargan, who is the Group Chief Operations and Technology Officer, and Markus Ronner, who is the Group Chief Compliance and Governance Officer. Mr. Dargan is responsible for delivering digital platforms, technology services, infrastructure, and operations, including cybersecurity and information security. Previously, he was Group Chief Digital and Information Officer, after leading our Group Technology function since joining UBS in 2016. In addition to this remit, he was also UBS Group AG's Group Executive Board (GEB) sponsor for our digital assets strategy and a sponsor of artificial intelligence and our agile transformation, which were integrated into his area of responsibility in 2023. Prior to joining UBS, he held various senior roles in technology, corporate strategy and investment banking at Standard Chartered Bank, Merrill Lynch, and Oliver Wyman. Mr. Ronner has been with UBS for more than 40 years and held various positions across the firm, including manager of the Group-wide too-big-to-fail program, COO Wealth Management & Swiss Bank, Head Products and Services of Wealth Management & Swiss Bank, COO Asset Management, and Head Group Internal Audit. In his current position, he is responsible at the Group level for the control of all non-financial risks, governmental and regulatory affairs, and investigations and governance matters.

> Refer to "Non-financial risk" in the "Risk management and control" section of this report for information about cybersecurity

#### Important business connections of independent members of the Board of Directors

As a global financial services provider and a major Swiss bank, we enter into business relationships with many large companies, including some in which our BoD members have management or independent board responsibilities.

Our Organization Regulations require one-third of UBS AG BoD members to be independent. For this purpose, independence is determined in accordance with FINMA Circular 2017/1 "Corporate governance – banks" and the NYSE rules.

In 2023, our BoD met the standards of the Organization Regulations for the percentage of directors who are considered independent under the criteria described above.

All relationships and transactions with UBS AG's independent BoD members are conducted in the ordinary course of business and are on the same terms as those prevailing at the time for comparable transactions with non-affiliated persons. All relationships and transactions with BoD members' associated companies are conducted at arm's length.

#### Checks and balances: Board of Directors and Executive Board

We operate under a strict dual board structure, as mandated by Swiss banking law. The separation of responsibilities between the BoD and the EB is clearly defined in the Organization Regulations. The BoD decides on the strategy of UBS AG, upon recommendations by the President of the EB, and exercises ultimate supervision over management; whereas the EB, headed by the President of the EB, has executive management responsibility. The functions of Chairman and President of the EB are assigned to two different people, leading to a separation of powers. This structure establishes checks and balances and preserves the institutional independence of the BoD from the executive management of UBS AG, for which responsibility is delegated to the EB, under the leadership of the President of the EB. No member of one board may simultaneously be a member of the other.

Supervision and control of the EB remain with the BoD. The authorities and responsibilities of the two bodies are governed by the AoA and the Organization Regulations.

Although the recruiting process for BoD and EB members takes into account a broad spectrum of factors, such as skills, backgrounds, experience and expertise, our approach with regard to diversity considerations does not constitute a diversity policy within the meaning of the EU Directive on Non-Financial Reporting, and Swiss law does not require UBS to maintain such a policy.

#### **Executive Board**

The BoD delegates the management of the business to the Executive Board.

#### Responsibilities, authorities and organizational principles of the Executive Board

At UBS AG, management of the business is also delegated, and its EB, under the leadership of the President of the EB, has executive management responsibility for UBS AG and its business. All members of the EB are members of the GEB. Sabine Keller-Busse, who serves as President UBS Switzerland AG and Ulrich Körner, CEO of Credit Suisse AG are both not member of the EB.

UBS AG EB has two permanent committees: the Asset and Liability Committee (the ALCO) and the Finance and Risk Committee (the FRC).

The ALCO is responsible for managing UBS AG's assets and liabilities in line with the UBS AG and Group strategy and regulatory requirements. In 2023, the ALCO held 10 meetings.

The FRC is responsible for supervising and controlling UBS AG's business, financial and risk profile of the overall UBS AG standalone as well as the entity's business activities in Switzerland and cross-jurisdictional branch-related matters, in line with the UBS AG and Group strategy and regulatory requirements. The FRC is also responsible for ensuring the financial and risk profile of UBS AG standalone complies with the agreed risk appetite, by ascertaining that appropriate and timely actions are taken. In 2023, the FRC held three meetings.

		Initial appointment	Step-down	
Executive Board	Position	to the EB	date	UBS business address
Sergio P. Ermotti	President of the Executive Board (also from 2011 to 2020)	05.04.2023		Bahnhofstrasse 45, 8001 Zurich, Switzerland
Michelle Bereaux	Integration Officer	09.05.2023		Bahnhofstrasse 45, 8001 Zurich, Switzerland
Christian Bluhm	Chief Risk Officer	2016		Bahnhofstrasse 45, 8001 Zurich, Switzerland
Michael Dargan	Chief Operations and Technology Officer	2021		Bahnhofstrasse 45, 8001 Zurich, Switzerland
Suni Harford	President Asset Management	2019	01.03.2024	Bahnhofstrasse 45, 8001 Zurich, Switzerland
Naureen Hassan	President UBS Americas	2022		Bahnhofstrasse 45, 8001 Zurich, Switzerland
Aleksandar Ivanovic	President Asset Management	01.03.2024		Bahnhofstrasse 45, 8001 Zurich, Switzerland
Robert Karofsky	President Investment Bank	2018		Bahnhofstrasse 45, 8001 Zurich, Switzerland
Iqbal Khan	President Global Wealth Management	2019		Bahnhofstrasse 45, 8001 Zurich, Switzerland
Edmund Koh	President UBS Asia Pacific	2019		Bahnhofstrasse 45, 8001 Zurich, Switzerland
Barbara Levi	General Counsel	2021		Bahnhofstrasse 45, 8001 Zurich, Switzerland
Beatriz Martin Jimenez	Head Non-core and Legacy and President UBS Europe, Middle East and Africa	09.05.2023		Bahnhofstrasse 45, 8001 Zurich, Switzerland
Markus Ronner	Chief Compliance and Governance Officer	2018		Bahnhofstrasse 45, 8001 Zurich, Switzerland
Stefan Seiler	Head Human Resources & Corporate Services	09.05.2023		Bahnhofstrasse 45, 8001 Zurich, Switzerland
Todd Tuckner	Chief Financial Officer (as of 12.06.2023)	09.05.2023		Bahnhofstrasse 45, 8001 Zurich, Switzerland
Ralph Hamers	President of the Executive Board	2020	05.04.2023	Bahnhofstrasse 45, 8001 Zurich, Switzerland
Sarah Youngwood	Chief Financial Officer	2022	12.06.2023	Bahnhofstrasse 45, 8001 Zurich, Switzerland

<sup>&</sup>gt; Refer to the UBS Group Annual Report 2023, available under "Annual reporting" at ubs.com/investors, for the biographies of the members of the EB

## Change of control and defense measures

Our Articles of Association (the AoA) do not provide any measures for delaying, deferring or preventing a change of control.

#### Clauses on change of control

Neither the terms regulating the BoD members' mandate nor any employment contracts with EB members contain change of control clauses.

All employment contracts with EB members stipulate a notice period of six months. During the notice period, EB members are entitled to their salaries and the continuation of existing employment benefits and may be eligible to be considered for a discretionary performance award based on their contribution during their tenure.

In case of a change of control, we may, at our discretion, accelerate the vesting of and / or relax applicable forfeiture provisions of employees' awards.

#### **Auditors**

Audit is an integral part of corporate governance. While safeguarding their independence, the external auditors closely coordinate their work with Internal Audit (IA). The Audit Committee and, ultimately, the BoD supervise the effectiveness of audit work.

> Refer to "Board of Directors" in this section for more information about the Audit Committee

#### **External independent auditors**

The 2023 AGM re-elected Ernst & Young Ltd (EY) as auditors for UBS AG for the 2023 financial year. EY assumes virtually all auditing functions according to laws, regulatory requests and the AoA. Robert Jacob is the EY lead partner in charge of the overall coordination of the UBS Group financial and regulatory audits and the co-signing partner of the financial audit. In 2020, Maurice McCormick became the lead audit partner for the financial statement audit and has an incumbency limit of five years. In 2021, Hannes Smit became the Lead Auditor to the Swiss Financial Market Supervisory Authority (FINMA), with an incumbency limit of seven years. Daniel Martin has been the co-signing partner for the FINMA audit since 2019, with an incumbency limit of seven years.

During 2023, the Audit Committee held 14 meetings with the external auditors.

#### Review of UBS AG audit engagement

EU rules require UBS Europe SE, an indirect subsidiary of UBS AG, to rotate its external auditors in the 2024 financial year. In connection with this required change, and in consideration of governance best practices, the Board of Directors of UBS Group AG considered whether it would propose to shareholders a rotation of the Group auditor concurrent with the change at UBS Europe SE. Under the direction of the Audit Committee of UBS Group AG, UBS Group conducted a formal review of the Group audit engagement including soliciting proposals from potential auditors. In early 2022, based on the results of this assessment, the Board of Directors of UBS Group AG decided to retain EY as the Group's external auditors.

#### Audit effectiveness assessment

The Audit Committee assesses the performance, effectiveness and independence of the external auditors on an annual basis. The assessment is generally based on interviews with senior management and survey feedback from stakeholders across the Group. Assessment criteria include quality of service delivery, quality and competence of the audit team, value added as part of the audit, insightfulness, and the overall relationship with EY. Based on its own analysis and the assessment results, including feedback received as part of the review of the Group audit engagement described above, the Audit Committee concluded that EY's audit has been effective.

#### Fees paid to external independent auditors

UBS AG and its subsidiaries paid the following fees (including expenses) to their external independent auditors.

	For the year e	ended
USD m	31.12.23	31.12.22
Audit		
Global audit fees	52	48
Additional services classified as audit (services required by law or statute, including work of a non-recurring nature mandated by regulators)	5	7
Total audit	57	56
Non-audit Audit-related fees	10	11
Audit-related fees	10	11
of which: assurance and attestation services	<i>5</i>	<i>t</i>
of which: control and performance reports	5	Š
of which: consultation concerning financial accounting and reporting standards	0	l
Tax fees	1	
All other fees	0	

#### Special auditors for potential capital increases

At the AGM on 8 April 2021, BDO AG was reappointed as special auditors for a three-year term of office. Special auditors provide audit opinions in connection with potential capital increases independently from other auditors.

#### Services performed and fees

The Audit Committee oversees all services provided to UBS by the external auditors. For services requiring the approval from the Audit Committee, a preapproval may be granted either for a specific mandate or in the form of a blanket preapproval authorizing a limited and well-defined type and scope of services. The fees (including expenses) paid to EY are set forth in the table above. In addition, EY received USD 27m in 2023 (USD 35m in 2022) for services performed on behalf of our investment funds, many of which have independent fund boards or trustees.

Audit work includes all services necessary to perform the audit for UBS AG in accordance with applicable laws and generally accepted auditing standards, as well as other assurance services that conventionally only the auditor can provide. These include statutory and regulatory audits, attestation services and the review of documents to be filed with regulatory bodies. The additional services classified as audit in 2023 included several engagements for which EY was mandated at the request of FINMA.

Audit-related work consists of assurance and related services traditionally performed by auditors, such as attestation services related to financial reporting, internal control reviews and performance standard reviews, as well as consultation concerning financial accounting and reporting standards.

Tax work involves services performed by professional staff in EY's tax division and includes tax compliance and tax consultation with respect to our own affairs.

"Other" services are permitted services, which include technical IT security control reviews and assessments.

#### **Internal Audit**

IA performs the internal auditing role for UBS AG. It is an independent function that provides expertise and insights to confirm controls are functioning correctly and highlight where UBS needs to better manage current and emerging risks.

IA supports the BoD in discharging its governance responsibilities by taking a dynamic approach to audit, issue assurance and risk assessment, drawing attention to key risks in order to drive action to prevent unexpected loss or damage to the firm's reputation. To support the achievement of UBS's objectives, IA independently, objectively and systematically assesses the:

- (i) soundness of UBS AG's risk and control culture;
- (ii) reliability and integrity of financial and operational information, including whether activities are properly, accurately and completely recorded, and the quality of underlying data and models; and
- (iii) design, operating effectiveness and sustainability of:
  - processes to define strategy and risk appetite, as well as the overall adherence to the approved strategy;
  - governance processes;
  - risk management, including whether risks are appropriately identified and managed;
  - internal controls, specifically whether they are commensurate with the risks taken;
  - remediation activities; and
  - processes to comply with legal and regulatory requirements, internal policies, and UBS AG's constitutional documents and contracts.

Audit reports that include significant issues are provided to the President of the EB, relevant EB members and other responsible management. The Chairman, the Audit Committee and the Risk Committee of the BoD are regularly informed of such issues.

In addition, IA provides independent assurance on the effective and sustainable remediation of control deficiencies within its mandate, taking a prudent and conservative risk-based approach and assessing at the issue level whether the root cause and the potential exposure for the firm have been holistically and sustainably addressed. IA also cooperates closely with risk control functions and internal and external legal advisors on investigations into major control issues.

To ensure IA's independence from management, the IA Executive UBS AG reports to the Chairman of the BoD and to the Audit Committee, which assesses annually whether IA has sufficient resources to perform its function, as well as its independence and performance. In the Audit Committee's assessment, IA is sufficiently resourced to fulfill its mandate and complete its auditing objectives. IA's role, position, responsibilities and accountability are set out in UBS AG's Organization Regulations and the Charter for IA. IA has unrestricted access to all accounts, books, records, systems, property and personnel, and must be provided with all information and data that it needs to fulfill its auditing responsibilities. IA also conducts special audits at the request of the Audit Committee, or other BoD members, committees or the President of the EB in consultation with the Audit Committee.

IA enhances the efficiency of its work through coordination and close cooperation with the external auditors.

## Information policy

We provide regular information to our shareholder and to the wider financial community.

#### Financial reports for UBS AG are expected to be published on the following dates:

First quarter 2024	7 May 2024
Second quarter 2024	27 August 2024
Third quarter 2024	30 October 2024

#### The annual general meetings of the shareholders of UBS AG will take place on the following dates:

2024	23 April 2024
2025	10 April 2025

<sup>&</sup>gt; Refer to the corporate calendar available at *ubs.com/investors* for the dates of the publication of financial reports and other key dates

Our annual and quarterly publications are available in fully online and .pdf formats at *ubs.com/investors*, under "Financial information."

#### **Financial reporting policies**

We report UBS AG's results for each financial quarter, with the exception of the fourth quarter, including a breakdown of results by business division and disclosures or key developments relating to risk management and control, capital, liquidity and funding management. With the exception of the fourth quarter, each quarter we publish quarterly financial reports for UBS AG.

The consolidated financial statements of UBS AG are prepared in accordance with IFRS Accounting Standards as issued by the International Accounting Standards Board.

> Refer to "Note 1 Summary of material accounting policies" in the "Consolidated financial statements" section of this report for more information about the basis of accounting

#### US disclosure requirements

As a foreign private issuer, we must file reports and other information, including certain financial reports, with the US Securities and Exchange Commission (the SEC) under the US federal securities laws.

An evaluation of the effectiveness of our disclosure controls and procedures (as defined in Rule 13a–15e) under the US Securities Exchange Act of 1934 has been carried out, under the supervision of management, including the Group CEO, the Group CFO and the Group Controller and Chief Accounting Officer. Based on that evaluation, the Group CEO and the Group CFO concluded that our disclosure controls and procedures were effective as of 31 December 2023. No significant changes have been made to our internal controls or to other factors that could significantly affect these controls subsequent to the date of their evaluation.

# Financial statements

# Consolidated financial statements

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#### Management's report on internal control over financial reporting

#### Management's responsibility for internal control over financial reporting

The Board of Directors and management of UBS AG are responsible for establishing and maintaining adequate internal control over financial reporting. UBS AG's internal control over financial reporting is designed to provide reasonable assurance regarding the preparation and fair presentation of published financial statements in accordance with IFRS Accounting Standards as issued by the International Accounting Standards Board (IASB).

UBS AG's internal control over financial reporting includes those policies and procedures that:

- pertain to the maintenance of records that, in reasonable detail, accurately and fairly reflect transactions and dispositions of assets;
- provide reasonable assurance that transactions are recorded as necessary to permit preparation and fair presentation
  of financial statements, and that receipts and expenditures of the company are being made only in accordance with
  authorizations of UBS AG management; and
- provide reasonable assurance regarding prevention or timely detection of unauthorized acquisition, use or disposition
  of the company's assets that could have a material effect on the financial statements.

Because of its inherent limitations, internal control over financial reporting may not prevent or detect misstatements. Also, projections of any evaluation of effectiveness to future periods are subject to the risk that controls may become inadequate because of changes in conditions, or that the degree of compliance with the policies or procedures may deteriorate.

#### Management's assessment of internal control over financial reporting as of 31 December 2023

UBS AG management has assessed the effectiveness of UBS AG's internal control over financial reporting as of 31 December 2023 based on the criteria set forth by the Committee of Sponsoring Organizations of the Treadway Commission (COSO) in Internal Control – Integrated Framework (2013 Framework). Based on this assessment, management believes that, as of 31 December 2023, UBS AG's internal control over financial reporting was effective.

The effectiveness of UBS AG's internal control over financial reporting as of 31 December 2022 has been audited by Ernst & Young Ltd, UBS AG's independent registered public accounting firm, as stated in their *Report of the independent registered public accounting firm on internal control over financial reporting,* which expresses an unqualified opinion on the effectiveness of UBS AG's internal control over financial reporting as of 31 December 2023.

#### Reports of the independent registered public accounting firm included in this report

The accompanying reports of the independent registered public accounting firm on the consolidated financial statements Report of the independent registered public accounting firm on the consolidated financial statements and internal control over financial reporting Report of the independent registered public accounting firm on internal control over financial reporting of UBS Group are included in our filing on 28 March 2024 with the Securities and Exchange Commission on Form 20-F pursuant to US reporting obligations.



Ernst & Young Ltd Aeschengraben 27 P.O. Box 4002 Basel Phone: +41 58 286 86 86 www.ey.com/en\_ch

#### Report of Independent Registered Public Accounting Firm

To the Shareholders and the Board of Directors of UBS AG

#### Opinion on Internal Control over Financial Reporting

We have audited UBS AG and subsidiaries' internal control over financial reporting as of 31 December 2023, based on criteria established in Internal Control—Integrated Framework issued by the Committee of Sponsoring Organizations of the Treadway Commission (2013 framework) (the COSO criteria). In our opinion, UBS AG and subsidiaries ("the Group") maintained, in all material respects, effective internal control over financial reporting as of 31 December 2023, based on the COSO criteria.

We also have audited, in accordance with the standards of the Public Company Accounting Oversight Board (United States) (PCAOB), the consolidated balance sheets of the Group as of 31 December 2023 and 2022, the related consolidated income statements, statements of comprehensive income, statements of changes in equity and statements of cash flows for each of the three years in the period ended 31 December 2023, and the related notes and our report dated 27 March 2024 expressed an unqualified opinion thereon.

#### **Basis for Opinion**

The Group's management is responsible for maintaining effective internal control over financial reporting and for its assessment of the effectiveness of internal control over financial reporting included in the accompanying Management's Report on Internal Control over Financial Reporting. Our responsibility is to express an opinion on the Group's internal control over financial reporting based on our audit. We are a public accounting firm registered with the PCAOB and are required to be independent with respect to the Group in accordance with the U.S. federal securities laws and the applicable rules and regulations of the Securities and Exchange Commission and the PCAOB.

We conducted our audit in accordance with the standards of the PCAOB. Those standards require that we plan and perform the audit to obtain reasonable assurance about whether effective internal control over financial reporting was maintained in all material respects.

Our audit included obtaining an understanding of internal control over financial reporting, assessing the risk that a material weakness exists, testing and evaluating the design and operating effectiveness of internal control based on the assessed risk, and performing such other procedures as we considered necessary in the circumstances. We believe that our audit provides a reasonable basis for our opinion.

#### Definition and Limitations of Internal Control Over Financial Reporting

A company's internal control over financial reporting is a process designed to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with generally accepted accounting principles. A company's internal control over financial reporting includes those policies and procedures that (1) pertain to the maintenance of records that, in reasonable detail, accurately and fairly reflect the transactions and dispositions of the assets of the company; (2) provide reasonable assurance that transactions are recorded as necessary to permit preparation of financial statements in accordance with generally accepted accounting principles, and that receipts and expenditures of the company are being made only in accordance with authorizations of management and directors of the company; and (3) provide reasonable assurance regarding prevention or timely detection of unauthorized acquisition, use, or disposition of the company's assets that could have a material effect on the financial statements.

Because of its inherent limitations, internal control over financial reporting may not prevent or detect misstatements. Also, projections of any evaluation of effectiveness to future periods are subject to the risk that controls may become inadequate because of changes in conditions, or that the degree of compliance with the policies or procedures may deteriorate

Ernst & Young Ltd Basel, 27 March 2024

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#### Report of Independent Registered Public Accounting Firm

To the Shareholders and the Board of Directors of UBS AG

#### Opinion on the Financial Statements

We have audited the accompanying consolidated balance sheets of UBS AG and subsidiaries ("the Group") as of 31 December 2023 and 2022, the related consolidated income statements, statements of comprehensive income, statements of changes in equity and statements of cash flows for each of the three years in the period ended 31 December 2023, and the related notes to the consolidated financial statements, including the information identified as "audited" as described in Note 1 (collectively referred to as the "consolidated financial statements"). In our opinion, the consolidated financial statements present fairly, in all material respects, the financial position of the Group at 31 December 2023 and 2023, and the results of its operations and its cash flows for each of the three years in the period ended 31 December 2023, in conformity with the IFRS Accounting Standards as issued by the International Accounting Standards Board.

We also have audited, in accordance with the standards of the Public Company Accounting Oversight Board (United States) (PCAOB), the Group's internal control over financial reporting as of 31 December 2023, based on criteria established in Internal Control-Integrated Framework issued by the Committee of Sponsoring Organizations of the Treadway Commission (2013 framework) and our report dated 27 March 2024 expressed an unqualified opinion thereon.

#### **Basis for Opinion**

These financial statements are the responsibility of the Group's Board of Directors. Our responsibility is to express an opinion on the Group's financial statements based on our audits. We are a public accounting firm registered with the PCAOB and are required to be independent with respect to the Group in accordance with the U.S. federal securities laws and the applicable rules and regulations of the Securities and Exchange Commission and the PCAOB.

We conducted our audits in accordance with the standards of the PCAOB. Those standards require that we plan and perform the audit to obtain reasonable assurance about whether the financial statements are free of material misstatement, whether due to error or fraud. Our audits included performing procedures to assess the risks of material misstatement of the financial statements, whether due to error or fraud, and performing procedures that respond to those risks. Such procedures included examining, on a test basis, evidence regarding the amounts and disclosures in the financial statements. Our audits also included evaluating the accounting principles used and significant estimates made by management, as well as evaluating the overall presentation of the financial statements. We believe that our audits provide a reasonable basis for our opinion.

#### Critical Audit Matters

The critical audit matters communicated below are matters arising from the current period audit of the financial statements that were communicated or required to be communicated to the audit committee and that: (1) relate to accounts or disclosures that are material to the financial statements and (2) involved our especially challenging, subjective or complex judgments. The communication of critical audit matters does not alter in any way our opinion on the consolidated financial statements, taken as a whole, and we are not, by communicating the critical audit matters below, providing separate opinions on the critical audit matters or on the accounts or disclosures to which they relate.



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#### Valuation of complex or illiquid instruments at fair value

Description of the Matter At 31 December 2023, as explained in Notes 1 and 20 to the consolidated financial statements, the Group held financial assets and liabilities measured at fair value of USD 358,139 million and USD 328,401 million, respectively, including financial instruments that did not trade in active markets. These instruments are reported within the following accounts: financial assets and liabilities at fair value held for trading, derivative financial instruments, financial assets at fair value not held for trading, debt issued designated at fair value, brokerage payables designated at fair value, and other financial liabilities designated at fair value. In determining the fair value of these financial instruments, the Group used valuation techniques, modelling assumptions, and estimates of unobservable market inputs which required significant management judgment.

Auditing management's judgments and assumptions used in the estimation of the fair value of these instruments was complex due to the highly judgmental nature of valuation techniques, key modelling assumptions and significant unobservable inputs. Auditing the valuation of complex or illiquid instruments at fair value included consideration of any incremental risks arising from the impact of current macroeconomic influences on valuation techniques and inputs, such as geopolitics and inflation. The valuation techniques that required especially complex judgment were comprised of discounted cash flow and earnings-based valuation techniques. Highly judgmental modelling assumptions result from a range of different models or model calibrations used by market participants. Valuation inputs which were particularly complex and subjective included those with a limited degree of observability and the associated extrapolation, interpolation or calibration of curves using limited and proxy data points. Examples of such inputs included unobservable credit spreads and bond prices, and volatility.

How We Addressed the Matter in Our Audit We obtained an understanding, evaluated the design and tested the operating effectiveness of the controls over management's financial instrument valuation processes, including controls over market data inputs, model and methodology governance, and valuation adjustments.

We tested the valuation techniques, models and methodologies, and the inputs used in those models, as outlined above, by performing an independent revaluation of certain complex or illiquid financial assets and liabilities with the support of specialists. We used independent models and inputs and compared inputs to available market data among other procedures. We also independently challenged key judgments in relation to a sample of fair value adjustments.

We also assessed management's disclosures regarding fair value measurement (within Notes 1 and 20 to the consolidated financial statements).

# Legal provisions and contingent liabilities

Description of the Matter At 31 December 2023, the Group's provisions for litigation, regulatory and similar matters and contingent liabilities (legal provisions) were USD 1,810 million. As explained in Note 17 to the consolidated financial statements, the Group operates in a legal and regulatory environment that is exposed to significant litigation and similar risks arising from disputes and regulatory proceedings. Such matters are subject to many uncertainties and the outcomes



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may be difficult to predict. These uncertainties inherently affect the amount and timing of potential outflows with respect to the legal provisions which have been established.

Auditing management's assessment of legal provisions was complex and judgmental due to the significant subjectivity involved in management's estimate of the amount and probability that an outflow of resources will be required for existing legal matters, including inquiries regarding cross-border wealth management businesses (Note 17b 1). The legal provisions for these matters are based on management's estimation of the amount and likelihood of the occurrence of certain scenarios.

How We Addressed the Matter in Our Audit We obtained an understanding, evaluated the design and tested the operational effectiveness of management's controls over the legal provision process. Our procedures included testing management's review of the accuracy of the inputs to the estimation of the amount and likelihood of the occurrence of certain scenarios.

Where appropriate, we assessed the methodologies on which the provision amounts were based with the involvement of specialists, recalculated the provisions and tested the underlying information. We inspected internal and external legal analyses of the matters supporting the judgmental aspects impacted by legal interpretations. We obtained correspondence directly from external legal counsel to assess the information provided by management and performed inquiries with external counsel as necessary.

We also assessed management's disclosure regarding legal provisions (within Note 17 to the consolidated financial statements).

#### Recognition of deferred tax assets

Description of the Matter At 31 December 2023, the Group's deferred tax assets ("DTAs") were USD 9,244 million (see Note 8 to the consolidated financial statements). DTAs are recognized to the extent it is probable that taxable profits will be available, against which applicable deductible temporary differences or the carryforward of unused tax losses within the loss carryforward period can be utilized. There is significant judgment exercised when estimating future taxable income that is not based on the reversal of taxable temporary differences. Management's estimate of future taxable profits is based on its strategic plan that is sensitive to the assumptions made in estimating future taxable income.

Auditing management's assessment of the recognition of the Group's DTAs was complex due to the highly judgmental nature of estimating future taxable profits. Estimating future profitability is inherently subjective as it is sensitive to future economic, market and other conditions, which are difficult to predict, such as the impact of geopolitics, inflation, and interest rates. Specifically, some of the more subjective key macro-economic assumptions used included gross domestic product growth rates, equity market performance, and interest rate expectations.

How We Addressed the We obtained an understanding, evaluated the design, and tested the operating effectiveness of management's controls over DTA valuation, which included the assumptions used in developing the strategic plans and estimating future taxable income.



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Matter in Our Audit We assessed the completeness and accuracy of the data used for the estimations of future taxable income. This included recalculating the outputs of models applied to the recognition process for DTAs.

We involved specialists to assist in assessing the key economic assumptions embedded in the strategic plans. We compared key assumptions used to forecast future taxable income to externally available historical and prospective data and assumptions and assessed the sensitivity of the outcomes using reasonably possible changes in assumptions.

We also assessed management's disclosure regarding recognized and unrecognized deferred tax assets (within Note 8 to the consolidated financial statements).

#### Expected credit losses

Description of the Matter At 31 December 2023, the Group's allowances and provisions for expected credit losses ("ECL") were USD 1,244 million. As explained in Notes 1, 9 and 19 to the consolidated financial statements, ECL is recognized for financial assets measured at amortized cost, financial assets measured at fair value through other comprehensive income, fee and lease receivables, financial guarantees, and loan commitments not measured at fair value. ECL is also recognized on the undrawn portion of committed unconditionally revocable credit lines, which include the Group's credit card limits and master credit facilities. The allowances and provisions for ECL consists of exposures that are in default which are individually evaluated for impairment (stage 3), as well as losses inherent in the loan portfolio that are not specifically identified (stage 1 and stage 2). Management's ECL estimates represent the difference between contractual cash flows and those the Group expects to receive, discounted at the effective interest rate. The method used to calculate ECL is based on a combination of the following principal factors: probability of default ("PD"), loss given default ("LGD") and exposure at default ("EAD").

Auditing management's estimate of the allowances and provisions for ECL was complex due to the highly judgmental nature of forward-looking economic scenarios that form the basis of the ECL calculation, their probability weightings, related post-model adjustments, and the credit risk models used to estimate stage 1 and stage 2 ECL. The macroeconomic developments during 2023, including persisting geopolitical tensions and inflation, contributed to further uncertainty and complexity in estimating ECL. As a result, the ECL estimation required higher management judgment, specifically within the following two areas: (i) scenario selection, including assumptions about the scenario severity, underlying macroeconomic variables, and the number of scenarios necessary to sufficiently cover the bandwidth of potential outcomes, as well as related scenario weights and post-model adjustments; and (ii) credit risk models, since the output from historic data based models may not be indicative of current or future conditions.

Additionally, auditing the measurement of individual ECL for stage 3 was complex due to the high degree of judgment involved in management's process for estimating ECL based on assumptions. These assumptions take into account expected future cash flows from collateral and other credit enhancements or expected payouts from bankruptcy proceedings for unsecured claims and, where applicable, time to realization of collateral and the seniority of claims.





How We Addressed the Matter in Our Audit We obtained an understanding, evaluated the design and tested the operating effectiveness of management's controls over the ECL estimate, including management's choice of forward-looking economic scenarios used to measure ECL and the probability weighting assigned to such scenarios. We evaluated management's methodologies and governance controls for developing and monitoring the economic scenarios used and the probability weightings assigned to them, and related post-model adjustments. Supported by specialists, we assessed the key macroeconomic variables used in the forward-looking scenarios, such as real gross domestic product growth, unemployment rate, interest rates and house price indices, and evaluated the modelled correlation and translation of those macroeconomic factors to the ECL estimate. We further assessed the appropriateness of the post-model adjustments by considering management's governance process, assumptions used and sensitivity analysis.

We also obtained an understanding, evaluated the design and tested the operating effectiveness of controls over credit risk models used in the ECL estimate, including controls over the completeness and accuracy of model input data, calculation logic, and output data used in the overall ECL calculation. With the support of specialists, on a sample basis, we performed an evaluation of management's models and tested the model outcomes by inspecting model documentation, reperforming model calculations, and comparing data used as inputs to management's forecast to external sources, among other procedures.

For the measurement of stage 3, we obtained an understanding, evaluated the design and tested the operating effectiveness of controls over management's process, including an evaluation of the assumptions used by management regarding the future cash flows from debtors' continuing operations and/or the liquidation of collateral. Supported by specialists in certain areas, we additionally tested collateral valuation, cash flow assumptions and exit strategies by performing inquiries of management, inspecting underlying documents, such as loan contracts, financial statements, covenants, budgets and business plans, and by reperforming discounted cash flow calculations among other procedures, on a sample basis.

We also assessed management's disclosures regarding financial assets at amortized cost and other positions in scope of expected credit loss measurement (within Notes 1, 9 and 19 to the consolidated financial statements).

Ernit a Yang Udd

Ernst & Young Ltd

We have served as the Group's auditor since 1998.

Basel, Switzerland

27 March 2024

# UBS AG consolidated financial statements

# Primary financial statements and share information

#### Audited |

# Income statement

		For the year ended					
USD m	Note	31.12.23	31.12.22	31.12.21			
Interest income from financial instruments measured at amortized cost and fair value through other comprehensive income	3	22,444	11,803	8,534			
Interest expense from financial instruments measured at amortized cost	3	(19,643)	(6,696)	(3,366)			
Net interest income from financial instruments measured at fair value through profit or loss and other	3	1,765	1,410	1,437			
Net interest income	3	4,566	6,517	6,605			
Other net income from financial instruments measured at fair value through profit or loss	3	9,934	7,493	5,844			
Fee and commission income	4	20,399	20,846	24,422			
Fee and commission expense	4	(1,790)	(1,823)	(1,985)			
Net fee and commission income	4	18,610	19,023	22,438			
Other income	5	566	1,882	941			
Total revenues		33,675	34,915	35,828			
Credit loss expense / (release)	19	143	29	(148)			
Personnel expenses	6	15,655	15,080	15,661			
General and administrative expenses	7	11,118	9,001	9,476			
Depreciation, amortization and impairment of non-financial assets	11, 12	2,238	1,845	1,875			
Operating expenses		29,011	25,927	27,012			
Operating profit / (loss) before tax		4,521	8,960	8,964			
Tax expense / (benefit)	8	1,206	1,844	1,903			
Net profit / (loss)		3,315	7,116	7,061			
Net profit / (loss) attributable to non-controlling interests	·	25	32	29			
Net profit / (loss) attributable to shareholders		3,290	7,084	7,032			

# Statement of comprehensive income

			the year ended	
USD m	Note	31.12.23	31.12.22	31.12.2
Comprehensive income attributable to shareholders				
Net profit / (loss)		3,290	7,084	7,03
Other comprehensive income that may be reclassified to the income statement			,	,
Foreign currency translation				
Foreign currency translation movements related to net assets of foreign operations, before tax		1,747	(869)	(1,046
Effective portion of changes in fair value of hedging instruments designated as net investment hedges, before tax		(912)	319	49:
Foreign currency translation differences on foreign operations reclassified to the income statement		58	32	(1
Effective portion of changes in fair value of hedging instruments designated as net investment hedges reclassified to				\.'
the income statement		(28)	(4)	10
Income tax relating to foreign currency translations, including the effect of net investment hedges		(17)	4	3!
Subtotal foreign currency translation, net of tax		849 <sup>1</sup>	(519)	(510
Financial assets measured at fair value through other comprehensive income			, ,	
Net unrealized gains / (losses), before tax		4	(440)	(203
Net realized (gains) / losses reclassified to the income statement from equity		1		(9
Reclassification of financial assets to Other financial assets measured at amortized cost <sup>2</sup>		······	449	
Income tax relating to net unrealized gains / (losses)		0	(3)	5 <u>.</u>
Subtotal financial assets measured at fair value through other comprehensive income, net of tax		5	6	(157
Cash flow hedges of interest rate risk	25			(137
Effective portion of changes in fair value of derivative instruments designated as cash flow hedges, before tax	23	(36)	(5,758)	(992
Net (gains) / losses reclassified to the income statement from equity		1,745	(159)	(1,073
Income tax relating to cash flow hedges			1,124	390
Subtotal cash flow hedges, net of tax		(309)		
<u> </u>	25	1,400³	(4,793)	(1,675
Cost of hedging	25	(40)		(2.2)
Cost of hedging, before tax		(19)	45	(32)
Income tax relating to cost of hedging		0 (40)	0	(2.5)
Subtotal cost of hedging, net of tax		(19)	45	(26)
Total other comprehensive income that may be reclassified to the income statement, net of tax		2,235	(5,260)	(2,368)
Other comprehensive income that will not be reclassified to the income statement				
Defined benefit plans	26			
Gains / (losses) on defined benefit plans, before tax		(103)	40	133
Income tax relating to defined benefit plans		(33)	41	(31)
Subtotal defined benefit plans, net of tax		(136)	81	102
Own credit on financial liabilities designated at fair value	20			
Gains / (losses) from own credit on financial liabilities designated at fair value, before tax		(861)	867	46
Income tax relating to own credit on financial liabilities designated at fair value		71	(71)	
Subtotal own credit on financial liabilities designated at fair value, net of tax		(790)4	796	46
Total other comprehensive income that will not be reclassified to the income statement, net of tax		(927)	877	148
			()	(
Total other comprehensive income		1,308	(4,383)	(2,220)
Total comprehensive income attributable to shareholders		4,598	2,701	4,813
Comprehensive income attributable to non-controlling interests				
Net profit / (loss)		25	32	29
Total other comprehensive income that will not be reclassified to the income statement, net of tax		2	(14)	(16)
Total comprehensive income attributable to non-controlling interests		27	18	13
Total comprehensive income				
Net profit / (loss)		2 215	7,116	7,061
		3,315		
Other comprehensive income		1,311	(4,396)	(2,235)
of which: other comprehensive income that may be reclassified to the income statement		2,235	(5,260)	(2,368,
of which: other comprehensive income that will not be reclassified to the income statement		(924)	864	132
Total comprehensive income		4,625	2,719	4,826

<sup>1</sup> Mainly reflects a significant strengthening of the Swiss franc and the euro against the US dollar.

2 Effective 1 April 2022, a portfolio of assets previously classified as Financial assets measured at fair value through other comprehensive income was reclassified to Other financial assets measured at amortized cost. Refer to Note 13a for more information.

3 Mainly reflects net losses on hedging instruments that were reclassified from OCI to the income statement.

4 Mainly reflects a tightening of our own credit spreads.

# **Balance sheet**

USD m	Note	31.12.23	31.12.22
Assets	Note	31.12.23	J1.12.22
Cash and balances at central banks		171,806	169,445
Amounts due from banks	9	28,206	14,671
Receivables from securities financing transactions measured at amortized cost	9, 21	74,128	67,814
Cash collateral receivables on derivative instruments	9, 21	32,300	35,033
Loans and advances to customers	9	405,633	390,027
Other financial assets measured at amortized cost	9, 13a	54,334	53,389
Total financial assets measured at amortized cost	5, 150	766,407	730,379
Financial assets at fair value held for trading	20	135,098	108,034
of which: assets pledged as collateral that may be sold or repledged by counterparties		44,524	36,742
Derivative financial instruments	10, 20, 21	131,728	150,109
Brokerage receivables	20	20,883	17,576
Financial assets at fair value not held for trading	20	63,754	59,408
Total financial assets measured at fair value through profit or loss	20	351,463	335,127
Financial assets measured at fair value through other comprehensive income	20	2,233	2,239
Investments in associates		983	1,101
Property, equipment and software		11,044	11,316
Goodwill and intangible assets	12	6,265	6,267
Deferred tax assets	8	9,244	9,354
Other non-financial assets		8,377	9,652
Total assets	130	1,156,016	1,105,436
		.,,	1,100,100
Liabilities		46.700	
Amounts due to banks		16,720	11,596
Payables from securities financing transactions measured at amortized cost	21	5,782	4,202
Cash collateral payables on derivative instruments	21	34,886	36,436
Customer deposits	14a	555,673	527,171
Funding from UBS Group AG measured at amortized cost	14b	67,282	56,147
Debt issued measured at amortized cost	16	69,784	59,499
Other financial liabilities measured at amortized cost	18a	12,713	10,391
Total financial liabilities measured at amortized cost		762,840	705,442
Financial liabilities at fair value held for trading	20	31,712	29,515
Derivative financial instruments	10, 20, 21	140,707	154,906
Brokerage payables designated at fair value	20	42,275	45,085
Debt issued designated at fair value	15, 20	86,341	71,842
Other financial liabilities designated at fair value	18b, 20	27,366	32,033
Total financial liabilities measured at fair value through profit or loss		328,401	333,382
Provisions	17a	2,524	3,183
Other non-financial liabilities	18c	6,682	6,489
Total liabilities		1,100,448	1,048,496
Equity			
Share capital		386	338
Share premium		24,638	24,648
Retained earnings		28,235	31,746
Other comprehensive income recognized directly in equity, net of tax		1,974	(133)
Equity attributable to shareholders		55,234	56,598
Equity attributable to non-controlling interests		335	342
Total equity		55,569	56,940
Total liabilities and equity		1,156,016	1,105,436

USD m	Share capital	Share premium	Retained earnings	
Balance as of 31 December 2020	338	24,580	25,251	
Premium on shares issued and warrants exercised		(7) <sup>2</sup>		
Tax (expense) / benefit		(102)		
Dividends			(4,539)	
Translation effects recognized directly in retained earnings			18	
Share of changes in retained earnings of associates and joint ventures			1	
New consolidations / (deconsolidations) and other increases / (decreases) <sup>3</sup>		182		
Total comprehensive income for the year			7,180	
of which: net profit / (loss)			7,032	
of which: OCI, net of tax			148	
Balance as of 31 December 2021	338	24,653	27,912	
Premium on shares issued and warrants exercised		(14) <sup>2</sup>		
Tax (expense) / benefit		5		
Dividends			(4,200)	
Translation effects recognized directly in retained earnings			69	
Share of changes in retained earnings of associates and joint ventures			0	
New consolidations / (deconsolidations) and other increases / (decreases)		4	3	
Total comprehensive income for the year			7,961	
of which: net profit / (loss)			7,084	
of which: OCI, net of tax			877	
Balance as of 31 December 2022	338	24,648	31,746	
Premium on shares issued and warrants exercised		(19)2		
Tax (expense) / benefit		12		
Dividends			(6,000)	
Translation effects recognized directly in retained earnings			127	
Share of changes in retained earnings of associates and joint ventures			(1)	
Share capital currency change	48	(48)		
New consolidations / (deconsolidations) and other increases / (decreases)		45 <sup>4</sup>	0	
Total comprehensive income for the year			2,363	
of which: net profit / (loss)			3,290	
of which: OCI, net of tax			(927)	
Balance as of 31 December 2023	386	24,638	28,235	

<sup>1</sup> Excludes other comprehensive income related to defined benefit plans and own credit, which is recorded directly in Retained earnings. 2 Includes decreases related to recharges by UBS Group AG for share-based compensation awards granted to employees of UBS AG or its subsidiaries. 3 Includes the effects related to the launch of UBS AG's new operational partnership entity with Sumitomo Mitsui Trust Holdings, Inc in 2021. 4 Includes an increase of USD 45m related to the issuance of high-trigger loss-absorbing additional tier 1 capital with an equity conversion feature.

Total equity	Non-controlling interests	Total equity attributable to shareholders	of which: cash flow hedges	of which: financial assets at fair value through OCI	of which: foreign currency translation	Other comprehensive income recognized directly in equity, net of tax <sup>1</sup>
58,073	319	57,754	2,321	151	<i>5,126</i>	7,585
(7)		(7)				
(102)		(102)				
(4,542)	(4)	(4,539)				
0		0	(18)	0		(18)
1		1				
193	12	182				
4,826	13	4,813	(1,675)	(157)	(510)	(2,368)
7,061	29	7,032				
(2,235)	(16)	(2,220)	(1,675)	(157)	(510)	(2,368)
58,442	340	58,102	628	(7)	4,617	5,200
(14)		(14)				
5		5				
(4,209)	(9)	(4,200)				
0		0	(69)	0		(69)
0		0				
(3)	(7)	4		(3)		(3)
2,719	18	2,701	(4,793)	6	(519)	(5,260)
7,116	32	7,084				
(4,396)	(14)	(4,383)	(4,793)	6	(519)	(5,260)
56,940	342	56,598	(4,234)	(4)	4,098	(133)
(19)		(19)				
12		12				
(6,004)	(4)	(6,000)				
0		0	(127)	0		(127)
(1)		(1)				
0		0				
15	(31)	45				
4,625	27	4,598	1,400	5	849	2,235
3,315	<i>25</i>	3,290				
1,311	2	1,308	1,400	5	849	2,235
55,569	335	55,234	(2,961)	1	4,947	1,974

#### Share information and earnings per share

# **Ordinary share capital**

As of 31 December 2023, UBS AG had 3,858,408,466 issued shares (31 December 2022: 3,858,408,466 shares). In the second quarter of 2023, the share capital currency of UBS AG was changed from the Swiss franc to the US dollar, as approved by shareholders at the 2023 Annual General Meeting (the AGM). As a result, the nominal value per share has changed from CHF 0.10 to USD 0.10, resulting in a reclassification between share capital and capital contribution reserve (presented as share premium in the consolidated financial statements) and leading to a share capital of USD 385,840,846.60. The shares were entirely held by UBS Group AG.

# **Conditional share capital**

As of 31 December 2023, the following conditional share capital was available to the Board of Directors (the BoD) of UBS AG:

A maximum of USD 38,000,000 represented by up to 380,000,000 fully paid registered shares with a nominal value of USD 0.10 each, to be issued through the voluntary or mandatory exercise of conversion rights and / or warrants granted in connection with the issuance of bonds or similar financial instruments on national or international capital markets. This conditional capital allowance was approved at the Extraordinary General Meeting held on 26 November 2014, having originally been approved at the AGM of UBS AG on 14 April 2010. The BoD has not made use of such allowance.

# Capital band, conversion capital and reserve capital

As of 31 December 2023, UBS AG has not introduced a capital band, any conversion capital or any reserve capital.

## **Earnings per share**

In 2015, UBS AG shares were delisted from the SIX Swiss Exchange and the New York Stock Exchange. As of 31 December 2023, 100% of UBS AG's issued shares were held by UBS Group AG and therefore were not publicly traded. Accordingly, earnings per share information is not provided for UBS AG.

# Statement of cash flows

	For	the year ended	
USD m	31.12.23	31.12.22	31.12.21
Cash flow from / (used in) operating activities			
Net profit / (loss)	3,315	7,116	7,061
Non-cash items included in net profit and other adjustments:			•••••
Depreciation, amortization and impairment of non-financial assets	2,238	1,845	1,875
Credit loss expense / (release)	143	29	(148)
Share of net (profit) / loss of associates and joint ventures and impairment related to associates	163	(32)	(105)
Deferred tax expense / (benefit)	(222)	491	432
Net loss / (gain) from investing activities	(225)	(1,515)	(230)
Net loss / (gain) from financing activities	4,919	(16,587)	100
Other net adjustments <sup>1</sup>	(10,383)	5,792	3,790
Net change in operating assets and liabilities: 1,2			•••••
Amounts due from banks and amounts due to banks	(10,093) <sup>3</sup>	(1,088)	2,148
Receivables from securities financing transactions measured at amortized cost	(4,993)	5,690	(1,565)
Payables from securities financing transactions measured at amortized cost	1,543	(1,247)	(751)
Cash collateral on derivative instruments	1,162	73	(3,311)
Loans and advances to customers	3,707	1,653	(26,943)
Customer deposits	6,521	(9,409)	29,349
Financial assets and liabilities at fair value held for trading and derivative financial instruments	(16,017)	8,173	(10,635)
Brokerage receivables and payables	(6,101)	6,019	8,115
Financial assets at fair value not held for trading and other financial assets and liabilities	(4,661)	5,557	19,793
Provisions and other non-financial assets and liabilities	2,325	(437)	2,617
Income taxes paid, net of refunds	(1,541)	(1,495)	(1,026)
Net cash flow from / (used in) operating activities	(28,202)	10,630	30,563
Cash flow from / (used in) investing activities			
Purchase of subsidiaries, associates and intangible assets	(4)	(3)	(1)
Disposal of subsidiaries, associates and intangible assets	109	1.729	593
Purchase of property, equipment and software	(1,283)	(1,478)	(1,581)
Disposal of property, equipment and software	33	161	295
Net (purchase) / redemption of financial assets measured at fair value through other comprehensive income	30	(699)	(750)
Purchase of debt securities measured at amortized cost	(14,244)	(30,792)	(4,922)
Disposal and redemption of debt securities measured at amortized cost	10,435	18,799	4,507
Net cash flow from / (used in) investing activities	(4,924)	(12,283)	(1,860)

Table continues below.

#### Statement of cash flows (continued)

Table continued from above.					
	For the year ended				
USD m	31.12.23	31.12.22	31.12.21		
Cash flow from / (used in) financing activities					
Net issuance (repayment) of short-term debt measured at amortized cost	7,181	(12,249)	(3,093)		
Distributions paid on UBS AG shares	(6,000)	(4,200)	(4,539)		
Issuance of debt designated at fair value and long-term debt measured at amortized cost <sup>4</sup>	104,551	79,457	98,619		
Repayment of debt designated at fair value and long-term debt measured at amortized cost <sup>4</sup>	(85,541)	(67,670)	(79,799)		
Net cash flows from other financing activities	(501)	(595)	(261)		
Net cash flow from / (used in) financing activities	19,690	(5,257)	10,927		
Total cash flow  Cash and cash equivalents at the beginning of the year	195.200	207.755	173,430		
Net cash flow from / (used in) operating, investing and financing activities	(13,435)	(6,911)	39,630		
Effects of exchange rate differences on cash and cash equivalents <sup>1</sup>	8.704	(5,645)	(5,306)		
Cash and cash equivalents at the end of the year <sup>5</sup>	190,469	195,200	207,755		
of which: cash and balances at central banks <sup>6</sup>	171,723	169,363	192,706		
of which: amounts due from banks <sup>6</sup>	12,078	13,329	13,822		
of which: money market paper <sup>6,7</sup>	6,668	12,508	1,227		
Additional information					
Net cash flow from / (used in) operating activities includes:					
Interest received in cash	32,576	15,730	11,170		
Interest paid in cash	26,711	8,315	4,802		
Dividends on equity investments, investment funds and associates received in cash <sup>8</sup>	2,241	1,907	2,531		

<sup>1</sup> Foreign currency translation and foreign exchange effects on operating assets and liabilities and on cash and cash equivalents are presented within the Other net adjustments line. Does not include foreign currency hedge effects related to foreign exchange swaps. 2 Effective from 2023, UBS AG has refined the presentation in the statement of cash flows and now presents cash flows from Loans and advances to customers, Customer deposits, Receivables from securities financing transactions measured at amortized cost and Payables from securities financing transactions measured at amortized cost and Payables from securities financing transactions measured at amortized cost diversity of the presentation. 3 Mainly reflects funding provided to Credit Suisse. 4 Includes funding from UBS Group AG measured at amortized cost (recognized on the balance sheet in Other financial liabilities designated at fair value). 5 USD 4,553m, USD 4,253m and USD 3,408m of Cash and cash equivalents (mainly reflected in Amounts due from banks) were restricted as of 31 December 2022, and 31 December 2021, respectively. Refer to Note 22 for more information. 6 Includes only balances with an original maturity of three months or less. 7 Money market paper is included in the balance sheet under Financial assets at fair value not held for trading (31 December 2023: USD 6,455m; 31 December 2021: USD 16,455m; 31 December 2022: USD 6,455m; 31 December 2022: USD 6,455m; 31 December 2022: USD 6,455m; 31 December 2022: USD 29m; 31 December 2023: USD 29m; 31 December 2022: USD

#### Changes in liabilities arising from financing activities

	Debt issued			Debt issued	Over-the-	Funding from	
	measured at	of which:	of which:	designated at fair	counter debt	UBS Group	
USD m	amortized cost	short-term <sup>1</sup>	long-term <sup>2</sup>	value	instruments <sup>3</sup>	AG <sup>4</sup>	Total
Balance as of 1 January 2022	82,432	43,098	39,334	71,460	2,128	59,635	215,655
Cash flows	(19,390)	(12,249)	(7,141)	13,277	(251)	5,903	(461)
Non-cash changes	(3,543)	(1, 173)	(2,370)	(12,895)	(193)	(7,595)	(24,225)
of which: foreign currency translation	(2,233)	(1, 173)	(1,061)	(1,405)	(113)	(1,285)	(5,036)
of which: fair value changes				(11,490)	(80)	(1,060)	(12,629)
of which: hedge accounting and other effects	(1,310)		(1,310)			(5,250)	(6,560)
Balance as of 31 December 2022	59,499	29,676	29,823	71,842	1,684	57,943	190,968
Cash flows	7,979	7,181	<i>798</i>	8,433	(122)	9,901	26,191
Non-cash changes	2,306	428	1,878	6,066	4	2,389	10,764
of which: foreign currency translation	1,718	428	1,290	1,033	(50)	766	3,467
of which: fair value changes				5,033	53	374	5,461
of which: hedge accounting and other effects	588		588			1,249	1,836
Balance as of 31 December 2023	69,784	37,285	32,499	86,341	1,566	70,232	227,923

<sup>1</sup> Debt with an original contractual maturity of less than one year. 2 Debt with an original maturity greater than or equal to one year. The classification of debt issued into short-term and long-term does not consider any early redemption features. 3 Included in balance sheet line Other financial liabilities designated at fair value. 4 Includes funding from UBS Group AG measured at amortized cost (refer to Note 14b) and measured at fair value (refer to Note 18b).

# Notes to the UBS AG consolidated financial statements

# Note 1 Summary of material accounting policies

The following table provides an overview of information included in this Note.

141 141 141 141 141 142 146	<ul> <li>a) Material accounting policies</li> <li>Basis of accounting</li> <li>1) Consolidation</li> <li>2) Financial instruments <ul> <li>a. Recognition</li> <li>b. Classification, measurement and presentation</li> <li>c. Loan commitments and financial guarantees</li> </ul> </li> </ul>	152 153 153 154 154 154 155	<ol> <li>Share-based and other deferred compensation plans</li> <li>Post-employment benefit plans</li> <li>Income taxes</li> <li>Investments in associates</li> <li>Property, equipment and software</li> <li>Goodwill</li> <li>Provisions and contingent liabilities</li> </ol>
146	d. Interest income and expense	155	11) Foreign currency translation
146	e. Derecognition		
146 147	<ul> <li>f. Fair value of financial instruments</li> <li>g. Allowances and provisions for expected credit losses</li> </ul>	156	<ul> <li>b) Changes in accounting policies, comparability and other adjustments</li> </ul>
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# a) Material accounting policies

This Note describes the material accounting policies applied in the preparation of the consolidated financial statements (the Financial Statements) of UBS AG and its subsidiaries (UBS AG). On 21 March 2024, the Financial Statements were authorized for issue by the Board of Directors (the BoD).

# **Basis of accounting**

The Financial Statements have been prepared in accordance with IFRS Accounting Standards, as issued by the International Accounting Standards Board (the IASB), and are presented in US dollars.

Disclosures marked as audited in the "Risk, capital, liquidity and funding, and balance sheet" section of this report form an integral part of the Financial Statements. These disclosures relate to requirements under IFRS 7, Financial Instruments: Disclosures, and IAS 1, Presentation of Financial Statements, and are not repeated in this section.

The accounting policies described in this Note have been applied consistently in all years presented unless otherwise stated in Note 1b.

#### Critical accounting estimates and judgments

Preparation of these Financial Statements under IFRS Accounting Standards requires management to apply judgment and make estimates and assumptions that affect reported amounts of assets, liabilities, income and expenses and disclosure, of contingent assets and liabilities, and may involve significant uncertainty at the time they are made. Such estimates and assumptions are based on the best available information. UBS AG regularly reassesses such estimates and assumptions, which encompass historical experience, expectations of the future and other pertinent factors, to determine their continuing relevance based on current conditions, updating them as necessary. Changes in those estimates and assumptions may have a significant effect on the Financial Statements. Furthermore, actual results may differ significantly from UBS AG's estimates, which could result in significant losses to UBS AG, beyond what was anticipated or provided for.

The following areas contain estimation uncertainty or require critical judgment and have a significant effect on amounts recognized in the Financial Statements:

- expected credit loss measurement (refer to item 2g in this Note and to Note 19);
- fair value measurement (refer to item 2f in this Note and to Note 20);
- income taxes (refer to item 6 in this Note and to Note 8);
- provisions and contingent liabilities (refer to item 10 in this Note and to Note 17);
- post-employment benefit plans (refer to item 5 in this Note and to Note 26);
- goodwill (refer to item 9 in this Note and to Note 12); and
- consolidation of structured entities (refer to item 1 in this Note and to Note 28).

# 1) Consolidation

The Financial Statements include the financial statements of UBS AG and its subsidiaries, presented as a single economic entity; intercompany transactions and balances have been eliminated. UBS AG consolidates all entities that it controls, including structured entities (SEs), which is the case when it has: (i) power over the relevant activities of the entity; (ii) exposure to the entity's variable returns; and (iii) the ability to use its power to affect its own returns.

Consideration is given to all facts and circumstances to determine whether UBS AG has power over another entity, i.e., the current ability to direct the relevant activities of an entity when decisions about those activities need to be made.

Subsidiaries, including SEs, are consolidated from the date when control is gained and deconsolidated from the date when control ceases. Control, or the lack thereof, is reassessed if facts and circumstances indicate that there is a change to one or more elements required to establish that control is present.

Business combinations are accounted for using the acquisition method. The amount of non-controlling interests, if any, is measured at the non-controlling interest's proportionate share of the acquiree's identifiable net assets.

#### > Refer to Note 28 for more information

#### Critical accounting estimates and judgments

Each individual entity is assessed for consolidation in line with the aforementioned consolidation principles. The assessment of control can be complex and requires the use of significant judgment, in particular in determining whether UBS AG has power over the entity. As the nature and extent of UBS AG's involvement is unique for each entity, there is no uniform consolidation outcome by entity. Certain entities within a class may be consolidated while others may not. When carrying out the consolidation assessment, judgment is exercised considering all the relevant facts and circumstances, including the nature and activities of the investee, as well as the substance of voting and similar rights.

#### > Refer to Note 28 for more information

#### 2) Financial instruments

#### a. Recognition

UBS AG generally recognizes financial instruments when it becomes a party to contractual provisions of an instrument. However, UBS AG does not recognize assets received in transfers that do not qualify for derecognition by the transferor (applying derecognition principles under IFRS Accounting Standards as described in item 2e below). UBS AG applies settlement date accounting to all standard purchases and sales of non-derivative financial instruments.

UBS AG may act in a fiduciary capacity, which results in it holding or placing assets on behalf of individuals, trusts, retirement benefit plans and other institutions. Unless these items meet the definition of an asset and the recognition criteria are satisfied, they are not recognized on UBS AG's balance sheet and the related income is excluded from the Financial Statements.

Client cash balances associated with derivatives clearing and execution services are not recognized on the balance sheet if, through contractual agreement, regulation or practice, UBS AG neither obtains benefits from nor controls such cash balances.

# b. Classification, measurement and presentation

#### Financial assets

Where the contractual terms of a debt instrument result in cash flows that are solely payments of principal and interest (SPPI) on the principal amount outstanding, the debt instrument is classified as measured at amortized cost if it is held within a business model that has an objective of holding financial assets to collect contractual cash flows, or at fair value through other comprehensive income (FVOCI) if it is held within a business model with the objective of both collecting contractual cash flows and selling financial assets.

All other financial assets are measured at fair value through profit or loss (FVTPL), including those held for trading or those managed on a fair value basis, except for derivatives designated in certain hedge accounting relationships (refer to item 2j in this Note for more information).

#### Business model assessment and contractual cash flow characteristics

UBS AG determines the nature of a business model by considering the way financial assets are managed to achieve a particular business objective at the time an asset is recognized.

In assessing whether contractual cash flows are SPPI, UBS AG considers whether the contractual terms of the financial asset contain a term that could change the timing or amount of contractual cash flows arising over the life of the instrument. This assessment includes contractual cash flows that may vary due to environmental, social and governance (ESG) triggers.

#### Financial liabilities

#### Financial liabilities measured at amortized cost

Financial liabilities measured at amortized cost include *Debt issued measured at amortized cost* and *Funding from UBS Group AG measured at amortized cost*. The latter includes contingent capital instruments issued to UBS Group AG prior to November 2023 that contain contractual provisions under which the principal amounts would be written down upon either a specified common equity tier 1 (CET1) ratio breach or a determination by the Swiss Financial Market Supervisory Authority (FINMA) that a viability event has occurred. Such contractual provisions are not derivatives, as the underlying is deemed to be a non-financial variable specific to a party to the contract. Issuances after November 2023 include a contractual equity conversion feature with the same triggers, i.e., a CET1 ratio breach or FINMA viability event. When the debt is issued in US dollars, these conversion features are classified as equity and are accounted for in *Share premium* separately from the amortized cost debt host.

When the legal bail-in mechanism for write-down or conversion into equity does not form part of the contractual terms of issued debt instruments, it does not affect the accounting classification of these instruments as debt or equity.

If a debt were to be written down or converted into equity in a future period, it would be partially or fully derecognized, with the difference between its carrying amount and the fair value of any equity issued recognized in the income statement.

# Financial liabilities measured at fair value through profit or loss

UBS AG designates certain issued debt instruments as financial liabilities at fair value through profit or loss, on the basis that such financial instruments include embedded derivatives that are not closely related and which significantly impact the cash flows of the instrument and / or are managed on a fair value basis (refer to the table below for more information). Financial instruments including embedded derivatives arise predominantly from the issuance of certain structured debt instruments.

# Measurement and presentation

After initial recognition, UBS AG classifies, measures and presents its financial assets and liabilities in accordance with IFRS 9, as described in the table below.

# Classification, measurement and presentation of financial assets

Financial assets	classification	Significant items included	Measurement and presentation
Measured at amortized cost		This classification includes:  - cash and balances at central banks;  - amounts due from banks;  - receivables from securities financing transactions;  - cash collateral receivables on derivative instruments;  - residential and commercial mortgages;  - corporate loans;  - secured loans, including Lombard loans, and unsecured loans;  - loans to financial advisors; and  - debt securities held as high-quality liquid assets (HQLA).	Measured at amortized cost using the effective interest method less allowances for expected credit losses (ECL) (refer to items 2d and 2g in this Note for more information)  The following items are recognized in the income statement:  interest income, which is accounted for in accordance with item 2d in this Note;  ECL and reversals; and  foreign exchange (FX) translation gains and losses.  When a financial asset at amortized cost is derecognized, the gain or loss is recognized in the income statement.
Measured at FVOCI	Debt instruments measured at FVOCI	This classification primarily includes debt securities held as HQLA.	Measured at fair value, with unrealized gains and losses reported in <i>Other comprehensive income</i> , net of applicable income taxes, until such investments are derecognized. Upon derecognition, any accumulated balances in <i>Other comprehensive income</i> are reclassified to the income statement and reported within <i>Other income</i> .  The following items, which are determined on the same basis as for financial assets measured at amortized cost, are recognized in the income statement:  interest income, which is accounted for in accordance with item 2d in this Note;  ECL and reversals; and  FX translation gains and losses.

# Classification, measurement and presentation of financial assets

Financial asse	ts classification	Significant items included	Measurement and presentation
Measured at FVTPL	Held for trading	Financial assets held for trading include:  – all derivatives with a positive replacement value, except those that are designated and effective hedging instruments; and	Measured at fair value, with changes recognized in the income statement.
		other financial assets acquired principally for the purpose of selling or repurchasing in the near term, or that are part of a portfolio of identified financial instruments that are managed together and for which there is evidence of a recent actual pattern of short-term profit taking. Included in this category are debt instruments (including those in the form of securities, money market paper, and traded corporate and bank loans) and equity instruments.	Derivative assets (including derivatives that are designated and effective hedging instruments) are generally presented as <i>Derivative financial instruments</i> , except those exchange-traded derivatives (ETD) and over-the-counter (OTC)-cleared derivatives that are legally settled on a daily basis or economically net settled on a daily basis, which are presented within <i>Cash collateral receivables on derivative instruments</i> .  Changes in fair value, initial transaction costs, dividends
	Mandatorily measured at	Financial assets mandatorily measured at FVTPL that are not held for trading include:	and gains and losses arising on disposal or redemption are recognized in <i>Other net income from financial</i>
	FVTPL – Other	certain structured instruments, certain commercial loans, and receivables from securities financing transactions that are managed on a fair value basis;	instruments measured at fair value through profit or loss, except interest income on instruments other than derivatives (refer to item 2d in this Note), interest on derivatives designated as hedging instruments in hedges
		<ul> <li>loans managed on a fair value basis, including those hedged with credit derivatives;</li> </ul>	of interest rate risk and forward points on certain short- and long-duration FX contracts acting as economic
		<ul> <li>certain debt securities held as HQLA and managed on a fair value basis;</li> </ul>	hedges, which are reported in Net interest income.
		<ul> <li>certain investment fund holdings and assets held to hedge delivery obligations related to cash-settled employee compensation plans;</li> </ul>	Changes in the fair value of derivatives that are designated and effective hedging instruments are presented either in the income statement or <i>Other</i>
		<ul> <li>brokerage receivables, for which contractual cash flows do not meet the SPPI criterion because the aggregate balance is accounted for as a single unit of account, with interest being calculated on the individual components;</li> </ul>	comprehensive income, depending on the type of hedgrelationship (refer to item 2j in this Note for more information).
		<ul> <li>auction rate securities, for which contractual cash flows do not meet the SPPI criterion because interest may be reset at rates that contain leverage;</li> </ul>	
		– equity instruments; and	
		<ul> <li>assets held under unit-linked investment contracts.</li> </ul>	

# Classification, measurement and presentation of financial liabilities

Financial liabi	lities classification	Significant items included	Measurement and presentation
Measured at amortized cost		This classification includes:  - demand and time deposits;  - retail savings / deposits;  - sweep deposits;  - payables from securities financing transactions;  - non-structured debt issued;  - subordinated debt;	Measured at amortized cost using the effective interest method.  When a financial liability at amortized cost is derecognized, the gain or loss is recognized in the income statement.
		<ul> <li>commercial paper and certificates of deposit;</li> <li>obligations against funding from UBS Group AG; and</li> <li>cash collateral payables on derivative instruments.</li> </ul>	Interest income generated from client deposits derecognized pursuant to certain deposit sweep programs is presented within <i>Net interest income from financial instruments measured at fair value through profit or loss and other</i> .
Measured at FVTPL	Held for trading	Financial liabilities held for trading include:  - all derivatives with a negative replacement value (including certain loan commitments), except those that are designated and effective hedging instruments; and  - obligations to deliver financial instruments, such as debt and equity instruments, that UBS AG has sold to third parties but does not own (short positions).	Measurement and presentation of financial liabilities classified at FVTPL follow the same principles as for financial assets classified at FVTPL, except that the amount of change in the fair value of a financial liability designated at FVTPL that is attributable to changes in UBS AG's own credit risk is presented in <i>Other comprehensive income</i> directly within <i>Retained earnings</i> and is never reclassified to the income statement.
	Designated at FVTPL	Financial liabilities designated at FVTPL include:  - issued hybrid debt instruments, primarily equity-linked, credit-linked and rates-linked bonds or notes;  - issued debt instruments managed on a fair value basis;  - obligations against funding from UBS Group AG managed on a fair value basis;  - certain payables from securities financing transactions;  - amounts due under unit-linked investment contracts, the cash flows of which are linked to financial assets measured at FVTPL and eliminate an accounting mismatch; and  - brokerage payables, which arise in conjunction with brokerage receivables and are measured at FVTPL to achieve measurement consistency.	Derivative liabilities (including derivatives that are designated and effective hedging instruments) are generally presented as <i>Derivative financial instruments</i> , except those exchange-traded and OTC-cleared derivatives that are legally settled on a daily basis or economically net settled on a daily basis, which are presented within <i>Cash collateral payables on derivative instruments</i> .

#### c. Loan commitments and financial guarantees

Loan commitments are arrangements to provide credit under defined terms and conditions. Irrevocable loan commitments are classified as: (i) derivative loan commitments measured at fair value through profit or loss; (ii) loan commitments not measured at fair value. Financial guarantee contracts are contracts that require UBS AG to make specified payments to reimburse the holder for an incurred loss because a specified debtor fails to make payments when due in accordance with the terms of a specified debt instrument.

# d. Interest income and expense

Interest income and expense are recognized in the income statement based on the effective interest method. When calculating the effective interest rate (the EIR) for financial instruments (other than credit-impaired financial instruments), UBS AG estimates future cash flows considering all contractual terms of the instrument, but not expected credit losses, with the EIR applied to the gross carrying amount of the financial asset or the amortized cost of a financial liability. However, when a financial asset becomes credit impaired after initial recognition, interest income is determined by applying the EIR to the amortized cost of the instrument, which represents the gross carrying amount adjusted for any credit loss allowance.

Upfront fees, including fees on loan commitments not measured at fair value where a loan is expected to be issued, and direct costs are included within the initial measurement of a financial instrument measured at amortized cost or FVOCI and recognized over the expected life of the instrument as part of its EIR.

Fees related to loan commitments where no loan is expected to be issued, as well as loan syndication fees where UBS AG does not retain a portion of the syndicated loan or where UBS AG does retain a portion of the syndicated loan at the same effective yield for comparable risk as other participants, are included in *Net fee and commission income* and either recognized over the life of the commitment or when syndication occurs.

#### > Refer to item 3 in this Note for more information

Interest income on financial assets, excluding derivatives, is included in interest income when positive and in interest expense when negative. Similarly, interest expense on financial liabilities, excluding derivatives, is included in interest expense, except when interest rates are negative, in which case it is included in interest income.

#### > Refer to item 2b in this Note and Note 3 for more information

# e. Derecognition

#### Financial assets

UBS AG derecognizes a transferred financial asset, or a portion of a financial asset, if the purchaser has obtained substantially all the risks and rewards of the asset or a significant part of the risks and rewards combined with a practical ability to sell or pledge the asset.

Where financial assets have been pledged as collateral or in similar arrangements, they are considered to have been transferred if the counterparty has received the contractual rights to the cash flows of the pledged assets, as may be evidenced by, for example, the counterparty's right to sell or repledge the assets. In transfers where control over the financial asset is retained, UBS AG continues to recognize the asset to the extent of its continuing involvement, determined by the extent to which it is exposed to changes in the value of the transferred asset following the transfer.

## > Refer to Note 22 for more information

# Financial liabilities

UBS AG derecognizes a financial liability when it is extinguished, i.e., when the obligation specified in the contract is discharged, canceled or expires. When an existing financial liability is exchanged for a new one from the same lender on substantially different terms, or the terms of an existing liability are substantially modified, the original liability is derecognized and a new liability recognized with any difference in the respective carrying amounts recorded in the income statement.

Certain OTC derivative contracts and most exchange-traded futures and option contracts cleared through central clearing counterparties and exchanges are considered to be settled on a daily basis, as the payment or receipt of a variation margin on a daily basis represents a legal or economic settlement, which results in derecognition of the associated derivatives.

#### > Refer to Note 21 for more information

#### f. Fair value of financial instruments

UBS AG accounts for a significant portion of its assets and liabilities at fair value. Fair value is the price on the measurement date that would be received for the sale of an asset or paid to transfer a liability in an orderly transaction between market participants in the principal market, or in the most advantageous market in the absence of a principal market.

# > Refer to Note 20 for more information

#### Critical accounting estimates and judgments

The use of valuation techniques, modeling assumptions and estimates of unobservable market inputs in the fair valuation of financial instruments requires significant judgment and could affect the amount of gain or loss recorded for a particular position. Valuation techniques that rely more heavily on unobservable inputs and sophisticated models inherently require a higher level of judgment and may require adjustment to reflect factors that market participants would consider in estimating fair value, such as close-out costs, which are presented in Note 20d.

UBS AG's governance framework over fair value measurement is described in Note 20b, and UBS AG provides a sensitivity analysis of the estimated effects arising from changing significant unobservable inputs in Level 3 financial instruments to reasonably possible alternative assumptions in Note 20f.

, Refer to Note 20 for more information

# g. Allowances and provisions for expected credit losses

ECL are recognized for financial assets measured at amortized cost, financial assets measured at FVOCI, fee and lease receivables, financial guarantees, and loan commitments not measured at fair value. ECL are also recognized on the undrawn portion of committed unconditionally revocable credit lines, which include UBS AG's credit card limits and master credit facilities, as UBS AG is exposed to credit risk because the borrower has the ability to draw down funds before UBS AG can take credit risk mitigation actions.

#### Recognition of expected credit losses

ECL are recognized on the following basis.

- Stage 1 instruments: Maximum 12-month ECL are recognized from initial recognition, reflecting the portion of lifetime ECL that would result if a default occurs in the 12 months after the reporting date, weighted by the risk of a default occurring.
- Stage 2 instruments: Lifetime ECL are recognized if a significant increase in credit risk (an SICR) is observed subsequent to the instrument's initial recognition, reflecting lifetime cash shortfalls that would result from all possible default events over the expected life of a financial instrument, weighted by the risk of a default occurring. When an SICR is no longer observed, the instrument will move back to stage 1.
- Stage 3 instruments: Lifetime ECL are always recognized for credit-impaired financial instruments, as determined by the occurrence of one or more loss events, by estimating expected cash flows based on a chosen recovery strategy. Credit-impaired exposures may include positions for which no allowance has been recognized, for example because they are expected to be fully recoverable through collateral held.
- Changes in lifetime ECL since initial recognition are also recognized for assets that are purchased credit impaired (PCI).
   PCI financial instruments include those that are purchased at a deep discount or newly originated with a defaulted counterparty; they remain a separate category until derecognition.

All or part of a financial asset is written off if it is deemed uncollectible or forgiven. Write-offs reduce the principal amount of a claim and are charged against related allowances for credit losses. Recoveries, in part or in full, of amounts previously written off are generally credited to *Credit loss expense I (release)*.

ECL are recognized in the income statement in *Credit loss expense I (release*). A corresponding ECL allowance is reported as a decrease in the carrying amount of financial assets measured at amortized cost on the balance sheet. For financial assets that are measured at FVOCI, the carrying amount is not reduced, but an accumulated amount is recognized in *Other comprehensive income*. For off-balance sheet financial instruments and other credit lines, provisions for ECL are presented in *Provisions*.

# Default and credit impairment

UBS AG applies a single definition of default for credit risk management purposes, regulatory reporting and ECL, with a counterparty classified as defaulted based on quantitative and qualitative criteria.

Refer to the "Risk management and control" section of this report for more information

# Measurement of expected credit losses

IFRS 9 ECL reflect an unbiased, probability-weighted estimate based on loss expectations resulting from default events. The method used to calculate ECL applies the following principal factors: probability of default (PD), loss given default (LGD) and exposure at default (EAD). Parameters are generally determined on an individual financial asset level. Based on the materiality of the portfolio, for credit card exposures and personal account overdrafts in Switzerland, a portfolio approach is applied that derives an average PD and LGD for the entire portfolio. PDs and LGDs used in the ECL calculation are point-in-time(PIT)-based for key portfolios and consider both current conditions and expected cyclical changes. For material portfolios, PDs and LGDs are determined for different scenarios, whereas EAD projections are treated as scenario independent.

For the purpose of determining the ECL-relevant parameters, UBS AG leverages its Basel III advanced internal ratings-based (A-IRB) models that are also used in determining expected loss (EL) and risk-weighted assets under the Basel III framework and Pillar 2 stress loss models. Adjustments have been made to these models and IFRS 9-related models have been developed that consider the complexity, structure and risk profile of relevant portfolios and take account of the fact that PDs and LGDs used in the ECL calculation are PIT-based, as opposed to the corresponding Basel III through-the-cycle (TTC) parameters. All models that are relevant for measuring expected credit losses are subject to UBS AG's model validation and oversight processes.

*Probability of default:* PD represents the probability of a default over a specified time period. A 12-month PD represents the probability of default determined for the next 12 months and a lifetime PD represents the probability of default over the remaining lifetime of the instrument. PIT PDs are derived from TTC PDs and scenario forecasts. The modeling is region, industry and client segment specific and considers both macroeconomic scenario dependencies and client-idiosyncratic information.

Exposure at default: EAD represents an estimate of the exposure to credit risk at the time of a potential default occurring, considering expected repayments, interest payments and accruals, discounted at the EIR. Future drawdowns on facilities are considered through a credit conversion factor (a CCF) that is reflective of historical drawdown and default patterns and the characteristics of the respective portfolios.

Loss given default: LGD represents an estimate of the loss at the time of a potential default occurring, taking into account expected future cash flows from collateral and other credit enhancements, or expected payouts from bankruptcy proceedings for unsecured claims and, where applicable, time to realization of collateral and the seniority of claims. LGD is commonly expressed as a percentage of EAD.

# Estimation of expected credit losses

#### Number of scenarios and estimation of scenario weights

Determination of probability-weighted ECL requires evaluating a range of diverse and relevant future economic conditions, especially with a view to modeling the non-linear effect of assumptions about macroeconomic factors on the estimate.

To accommodate this requirement, UBS AG uses different economic scenarios in the ECL calculation. Each scenario is represented by a specific scenario narrative, which is relevant considering the exposure of key portfolios to economic risks, and for which a set of consistent macroeconomic variables is determined. The estimation of the appropriate weights for these scenarios is predominantly judgment-based. The assessment is based on a holistic review of the prevailing economic or political conditions, which may exhibit different levels of uncertainty. It takes into account the impact of changes in the nature and severity of the underlying scenario narratives and the projected economic variables.

The determined weights constitute the probabilities that the respective set of macroeconomic conditions will occur and not that the chosen particular narratives with the related macroeconomic variables will materialize.

#### Macroeconomic and other factors

The range of macroeconomic, market and other factors that is modeled as part of the scenario determination is wide, and historical information is used to support the identification of the key factors. As the forecast horizon increases, the availability of information decreases, requiring an increase in judgment. For cycle-sensitive PD and LGD determination purposes, UBS AG projects the relevant economic factors for a period of three years before reverting, over a specified period, to cycle-neutral PD and LGD for longer-term projections.

Factors relevant for ECL calculation vary by type of exposure. Regional and client-segment characteristics are generally taken into account, with specific focus on Switzerland and the US, considering UBS AG's key ECL-relevant portfolios.

For UBS AG, the following forward-looking macroeconomic variables represent the most relevant factors for ECL calculation:

- gross domestic product (GDP) growth rates, given their significant effect on borrowers' performance;
- unemployment rates, given their significant effect on private clients' ability to meet contractual obligations;
- house price indices, given their significant effect on mortgage collateral valuations;
- interest rates, given their significant effect on counterparties' abilities to service debt;
- consumer price indices, given their overall relevance for companies' performance, private clients' purchasing power and economic stability; and
- equity indices, given that they are an important factor in UBS AG's corporate rating tools.

# Scenario generation, review process and governance

A team of economists, which is part of Group Risk Control, develops the forward-looking macroeconomic assumptions with involvement from a broad range of experts.

The scenarios, their weights and the key macroeconomic and other factors are subject to a critical assessment by the IFRS 9 Scenario Sounding Sessions and ECL Management Forum, which include senior management from Group Risk and Group Finance. Important aspects for the review include whether there may be particular credit risk concerns that may not be capable of being addressed systematically and require post-model adjustments for stage allocation and ECL allowance.

The Group Model Governance Committee (the GMGC), as the highest authority under UBS AG's model governance framework, ratifies the decisions taken by the ECL Management Forum.

# > Refer to Note 19 for more information

#### ECL measurement period

The period for which lifetime ECL are determined is based on the maximum contractual period that UBS AG is exposed to credit risk, taking into account contractual extension, termination and prepayment options. For irrevocable loan commitments and financial guarantee contracts, the measurement period represents the maximum contractual period for which UBS AG has an obligation to extend credit.

Additionally, some financial instruments include both an on-demand loan and a revocable undrawn commitment, where the contractual cancellation right does not limit UBS AG's exposure to credit risk to the contractual notice period, as the client has the ability to draw down funds before UBS AG can take risk-mitigating actions. In such cases UBS AG is required to estimate the period over which it is exposed to credit risk. This applies to UBS AG's credit card limits, which do not have a defined contractual maturity date, are callable on demand and where the drawn and undrawn components are managed as one exposure. The exposure arising from UBS AG's credit card limits is not significant and is managed at a portfolio level, with credit actions triggered when balances are past due. An ECL measurement period of seven years is applied for credit card limits, capped at 12 months for stage 1 balances, as a proxy for the period that UBS AG is exposed to credit risk.

Customary master credit agreements in the Swiss corporate market also include on-demand loans and revocable undrawn commitments. For smaller commercial facilities, a risk-based monitoring (RbM) approach is in place that highlights negative trends as risk events, at an individual facility level, based on a combination of continuously updated risk indicators. The risk events trigger additional credit reviews by a risk officer, enabling informed credit decisions to be taken. Larger corporate facilities are not subject to RbM, but are reviewed at least annually through a formal credit review. UBS AG has assessed these credit risk management practices and considers both the RbM approach and formal credit reviews as substantive credit reviews resulting in a re-origination of the given facility. Following this, a 12-month measurement period from the reporting date is used for both types of facilities as an appropriate proxy of the period over which UBS AG is exposed to credit risk, with 12 months also used as a look-back period for assessing an SICR, always from the respective reporting date.

# Significant increase in credit risk

Financial instruments subject to ECL are monitored on an ongoing basis. To determine whether the recognition of a maximum 12-month ECL continues to be appropriate, an assessment is made as to whether an SICR has occurred since initial recognition of the financial instrument, applying both quantitative and qualitative factors.

Primarily, UBS AG assesses changes in an instrument's risk of default on a quantitative basis by comparing the annualized forward-looking and scenario-weighted lifetime PD of an instrument determined at two different dates:

- at the reporting date; and
- at inception of the instrument.

If, based on UBS AG's quantitative modeling, an increase exceeds a set threshold, an SICR is deemed to have occurred and the instrument is transferred to stage 2 with lifetime ECL recognized.

The threshold applied varies depending on the original credit quality of the borrower, with a higher SICR threshold set for those instruments with a low PD at inception. The SICR assessment based on PD changes is made at an individual financial asset level. A high-level overview of the SICR trigger, which is a multiple of the annualized remaining lifetime PIT PD expressed in rating downgrades, is provided in the "SICR thresholds" table below. The actual SICR thresholds applied are defined on a more granular level by interpolating between the values shown in the table.

#### SICR thresholds

Internal rating at origination of the instrument	Rating downgrades / SICR trigger
0–3	3
4–8	2
9–13	1

<sup>&</sup>gt; Refer to the "Risk management and control" section of this report for more details about UBS AG's internal rating system

Irrespective of the SICR assessment based on default probabilities, credit risk is generally deemed to have significantly increased for an instrument if contractual payments are more than 30 days past due. For certain less material portfolios, specifically the Swiss credit card portfolio, the 30-day past due criterion is used as the primary indicator of an SICR. Where instruments are transferred to stage 2 due to the 30-day past due criterion, a minimum period of six months is applied before a transfer back to stage 1 can be triggered, where applicable. For instruments in Personal & Corporate Banking and Global Wealth Management Region Switzerland that are between 90 and 180 days past due but have not been reclassified to stage 3, a one-year period is applied before a transfer back to stage 1 can be triggered.

Additionally, based on individual counterparty-specific indicators, external market indicators of credit risk or general economic conditions, counterparties may be moved to a watch list, which is used as a secondary qualitative indicator for an SICR. Exception management is further applied, allowing for individual and collective adjustments on exposures sharing the same credit risk characteristics to take account of specific situations that are not otherwise fully reflected.

In general, the overall SICR determination process does not apply to Lombard loans, securities financing transactions and certain other asset-based lending transactions, because of the risk management practices adopted, including daily monitoring processes with strict margining. If margin calls are not satisfied, a position is closed out and classified as a stage 3 position. In exceptional cases, an individual adjustment and a transfer into stage 2 may be made to take account of specific facts.

Credit risk officers are responsible for the identification of an SICR, which for accounting purposes is in some respects different from internal credit risk management processes. This difference mainly arises because ECL accounting requirements are instrument-specific, such that a borrower can have multiple exposures allocated to different stages, and maturing loans in stage 2 will migrate to stage 1 upon renewal irrespective of the actual credit risk at that time. Under a risk-based approach, a holistic counterparty credit assessment and the absolute level of risk at any given date will determine what risk-mitigating actions may be warranted.

## > Refer to the "Risk management and control" section of this report for more information

#### Critical accounting estimates and judgments

The calculation of ECL requires management to apply significant judgment and make estimates and assumptions that can result in significant changes to the timing and the amount of ECL recognized.

#### Determination of a significant increase in credit risk

IFRS 9 does not include a definition of what constitutes an SICR, with UBS AG's assessment considering qualitative and quantitative criteria. An IFRS 9 ECL Management Forum has been established to review and challenge the SICR results.

# Scenarios, scenario weights and macroeconomic variables

ECL reflect an unbiased and probability-weighted amount, which UBS AG determines by evaluating a range of possible outcomes. Management selects forward-looking scenarios that include relevant macroeconomic variables and management's assumptions around future economic conditions. IFRS 9 Scenario Sounding Sessions, in addition to the IFRS 9 ECL Management Forum, are in place to derive, review and challenge the scenario selection and weights, and to determine whether any additional post-model adjustments are required that may significantly affect ECL.

#### ECL measurement period

Lifetime ECL are generally determined based upon the contractual maturity of the transaction, which significantly affects ECL. For credit card limits and Swiss callable master credit facilities, judgment is required, as UBS AG must determine the period over which it is exposed to credit risk. A seven-year period is applied for credit card limits, capped at 12 months for stage 1 positions, and a 12-month period applied for master credit facilities.

#### Modeling and post-model adjustments

A number of complex models have been developed or modified to calculate ECL, with additional post-model adjustments required that may significantly affect ECL. The models are governed by UBS AG's model validation controls and approved by the GMGC. The post-model adjustments are approved by the ECL Management Forum and endorsed by the GMGC.

A sensitivity analysis covering key macroeconomic variables, scenario weights and SICR trigger points on ECL measurement is provided in Note 19f.

#### > Refer to Note 19 for more information

#### h. Restructured and modified financial assets

When payment default is expected, or where default has already occurred, UBS AG may grant concessions to borrowers in financial difficulties that it would not consider in the normal course of its business, such as preferential interest rates, extension of maturity, modifying the schedule of repayments, debt / equity swap, subordination, etc.

#### > Refer to the "Risk management and control" section of this report for more information

Modifications result in an alteration of future contractual cash flows and can occur within UBS AG's normal risk tolerance or as part of a credit restructuring where a counterparty is in financial difficulties. The restructuring or modification of a financial asset could lead to a substantial change in the terms and conditions, resulting in the original financial asset being derecognized and a new financial asset being recognized. Where the modification does not result in a derecognition, any difference between the modified contractual cash flows discounted at the original EIR and the existing gross carrying amount of the given financial asset is recognized in the income statement as a modification gain or loss.

#### i. Offsetting

UBS AG presents financial assets and liabilities on its balance sheet net if (i) it has a legally enforceable right to set off the recognized amounts and (ii) it intends either to settle on a net basis or to realize the asset and settle the liability simultaneously. Netted positions include, for example, certain derivatives and repurchase and reverse repurchase transactions with various counterparties, exchanges and clearing houses.

In assessing whether UBS AG intends to either settle on a net basis, or to realize the asset and settle the liability simultaneously, emphasis is placed on the effectiveness of operational settlement mechanics in eliminating substantially all credit and liquidity exposure between the counterparties. This condition precludes offsetting on the balance sheet for substantial amounts of UBS AG's financial assets and liabilities, even though they may be subject to enforceable netting arrangements. Repurchase arrangements and securities financing transactions are presented net only to the extent that the settlement mechanism eliminates, or results in insignificant, credit and liquidity risk, and processes the receivables and payables in a single settlement process or cycle.

#### > Refer to Note 21 for more information

#### i. Hedge accounting

UBS AG applies hedge accounting requirements of IFRS 9 where the criteria for documentation and hedge effectiveness are met. If a hedge relationship no longer meets the criteria for hedge accounting, hedge accounting is discontinued. Voluntary discontinuation of hedge accounting is not permitted under IFRS 9.

# Fair value hedges of interest rate risk related to debt instruments and loan assets

The fair value change of the hedged item attributable to a hedged risk is reflected as an adjustment to the carrying amount of the hedged item and recognized in the income statement along with the change in the fair value of the hedging instrument.

# Fair value hedges of FX risk related to debt instruments

The fair value change of the hedged item attributable to the hedged risk is reflected in the measurement of the hedged item and recognized in the income statement along with the change in the fair value of the hedging instrument. The foreign currency basis spread of cross-currency swaps designated as hedging derivatives is excluded from the designation and accounted for as a cost of hedging with amounts deferred in *Other comprehensive income* within *Equity*. These amounts are released to the income statement over the term of the hedged item.

## Discontinuation of fair value hedges

Discontinuations for reasons other than derecognition of the hedged item result in an adjustment to the carrying amount, which is amortized to the income statement over the remaining life of the hedged item using the effective interest method. If the hedged item is derecognized, the unamortized fair value adjustment or deferred cost of hedging amount is recognized immediately in the income statement as part of any derecognition gain or loss.

# Cash flow hedges of forecast transactions

Fair value gains or losses associated with the effective portion of derivatives designated as cash flow hedges for cash flow repricing risk are recognized initially in *Other comprehensive income* within *Equity* and reclassified to *Interest income* from financial instruments measured at amortized cost and fair value through other comprehensive income or Interest expense from financial instruments measured at amortized cost in the periods when the hedged forecast cash flows affect profit or loss, including discontinued hedges for which forecast cash flows are expected to occur. If the forecast transactions are no longer expected to occur, the deferred gains or losses are immediately reclassified to the income statement.

# Hedges of net investments in foreign operations

Gains or losses on the hedging instrument relating to the effective portion of a hedge are recognized directly in *Other comprehensive income* within *Equity*, while any gains or losses relating to the ineffective and / or undesignated portion (for example, the interest element of a forward contract) are recognized in the income statement. Upon disposal or partial disposal of the foreign operation, the cumulative value of any such gains or losses recognized in *Equity* associated with the entity is reclassified to *Other income*.

# Interest Rate Benchmark Reform

UBS AG continued hedge accounting during the period of uncertainty before existing interest rate benchmarks were replaced with alternative risk-free interest rates. During this period, UBS AG assumed that the current benchmark rates would continue to exist, such that forecast transactions were considered highly probable and hedge relationships remain, with little or no consequential impact on the financial statements. Upon replacement of existing interest rate benchmarks by alternative risk-free interest rates, UBS AG applied the requirements of *Amendments to IFRS 9, IAS 39, IFRS 7, IFRS 4* and *IFRS 16 (Interest Rate Benchmark Reform – Phase 2)*, where applicable.

#### > Refer to Note 25 for more information

# 3) Fee and commission income and expenses

UBS AG earns fee income from the diverse range of services it provides to its clients. Fee income can be divided into two broad categories: fees earned from services that are provided over a certain period of time, such as management of clients' assets, custody services and certain advisory services; and fees earned from PIT services, such as underwriting fees, deal-contingent merger and acquisitions fees, and brokerage fees (e.g., securities and derivatives execution and clearing). UBS AG recognizes fees earned from PIT services when it has fully provided the service to the client. Where the contract requires services to be provided over time, income is recognized on a systematic basis over the life of the agreement.

Consideration received is allocated to the separately identifiable performance obligations in a contract. Owing to the nature of UBS AG's business, contracts that include multiple performance obligations are typically those that are considered to include a series of similar performance obligations fulfilled over time with the same pattern of transfer to the client, e.g., management of client assets and custodial services. As a consequence, UBS AG is not required to apply significant judgment in allocating the consideration received across the various performance obligations.

PIT services are generally for a fixed price or dependent on deal size, e.g., a fixed number of basis points of trade size, where the amount of revenue is known when the performance obligation is met. Fixed-over-time fees are recognized on a straight-line basis over the performance period. Custodial and asset management fees can be variable through reference to the size of the customer portfolio. However, they are generally billed on a monthly or quarterly basis once the customer's portfolio size is known or known with near certainty and therefore also recognized ratably over the performance period. UBS AG does not recognize performance fees related to management of clients' assets or fees related to contingencies beyond UBS AG's control until such uncertainties are resolved.

UBS AG's fees are generally earned from short-term contracts. As a result, UBS AG's contracts do not include a financing component or result in the recognition of significant receivables or prepayment assets. Furthermore, due to the short-term nature of such contracts, UBS AG has not capitalized any material costs to obtain or fulfill a contract or generated any significant contract assets or liabilities.

UBS AG presents expenses primarily in line with their nature in the income statement, differentiating between expenses that are directly attributable to the satisfaction of specific performance obligations associated with the generation of revenues, which are generally presented within *Total revenues* as *Fee and commission expense*, and those that are related to personnel, general and administrative expenses, or depreciation and amortization which are presented within *Operating expenses*. For derivatives execution and clearing services (where UBS AG acts as an agent), UBS AG only records its specific fees in the income statement, with fees payable to other parties not recognized as an expense but instead directly offset against the associated income collected from the given client.

> Refer to Note 4 for more information, including the disaggregation of revenues

## 4) Share-based and other deferred compensation plans

UBS AG recognizes expenses for deferred compensation awards over the period that the employee is required to provide service to become entitled to the award. Where the service period is shortened, for example in the case of employees affected by restructuring programs or mutually agreed termination provisions, recognition of such expense is accelerated to the termination date. Where no future service is required, such as for employees who are eligible for retirement or who have met certain age and length-of-service criteria, the services are presumed to have been received and compensation expense is recognized over the performance year or, in the case of off-cycle awards, immediately on the grant date.

#### Share-based compensation plans

UBS Group AG is the grantor of and maintains the obligation to settle share-based compensation plans that are awarded to employees of UBS AG. As a consequence, UBS AG classifies the awards of UBS Group AG shares as equity-settled share-based payment transactions. UBS AG recognizes the fair value of awards granted to its employees by reference to the fair value of UBS Group AG's equity instruments on the date of grant, taking into account the terms and conditions inherent in the award, including, where relevant, dividend rights, transfer restrictions in effect beyond the vesting date, market conditions, and non-vesting conditions.

For equity-settled awards, fair value is not remeasured unless the terms of the award are modified such that there is an incremental increase in value. Expenses are recognized, on a per-tranche basis, over the service period based on an estimate of the number of instruments expected to vest and are adjusted to reflect the actual outcomes of service or performance conditions.

For equity-settled awards, forfeiture events resulting from a breach of a non-vesting condition (i.e., one that does not relate to a service or performance condition) do not result in any adjustment to the share-based compensation expense.

For cash-settled share-based awards, fair value is remeasured at each reporting date, so that the cumulative expense recognized equals the cash distributed.

### Other deferred compensation plans

Compensation expense for other deferred compensation plans is recognized on a per-tranche or straight-line basis, depending on the nature of the plan. The amount recognized is measured based on the present value of the amount expected to be paid under the plan and is remeasured at each reporting date, so that the cumulative expense recognized equals the cash or the fair value of respective financial instruments distributed.

> Refer to Note 27 for more information

# 5) Post-employment benefit plans

#### Defined benefit plans

Defined benefit plans specify an amount of benefit that an employee will receive, which usually depends on one or more factors, such as age, years of service and compensation. The defined benefit liability recognized in the balance sheet is the present value of the defined benefit obligation, measured using the projected unit credit method, less the fair value of the plan's assets at the balance sheet date, with changes resulting from remeasurements recorded immediately in *Other comprehensive income*. If the fair value of the plan's assets is higher than the present value of the defined benefit obligation, the recognition of the resulting net asset is limited to the present value of economic benefits available in the form of refunds from the plan or reductions in future contributions to the plan. Calculation of the net defined benefit obligation or asset takes into account the specific features of each plan, including risk sharing between employee and employer, and is calculated periodically by independent qualified actuaries.

#### Critical accounting estimates and judgments

The net defined benefit liability or asset at the balance sheet date and the related personnel expense depend on the expected future benefits to be provided, determined using a number of economic and demographic assumptions. A range of assumptions could be applied, and different assumptions could significantly alter the defined benefit liability or asset and pension expense recognized. The most significant assumptions include life expectancy, discount rate, expected salary increases, pension increases and interest credits on retirement savings account balances. Sensitivity analysis for reasonable possible movements in each significant assumption for UBS AG's post-employment obligations is provided in Note 26.

> Refer to Note 26 for more information

#### Defined contribution plans

A defined contribution plan pays fixed contributions into a separate entity from which post-employment and other benefits are paid. UBS AG has no legal or constructive obligation to pay further amounts if the plan does not hold sufficient assets to pay employees the benefits relating to employee service in the current and prior periods. Compensation expense is recognized when the employees have rendered services in exchange for contributions. This is generally in the year of contribution. Prepaid contributions are recognized as an asset to the extent that a cash refund or a reduction in future payments is available.

#### 6) Income taxes

UBS AG is subject to the income tax laws of Switzerland and those of the non-Swiss jurisdictions in which UBS AG has business operations.

UBS AG's provision for income taxes is composed of current and deferred taxes. Current income taxes represent taxes to be paid or refunded for the current period or previous periods.

Deferred tax assets (DTAs) and deferred tax liabilities (DTLs) are recognized for temporary differences between the carrying amounts and tax bases of assets and liabilities that will result in deductible or taxable amounts, respectively in future periods. DTAs may also arise from other sources, including unused tax losses and unused tax credits. DTAs and DTLs are measured using the applicable tax rates and laws that have been enacted or substantively enacted by the end of the reporting period and that will be in effect when such differences are expected to reverse.

DTAs are recognized only to the extent it is probable that sufficient taxable profits will be available against which these differences can be used. When an entity or tax group has a history of recent losses, DTAs are only recognized to the extent that there are sufficient taxable temporary differences or there is convincing other evidence that sufficient taxable profit will be available against which the unused tax losses can be utilized.

Deferred and current tax assets and liabilities are offset when: (i) they arise in the same tax reporting group; (ii) they relate to the same tax authority; (iii) the legal right to offset exists; and (iv) with respect to current taxes they are intended to be settled net or realized simultaneously.

Current and deferred taxes are recognized as income tax benefit or expense in the income statement, except for current and deferred taxes recognized in relation to: (i) the acquisition of a subsidiary (for which such amounts would affect the amount of goodwill arising from the acquisition); (ii) unrealized gains or losses on financial instruments that are classified at FVOCI; (iii) changes in fair value of derivative instruments designated as cash flow hedges; (iv) remeasurements of defined benefit plans; or (v) certain foreign currency translations of foreign operations. Amounts relating to points (ii) through (v) above are recognized in *Other comprehensive income* within *Equity*.

UBS AG reflects the potential effect of uncertain tax positions for which acceptance by the relevant tax authority is not considered probable by adjusting current or deferred taxes, as applicable, using either the most likely amount or expected value methods, depending on which method is deemed a better predictor of the basis on which, and extent to which, the uncertainty will be resolved.

#### Critical accounting estimates and judgments

Tax laws are complex, and judgment and interpretations about the application of such laws are required when accounting for income taxes. UBS AG considers the performance of its businesses and the accuracy of historical forecasts and other factors when evaluating the recoverability of its DTAs, including the remaining tax loss carry-forward period, and its assessment of expected future taxable profits in the forecast period used for recognizing DTAs. Estimating future profitability and business plan forecasts is inherently subjective and is particularly sensitive to future economic, market and other conditions.

Forecasts are reviewed annually, but adjustments may be made at other times, if required. If recent losses have been incurred, convincing evidence is required to prove there is sufficient future profitability given that the value of UBS AG's DTAs may be affected, with effects primarily recognized through the income statement.

In addition, judgment is required to assess the expected value of uncertain tax positions and the related probabilities, including interpretation of tax laws, the resolution of any income tax-related appeals and litigation.

> Refer to Note 8 for more information

# 7) Investments in associates

Interests in entities where UBS AG has significant influence over the financial and operating policies of these entities but does not have control are classified as investments in associates and accounted for under the equity method of accounting. Typically, UBS AG has significant influence when it holds, or has the ability to hold, between 20% and 50% of an entity's voting rights. Investments in associates are initially recognized at cost, and the carrying amount is increased or decreased after the date of acquisition to recognize UBS AG's share of the investee's comprehensive income and any impairment losses. The net investment in an associate is impaired if there is objective evidence of a loss event and the carrying amount of the investment in the associate exceeds its recoverable amount.

> Refer to Note 28 for more information

# 8) Property, equipment and software

Property, equipment and software is measured at cost less accumulated depreciation and impairment losses. Software development costs are capitalized only when the costs can be measured reliably and it is probable that future economic benefits will arise. Depreciation of property, equipment and software begins when they are available for use and is calculated on a straight-line basis over an asset's estimated useful life.

Property, equipment and software are generally tested for impairment at the appropriate cash-generating unit level, alongside goodwill and intangible assets as described in item 9 in this Note. An impairment charge is recognized for such assets if the recoverable amount is below its carrying amount. The recoverable amounts of such assets, other than property that has a market price, are generally determined using a replacement cost approach that reflects the amount that would be currently required by a market participant to replace the service capacity of the asset. If such assets are no longer used, they are tested individually for impairment.

> Refer to Note 11 for more information

#### 9) Goodwill

Goodwill represents the excess of the consideration over the fair value of identifiable assets, liabilities and contingent liabilities acquired that arises in a business combination. Goodwill is not amortized but is assessed for impairment at the end of each reporting period, or when indicators of impairment exist. UBS AG tests goodwill for impairment annually, irrespective of whether there is any indication of impairment.

An impairment charge is recognized in the income statement if the carrying amount exceeds the recoverable amount of a cash-generating-unit.

# Critical accounting estimates and judgments

UBS AG's methodology for goodwill impairment testing is based on a model that is most sensitive to the following key assumptions: (i) forecasts of earnings available to shareholders (typically estimated on a discrete basis for years one to three but could extend up to five years, as permitted under IFRS Accounting Standards, in order to reflect facts and circumstances specific to a cash-generating unit); (ii) changes in the discount rates; and (iii) changes in the long-term growth rate.

Earnings available to shareholders are estimated on the basis of forecast results, which are part of the business plan approved by the BoD. The discount rates and growth rates are determined using external information, and also considering inputs from both internal and external analysts and the view of management.

The key assumptions used to determine the recoverable amounts of each cash-generating unit are tested for sensitivity by applying reasonably possible changes to those assumptions.

> Refer to Notes 2 and 12 for more information

# 10) Provisions and contingent liabilities

Provisions are liabilities of uncertain timing or amount, and are generally recognized in accordance with IAS 37, *Provisions, Contingent Liabilities and Contingent Assets*, when: (i) UBS AG has a present obligation as a result of a past event; (ii) it is probable that an outflow of resources will be required to settle the obligation; and (iii) a reliable estimate of the amount of the obligation can be made.

The majority of UBS AG's provisions relate to litigation, regulatory and similar matters, restructuring, and employee benefits. Restructuring provisions are generally recognized as a consequence of management agreeing to materially change the scope of the business or the manner in which it is conducted, including changes in management structures. Provisions for employee benefits relate mainly to service anniversaries and sabbatical leave, and are recognized in accordance with measurement principles set out in item 4 in this Note. In addition, UBS AG presents expected credit loss allowances within *Provisions* if they relate to a loan commitment, financial guarantee contract or a revolving revocable credit line.

IAS 37 provisions are measured considering the best estimate of the consideration required to settle the present obligation at the balance sheet date.

When conditions required to recognize a provision are not met, a contingent liability is disclosed, unless the likelihood of an outflow of resources is remote. Contingent liabilities are also disclosed for possible obligations that arise from past events, the existence of which will be confirmed only by uncertain future events not wholly within the control of UBS AG.

#### Critical accounting estimates and judgments

Recognition of provisions often involves significant judgment in assessing the existence of an obligation that results from past events and in estimating the probability, the timing and the amount of any outflows of resources. This is particularly the case for litigation, regulatory and similar matters, which, due to their nature, are subject to many uncertainties, making their outcome difficult to predict.

The amount of any provision recognized is sensitive to the assumptions used, and there could be a wide range of possible outcomes for any particular matter.

Management regularly reviews all the available information regarding such matters, including legal advice, to assess whether the recognition criteria for provisions have been satisfied and to determine the timing and the amount of any potential outflows.

> Refer to Note 17 for more information

# 11) Foreign currency translation

Transactions denominated in a foreign currency are translated into the functional currency of the reporting entity at the spot exchange rate on the date of the transaction. At the balance sheet date, all monetary assets, including those at FVOCI, and monetary liabilities denominated in foreign currency are translated into the functional currency using the closing exchange rate. Translation differences are reported in *Other net income from financial instruments measured at fair value through profit or loss*.

Non-monetary items measured at historical cost are translated at the exchange rate on the date of the transaction.

Upon consolidation, assets and liabilities of foreign operations are translated into US dollars, UBS AG's presentation currency, at the closing exchange rate on the balance sheet date, and income and expense items and other comprehensive income are translated at the average rate for the period. The resulting foreign currency translation differences are recognized in *Equity* and reclassified to the income statement when UBS AG disposes of, partially or in its entirety, the foreign operation and UBS AG no longer controls the foreign operation.

Share capital issued and share premium held are translated at the historic average rate, with the difference between the historic average rate and the spot rate realized upon repayment of share capital reported as *Share premium*. Cumulative amounts recognized in *Other comprehensive income* in respect of cash flow hedges and financial assets measured at FVOCI are translated at the closing exchange rate as of the balance sheet dates, with any translation effects adjusted through *Retained earnings*.

> Refer to Note 32 for more information

# b) Changes in accounting policies, comparability and other adjustments

#### New or amended accounting standards

#### IFRS 17, Insurance Contracts

Effective from 1 January 2023, UBS AG has adopted IFRS 17, *Insurance Contracts*, which sets out the accounting requirements for contractual rights and obligations that arise from insurance contracts issued and reinsurance contracts held. The adoption has had no effect on UBS AG's financial statements. UBS AG does not provide insurance services in any market.

# Amendments to IAS 12, Income Taxes

In May 2023, the IASB issued amendments to IAS 12, *Income Taxes*, in relation to top-up taxes on income under Global Anti-Base Erosion Rules that is imposed under legislation that has been enacted or substantively enacted to implement the Pillar Two model rules published by the Organisation for Economic Co-operation and Development.

Certain countries in which UBS AG operates had enacted such legislation by 31 December 2023, including Switzerland, which introduced a tax with effect from 1 January 2024 that is expected to be a qualified domestic minimum top-up tax, and other countries (including Germany, France and Italy) also introduced top-up taxes in respect of a non-domestic UBS AG's worldwide operations with effect from 1 January 2025. Moreover, it is expected that other countries will enact such legislation in 2024.

The amendments to IAS 12 introduced an exception, whereby deferred tax assets and deferred tax liabilities should not be recognized or disclosed in respect of top-up taxes, which has been applied for the purposes of these financial statements.

An assessment was performed of UBS AG's potential exposure to top-up taxes under legislation that was enacted or substantively enacted to implement the Pillar Two model rules by 31 December 2023, reflecting country-by-country reporting and, also, the corporate tax expenses of UBS AG entities for recent years and those expected in future years. This assessment indicated that UBS AG's profits in future years are expected to be almost entirely earned in countries with corporate tax expenses that are at a tax rate of 15% or more and will not, therefore, be subject to top-up taxes. Consequently, UBS AG is not expected to have a material annual exposure to top-up taxes for future years under this legislation.

# c) IFRS Accounting Standards and Interpretations to be adopted in 2024 and later and other changes

# Other amendments to IFRS Accounting Standards

The IASB has issued a number of minor amendments to IFRS Accounting Standards, effective from 1 January 2024 and later. These amendments are not expected to have a significant effect on UBS AG when they are adopted.

# Note 2a Segment reporting

UBS AG's businesses are organized globally into five business divisions: Global Wealth Management, Personal & Corporate Banking, Asset Management, the Investment Bank, and Non-core and Legacy. All five business divisions are supported by Group Items and qualify as reportable segments for the purpose of segment reporting. Together with Group Items, the five business divisions reflect the management structure of UBS AG.

- Global Wealth Management provides financial services, advice and solutions to private wealth clients. Its offering
  ranges from investment management to estate planning and corporate finance advice, in addition to specific wealth
  management and banking products and services.
- Personal & Corporate Banking serves its private, corporate and institutional clients' needs, from banking to retirement, financing, investments and strategic transactions, in Switzerland, through its branch network and digital channels.
- Asset Management is a global, large-scale and diversified asset manager. It offers investment capabilities and styles
  across all major traditional and alternative asset classes, as well as advisory support to institutions, wholesale
  intermediaries and wealth management clients.
- The Investment Bank provides a range of services to institutional, corporate and wealth management clients globally, to help them raise capital, grow their businesses, invest and manage risks. Its offering includes research, advisory services, facilitating clients raising debt and equity from the public and private markets and capital markets, cash and derivatives trading across equities and fixed income, and financing.
- Non-core and Legacy includes positions and businesses not aligned with our strategy and policies previously reported
  in Group Functions and smaller amounts of assets and liabilities of UBS AG's business divisions that have been assessed
  as not strategic in light of the acquisition of the Credit Suisse Group.
- Our Group functions are support and control functions that provide services to the Group. Virtually all costs incurred by the support and control functions are allocated to the business divisions, leaving a residual amount that we refer to as **Group Items** in our segment reporting. Group functions is made up of the following major areas: Group Services (which consists of the Group Operations and Technology Office, Corporate Services, Compliance, Regulatory & Governance, Finance, Risk Control, Human Resources, Communications & Branding, Legal, the Group Integration Office, Group Sustainability and Impact, and Chief Strategy Office) and Group Treasury.

Financial information about the five business divisions and Group Items is presented separately in internal management reports to the Executive Board, which is considered the "chief operating decision-maker" pursuant to IFRS 8, *Operating Segments*.

UBS AG's internal accounting policies, which include management accounting policies and service-level agreements, determine the revenues and expenses directly attributable to each reportable segment. Transactions between the reportable segments are carried out at internally agreed rates and are reflected in the operating results of the reportable segments. Revenue-sharing agreements are used to allocate external client revenues to reportable segments where several reportable segments are involved in the value creation chain. Total intersegment revenues for UBS AG are immaterial, as the majority of the revenues are allocated across the segments by means of revenue-sharing agreements. Interest income earned from managing UBS AG's consolidated equity is allocated to the reportable segments based on average attributed equity and currency composition. Assets and liabilities of the reportable segments are funded through and invested with Group functions, and the net interest margin is reflected in the results of each reportable segment.

Segment assets are based on a third-party view and do not include intercompany balances. This view is in line with internal reporting to management. If one operating segment is involved in an external transaction together with another operating segment or Group function, additional criteria are considered to determine the segment that will report the associated assets. This will include a consideration of which segment's business needs are being addressed by the transaction and which segment is providing the funding and / or resources. Allocation of liabilities follows the same principles.

Non-current assets disclosed for segment reporting purposes represent assets that are expected to be recovered more than 12 months after the reporting date, excluding financial instruments, deferred tax assets and post-employment benefits.

# Note 2a Segment reporting (continued)

VCD	Global Wealth	Personal & Corporate	Asset	Investment	Non-core and	Group	LIDC AC
USD m	Management	Banking	Management	Bank	Legacy <sup>1</sup>	Items <sup>1</sup>	UBS AC
For the year ended 31 December 2023							
Net interest income	5,436	3,128	(39)	(2,612)	25	(1,372)	4,566
Non-interest income	13,194	2,158	2,108	10,371	34	1,244	29,109
Total revenues	18,631	5,285	2,069	7,759	59	(128)	33,675
Credit loss expense / (release)	25	50	(1)	67	1	1	143
Operating expenses	14,900	2,889	1,706	7,588	1,010	919	29,01
Operating profit / (loss) before tax	3,705	2,346	364	104	(952)	(1,048)	4,52
Tax expense / (benefit)							1,206
Net profit / (loss)							3,31!
Additional information							
Total assets	369,176	257,068	19,662	381,023	13,845	115,242	1,156,016
Additions to non-current assets	666	219	70	445	0	0	1,400
-		Personal &					
	Global Wealth	Corporate	Asset	Investment	Non-core and	Group	
USD m	Management	Banking	Management	Bank	Legacy <sup>1</sup>	Items <sup>1</sup>	UBS AC
Fourth a vega and ad 24 December 2022							
For the year ended 31 December 2022  Net interest income	5,274	2,192	(19)	(241)	1	(690)	6,517
Non-interest income	13,689	2,113	2,980 <sup>2</sup>	8,958	236	423	28,398
Total revenues	18,963	4,304	2,961	8,717	237	(267)	34,915
	18,903	39	2,901	(12)	237	0	29
Credit loss expense / (release)	<del>-</del>				<del>.</del>		
Operating expenses	14,069	2,475	1,565	6,890	104	823	25,927
Operating profit / (loss) before tax	4,894	1,790	1,396	1,839	131	(1,091)	8,960
Tax expense / (benefit)							1,844
Net profit / (loss)							7,116
Additional information							
Total assets	388,624	235,330	16,971	391,495	13,367	59,649	1,105,436
Additions to non-current assets	42	13	1	33	0	1,773	1,862
		Personal &					
	Global Wealth	Corporate	Asset	Investment	Non-core and	Group	
USD m	Management	Banking	Management	Bank	Legacy <sup>1</sup>	Items <sup>1</sup>	UBS AC
For the year ended 31 December 2021							
Net interest income	4,244	2,120	(15)	481	(11)	(215)	6,605
Non-interest income	15,175	2,144	2,632	8,978	70	224	29,222
Total revenues	19,419	4,264	2,617	9,459	60	9	35,828
Credit loss expense / (release)	(29)	(86)	1	(34)	0	0	(148)
Operating expenses	14,743	2,623	1,593	6,902	138	1,014	27,012
Operating profit / (loss) before tax	4,706	1,726	1,023	2,592	(78)	(1,005)	8,964
Tax expense / (benefit)	4,700	1,720	1,023	2,392	(/0)	(1,000)	
							1,903
Net profit / (loss)							7,061
Additional information							
Total assets <sup>3</sup>	395,235	225,425	25,202	346,641	25,153	98,488	1,116,145
Additions to non-current assets	56	16	1	30	0	1,689	1,791

Additions to non-current assets 56 16 1 30 0 1,689 1,791

1 As of or for the year ended 31 December 2023, Non-core and Legacy (previously reported within Group Functions) became a separate reportable segment and Group Functions has been renamed Group Items. Prior periods have been revised to reflect these changes. 2 Includes an USD 848m gain in Asset Management related to the sale of UBS AG's shareholding in Mitsubishi Corp.-UBS Realty Inc. 3 During 2022, UBS AG refined the methodology applied to allocate balance sheet resources from Group Items to the business divisions, with prospective effect. If the new methodology had been applied as of 31 December 2021, balance sheet assets allocated to business divisions would have been USD 26bn higher, of which USD 14bn would have related to the Investment Bank.

# Note 2b Segment reporting by geographic location

The operating regions shown in the table below correspond to the regional management structure of UBS AG. The allocation of total revenues to these regions reflects, and is consistent with, the basis on which the business is managed and its performance is evaluated. These allocations involve assumptions and judgments that management considers to be reasonable, and may be refined to reflect changes in estimates or management structure. The main principles of the allocation methodology are that client revenues are attributed to the domicile of the given client and trading and portfolio management revenues are attributed to the country where the risk is managed. This revenue attribution is consistent with the mandate of the regional Presidents. Certain revenues, such as those related to Non-core and Legacy Portfolio, are managed at a Group level. These revenues are included in the *Global* line.

The geographic analysis of non-current assets is based on the location of the entity in which the given assets are recorded.

#### For the year ended 31 December 2023

	Total reven	Total revenues		assets
	USD bn	Share %	USD bn	Share %
Americas <sup>1</sup>	13.3	39	8.6	47
Asia Pacific	5.2	15	1.2	7
Europe, Middle East and Africa (excluding Switzerland)	6.1	18	2.6	14
Switzerland	9.2	27	5.9	32
Global	(0.1)	0	0.0	0
Total	33.7	100	18.3	100

#### For the year ended 31 December 2022

	Total reve	Total revenues		assets
	USD bn	Share %	USD bn	Share %
Americas <sup>1</sup>	13.8	40	9.0	48
Asia Pacific	5.6	16	1.5	8
Europe, Middle East and Africa (excluding Switzerland)	7.0	20	2.6	14
Switzerland	7.7	22	5.6	30
Global	0.8	2	0.0	0
Total	34.9	100	18.7	100

#### For the year ended 31 December 2021

	Total revenues		Total non-current	assets
	USD bn	Share %	USD bn	Share %
Americas <sup>1</sup>	14.5	40	9.0	47
Asia Pacific	6.5	18	1.4	7
Europe, Middle East and Africa (excluding Switzerland)	7.0	20	2.6	13
Switzerland	7.8	22	6.3	33
Global	0.1	0	0.0	0
Total	35.8	100	19.3	100

<sup>1</sup> Predominantly related to the US.

# Income statement notes

# Note 3 Net interest income and other net income from financial instruments measured at fair value through profit or loss

	For	the year ended	
USD m	31.12.23	31.12.22	31.12.21
Net interest income from financial instruments measured at fair value through profit or loss and other	1,765	1,410	1,437
Other net income from financial instruments measured at fair value through profit or loss¹	9,934	7,493	5,844
Total net income from financial instruments measured at fair value through profit or loss and other	11,698	8,903	7,281
Net interest income			
Interest income from loans and deposits <sup>2</sup>	19,637	9,634	6,489
Interest income from securities financing transactions measured at amortized cost <sup>3</sup>	3,450	1,378	513
Interest income from other financial instruments measured at amortized cost	1,152	545	284
Interest income from debt instruments measured at fair value through other comprehensive income	103	74	115
Interest resulting from derivative instruments designated as cash flow hedges	(1,898)	173	1,133
Total interest income from financial instruments measured at amortized cost and fair value through other comprehensive income	22,444	11,803	8,534
Interest expense on loans and deposits⁴	14,977	4,488	1,655
Interest expense on securities financing transactions measured at amortized cost <sup>5</sup>	1,714	1,089	1,102
Interest expense on debt issued	2,855	1,031	512
Interest expense on lease liabilities	97	88	98
Total interest expense from financial instruments measured at amortized cost	19,643	6,696	3,366
Total net interest income from financial instruments measured at amortized cost and fair value through other comprehensive income	2,801	5,108	5,168
Total net interest income from financial instruments measured at fair value through profit or loss and other	1,765	1,410	1,437
Total net interest income	4,566	6,517	6,605

1 Includes net losses from financial liabilities designated at fair value of USD 4,065m (net gains of USD 17,036m in 2022 and net losses of USD 6,457m in 2021). This complementary "of which" information for financial liabilities designated at fair value excludes fair value changes on hedges related to financial liabilities designated at fair value, and foreign currency translation effects arising from translating foreign currency translations into the respective functional currency, both of which are reported within Other net income from financial instruments measured at fair value through profit or loss. Net gains / (losses) from financial liabilities designated at fair value included net losses of 2,045m (net gains of USD 4,112m and net losses of USD 2,068m in 2022 and 2021, respectively) from financial liabilities related to unit-linked investment notes issued by UBS AG's Asset Management business. These gains / (losses) are fully offset within Other net income from financial instruments measured at fair value through profit or loss by the fair value change on the financial assets hedging the unit-linked investment contracts, which are not disclosed as part of Net gains / (losses) from financial liabilities designated at fair value. 2 Consists of interest income from cash and balances at central banks, amounts due from banks and customers, and cash collateral preceivables on derivative instruments, as well as negative interest on amounts due to banks, customer deposits, and funding from UBS Group AG measured at amortized cost. 4 Consists of interest expense on amounts due to banks, cash collateral payables on derivative instruments. 5 Includes negative interest, including fees, on receivables from securities financing transactions measured at amortized cost.

#### Note 4 Net fee and commission income

	For	the year ended	
USD m	31.12.23	31.12.22	31.12.21
Underwriting fees	637	633	1,512
M&A and corporate finance fees	669	804	1,102
Brokerage fees	3,323	3,487	4,383
Investment fund fees	4,730	4,942	5,790
Portfolio management and related services	9,091	9,059	9,762
Other	1,950	1,921	1,874
Total fee and commission income <sup>1</sup>	20,399	20,846	24,422
of which: recurring	14,008	14,229	15,410
of which: transaction-based	6,320	6,550	8,743
of which: performance-based	71	68	269
Fee and commission expense	1,790	1,823	1,985
Net fee and commission income	18,610	19,023	22,438

1 For the year ended 31 December 2023, reflects third-party fee and commission income of USD 12,687m for Global Wealth Management, USD 1,840m for Personal & Corporate Banking, USD 2,723m for Asset Management, USD 3,153m for the Investment Bank, USD 7m for Non-core and Legacy and negative USD 11m for Group Items (for the year ended 31 December 2022: USD 12,990m for Global Wealth Management, USD 1,657m for Personal & Corporate Banking, USD 2,840m for Asset Management, USD 3,350m for the Investment Bank, USD 0m for Non-core and Legacy and USD 10m for Group Items; for the year ended 31 December 2021: USD 14,545m for Global Wealth Management, USD 1,645m for Personal & Corporate Banking, USD 3,337m for Asset Management, USD 4,863m for the Investment Bank, USD 0m for Non-core and Legacy and USD 33m for Group Items). For the year ended 31 December 2023, Non-core and Legacy (previously reported within Group Functions) represents a separate reportable segment and Group Functions has been renamed Group Items. Prior periods have been revised to reflect these changes.

#### Note 5 Other income

	For	the year ended	
USD m	31.12.23	31.12.22	31.12.21
Associates, joint ventures and subsidiaries			
Net gains / (losses) from acquisitions and disposals of subsidiaries <sup>1</sup>	24	148	(11)
Net gains / (losses) from disposals of investments in associates and joint ventures	0	844 <sup>2</sup>	41
Share of net profits of associates and joint ventures	(163) <sup>3</sup>	32	105
Total	(138)	1,024	134
Net gains / (losses) from disposals of financial assets measured at fair value through other comprehensive income	(1)	(1)	9
Income from properties <sup>4</sup>	18	20	22
Net gains / (losses) from properties held for sale	8	71	100 <sup>5</sup>
Income from shared services provided to UBS Group AG or its subsidiaries	568	460	451
Other <sup>6</sup>	112	308 <sup>7</sup>	2248
Total other income	566	1,882	941

1 Includes foreign exchange gains / (losses) reclassified from other comprehensive income related to the disposal or closure of foreign operations. Refer to Note 29 for more information about UBS AG's acquisitions and disposals of subsidiaries and businesses. 2 Includes an USD 848m gain related to the sale of UBS AG's shareholding in Mitsubishi Corp.-UBS Realty Inc. 3 Includes a USD 255m share of proportionate impairment losses reflected in the SIX Group profit and loss, of which USD 191m reported in Personal and Corporate Banking and USD 64m reported in Global Wealth Management. 4 Includes rent received from third parties. 5 Mainly relates to the sale of a property in Basel. 6 Includes gains of USD 21m related to the repurchase of UBS AG's own debt instruments (compared with a gain of USD 23m in 2022 and a loss of USD 17m in 2021). 7 Mainly relates to a portion of the total USD 133m gain on the sale of UBS AG's domestic wealth management business in Spain of USD 111m (with the remaining amount disclosed within Net gains / (losses) from acquisitions and disposals of subsidiaries) and income of USD 111m related to a legacy litigation settlement and a legacy bankruptcy claim.

8 Includes a gain of USD 100m from the sale of UBS AG's domestic wealth management business in Austria.

#### **Note 6 Personnel expenses**

	For	the year ended	
USD m	31.12.23	31.12.22	31.12.21
Salaries <sup>1</sup>	5,898	5,528	5,723
Variable compensation <sup>2</sup>	7,669	7,636	7,973
of which: performance awards	2,841	2,910	2,916
of which: financial advisors <sup>3</sup>	4,549	4,508	4,860
of which: other	<i>279</i>	217	196
Contractors	98	119	142
Social security	835	730	762
Post-employment benefit plans <sup>4</sup>	579	555	582
of which: defined benefit plans	<i>259</i>	256	280
of which: defined contribution plans	<i>320</i>	299	303
Other personnel expenses	576	513	479
Total personnel expenses	15,655	15,080	15,661

1 Includes role-based allowances. 2 Refer to Note 27 for more information. 3 Consists of cash and deferred compensation awards and is based on compensable revenues and firm tenure using a formulaic approach. It also includes expenses related to compensation commitments with financial advisors entered into at the time of recruitment that are subject to vesting requirements. 4 Refer to Note 26 for more information. Includes curtailment gains of USD 3m for the year ended 31 December 2023 (for the year ended 31 December 2022: USD 13m; for the year ended 31 December 2021: USD 49m), which represent a reduction in the defined benefit obligation related to the Swiss pension plan resulting from a decrease in headcount following restructuring activities.

Personnel expenses increased by USD 575m to USD 15,655m and included integration-related expenses of USD 626m.

# Note 7 General and administrative expenses

	For	the year ended	
USD m	31.12.23	31.12.22	31.12.21
Outsourcing costs	478	451	426
Technology costs	558	502	490
Consulting, legal and audit fees	650	494	465
Real estate and logistics costs	679	507	530
Market data services	400	367	367
Marketing and communication	209	195	171
Travel and entertainment	205	156	66
Litigation, regulatory and similar matters <sup>1</sup>	816	348	910
Other	7,123	5,981	6,051
of which: shared services costs charged by UBS Group AG or its subsidiaries	6,203	<i>5,264</i>	5,321
Total general and administrative expenses	11,118	9,001	9,476

<sup>1</sup> Reflects the net increase, including recoveries from third parties, in provisions for litigation, regulatory and similar matters recognized in the income statement. Refer to Note 17 for more information.

General and administrative expenses increased by USD 2,117m to USD 11,118m, which included integration-related expenses of USD 491m, largely reflected in higher consulting and real estate costs.

#### Note 8 Income taxes

	For	the year ended	
USD m	31.12.23	31.12.22	31.12.21
Tax expense / (benefit)			
Swiss			
Current	810	664	614
Deferred	39	(22)	26
Total Swiss	849	642	640
Non-Swiss			
Current	618	689	857
Deferred	(262)	513	406
Total non-Swiss	356	1,202	1,263
Total income tax expense / (benefit) recognized in the income statement	1,206	1,844	1,903

# Income tax recognized in the income statement

The Swiss current tax expenses related to taxable profits of UBS Switzerland AG and other Swiss entities.

The non-Swiss current tax expenses related to expenses of USD 100m in respect of US corporate alternative minimum tax (CAMT) and USD 518m in respect of other taxable profits of non-Swiss subsidiaries and branches.

The non-Swiss net deferred tax benefit primarily related to a benefit of USD 274m in respect of an increase in deferred tax assets (DTAs) that resulted from an increase in the expected value of future tax deductions for deferred compensation awards due to an increase in the Group's share price during the year. In addition, the net deferred tax benefit included a benefit of USD 100m in respect of the recognition of DTAs for tax credits carried forward in respect of CAMT. These benefits were partly offset by a net deferred tax expense of USD 112m that primarily related to the amortization of DTAs previously recognized in relation to tax losses carried forward.

Excluding any potential effects from the remeasurement of DTAs in connection with the business planning process and any material jurisdictional statutory tax rate changes that could be enacted, UBS AG expects a tax rate for 2024 of around 24%.

	For		
USD m	31.12.23	31.12.22	31.12.21
Operating profit / (loss) before tax	4,521	8,960	8,964
of which: Swiss	3,174	4,052	2,983
of which: non-Swiss	<i>1,347</i>	4,907	5,981
Income taxes at Swiss tax rate of 18.5% for 2023, 18% for 2022 and 18.5% for 2021	836	1,613	1,658
Increase / (decrease) resulting from:			
Non-Swiss tax rates differing from Swiss tax rate	(43)	267	217
Tax effects of losses not recognized	71	74	124
Previously unrecognized tax losses now utilized	(401)	(217)	(179)
Non-taxable and lower-taxed income	(165)	(316)	(252)
Non-deductible expenses and additional taxable income	1,017	414	487
Adjustments related to prior years, current tax	(15)	(33)	(38)
Adjustments related to prior years, deferred tax	10	19	(3)
Change in deferred tax recognition	(273)	(217)	(341)
Adjustments to deferred tax balances arising from changes in tax rates	0	0	(1)
Other items	169	240	230
Income tax expense / (benefit)	1,206	1,844	1,903

# Note 8 Income taxes (continued)

The components of operating profit before tax, and the differences between income tax expense reflected in the financial statements and the amounts calculated at the Swiss tax rate, are provided in the table above and explained below.

Component	Description
Non-Swiss tax rates differing from the Swiss tax rate	To the extent that UBS AG profits or losses arise outside Switzerland, the applicable local tax rate may differ from the Swiss tax rate. This item reflects, for such profits, an adjustment from the tax expense that would arise at the Swiss tax rate to the tax expense that would arise at the applicable local tax rate. Similarly, it reflects, for such losses, an adjustment from the tax benefit that would arise at the Swiss tax rate to the tax benefit that would arise at the applicable local tax rate.
Tax effects of losses not recognized	This item relates to tax losses of entities arising in the year that are not recognized as DTAs and where no tax benefit arises in relation to those losses. Therefore, the tax benefit calculated by applying the local tax rate to those losses as described above is reversed.
Previously unrecognized tax losses now utilized	This item relates to taxable profits of the year that are offset by tax losses of previous years for which no DTAs were previously recorded. Consequently, no current tax or deferred tax expense arises in relation to those taxable profits and the tax expense calculated by applying the local tax rate on those profits is reversed.
Non-taxable and lower- taxed income	This item relates to tax deductions for the year in respect of permanent differences. These include deductions in respect of profits that are either not taxable or are taxable at a lower rate of tax than the local tax rate. They also include deductions made for tax purposes, which are not reflected in the accounts.
Non-deductible expenses and additional taxable income	This item relates to additional taxable income for the year in respect of permanent differences. These include income that is recognized for tax purposes by an entity but is not included in its profit that is reported in the financial statements, as well as expenses for the year that are non-deductible (e.g., client entertainment costs are not deductible in certain locations).
Adjustments related to prior years, current tax	This item relates to adjustments to current tax expense for prior years (e.g., if the tax payable for a year is agreed with the tax authorities in an amount that differs from the amount previously reflected in the financial statements).
Adjustments related to prior years, deferred tax	This item relates to adjustments to deferred tax positions recognized in prior years (e.g., if a tax loss for a year is fully recognized and the amount of the tax loss agreed with the tax authorities is expected to differ from the amount previously recognized as DTAs in the accounts).
Change in deferred tax recognition	This item relates to changes in DTAs, including changes in DTAs previously recognized resulting from reassessments of expected future taxable profits. It also includes changes in temporary differences in the year, for which deferred tax is not recognized.
Adjustments to deferred tax balances arising from changes in tax rates	This item relates to remeasurements of DTAs and liabilities recognized due to changes in tax rates. These have the effect of changing the future tax saving that is expected from tax losses or deductible tax differences and therefore the amount of DTAs recognized or, alternatively, changing the tax cost of additional taxable income from taxable temporary differences and therefore the deferred tax liability.
Other items	Other items include other differences between profits or losses at the local tax rate and the actual local tax expense or benefit, including movements in provisions for uncertain positions in relation to the current year and other items.

# Income tax recognized directly in equity

A net tax expense of USD 288m was recognized in *Other comprehensive income* (2022: net benefit of USD 1,095m) and a net tax benefit of USD 12m was recognized in *Share premium* (2022: net benefit of USD 5m).

#### Note 8 Income taxes (continued)

#### **Deferred tax assets and liabilities**

UBS AG has gross DTAs, valuation allowances and recognized DTAs related to tax loss carry-forwards and deductible temporary differences, as well as deferred tax liabilities in respect of taxable temporary differences, as shown in the table below. The valuation allowances reflect DTAs that were not recognized because, as of the last remeasurement period, management did not consider it probable that there would be sufficient future taxable profits available to utilize the related tax loss carry-forwards and deductible temporary differences.

The recognition of DTAs is supported by forecasts of taxable profits for the entities concerned. In addition, tax planning opportunities are available that would result in additional future taxable income and these would be utilized, if necessary.

Deferred tax liabilities are recognized in respect of investments in subsidiaries, branches and associates, and interests in joint arrangements, except to the extent that UBS AG can control the timing of the reversal of the associated taxable temporary difference, and it is probable that such will not reverse in the foreseeable future. However, as of 31 December 2023, this exception was not considered to apply to any taxable temporary differences.

USD m		31.12.23		31.12.22					
		Valuation			Valuation				
Deferred tax assets <sup>1</sup>	Gross	allowance	Recognized	Gross	allowance	Recognized			
Tax loss carry-forwards	11,453	(8,496)	2,957	12,708	(8,720)	3,988			
Unused tax credits	95	0	95	0	0	0			
Temporary differences	6,771	(579)	6,192	5,774	(408)	5,365			
of which: related to real estate costs capitalized for US tax									
purposes	<i>2,703</i>	0	<i>2,703</i>	2,485	0	2,485			
of which: related to compensation and benefits	1,457	(205)	1,252	1,169	(175)	993			
of which: related to cash flow hedges	619	0	619	947	0	947			
of which: other	1,992	(374)	1,618	1,173	(233)	940			
Total deferred tax assets	18,319	(9,076)	9,244 <sup>2</sup>	18,482	(9,128)	9,354 <sup>2</sup>			
of which: related to the US			8,505			8,294			
of which: related to other locations			<i>739</i>			1,060			

Deferred tax liabilitiesTotal deferred tax liabilities162233

In general, US federal tax losses incurred prior to 31 December 2017 can be carried forward for 20 years. US federal tax losses incurred after that date can be carried forward indefinitely, although the utilization of such losses is limited to 80% of the entity's future year taxable profits. UK tax losses can also be carried forward indefinitely; they can shelter up to either 25% or 50% of future year taxable profits, depending on when the tax losses arose. The amounts of US tax loss carry-forwards that are included in the table below are based on their amount for federal tax purposes rather than for state and local tax purposes.

## Unrecognized tax loss carry-forwards

USD m	31.12.23	31.12.22
Within 1 year	192	231
From 2 to 5 years	10,278	2,184
From 6 to 10 years	2,708	11,106
From 11 to 20 years	1,199	1,610
No expiry	16,252	16,960
Total	30,630	32,091
of which: related to the US <sup>1</sup>	12,354	13,350
of which: related to the UK	14,333	14,332
of which: related to other locations	3,943	4,409

<sup>1</sup> Related to UBS AG's US branch.

<sup>1</sup> After offset of DTLs, as applicable. 2 As of 31 December 2023, UBS AG recognized DTAs of USD 408m (31 December 2022: USD 471m) in respect of entities that incurred losses in either the current or preceding year.

# Balance sheet notes

# Note 9 Financial assets at amortized cost and other positions in scope of expected credit loss measurement

The tables below provide information about financial instruments and certain credit lines that are subject to expected credit loss (ECL) requirements. UBS AG's ECL disclosure segments, or "ECL segments" are aggregated portfolios based on shared risk characteristics and on the same or similar rating methods applied. The key segments are presented in the table below.

#### > Refer to Note 19 for more information about expected credit loss measurement

Segment	Segment description	Description of credit risk sensitivity	Business division
Private clients with mortgages	Lending to private clients secured by owner-occupied real estate and personal account overdrafts of those clients	Sensitive to the interest rate environment, unemployment levels, real estate collateral values and other regional aspects	<ul><li>Personal &amp; Corporate Banking</li><li>Global Wealth Management</li></ul>
Real estate financing	Rental or income-producing real estate financing to private and corporate clients secured by real estate	Sensitive to unemployment levels, the interest rate environment, real estate collateral values and other regional aspects	<ul><li>Personal &amp; Corporate Banking</li><li>Global Wealth Management</li><li>Investment Bank</li></ul>
Large corporate clients	Lending to large corporate and multi- national clients	Sensitive to GDP developments, unemployment levels, seasonality, business cycles and collateral values (diverse collateral, including real estate and other collateral types)	<ul><li>Personal &amp; Corporate Banking</li><li>Investment Bank</li></ul>
SME clients	Lending to small and medium-sized corporate clients	Sensitive to GDP developments, unemployment levels, the interest rate environment and, to some extent, seasonality, business cycles and collateral values (diverse collateral, including real estate and other collateral types)	– Personal & Corporate Banking
Lombard	Loans secured by pledges of marketable securities, guarantees and other forms of collateral (including concentration in hedge funds, private equity and unlisted equities), as well as unsecured recourse lending	Sensitive to equity and debt markets (e.g., changes in collateral values)	– Global Wealth Management
Credit cards	Credit card solutions in Switzerland and the US	Sensitive to unemployment levels	<ul><li>Personal &amp; Corporate Banking</li><li>Global Wealth Management</li></ul>
Commodity trade finance	Working capital financing of commodity traders, generally extended on a self- liquidating transactional basis	Sensitive primarily to the strength of individual transaction structures and collateral values (price volatility of commodities), as the primary source for debt service is directly linked to the shipments financed	– Personal & Corporate Banking
Financial intermediaries and hedge funds	Lending to financial institutions and pension funds, including exposures to broker-dealers and clearing houses	Sensitive to GDP development, the interest rate environment, price and volatility risks in financial markets, and regulatory and political risk	<ul><li>Personal &amp; Corporate Banking</li><li>Investment Bank</li></ul>

<sup>&</sup>gt; Refer to Note 19f for more details regarding sensitivity

# Note 9 Financial assets at amortized cost and other positions in scope of expected credit loss measurement (continued)

The tables below provide ECL exposure and ECL allowance and provision information about financial instruments and certain non-financial instruments that are subject to ECLs.

USD m	31.12.23							
		Carrying a	mount <sup>1</sup>			ECL allov	vances	
Financial instruments measured at amortized cost	Total	Stage 1	Stage 2	Stage 3	Total	Stage 1	Stage 2	Stage 3
Cash and balances at central banks	171,806	171,788	18	0	(26)	0	(26)	C
Amounts due from banks	28,206	28,191	14	0	(7)	(6)	(1)	0
Receivables from securities financing transactions measured at amortized cost	74,128	74,128	0	0	(2)	(2)	0	0
Cash collateral receivables on derivative instruments	32,300	32,300	0	0	0	0	0	0
Loans and advances to customers	405,633	385,493	18,131	2,009	(935)	(173)	(185)	(577)
of which: Private clients with mortgages	174,400	163,617	9,955	828	(156)	(39)	(89)	(28,
of which: Real estate financing	54,305	50,252	4,038	15	(46)	(20)	(25)	(1,
of which: Large corporate clients	14,431	12,594	1,331	506	(241)	(34)	(32)	(174,
of which: SME clients	12,694	10,662	1,524	508	(262)	(34)	(24)	(204)
of which: Lombard	117,924	117,874	0	50	(22)	(5)	0	(17,
of which: Credit cards	2,041	1,564	438	39	(42)	(6)	(11)	(24,
of which: Commodity trade finance	2,889	2,873	12	4	(119)	(7)	0	(111,
Other financial assets measured at amortized cost	54,334	53,882	312	141	(87)	(16)	(5)	(66)
of which: Loans to financial advisors	2,615	2,422	79	114	(49)	(4)	(1)	(44,
Total financial assets measured at amortized cost	766,407	745,782	18,475	2,150	(1,057)	(197)	(217)	(643)
Financial assets measured at fair value through other comprehensive income	2,233	2,233	0	0	0	0	0	0
Total on-balance sheet financial assets within the scope of ECL requirements	768,640	748,015	18,475	2,150	(1,057)	(197)	(217)	(643)

		Total exp	osure		ECL provisions			
Off-balance sheet (within the scope of ECL)	Total	Stage 1	Stage 2	Stage 3	Total	Stage 1	Stage 2	Stage 3
Guarantees	33,211	32,332	761	118	(40)	(14)	(7)	(19)
of which: Large corporate clients	3,624	3,051	486	87	(10)	(3)	(2)	(6)
of which: SME clients	1,506	1,299	177	31	(7)	(1)	(1)	(5)
of which: Financial intermediaries and hedge funds	22,549	22,504	46	0	(12)	(8)	(3)	0
of which: Lombard	3,009	3,009	0	0	(1)	0	0	(1)
of which: Commodity trade finance	1,811	1,803	8	0	(1)	(1)	0	0
Irrevocable loan commitments	44,018	42,085	1,878	56	(95)	(55)	(38)	(2)
of which: Large corporate clients	26,096	24,444	1,622	30	(76)	(45)	(28)	(2)
Forward starting reverse repurchase and securities borrowing agreements	10,373	10,373	0	0	0	0	0	0
Committed unconditionally revocable credit lines	47,421	45,452	1,913	56	(49)	(39)	(10)	0
of which: Real estate financing	9,439	8,854	585	0	(4)	(3)	(1)	0
of which: Large corporate clients	5,110	4,951	151	8	(6)	(4)	(3)	0
of which: SME clients	5,408	5, 188	191	29	(21)	(17)	(3)	0
of which: Lombard	8,964	8,964	0	1	0	0	0	0
of which: Credit cards	10,458	9,932	522	4	(10)	(8)	(2)	0
of which: Commodity trade finance	<i>537</i>	<i>537</i>	0	0	0	0	0	0
Irrevocable committed prolongation of existing loans	4,183	4,169	11	4	(4)	(3)	0	0
Total off-balance sheet financial instruments and credit lines	139,206	134,410	4,562	234	(188)	(111)	(56)	(21)
Total allowances and provisions					(1,244)	(308)	(272)	(664)

<sup>1</sup> The carrying amount of financial assets measured at amortized cost represents the total gross exposure net of the respective ECL allowances.

Note 9 Financial assets at amortized cost and other positions in scope of expected credit loss measurement (continued)

USD m	31.12.22							
		Carrying a	mount <sup>1</sup>			ECL allow	vances	
Financial instruments measured at amortized cost	Total	Stage 1	Stage 2	Stage 3	Total	Stage 1	Stage 2	Stage 3
Cash and balances at central banks	169,445	169,402	44	0	(12)	0	(12)	0
Amounts due from banks	14,671	14,670	1	0	(6)	(5)	(1)	0
Receivables from securities financing transactions measured at amortized cost	67,814	67,814	0	0	(2)	(2)	0	0
Cash collateral receivables on derivative instruments	35,033	35,033	0	0	0	0	0	0
Loans and advances to customers	390,027	372,903	15,587	1,538	(783)	(129)	(180)	(474)
of which: Private clients with mortgages	156,930	147,651	8,579	699	(161)	(27)	(107)	(28)
of which: Real estate financing	46,470	43,112	3,349	9	(41)	(17)	(23)	0
of which: Large corporate clients	12,226	10,733	1,189	303	(130)	(24)	(14)	(92)
of which: SME clients	13,903	12,211	1,342	351	(251)	(26)	(22)	(203)
of which: Lombard	132,287	132,196	0	91	(26)	(9)	0	(17)
of which: Credit cards	1,834	1,420	382	31	(36)	(7)	(10)	(19)
of which: Commodity trade finance	3,272	3,261	0	11	(96)	(6)	0	(90)
Other financial assets measured at amortized cost	53,389	52,829	413	147	(86)	(17)	(6)	(63)
of which: Loans to financial advisors	2,611	2,357	128	126	(59)	(7)	(2)	(51)
Total financial assets measured at amortized cost	730,379	712,651	16,044	1,685	(890)	(154)	(199)	(537)
Financial assets measured at fair value through other comprehensive income	2,239	2,239	0	0	0	0	0	0
Total on-balance sheet financial assets within the scope of ECL requirements	732,618	714,889	16,044	1,685	(890)	(154)	(199)	(537)

		Total exposure					ECL provisions			
Off-balance sheet (within the scope of ECL)	Total	Stage 1	Stage 2	Stage 3	Total	Stage 1	Stage 2	Stage 3		
Guarantees	22,167	19,805	2,254	108	(48)	(13)	(9)	(26)		
of which: Large corporate clients	3,663	2,883	721	58	(26)	(2)	(3)	(21)		
of which: SME clients	1,337	1,124	164	49	(5)	(1)	(1)	(3)		
of which: Financial intermediaries and hedge funds	11,833	10,513	1,320	0	(12)	(8)	(4)	0		
of which: Lombard	2,376	2,376	0	1	(1)	0	0	(1)		
of which: Commodity trade finance	2,121	2,121	0	0	(1)	(1)	0	0		
Irrevocable loan commitments	39,996	37,531	2,341	124	(111)	(59)	(52)	0		
of which: Large corporate clients	23,611	21,488	2,024	99	(93)	(49)	(45)	0		
Forward starting reverse repurchase and securities borrowing agreements	3,801	3,801	0	0	0	0	0	0		
Committed unconditionally revocable credit lines	43,677	41,809	1,833	36	(40)	(32)	(8)	0		
of which: Real estate financing	8,711	8,528	183	0	(6)	(6)	0	0		
of which: Large corporate clients	4,578	4,304	268	5	(4)	(1)	(2)	0		
of which: SME clients	4,723	4,442	256	26	(19)	(16)	(3)	0		
of which: Lombard	7,855	7,854	0	1	0	0	0	0		
of which: Credit cards	9,390	8,900	487	3	(7)	(5)	(2)	0		
of which: Commodity trade finance	327	327	0	0	0	0	0	0		
Irrevocable committed prolongation of existing loans	4,696	4,600	94	2	(2)	(2)	0	0		
Total off-balance sheet financial instruments and credit lines	114,337	107,545	6,522	270	(201)	(106)	(69)	(26)		
Total allowances and provisions					(1,091)	(260)	(267)	(564)		

<sup>1</sup> The carrying amount of financial assets measured at amortized cost represents the total gross exposure net of the respective ECL allowances.

# Note 9 Financial assets at amortized cost and other positions in scope of expected credit loss measurement (continued)

Coverage ratios are calculated for the core loan portfolio by taking ECL allowances and provisions divided by the gross carrying amount of the exposures. Core loan exposure is defined as the sum of *Loans and advances to customers* and *Loans to financial advisors*.

These ratios are influenced by the following key factors:

- Lombard loans are generally secured with marketable securities in portfolios that are, as a rule, highly diversified, with strict lending policies that are intended to ensure that credit risk is minimal under most circumstances;
- mortgage loans to private clients and real estate financing are controlled by conservative eligibility criteria, including low loan-to-value ratios and strong debt service capabilities;
- the amount of unsecured retail lending (including credit cards) is insignificant;
- lending in Switzerland includes government-backed COVID-19 loans;
- contractual maturities in the loan portfolio, which are a factor in the calculation of ECLs, are generally short, with Lombard lending typically having average contractual maturities of 12 months or less, real estate lending generally between two and three years in Switzerland, with long-dated maturities in the US, and corporate lending between one and two years with related loan commitments up to four years; and
- write-offs of ECL allowances against the gross loan balances when all or part of a financial asset is deemed uncollectible
  or forgiven, reduces the coverage ratios.

The total combined on- and off-balance sheet coverage ratio was at 22 basis points as of 31 December 2023, 1 basis point higher than on 31 December 2022. The combined stage 1 and 2 ratio of 10 basis points was unchanged compared with 31 December 2022; the stage 3 ratio was 22%, materially unchanged compared with 31 December 2022.

				3	1.12.23							
	Gros	Gross carrying amount (USD m)					ECL coverage (bps)					
On-balance sheet	Total	Stage 1	Stage 2	Stage 3	Total	Stage 1	Stage 2	Stage 1&2	Stage 3			
Private clients with mortgages	174,555	163,656	10,044	856	9	2	88	7	326			
Real estate financing	54,351	50,272	4,063	16	9	4	61	8	594			
Total real estate lending	228,906	213,928	14,107	872	9	3	81	8	331			
Large corporate clients	14,671	12,628	1,363	680	164	27	237	48	2,558			
SME clients	12,956	10,696	1,548	712	202	32	155	47	2,861			
Total corporate lending	27,627	23,324	2,911	1,392	182	29	193	48	2,714			
Lombard	117,946	117,879	0	67	2	0	0	0	2,487			
Credit cards	2,083	1,571	449	63	200	40	253	87	3,801			
Commodity trade finance	3,008	2,881	12	115	394	25	62	25	9,676			
Other loans and advances to customers	26,997	26,083	837	77	18	10	44	11	2,379			
Loans to financial advisors	2,665	2,426	80	159	185	17	122	20	2,793			
Total other lending	152,699	150,840	1,378	481	18	3	117	4	4,462			
Total <sup>1</sup>	409,232	388,092	18,396	2,744	24	5	101	9	2,263			

	(	ross exposure	(USD m)		ECL coverage (bps)					
Off-balance sheet	Total	Stage 1	Stage 2	Stage 3	Total	Stage 1	Stage 2	Stage 1&2	Stage 3	
Private clients with mortgages	6,801	6,560	226	15	8	7	29	8	40	
Real estate financing	10,662	10,064	599	0	6	5	22	6	0	
Total real estate lending	17,463	16,624	824	15	6	6	24	6	40	
Large corporate clients	34,829	32,446	2,259	125	27	16	147	25	628	
SME clients	7,872	7,337	456	80	47	29	230	41	626	
Total corporate lending	42,702	39,782	2,715	205	30	18	161	28	627	
Lombard	13,609	13,609	0	1	1	1	0	1	0	
Credit cards	10,458	9,932	522	4	10	8	35	10	0	
Commodity trade finance	2,354	2,346	8	0	4	4	36	4	0	
Financial intermediaries and hedge funds	25,378	25,148	230	0	5	4	157	5	0	
Other off-balance sheet commitments	16,869	16,596	264	9	12	5	170	8	0	
Total other lending	68,668	67,630	1,024	14	7	4	97	6	5,921	
Total <sup>2</sup>	128,833	124,037	4,562	234	15	9	122	13	908	
Total on- and off-balance sheet <sup>3</sup>	538,065	512,129	22,958	2,978	22	6	105	10	2,157	

1 Includes Loans and advances to customers and Loans to financial advisors, which are presented on the balance sheet line Other financial assets measured at amortized cost. 2 Excludes Forward starting reverse repurchase and securities borrowing agreements. 3 Includes on-balance sheet exposure, gross and off-balance sheet exposure (notional) and the related ECL coverage ratio (bps).

Note 9 Financial assets at amortized cost and other positions in scope of expected credit loss measurement (continued)

				3	1.12.22		31.12.22									
	Gros	Gross carrying amount (USD m)					ECL coverage (bps)									
On-balance sheet	Total	Stage 1	Stage 2	Stage 3	Total	Stage 1	Stage 2	Stage 1&2	Stage 3							
Private clients with mortgages	157,091	147,678	8,686	727	10	2	123	9	381							
Real estate financing	46,511	43,129	3,372	9	9	4	70	9	232							
Total real estate lending	203,602	190,807	12,059	736	10	2	108	9	379							
Large corporate clients	12,356	10,757	1,204	395	105	22	120	32	2,325							
SME clients	14,154	12,237	1,364	553	177	22	161	36	3,664							
Total corporate lending	26,510	22,994	2,567	949	144	22	142	34	3,106							
Lombard	132,313	132,205	0	108	2	1	0	1	1,580							
Credit cards	1,869	1,427	393	50	190	46	256	91	3,779							
Commodity trade finance	3,367	3,266	0	101	285	18	0	18	8,901							
Other loans and advances to customers	23,149	22,333	748	68	18	6	38	7	3,769							
Loans to financial advisors	2,670	2,364	130	176	221	28	124	33	2,870							
Total other lending	163,368	161,595	1,270	503	16	3	114	3	4,016							
Total <sup>1</sup>	393,480	375,396	15,896	2,188	21	4	114	8	2,398							

	G	Gross exposure (USD m)					ECL coverage (bps)					
Off-balance sheet	Total	Stage 1	Stage 2	Stage 3	Total	Stage 1	Stage 2	Stage 1&2	Stage 3			
Private clients with mortgages	6,535	6,296	236	3	5	4	18	4	1,183			
Real estate financing	10,054	9,779	275	0	6	7	0	6	0			
Total real estate lending	16,589	16,075	511	3	6	6	2	6	1,288			
Large corporate clients	32,126	28,950	3,013	163	38	18	165	32	1,263			
SME clients	7,122	6,525	499	98	47	30	214	43	304			
Total corporate lending	39,247	35,475	3,513	260	40	20	172	34	903			
Lombard	12,919	12,918	0	1	2	1	0	1	0			
Credit cards	9,390	8,900	487	3	7	5	36	7	0			
Commodity trade finance	2,459	2,459	0	0	3	3	0	3	0			
Financial intermediaries and hedge funds	18,128	16,464	1,664	0	7	6	25	7	0			
Other off-balance sheet commitments	11,803	11,454	346	3	11	8	68	9	0			
Total other lending	54,700	52,195	2,498	7	6	5	33	6	0			
Total <sup>2</sup>	110,537	103,745	6,522	270	18	10	106	16	980			
Total on- and off-balance sheet <sup>3</sup>	504,016	479,140	22,418	2,458	21	5	112	10	2,242			

<sup>1</sup> Includes Loans and advances to customers and Loans to financial advisors, which are presented on the balance sheet line Other financial assets measured at amortized cost. 2 Excludes Forward starting reverse repurchase and securities borrowing agreements. 3 Includes on-balance sheet exposure, gross and off-balance sheet exposure (notional) and the related ECL coverage ratio (bps).

# Note 10 Derivative instruments

#### **Overview**

Over-the-counter (OTC) derivative contracts are usually traded under a standardized International Swaps and Derivatives Association (ISDA) master agreement or other recognized local industry-standard master agreements between UBS AG and its counterparties. Terms are negotiated directly with counterparties and the contracts have industry-standard settlement mechanisms prescribed by ISDA or similar industry-standard solutions. Other OTC derivatives are cleared through clearing houses, in particular interest rate swaps with LCH, where a settled-to-market method has been generally adopted, under which cash collateral exchanged on a daily basis is considered to legally settle the market value of the derivatives. Regulators in various jurisdictions have introduced rules requiring the payment and collection of initial and variation margins on certain OTC derivative contracts, which may have a bearing on price and other relevant terms.

Exchange-traded derivatives (ETD) are standardized in terms of their amounts and settlement dates, and are bought and sold on regulated exchanges. Exchanges offer the benefits of pricing transparency, standardized daily settlement of changes in value and, consequently, reduced credit risk.

Most of UBS AG's derivative transactions relate to sales and market-making activity. Sales activities include the structuring and marketing of derivative products to customers to enable them to take, transfer, modify or reduce current or expected risks. Market-making aims to directly support the facilitation and execution of client activity, and involves quoting bid and offer prices to other market participants with the aim of generating revenues based on spread and volume. UBS AG also uses various derivative instruments for hedging purposes.

- Refer to Notes 15 and 20 for more information about derivative instruments
- > Refer to Note 25 for more information about derivatives designated in hedge accounting relationships

#### **Risks of derivative instruments**

The derivative financial assets shown on the balance sheet can be an important component of UBS AG's credit exposure; however, the positive replacement values related to a respective counterparty are rarely an adequate reflection of UBS AG's credit exposure in its derivatives business with that counterparty. This is generally the case because, on the one hand, replacement values can increase over time (potential future exposure), while, on the other hand, exposure may be mitigated by entering into master netting agreements and bilateral collateral arrangements. Both the exposure measures used internally by UBS AG to control credit risk and the capital requirements imposed by regulators reflect these additional factors.

- > Refer to Note 21 for more information about derivative financial assets and liabilities after consideration of netting potential permitted under enforceable netting arrangements
- > Refer to the "Risk management and control" section of this report for more information about the risks arising from derivative instruments

#### **Derivative instruments**

		31	.12.23		31.12.22					
			Notional amounts				Notional amounts			
	Derivative	Dorivativa	related to derivative financial	Other	Derivative	Dorivativa	related to	Other		
	financial	financial	assets and	notional	financial	financial	derivative financial assets and	notional		
USD bn	assets	liabilities	liabilities <sup>2,3</sup>	amounts <sup>2,4</sup>	assets	liabilities	liabilities <sup>2,3</sup>	amounts <sup>2,4</sup>		
Interest rate	35.3	32.8	2,471.7	13,749.0	39.8	37.5	2,080.3	11,255.4		
of which: forwards (OTC)1	0.1	0.0	114.0	1,061.4	0.2	0.0	72.3	792.7		
of which: swaps (OTC)	23.0	18.2	<i>788.0</i>	11,884.1	25.2	19.8	607.1	9,728.6		
of which: options (OTC)	12.1	14.4	1,569.4		14.2	17.5	1,392.5			
of which: futures (ETD)				707.4		•••••		606.3		
of which: options (ETD)	0.0	0.0	0.2	96.1	0.0	0.0	8.3	127.7		
Credit derivatives	1.8	1.6	93.1		1.0	1.2	73.9			
of which: credit default swaps (OTC)	1.6	1.5	91.4		0.9	1.0	71.0			
of which: total return swaps (OTC)	0.0	0.1	0.7		0.1	0.2	1.2			
Foreign exchange	65.4	71.7	6,367.1	179.6	85.5	88.5	6,080.1	40.1		
of which: forwards (OTC)	15.6	18.9	1,881.7		26.5	28.6	1,763.8			
of which: swaps (OTC)	<i>43.5</i>	46.7	3,587.2	<i>178.7</i>	49.6	50.4	3,233.0	38.4		
of which: options (OTC)	6.2	6.1	892.6		9.3	9.2	1,073.2			
Equity / index	27.3	32.9	1,191.1	84.3	22.2	26.1	885.8	63.4		
of which: swaps (OTC)	6.0	8.9	263.4		5.3	6.6	217.4			
of which: options (OTC)	2.8	5.9	193.4		2.8	4.4	140.6			
of which: futures (ETD)				<i>77.3</i>		•••••		52.2		
of which: options (ETD)	10.3	10.0	<i>732.7</i>	6.9	9.0	8.1	526.7	11.2		
of which: client-cleared transactions (ETD)	8.1	8.0			5.1	7.0				
Commodities	1.6	1.3	128.6	15.5	1.4	1.4	132.3	17.6		
of which: swaps (OTC)	0.7	0.5	44.8		0.5	0.7	38.5			
of which: options (OTC)	0.6	0.3	38.4		0.4	0.3	29.1			
of which: futures (ETD)				13.0				16.4		
of which: forwards (ETD)	0.0	0.0	31.5		0.0	0.0	47.7			
of which: client-cleared transactions (ETD)	0.2	0.3			0.2	0.3				
Other <sup>5</sup>	0.3	0.4	86.0		0.2	0.1	49.7			
Total derivative instruments, based on IFRS netting <sup>6</sup>	131.7	140.7	10,337.6	14,028.4	150.1	154.9	9,302.1	11,376.5		

<sup>1</sup> Includes certain forward starting repurchase and reverse repurchase agreements that are classified as measured at fair value through profit or loss and are recognized within derivative instruments.

2 In cases where derivative financial instruments are presented on a net basis on the balance sheet, the respective notional amounts of the netted derivative financial instruments are still presented on a gross basis.

3 Notional amounts of client-cleared ETD and OTC transactions through central clearing counterparties are not disclosed, as they have a significantly different risk profile.

4 Other notional amounts relate to derivatives that are cleared through either a central counterparty or an exchange. The fair value of these derivatives is presented on the balance sheet net of the corresponding cash margin under Cash collateral receivables on derivative instruments, and was not material for any of the periods presented.

5 Includes mainly derivative loan commitments measured at FVTPL, as well as unsettled purchases and sales of non-derivative financial instruments for which the changes in the fair value between trade date and settlement date are recognized as derivative financial instruments.

6 Derivative financial assets and liabilities are presented net on the balance sheet if UBS AG has the unconditional and legally enforceable right to offset the recognized amounts, both in the normal course of business and in the event of default, bankruptcy or insolvency of the entity and all of the counterparties, and intends either to settle on a net basis or to realize the asset and settle the liability simultaneously. Refer to Note 21 for more information on netting arrangements.

#### Note 10 Derivative instruments (continued)

On a notional amount basis, approximately 51% of OTC interest rate contracts held as of 31 December 2023 (31 December 2022: 46%) mature within one year, 30% (31 December 2022: 32%) within one to five years and 19% (31 December 2022: 22%) after five years.

Notional amounts of interest rate contracts cleared through either a central counterparty or an exchange that are legally settled or economically net settled on a daily basis are presented under *Other notional amounts* in the table above and are categorized into maturity buckets on the basis of contractual maturities of the cleared underlying derivative contracts. Other notional amounts related to interest rate contracts increased by USD 2.5trn compared with 31 December 2022, mainly reflecting lower compression activity and higher business volumes driven by elevated interest rate volatility and inflation.

## Note 11 Property, equipment and software

	Owned	Leased				
	properties and	properties and		Projects in		
USD m	equipment <sup>1</sup>	equipment <sup>2</sup>	Software	progress	2023 <sup>3</sup>	20223
Historical cost						
Balance at the beginning of the year	10,352	4,275	9,220	1,046	24,893	24,542
Additions	106	96	81	1,110	1,393	1,859
Disposals / write-offs <sup>4</sup>	(299)	(63)	(1,087)	0	(1,449)	(414)
Reclassifications	550	0	1,390	(1,561)	378	(894)
Foreign currency translation	653	71	185	45	954	(200)
Balance at the end of the year	11,362	4,379	9,789	640	26,169	24,893
Accumulated depreciation						
Balance at the beginning of the year	6,697	1,638	5,242	0	13,577	12,830
Depreciation	457	446	1,070	0	1,974	1,819
Impairment <sup>5</sup>	15	0	223	0	238	2
Disposals / write-offs <sup>4</sup>	(296)	(62)	(1,087)	0	(1,445)	(410)
Reclassifications	207	0	(2)	0	206	(566)
Foreign currency translation	439	36	101	0	576	(99)
Balance at the end of the year	7,520	2,058	5,548	0	15,126	13,577
Net book value						
Net book value at the beginning of the year	3,655	2,637	3,978	1,046	11,316	11,712
Net book value at the end of the year	3,842	2,321	4,241	640 <sup>6</sup>	11,044	11,316

<sup>1</sup> Includes leasehold improvements and IT hardware. 2 Represents right-of-use assets recognized by UBS AG as lessee. UBS AG predominantly enters into lease contracts, or contracts that include lease components, in relation to real estate, including offices, retail branches and sales offices. The total cash outflow for leases during 2023 was USD 594m (2022: USD 589m). Interest expense on lease liabilities is included within Interest expense from financial instruments measured at amortized cost and Lease liabilities are included within Other financial liabilities measured at amortized cost. Refer to Notes 3 and 18a, respectively. There were no material gains or losses arising from sale-and-leaseback transactions in 2023 and in 2022. 3 The total reclassification amount for the respective periods represents net reclassifications from / to Properties and other non-current assets held for sale. 4 Includes write-offs of fully depreciated assets. 5 Impairment charges recorded in 2023 generally relate to assets that are no longer used, for which the recoverable amount based on a value-in-use approach was determined to be zero. 6 Consists of USD 415m related to software and USD 224m related to Owned properties and equipment.

## Note 12 Goodwill and intangible assets

#### Introduction

UBS AG performs an impairment test on its goodwill assets on an annual basis or when indicators of impairment exist.

UBS AG considers Asset Management, as reported in Note 2a, as a separate cash-generating unit (a CGU), as that is the level at which the performance of investment (and the related goodwill) is reviewed and assessed by management. Given that a significant amount of goodwill in Global Wealth Management relates to the acquisition of PaineWebber Group, Inc. in 2000, which mainly affected the Americas portion of the business, this goodwill remains separately monitored by the Americas, despite the formation of Global Wealth Management in 2018. Therefore, goodwill for Global Wealth Management is separately considered for impairment at the level of two CGUs: Americas; and Switzerland and International (consisting of EMEA, Asia Pacific and Global).

The impairment test is performed for each CGU to which goodwill is allocated by comparing the recoverable amount with the carrying amount of the respective CGU. UBS AG determines the recoverable amount of the respective CGUs based on their value in use. An impairment charge is recognized if the carrying amount exceeds the recoverable amount.

#### Note 12 Goodwill and intangible assets (continued)

As of 31 December 2023, total goodwill recognized on the balance sheet was USD 6.0bn, of which USD 3.7bn was carried by the Global Wealth Management Americas CGU, USD 1.2bn was carried by the Global Wealth Management Switzerland and International CGU, and USD 1.1bn was carried by Asset Management. Based on the impairment testing methodology described below, UBS AG concluded that the goodwill balances as of 31 December 2023 allocated to these CGUs were not impaired. For each of the CGUs, the recoverable amount substantially exceeded the carrying value as of 31 December 2023 and there was no indication of a significant risk of goodwill impairment based on the testing performed as of 31 December 2023.

## Methodology for goodwill impairment testing

The recoverable amounts are determined using a discounted cash flow model, which has been adapted to use inputs that consider features of the banking business and its regulatory environment. The recoverable amount of a CGU is the sum of the discounted earnings attributable to shareholders from the first three forecast years and the terminal value, adjusted for the effect of the capital assumed to be needed over the next three years and to support growth beyond that period. The terminal value, which covers all periods beyond the third year, is calculated on the basis of the forecast of the third-year profit, the discount rate and the long-term growth rate, as well as the implied perpetual capital growth. For the Global Wealth Management Americas CGU, the methodology is consistently applied, however, the forecast period was extended from three to five years (with a terminal value thereafter) in 2023 to provide for the CGU's specific planning assumptions, namely the ongoing investments in the core banking infrastructure in the US to enhance the product capabilities and offerings in this market in the mid term. The extension of the forecast period from three to five years did not trigger, defer or avoid an impairment of goodwill as of 31 December 2023.

The carrying amount for each CGU is determined by reference to UBS's equity attribution framework. Within this framework, UBS attributes equity to the businesses on the basis of their risk-weighted assets and leverage ratio denominator (both metrics include resource allocations from Group Items to the business divisions), their goodwill and their intangible assets, as well as attributed equity related to certain common equity tier 1 deduction items. The framework is primarily used for the purpose of measuring the performance of the businesses and includes certain management assumptions. Attributed equity is equal to the capital a CGU requires to conduct its business and is currently considered a reasonable approximation of the carrying amount of the CGUs. The attributed equity methodology is also applied in the business planning process, the inputs from which are used in calculating the recoverable amounts of the respective CGU.

## **Assumptions**

Valuation parameters used within UBS AG's impairment test model are linked to external market information, where applicable. The model used to determine the recoverable amount is most sensitive to changes in the forecast earnings available to shareholders in years one to three, to changes in the discount rates and to changes in the long-term growth rate. The applied long-term growth rate is based on long-term economic growth rates for different regions worldwide. Earnings available to shareholders are estimated on the basis of forecast results, which are part of the business plan approved by the Board of Directors.

The discount rates are determined by applying a capital asset pricing model-based approach, as well as considering quantitative and qualitative inputs from both internal and external analysts and the view of management. They also take into account regional differences in risk-free rates at the level of the individual CGUs. In line with discount rates, long-term growth rates are determined at the regional level based on nominal GDP growth rate forecasts.

Key assumptions used to determine the recoverable amounts of each CGU are tested for sensitivity by applying a reasonably possible change to those assumptions. Forecast earnings available to shareholders were changed by 20%, the discount rates were changed by 1.5 percentage points, and the long-term growth rates were changed by 0.75 percentage points. Under all scenarios, reasonably possible changes in key assumptions did not result in an impairment of goodwill or intangible assets reported by Global Wealth Management Americas, Global Wealth Management Switzerland and International, and Asset Management.

If the estimated earnings and other assumptions in future periods deviate from the current outlook, the value of goodwill attributable to Global Wealth Management Americas, Global Wealth Management Switzerland and International, and Asset Management may become impaired in the future, giving rise to losses in the income statement. Recognition of any impairment of goodwill would reduce IFRS Accounting Standards equity and net profit. It would not affect cash flows and, as goodwill is required to be deducted from capital under the Basel III capital framework, no effect would be expected on UBS AG's capital ratios.

## Discount and growth rates

	Discount rates		Growth rates	
In %	31.12.23	31.12.22	31.12.23	31.12.22
Global Wealth Management Americas	9.5	10.5	3.8	3.8
Global Wealth Management Switzerland and International	9.5	9.4	3.4	3.6
Asset Management	9.0	9.5	3.3	3.4

## Note 12 Goodwill and intangible assets (continued)

USD m	Goodwill	Intangible assets <sup>1</sup>	2023	2022
Historical cost				
Balance at the beginning of the year	6,043	1,598	7,641	7,739
Additions	0	6	6	0
Disposals <sup>2</sup>	(10)	(30)	(40)	(22)
Foreign currency translation	10	28	38	(76)
Balance at the end of the year	6,043	1,602	7,645	7,641
Accumulated amortization and impairment				
Balance at the beginning of the year	0	1,374	1,374	1,360
Amortization		26	26	26
Impairment / (reversal of impairment)	0	0	0	(1)
Disposals <sup>2</sup>	0	(30)	(30)	0
Foreign currency translation	0	9	9	(11)
Balance at the end of the year	0	1,379	1,379	1,374
Net book value at the end of the year	6,043	223	6,265	6,267
of which: Global Wealth Management Americas	3,712	36	3,748	3,740
of which: Global Wealth Management Switzerland and International	1,182	<i>52</i>	<i>1,233</i>	1,225
of which: Asset Management	1,149	0	1,149	1,167
of which: Investment Bank	0	135	<i>135</i>	135

<sup>1</sup> Intangible assets mainly include customer relationships, contractual rights and the fully amortized branch network intangible asset recognized in connection with the acquisition of PaineWebber Group, Inc. in 2000. 2 Reflects the derecognition of goodwill allocated to business and intangible assets held by entities that have been disposed of. Refer to Note 29 for more information.

The table below presents estimated aggregated amortization expenses for intangible assets.

USD m	Intangible assets
Estimated aggregated amortization expenses for:	
2024	27
2025	26
2026	26
2027	25
2028	19
Thereafter	98
Not amortized due to indefinite useful life	2
Total	223

# Note 13 Other assets

## a) Other financial assets measured at amortized cost

USD m	31.12.23	31.12.22
Debt securities	43,245	44,594
Loans to financial advisors	2,615	2,611
Fee- and commission-related receivables	1,883	1,803
Finance lease receivables	1,427	1,314
Settlement and clearing accounts	311	1,174
Accrued interest income	2,004	1,276
Other	2,849 <sup>1</sup>	618
Total other financial assets measured at amortized cost	54,334	53,389

<sup>1</sup> Predominantly includes cash collateral provided to exchanges and clearing houses to secure securities trading activity through those counterparties.

Effective from 1 April 2022, UBS has reclassified a portfolio of financial assets from Financial assets measured at fair value through other comprehensive income with a fair value of USD 6.9bn (the Portfolio) to Other financial assets measured at amortized cost.

#### Note 13 Other assets (continued)

The Portfolio's cumulative fair value losses of USD 449m pre-tax and USD 333m post-tax, previously recognized in *Other comprehensive income*, have been removed from equity and adjusted against the value of the assets on the reclassification date, so that the Portfolio is measured as if the assets had always been classified at amortized cost, with a value of USD 7.4bn as on 1 April 2022. The reclassification had no effect on the income statement. The reclassified Portfolio is made up of high-quality liquid assets, primarily US government treasuries and US government agency mortgage-backed securities, held and separately managed by UBS Bank USA. The accounting reclassification has arisen as a direct result of the transformation of UBS's Global Wealth Management Americas business, which has significantly impacted UBS Bank USA. This includes initiatives approved by the Group Executive Board to significantly grow and extend the business, as disclosed on 1 February 2022 during UBS's fourth quarter 2021 earnings presentation. Over the two years preceding the reclassification date, UBS Bank USA's deposit base grew by more than 100% generating substantial cash balances, with a number of new products being launched, including new deposit types that are longer in duration, additional lending and a broader range of customer segments targeted. Following the commencement of these activities and the announcement made in the first quarter of 2022, the Portfolio is no longer held in a business model to collect the contractual cash flows and sell the assets but is instead solely held to collect the contractual cash flows until the assets mature, requiring a reclassification of the Portfolio in line with IFRS 9 with effect from 1 April 2022.

#### b) Other non-financial assets

USD m	31.12.23	31.12.22
Precious metals and other physical commodities	4,426	4,471
Deposits and collateral provided in connection with litigation, regulatory and similar matters <sup>1</sup>	1,379	2,205
Prepaid expenses	1,062	709
VAT, withholding tax and other tax receivables	746	1,405
Properties and other non-current assets held for sale	105	279
Other	660	583
Total other non-financial assets	8,377	9,652

<sup>1</sup> Refer to Note 17 for more information.

#### Note 14 Customer deposits, and funding from UBS Group AG

## a) Customer deposits

USD m	31.12.23	31.12.22
Demand deposits	146,163	182,307
Retail savings / deposits	152,683	149,310
Sweep deposits	41,045	69,223
Time deposits <sup>1</sup>	215,782	126,331
Total customer deposits	555,673	527,171

<sup>1</sup> Includes customer deposits in UBS AG Jersey Branch placed by UBS Switzerland AG on behalf of its clients.

Customer deposits increased mainly due to net inflows into time deposit products, and positive foreign currency effects, partly offset by continued shifts into money market funds and US-government securities. In addition, customers continued to shift funds from Demand and Sweep deposits into time deposits.

#### b) Funding from UBS Group AG measured at amortized cost

USD m	31.12.23	31 12 22
Debt contributing to total loss-absorbing capacity (TLAC)	51,102	42,073
Debt eligible as high-trigger loss-absorbing additional tier 1 capital instruments	11,286	10,654
Debt eligible as low-trigger loss-absorbing additional tier 1 capital instruments	1,212	1,187
Other <sup>1</sup>	3,682	2,232
Total funding from UBS Group AG measured at amortized cost <sup>2,3</sup>	67,282	56,147

<sup>1</sup> Includes debt not eligible as TLAC having a residual maturity of less than one year and high-trigger loss-absorbing additional tier 1 capital instruments that ceased to be eligible when UBS Group AG issued notice of redemption. 2 The Total funding from UBS Group AG measured at amortized cost consists of subordinated debt of UBS AG and its subsidiaries toward UBS Group AG. Subordinated debt consists of unsecured debt obligations that are contractually subordinated in right of payment to all other present and future non-subordinated obligations of the respective issuing entity. All instruments contributing to TLAC are subordinated since 1.1.2020. 3 UBS AG has also recognized funding from UBS Group AG that is designated at fair value. Refer to Note 18b for more information.

UBS AG uses interest rate and foreign exchange derivatives to manage the risks inherent in certain debt instruments held at amortized cost. In some cases, UBS AG applies hedge accounting for interest rate risk as discussed in item 2j in Note 1a and Note 25. As a result of applying hedge accounting, the life-to-date adjustment to the carrying amount of *Funding from UBS Group AG measured at amortized cost* was a decrease of USD 3.2bn as of 31 December 2023 and a decrease of USD 5.1bn as of 31 December 2022, reflecting changes in fair value due to interest rate movements.

Of the *Total funding from UBS Group AG measured at amortized cost* outstanding as of 31 December 2023, USD 65.6bn pays a fixed interest rate and USD 1.7bn pays a floating rate of interest.

## > Refer to Note 23 for maturity information

#### Note 15 Debt issued designated at fair value

Issued debt instruments		
Equity-linked <sup>1</sup>	46,269	41,901
Rates-linked	16,880	16,276
Credit-linked	4,506	2,170
Fixed-rate	14,295	6,538
Commodity-linked	3,704	4,294
Other	687	663
Total debt issued designated at fair value	86,341	71,842
of which: issued by UBS AG with original maturity greater than one year <sup>2</sup>	<i>73,544</i>	57,750

<sup>1</sup> Includes investment fund unit-linked instruments issued. 2 Based on original contractual maturity without considering any early redemption features. As of 31 December 2023, 100% of the balance was unsecured (31 December 2022: 100%).

#### Note 16 Debt issued measured at amortized cost

USD m	31.12.23	31.12.22
Short-term debt <sup>1</sup>	37,285	29,676
Senior unsecured debt	18,450	17,892
of which: issued by UBS AG with original maturity greater than one year	18,446	17,892
Covered bonds	1,006	0
Subordinated debt	3,008	2,968
of which: eligible as low-trigger loss-absorbing tier 2 capital instruments	0	2,422
of which: eligible as non-Basel III-compliant tier 2 capital instruments	<i>538</i>	<i>536</i>
Debt issued through the Swiss central mortgage institutions	10,035	8,962
Long-term debt <sup>2</sup>	32,499	29,823
Total debt issued measured at amortized cost <sup>3,4</sup>	69,784	59,499

<sup>1</sup> Debt with an original contractual maturity of less than one year, includes mainly certificates of deposit and commercial paper. 2 Debt with an original contractual maturity greater than or equal to one year. The classification of debt issued into short-term and long-term does not consider any early redemption features. 3 Net of bifurcated embedded derivatives, the fair value of which was not material for the periods presented. 4 Except for Covered bonds and Debt issued through the Swiss central mortgage institutions, 100% of the balance was unsecured as of 31 December 2023.

UBS AG uses interest rate and foreign exchange derivatives to manage the risks inherent in certain debt instruments held at amortized cost. In some cases, UBS AG applies hedge accounting for interest rate risk as discussed in item 2j in Note 1a and Note 25. As a result of applying hedge accounting, the life-to-date adjustment to the carrying amount of *Debt issued measured at amortized cost* was a decrease of USD 0.4bn as of 31 December 2023 and a decrease of USD 1.0bn as of 31 December 2022, reflecting changes in fair value due to interest rate movements.

Subordinated debt consists of unsecured debt obligations that are contractually subordinated in right of payment to all other present and future non-subordinated obligations of the respective issuing entity. All of the subordinated debt instruments outstanding as of 31 December 2023 pay a fixed rate of interest.

## > Refer to Note 23 for maturity information

# Note 17 Provisions and contingent liabilities

#### a) Provisions

The table below presents an overview of total provisions.

USD m	31.12.23	31.12.22
Provisions other than provisions for expected credit losses	2,336	2,982
Provisions for expected credit losses <sup>1</sup>	188	201
Total provisions	2,524	3,183

<sup>1</sup> Refer to Note 9 for more information about ECL provisions recognized for off-balance sheet financial instruments and credit lines.

The following table presents additional information for provisions other than provisions for expected credit losses.

Litigation,				
regulatory and				
similar matters <sup>1</sup>	Restructuring <sup>2</sup>	Real estate <sup>3</sup>	Other <sup>4</sup>	Total 2023
2,586	98	122	175	2,982
866	234	8	41	1,148
(47)	(13)	0	(17)	(77)
(1,642)	(114)	(12)	(27)	(1,795)
48	4	18	10	79
1,810	209	135	181	2,336
	regulatory and similar matters¹ 2,586 866 (47) (1,642) 48	regulatory and similar matters¹ Restructuring² 2,586 98 866 234 (47) (13) (1,642) (114) 48 4	regulatory and similar matters¹         Restructuring²         Real estate³           2,586         98         122           866         234         8           (47)         (13)         0           (1,642)         (114)         (12)           48         4         18	regulatory and similar matters¹         Restructuring²         Real estate³         Other⁴           2,586         98         122         175           866         234         8         41           (47)         (13)         0         (17)           (1,642)         (114)         (12)         (27)           48         4         18         10

<sup>1</sup> Consists of provisions for losses resulting from legal, liability and compliance risks. 2 Consists of USD 146m of provisions for onerous contracts related to real estate as of 31 December 2022; USD 28m) and USD 64m of personnel-related restructuring provisions as of 31 December 2023 (31 December 2022; USD 70m). 3 Mainly includes provisions for reinstatement costs with respect to leased properties. 4 Mainly includes provisions related to employee benefits and operational risks.

Restructuring provisions relate to onerous contracts and personnel-related provisions. Onerous contracts for property are recognized when UBS AG is committed to pay for non-lease components, such as utilities, service charges, taxes and maintenance, when a property is vacated or not fully recovered from sub-tenants. Personnel-related restructuring provisions are generally used within a short period of time. The level of personnel-related provisions can change when natural staff attrition reduces the number of people affected by a restructuring event, and therefore results in lower estimated costs.

Information about provisions and contingent liabilities in respect of litigation, regulatory and similar matters, as a class, is included in Note 17b. There are no material contingent liabilities associated with the other classes of provisions.

#### b) Litigation, regulatory and similar matters

UBS operates in a legal and regulatory environment that exposes it to significant litigation and similar risks arising from disputes and regulatory proceedings. As a result, UBS is involved in various disputes and legal proceedings, including litigation, arbitration, and regulatory and criminal investigations. "UBS," "we" and "our," for purposes of this Note, refer to UBS AG and / or one or more of its subsidiaries, as applicable.

Such matters are subject to many uncertainties, and the outcome and the timing of resolution are often difficult to predict, particularly in the earlier stages of a case. There are also situations where UBS may enter into a settlement agreement. This may occur in order to avoid the expense, management distraction or reputational implications of continuing to contest liability, even for those matters for which UBS believes it should be exonerated. The uncertainties inherent in all such matters affect the amount and timing of any potential outflows for both matters with respect to which provisions have been established and other contingent liabilities. UBS makes provisions for such matters brought against it when, in the opinion of management after seeking legal advice, it is more likely than not that UBS has a present legal or constructive obligation as a result of past events, it is probable that an outflow of resources will be required, and the amount can be reliably estimated. Where these factors are otherwise satisfied, a provision may be established for claims that have not yet been asserted against UBS, but are nevertheless expected to be, based on UBS's experience with similar asserted claims. If any of those conditions is not met, such matters result in contingent liabilities. If the amount of an obligation cannot be reliably estimated, a liability exists that is not recognized even if an outflow of resources is probable. Accordingly, no provision is established even if the potential outflow of resources with respect to such matters could be significant. Developments relating to a matter that occur after the relevant reporting period, but prior to the issuance of financial statements, which affect management's assessment of the provision for such matter (because, for example, the developments provide evidence of conditions that existed at the end of the reporting period), are adjusting events after the reporting period under IAS 10 and must be recognized in the financial statements for the reporting period.

Specific litigation, regulatory and other matters are described below, including all such matters that management considers to be material and others that management believes to be of significance to UBS due to potential financial, reputational and other effects. The amount of damages claimed, the size of a transaction or other information is provided where available and appropriate in order to assist users in considering the magnitude of potential exposures.

In the case of certain matters below, we state that we have established a provision, and for the other matters, we make no such statement. When we make this statement and we expect disclosure of the amount of a provision to prejudice seriously our position with other parties in the matter because it would reveal what UBS believes to be the probable and reliably estimable outflow, we do not disclose that amount. In some cases we are subject to confidentiality obligations that preclude such disclosure. With respect to the matters for which we do not state whether we have established a provision, either: (a) we have not established a provision; or (b) we have established a provision but expect disclosure of that fact to prejudice seriously our position with other parties in the matter because it would reveal the fact that UBS believes an outflow of resources to be probable and reliably estimable.

With respect to certain litigation, regulatory and similar matters for which we have established provisions, we are able to estimate the expected timing of outflows. However, the aggregate amount of the expected outflows for those matters for which we are able to estimate expected timing is immaterial relative to our current and expected levels of liquidity over the relevant time periods.

The aggregate amount provisioned for litigation, regulatory and similar matters as a class is disclosed in the "Provisions" table in Note 17a above. It is not practicable to provide an aggregate estimate of liability for our litigation, regulatory and similar matters as a class of contingent liabilities. Doing so would require UBS to provide speculative legal assessments as to claims and proceedings that involve unique fact patterns or novel legal theories, that have not yet been initiated or are at early stages of adjudication, or as to which alleged damages have not been quantified by the claimants. Although UBS therefore cannot provide a numerical estimate of the future losses that could arise from litigation, regulatory and similar matters, UBS believes that the aggregate amount of possible future losses from this class that are more than remote substantially exceeds the level of current provisions.

Litigation, regulatory and similar matters may also result in non-monetary penalties and consequences. A guilty plea to, or conviction of, a crime could have material consequences for UBS. Resolution of regulatory proceedings may require UBS to obtain waivers of regulatory disqualifications to maintain certain operations, may entitle regulatory authorities to limit, suspend or terminate licenses and regulatory authorizations, and may permit financial market utilities to limit, suspend or terminate UBS's participation in such utilities. Failure to obtain such waivers, or any limitation, suspension or termination of licenses, authorizations or participations, could have material consequences for UBS.

The risk of loss associated with litigation, regulatory and similar matters is a component of operational risk for purposes of determining capital requirements. Information concerning our capital requirements and the calculation of operational risk for this purpose is included in the "Capital, liquidity and funding, and balance sheet" section of this report.

## Note 17 Provisions and contingent liabilities (continued)

#### Provisions for litigation, regulatory and similar matters by business division and in Group Items<sup>1</sup>

	Global Wealth Manage-	Personal & Corporate	Asset Manage-	Investment	Non-core and	Group	
USD m	ment	Banking	ment	Bank	Legacy <sup>2</sup>	Items <sup>2</sup>	Total 2023
Balance at the beginning of the year	1,182	159	8	308	771	158	2,586
Increase in provisions recognized in the income statement	113	0	5	81	665	2	866
Release of provisions recognized in the income statement	(7)	(9)	0	(2)	0	(29)	(47)
Provisions used in conformity with designated purpose	(98)	0	(1)	(106)	(1,435)	(1)	(1,642)
Foreign currency translation and other movements	31	6	0	5	4	1	48
Balance at the end of the year	1,220	156	12	286	4	132	1,810

<sup>1</sup> Provisions, if any, for the matters described in item 2 of this Note are recorded in Global Wealth Management, and provisions, if any, for the matters described in items 1 and 4 of this Note are allocated between Global Wealth Management and Personal & Corporate Banking. Provisions, if any, for the matters described in item 3 are allocated between the Investment Bank and Group Items. 2 Starting with the third quarter of 2023, Non-core and Legacy represents a separate reportable segment and Group Functions has been renamed Group Items. Prior periods have been revised to reflect these changes.

#### 1. Inquiries regarding cross-border wealth management businesses

Tax and regulatory authorities in a number of countries have made inquiries, served requests for information or examined employees located in their respective jurisdictions relating to the cross-border wealth management services provided by UBS and other financial institutions.

Since 2013, UBS (France) S.A., UBS AG and certain former employees have been under investigation in France in relation to UBS's cross-border business with French clients. In connection with this investigation, the investigating judges ordered UBS AG to provide bail ("caution") of EUR 1.1bn.

In 2019, the court of first instance returned a verdict finding UBS AG guilty of unlawful solicitation of clients on French territory and aggravated laundering of the proceeds of tax fraud, and UBS (France) S.A. guilty of aiding and abetting unlawful solicitation and of laundering the proceeds of tax fraud. The court imposed fines aggregating EUR 3.7bn on UBS AG and UBS (France) S.A. and awarded EUR 800m of civil damages to the French state. A trial in the Paris Court of Appeal took place in March 2021. In December 2021, the Court of Appeal found UBS AG guilty of unlawful solicitation and aggravated laundering of the proceeds of tax fraud. The court ordered a fine of EUR 3.75m, the confiscation of EUR 1bn, and awarded civil damages to the French state of EUR 800m. UBS appealed the decision to the French Supreme Court. The Supreme Court rendered its judgment on 15 November 2023. It upheld the Court of Appeal's decision regarding unlawful solicitation and aggravated laundering of the proceeds of tax fraud, but overturned the confiscation of EUR 1bn, the penalty of EUR 3.75m and the EUR 800m of civil damages awarded to the French state has reimbursed the EUR 800m of civil damages to UBS AG.

Our balance sheet at 31 December 2023 reflected a provision in an amount that UBS believes to be appropriate under the applicable accounting standard. As in the case of other matters for which we have established provisions, the future outflow of resources in respect of such matters cannot be determined with certainty based on currently available information and accordingly may ultimately prove to be substantially greater (or may be less) than the provision that we have recognized.

#### 2. Madoff

In relation to the Bernard L. Madoff Investment Securities LLC (BMIS) investment fraud, UBS AG, UBS (Luxembourg) S.A. (now UBS Europe SE, Luxembourg branch) and certain other UBS subsidiaries have been subject to inquiries by a number of regulators, including the Swiss Financial Market Supervisory Authority (FINMA) and the Luxembourg Commission de Surveillance du Secteur Financier. Those inquiries concerned two third-party funds established under Luxembourg law, substantially all assets of which were with BMIS, as well as certain funds established in offshore jurisdictions with either direct or indirect exposure to BMIS. These funds faced severe losses, and the Luxembourg funds are in liquidation. The documentation establishing both funds identifies UBS entities in various roles, including custodian, administrator, manager, distributor and promoter, and indicates that UBS employees serve as board members.

In 2009 and 2010, the liquidators of the two Luxembourg funds filed claims against UBS entities, non-UBS entities and certain individuals, including current and former UBS employees, seeking amounts totaling approximately EUR 2.1bn, which includes amounts that the funds may be held liable to pay the trustee for the liquidation of BMIS (BMIS Trustee).

A large number of alleged beneficiaries have filed claims against UBS entities (and non-UBS entities) for purported losses relating to the Madoff fraud. The majority of these cases have been filed in Luxembourg, where decisions that the claims in eight test cases were inadmissible have been affirmed by the Luxembourg Court of Appeal, and the Luxembourg Supreme Court has dismissed a further appeal in one of the test cases.

## Note 17 Provisions and contingent liabilities (continued)

In the US, the BMIS Trustee filed claims against UBS entities, among others, in relation to the two Luxembourg funds and one of the offshore funds. The total amount claimed against all defendants in these actions was not less than USD 2bn. In 2014, the US Supreme Court rejected the BMIS Trustee's motion for leave to appeal decisions dismissing all claims except those for the recovery of approximately USD 125m of payments alleged to be fraudulent conveyances and preference payments. In 2016, the bankruptcy court dismissed these claims against the UBS entities. In 2019, the Court of Appeals reversed the dismissal of the BMIS Trustee's remaining claims, and the US Supreme Court subsequently denied a petition seeking review of the Court of Appeals' decision. The case has been remanded to the Bankruptcy Court for further proceedings.

# 3. Foreign exchange, LIBOR and benchmark rates, and other trading practices

Foreign exchange-related regulatory matters: Beginning in 2013, numerous authorities commenced investigations concerning possible manipulation of foreign exchange markets and precious metals prices. As a result of these investigations, UBS entered into resolutions with Swiss, US and United Kingdom regulators and the European Commission. UBS was granted conditional immunity by the Antitrust Division of the DOJ and by authorities in other jurisdictions in connection with potential competition law violations relating to foreign exchange and precious metals businesses.

Foreign exchange-related civil litigation: Putative class actions have been filed since 2013 in US federal courts and in other jurisdictions against UBS and other banks on behalf of putative classes of persons who engaged in foreign currency transactions with any of the defendant banks. UBS has resolved US federal court class actions relating to foreign currency transactions with the defendant banks and persons who transacted in foreign exchange futures contracts and options on such futures under a settlement agreement that provides for UBS to pay an aggregate of USD 141m and provide cooperation to the settlement classes. Certain class members have excluded themselves from that settlement and have filed individual actions in US and English courts against UBS and other banks, alleging violations of US and European competition laws and unjust enrichment. UBS and the other banks have resolved those individual matters.

In 2015, a putative class action was filed in federal court against UBS and numerous other banks on behalf of persons and businesses in the US who directly purchased foreign currency from the defendants and alleged co-conspirators for their own end use. In 2022, the court denied plaintiffs' motion for class certification. In March 2023, the court granted defendants' summary judgment motion, dismissing the case. Plaintiffs have appealed.

LIBOR and other benchmark-related regulatory matters: Numerous government agencies conducted investigations regarding potential improper attempts by UBS, among others, to manipulate LIBOR and other benchmark rates at certain times. UBS reached settlements or otherwise concluded investigations relating to benchmark interest rates with the investigating authorities. UBS was granted conditional leniency or conditional immunity from authorities in certain jurisdictions, including the Antitrust Division of the DOJ and the Swiss Competition Commission (WEKO), in connection with potential antitrust or competition law violations related to certain rates. However, UBS has not reached a final settlement with WEKO, as the Secretariat of WEKO has asserted that UBS does not qualify for full immunity.

LIBOR and other benchmark-related civil litigation: A number of putative class actions and other actions are pending in the federal courts in New York against UBS and numerous other banks on behalf of parties who transacted in certain interest rate benchmark-based derivatives. Also pending in the US and in other jurisdictions are a number of other actions asserting losses related to various products whose interest rates were linked to LIBOR and other benchmarks, including adjustable rate mortgages, preferred and debt securities, bonds pledged as collateral, loans, depository accounts, investments and other interest-bearing instruments. The complaints allege manipulation, through various means, of certain benchmark interest rates, including USD LIBOR, Euroyen TIBOR, Yen LIBOR, EURIBOR, CHF LIBOR, GBP LIBOR and seek unspecified compensatory and other damages under varying legal theories.

USD LIBOR class and individual actions in the US: In 2013 and 2015, the district court in the USD LIBOR actions dismissed, in whole or in part, certain plaintiffs' antitrust claims, federal racketeering claims, Commodity Exchange Act claims, and state common law claims, and again dismissed the antitrust claims in 2016 following an appeal. In 2021, the Second Circuit affirmed the district court's dismissal in part and reversed in part and remanded to the district court for further proceedings. The Second Circuit, among other things, held that there was personal jurisdiction over UBS and other foreign defendants. Separately, in 2018, the Second Circuit reversed in part the district court's 2015 decision dismissing certain individual plaintiffs' claims and certain of these actions are now proceeding. In 2018, the district court denied plaintiffs' motions for class certification in the USD class actions for claims pending against UBS, and plaintiffs sought permission to appeal that ruling to the Second Circuit. The Second Circuit denied the petition to appeal. In 2020, an individual action was filed in the Northern District of California against UBS and numerous other banks alleging that the defendants conspired to fix the interest rate used as the basis for loans to consumers by jointly setting the USD LIBOR rate and monopolized the market for LIBOR-based consumer loans and credit cards. In September 2022, the court granted defendants' motion to dismiss the complaint in its entirety, while allowing plaintiffs the opportunity to file an amended complaint. Plaintiffs filed an amended complaint in October 2022, and defendants moved to dismiss the amended complaint. In October 2023, the court dismissed the amended complaint with prejudice. In January 2024, plaintiffs appealed the dismissal to the Ninth Circuit Court of Appeals. Defendants filed their response to the appeal in March 2024.

## Note 17 Provisions and contingent liabilities (continued)

Other benchmark class actions in the US:

Yen LIBOR / Euroyen TIBOR – In 2017, the court dismissed one Yen LIBOR / Euroyen TIBOR action in its entirety on standing grounds. In 2020, the appeals court reversed the dismissal and, subsequently, plaintiffs in that action filed an amended complaint focused on Yen LIBOR. In 2022, the court granted UBS's motion for reconsideration and dismissed the case against UBS. The dismissal of the case against UBS could be appealed following the disposition of the case against the remaining defendant in the district court.

CHF LIBOR – In 2017, the court dismissed the CHF LIBOR action on standing grounds and failure to state a claim. Plaintiffs filed an amended complaint, and the court granted a renewed motion to dismiss in 2019. Plaintiffs appealed. In 2021, the Second Circuit granted the parties' joint motion to vacate the dismissal and remand the case for further proceedings. Plaintiffs filed a third amended complaint in November 2022 and defendants moved to dismiss the amended complaint in January 2023.

*EURIBOR* – In 2017, the court in the EURIBOR lawsuit dismissed the case as to UBS and certain other foreign defendants for lack of personal jurisdiction. Plaintiffs have appealed.

GBP LIBOR – The court dismissed the GBP LIBOR action in 2019. Plaintiffs have appealed.

Government bonds: Putative class actions have been filed since 2015 in US federal courts against UBS and other banks on behalf of persons who participated in markets for US Treasury securities since 2007. A consolidated complaint was filed in 2017 in the US District Court for the Southern District of New York alleging that the banks colluded with respect to, and manipulated prices of, US Treasury securities sold at auction and in the secondary market and asserting claims under the antitrust laws and for unjust enrichment. Defendants' motions to dismiss the consolidated complaint were granted in 2021. Plaintiffs filed an amended complaint, which defendants moved to dismiss later in 2021. In March 2022, the court granted defendants' motion to dismiss that complaint, and in February 2024, the Second Circuit affirmed the district court's dismissal. Similar class actions have been filed concerning European government bonds and other government bonds.

In 2021, the European Commission issued a decision finding that UBS and six other banks breached European Union antitrust rules in 2007–2011 relating to European government bonds. The European Commission fined UBS EUR 172m. UBS is appealing the amount of the fine.

With respect to additional matters and jurisdictions not encompassed by the settlements and orders referred to above, our balance sheet at 31 December 2023 reflected a provision in an amount that UBS believes to be appropriate under the applicable accounting standard. As in the case of other matters for which we have established provisions, the future outflow of resources in respect of such matters cannot be determined with certainty based on currently available information and accordingly may ultimately prove to be substantially greater (or may be less) than the provision that we have recognized.

#### 4. Swiss retrocessions

The Federal Supreme Court of Switzerland ruled in 2012, in a test case against UBS, that distribution fees paid to a firm for distributing third-party and intra-group investment funds and structured products must be disclosed and surrendered to clients who have entered into a discretionary mandate agreement with the firm, absent a valid waiver. FINMA issued a supervisory note to all Swiss banks in response to the Supreme Court decision. UBS has met the FINMA requirements and has notified all potentially affected clients.

The Supreme Court decision has resulted, and continues to result, in a number of client requests for UBS to disclose and potentially surrender retrocessions. Client requests are assessed on a case-by-case basis. Considerations taken into account when assessing these cases include, among other things, the existence of a discretionary mandate and whether or not the client documentation contained a valid waiver with respect to distribution fees.

Our balance sheet at 31 December 2023 reflected a provision with respect to matters described in this item 4 in an amount that UBS believes to be appropriate under the applicable accounting standard. The ultimate exposure will depend on client requests and the resolution thereof, factors that are difficult to predict and assess. Hence, as in the case of other matters for which we have established provisions, the future outflow of resources in respect of such matters cannot be determined with certainty based on currently available information and accordingly may ultimately prove to be substantially greater (or may be less) than the provision that we have recognized.

#### Note 18 Other liabilities

# a) Other financial liabilities measured at amortized cost

USD m	31.12.23	31.12.22
Other accrued expenses	1,613	1,564
Accrued interest expenses	4,186	2,008
Settlement and clearing accounts	1,314	1,060
Lease liabilities	2,904	3,211
Other	2,695	2,549
Total other financial liabilities measured at amortized cost	12,713	10,391

# b) Other financial liabilities designated at fair value

USD m	31.12.23	31.12.22
Financial liabilities related to unit-linked investment contracts	15,922	13,221
Securities financing transactions	6,927	15,333
Over-the-counter debt instruments and other	1,566	1,684
Funding from UBS Group AG <sup>1</sup>	2,950	1,796
Total other financial liabilities designated at fair value	27,366	32,033

<sup>1</sup> The Funding from UBS Group AG consists of subordinated debt of UBS AG and its subsidiaries toward UBS Group AG. Subordinated debt consists of unsecured debt obligations that are contractually subordinated in right of payment to all other present and future non-subordinated obligations of the respective issuing entity.

# c) Other non-financial liabilities

USD m	31.12.23	31.12.22
Compensation-related liabilities	4,526	4,424
of which: financial advisor compensation plans	1,472	1,463
of which: other compensation plans	<i>1,955</i>	2,023
of which: net defined benefit liability	<i>487</i>	449
of which: other compensation-related liabilities <sup>1</sup>	611	490
Current tax liabilities	932	1,044
Deferred tax liabilities	162	233
VAT, withholding tax and other tax payables	712	472
Deferred income	276	233
Other	74	84
Total other non-financial liabilities	6,682	6,489

<sup>1</sup> Includes liabilities for payroll taxes and untaken vacation.

# Additional information

## Note 19 Expected credit loss measurement

#### a) Expected credit losses in the period

Total net credit loss expenses were USD 143m in 2023, reflecting net credit loss expenses of USD 23m related to stage 1 and 2 positions and net credit loss expenses of USD 120m related to credit-impaired (stage 3) positions.

> Refer to Note 19b for more information regarding changes to expected credit loss models, scenarios, scenario weights and the post-model adjustments and to Note 19c for more information regarding the development of ECL allowances and provisions

Stage 3 net expenses of USD 120m were recognized across a number of defaulted positions, with net expenses of USD 56m in the Investment Bank, USD 37m in Personal & Corporate Banking and USD 27m in Global Wealth Management.

Credit loss expense / (release)

create 1035 expense / (release)	Performing positions	Credit-impaired positions	
USD m	Stages 1 and 2	Stage 3	Total
For the year ended 31.12.23	-	-	
Global Wealth Management	(2)	27	25
Personal & Corporate Banking	13	37	50
Asset Management	0	(1)	(1)
Investment Bank	11	56	67
Non-core and Legacy	0	1	1
Group Items <sup>1</sup>	1	0	1
Total	23	120	143
For the year ended 31.12.22			
Global Wealth Management	(5)	5	0
Personal & Corporate Banking	27	12	39
Asset Management	0	0	0
Investment Bank	6	(18)	(12)
Non-core and Legacy	0	2	2
Group Items <sup>1</sup>	0	0	0
Total	29	0	29
For the year ended 31.12.21			
Global Wealth Management	(28)	(1)	(29)
Personal & Corporate Banking	(62)	(24)	(86)
Asset Management	0	1	1
Investment Bank	(34)	0	(34)
Non-core and Legacy	0	0	0
Group Items <sup>1</sup>	0	0	0
Total	(123)	(25)	(148)

<sup>1</sup> Starting with the third quarter of 2023, Non-core and Legacy became a separate reportable segment and Group Functions has been renamed Group Items. Prior periods have been restated to reflect these changes.

#### b) Changes to ECL models, scenarios, scenario weights and key inputs

Refer to Note 1a for information about the principles governing expected credit loss (ECL) models, scenarios, scenarios weights and key inputs applied.

#### Governance

Comprehensive cross-functional and cross-divisional governance processes are in place and are used to discuss and approve scenario updates and weights, to assess whether significant increases in credit risk resulted in stage transfers, to review model outputs and to reach conclusions regarding post-model adjustments.

## Model changes

During 2023, the model review and enhancement process led to adjustments of the probability of default (PD), loss given default (LGD) and credit conversion factor (CCF) models, resulting in a USD 27m increase in ECL allowances. This includes an increase of USD 16m in the Investment Bank, mainly related to lending to *Large corporate clients*, and a USD 12m increase in Personal & Corporate Banking, mainly related to lending to *Large corporate clients* and *SME clients*.

#### Scenario and key input updates

During 2023, the scenarios and related macroeconomic factors were updated from those applied at the end of 2022 by considering the prevailing economic and political conditions and uncertainty. The review focused on events that significantly changed the economic outlook during the year: the inflation outlook and economic growth in Europe, and rising global interest rates due to central banks' adoption of more restrictive monetary policies.

Baseline scenario: the projections of the baseline scenario, which are aligned to the economic and market assumptions used for UBS's business planning purposes, are broadly in line with external benchmarks, such as that from Bloomberg Consensus, Oxford Economics and the International Monetary Fund World Economic Outlook. The expectation for 2024 is that global growth slows down under the weight of monetary policy tightening and continued pressure on real purchasing power due to high, though falling inflation, and fading fiscal support. Unemployment rates are forecast to increase slightly from their 2023 levels. Interest rates are expected to remain high, given the persistence of inflationary pressures, leading to a less optimistic outlook for house prices worldwide, including in Switzerland.

Mild debt crisis scenario: The first hypothetical downside scenario is the mild debt crisis scenario. At the beginning of the second quarter of 2023, UBS replaced the global crisis scenario applied at the end of 2022 and at the end of the first quarter of 2023 with the mild debt crisis scenario. Economic, market and political developments suggested that the scenario suite should be rebalanced by reintroducing a mild downside scenario. The mild debt crisis scenario covers similar risks, but the assumptions are milder than the global crisis scenario. Therefore, the scenario shocks are less severe. It assumes that political, solvency and liquidity concerns cause a sell-off of sovereign debt in emerging markets and the peripheral Eurozone. The global economy and financial markets are negatively affected, and central banks are assumed to ease their monetary policy.

Stagflationary geopolitical crisis scenario: The second downside scenario is aligned with the 2024 Group binding stress scenario and was updated in 2023 to reflect expected risks, resulting in minimal changes. Geopolitical tensions cause an escalation of security concerns and undermine globalization. The ensuing economic regionalization leads to a surge in global commodity prices and further disruptions of supply chains, and raises the specter of prolonged stagflation. Central banks are forced to further tighten monetary policy to contain inflationary pressures. The severe interest rate and house price assumptions in the scenario had a substantive impact on model-based ECL allowances for loans secured by mortgages in Switzerland and the US. These effects were partly offset by post-model adjustment releases related to loans secured by mortgages. Refer to the section below on "Scenario weights and post-model adjustments" for more details.

Asset price inflation scenario: The upside scenario is based on positive developments, such as an easing of geopolitical tensions across the globe and a rebound in Chinese economic growth. A combination of lower commodity prices, effective monetary policies and easing supply chain disruptions helps to reduce inflation. Improved consumer and business sentiment lead to a global economic rebound, enabling central banks to normalize interest rates, which causes asset prices to increase significantly.

The table below details the key assumptions for the four scenarios applied as of 31 December 2023.

#### Scenario weights and post-model adjustments

The scenario weights did not change during 2023, but the scenario suite was adjusted in the second quarter of 2023 to replace one of the two severe downside scenarios with a mild downside scenario. The mild debt crisis scenario, developed in early 2023, was introduced in the scenario suite with the same weight as the more severe global crisis scenario, i.e., 15%, to balance a somewhat more optimistic outlook with milder scenario assumptions. The weights were kept unchanged for the stagflationary geopolitical crisis, baseline and asset price inflation scenarios, i.e., 25%, 60% and 0%, respectively. The weights are shown in the table below.

However, unquantifiable risks continue to be relevant, as the geopolitical risks remained high in 2023, and the impact on the world economy from escalations with unforeseeable consequences could be severe. In the near term, this uncertainty relates primarily to developments in the Russia–Ukraine and Middle East conflicts. Models, which are based on supportable statistical information from past experiences regarding interdependencies of macroeconomic factors and their implications for credit risk portfolios, cannot comprehensively reflect such extraordinary events, such as a pandemic or a fundamental change in the world political order. Rather than creating multiple additional scenarios to attempt gauging these risks and applying model parameters that lack supportable information and cannot be robustly validated, management continued to also apply post-model adjustments.

Total stage 1 and 2 allowances and provisions were USD 580m as of 31 December 2023 and included post-model adjustments of USD 133m (31 December 2022: USD 131m). Overlays are to cover for uncertainty levels, including the geopolitical situation.

**Economic scenarios and weights applied** 

		Assigned weights in %
ECL scenario	31.12.23	31.12.22
Asset price inflation	0.0	0.0
Baseline	60.0	60.0
Mild debt crisis	15.0	0.0
Stagflationary geopolitical crisis	25.0	25.0
Global crisis	0.0	15.0

Scenario assumptions		One year				Three years cumulative			
	Asset price		Mild debt	Stagflationary geopolitical	Asset price		Mild debt	Stagflationary geopolitical	
31.12.23	inflation	Baseline	crisis	crisis	inflation	Baseline	crisis	crisis	
Real GDP growth (% change)									
United States	4.0	0.1	(1.6)	(4.8)	9.1	4.4	0.6	(4.4)	
Eurozone	3.0	0.5	(1.7)	(5.6)	6.2	2.9	(0.1)	(5.7)	
Switzerland	3.0	1.4	(1.2)	(4.8)	6.6	4.4	0.3	(4.9)	
Consumer price index (% change)									
United States	2.5	2.3	(0.1)	10.0	8.1	7.1	2.3	15.8	
Eurozone	2.3	2.0	(0.2)	9.6	7.4	6.1	1.8	14.8	
Switzerland	2.1	1.5	(0.4)	5.8	6.2	4.3	0.8	10.7	
Unemployment rate (end-of-period level, %)									
United States	3.0	4.4	6.3	9.2	3.0	4.4	7.7	11.8	
Eurozone	6.0	6.9	8.2	10.6	6.0	6.8	9.0	11.8	
Switzerland	1.6	2.3	2.9	4.1	1.5	2.3	3.8	5.0	
Fixed income: 10-year government bonds (change in yields, basis points)									
USD	13	(82)	(215)	270	37	(78)	(155)	245	
EUR	20	(90)	(185)	225	58	(78)	(140)	195	
CHF	25	(41)	(73)	195	63	(34)	(28)	180	
Equity indices (% change)									
S&P 500	20.0	15.3	(26.6)	(51.5)	51.7	28.1	(12.2)	(45.6)	
EuroStoxx 50	20.0	12.0	(26.4)	(51.6)	46.6	22.9	(16.6)	(47.2)	
SPI	15.0	4.6	(24.5)	(51.6)	39.2	15.9	(11.2)	(47.2)	
Swiss real estate (% change)									
Single-Family Homes	6.6	(1.5)	(4.4)	(18.5)	14.0	0.8	(3.0)	(28.6)	
Other real estate (% change)									
United States (S&P / Case–Shiller)	8.1	0.6	(8.6)	(20.0)	19.7	5.8	(5.2)	(30.2)	
Eurozone (House Price Index)	7.0	0.6	(5.9)	(8.4)	15.4	6.4	(5.2)	(12.9)	

Scenario assumptions		One	e year			Three year	s cumulative	
			Stagflationary				Stagflationary	
	Asset price		geopolitical		Asset price		geopolitical	
31.12.22	inflation	Baseline	crisis	Global crisis	inflation	Baseline	crisis	Global crisis
Real GDP growth (% change)								
United States	4.0	(0.3)	(4.8)	(6.4)	9.1	3.2	(4.4)	(1.8)
Eurozone	3.0	0.6	(5.6)	(8.5)	6.2	2.5	(5.7)	(8.3)
Switzerland	3.0	0.7	(4.8)	(6.7)	6.6	3.5	(4.9)	(3.7)
Consumer price index (% change)								
United States	2.5	2.6	10.0	(0.5)	8.1	6.5	15.8	1.2
Eurozone	2.3	5.0	9.6	(0.7)	7.4	9.6	14.8	(0.7)
Switzerland	2.1	1.6	5.8	(1.8)	6.2	3.9	10.7	(1.6)
Unemployment rate (end-of-period level, %)								
United States	3.0	3.9	9.2	10.0	3.0	5.3	11.8	9.4
Eurozone	6.0	7.0	10.9	11.9	6.0	7.1	12.2	13.0
Switzerland	1.7	2.3	4.3	4.4	1.5	2.6	5.1	4.9
Fixed income: 10-year government bonds (change in yields, basis points)								
USD	25	(6)	235	(326)	70	(13)	205	(291)
EUR	20	48	250	(271)	58	45	220	(247)
CHF	25	46	220	(210)	63	57	205	(160)
Equity indices (% change)								
S&P 500	20.0	7.4	(51.5)	(50.0)	51.7	22.8	(45.6)	(27.9)
EuroStoxx 50	17.0	17.2	(51.6)	(50.0)	42.9	29.2	(47.2)	(39.3)
SPI	14.0	5.6	(51.6)	(46.0)	37.9	19.3	(47.2)	(32.9)
Swiss real estate (% change)								
Single-Family Homes	6.6	1.1	(16.7)	(19.9)	14.0	2.3	(32.9)	(23.9)
Other real estate (% change)								
United States (S&P / Case—Shiller)	7.8	(4.5)	(12.8)	(19.3)	19.1	(0.6)	(35.8)	(32.7)
Eurozone (House Price Index)	7.0	(2.7)	(8.4)	(8.9)	15.4	2.0	(14.7)	(17.5)

## c) Development of ECL allowances and provisions

The ECL allowances and provisions recognized in the period are impacted by a variety of factors, such as:

- the effect of selecting and updating forward-looking scenarios and the respective weights;
- origination of new instruments during the period;
- the effect of passage of time (lower residual lifetime PD and the effect of discount unwind) as the ECL on an instrument for the remaining lifetime decreases (all other factors remaining the same);
- derecognition of instruments in the period;
- change in individual asset quality of instruments;
- movements from a maximum 12-month ECL to the recognition of lifetime ECL (and vice versa) following transfers between stages 1 and 2;
- movements from stages 1 and 2 to stage 3 (credit-impaired status) when default has become certain and PD increases to 100% (or vice versa);
- changes in models or updates to model parameters;
- write-off; and
- foreign exchange translations for assets denominated in foreign currencies.

The table below explains the changes in the ECL allowances and provisions for on- and off-balance sheet financial instruments and credit lines in scope of ECL requirements between the beginning and the end of the period due to the factors listed above.

**Development of ECL allowances and provisions** 

USD m	Total	Stage 1	Stage 2	Stage 3
Balance as of 31 December 2022	(1,091)	(260)	(267)	(564)
Net movement from new and derecognized transactions <sup>1</sup>	(11)	(27)	9	7
of which: Private clients with mortgages	(5)	(8)	3	0
of which: Real estate financing	(2)	(4)	3	O
of which: Large corporate clients	2	(8)	3	7
of which: SME clients	(3)	(3)	0	O
of which: Other	(4)	(4)	0	O
of which: Financial intermediaries and hedge funds	(1)	(1)	0	O
of which: Loans to financial advisors	0	0	0	0
Remeasurements with stage transfers <sup>2</sup>	(140)	8	(7)	(142)
of which: Private clients with mortgages	3	1	3	(1)
of which: Real estate financing	(2)	2	(5)	O
of which: Large corporate clients	(76)	3	(3)	(76)
of which: SME clients	(56)	1	(1)	(55)
of which: Other	(10)	1	0	(11)
of which: Financial intermediaries and hedge funds	0	0	1	O
of which: Loans to financial advisors	1	0	0	C
Remeasurements without stage transfers <sup>3</sup>	35	7	14	14
of which: Private clients with mortgages	5	(5)	14	(3)
of which: Real estate financing	5	2	3	(1)
of which: Large corporate clients	<i>15</i>	13	10	(8)
of which: SME clients	44	(1)	1	44
of which: Other	(34)	(2)	(14)	(18)
of which: Sovereigns	(15)	0	(15)	0
of which: Loans to financial advisors	(7)	1	0	(8)
Model changes <sup>4</sup>	(27)	(18)	(9)	0
Movements with profit or loss impact <sup>5</sup>	(143)	(30)	7	(120)
Movements without profit or loss impact (write-off, FX and other) <sup>6</sup>	(10)	(18)	(13)	21
Balance as of 31 December 2023	(1,244)	(308)	(272)	(664)

<sup>1</sup> Represents the increase and decrease in allowances and provisions resulting from financial instruments (including guarantees and facilities) that were newly originated, purchased or renewed and from the final derecognition of loans or facilities on their maturity date or earlier. 2 Represents the remeasurement between 12-month and lifetime ECL due to stage transfers. 3 Represents the change in allowances and provisions related to changes in model inputs or assumptions, including changes in forward-looking macroeconomic conditions, changes in the exposure profile, PD and LGD changes, and unwinding of the time value. 4 Represents the change in the allowances and provisions related to changes in models and methodologies. 5 Includes ECL movements from new and derecognized transactions, remeasurement changes, and model and methodology changes. 6 Represents the decrease in allowances and provisions resulting from write-offs of the ECL allowance against the gross carrying amount when all or part of a financial asset is deemed uncollectible or forgiven and movements in foreign exchange rates.

Movements with profit or loss impact: Stages 1 and 2 ECL allowances and provisions increased on a net basis by USD 23m:

- Net movement from new and derecognized transactions includes USD 27m stage 1 expenses and USD 9m stage 2 releases: Stage 1 expenses are primarily driven by new loans secured by real estate and corporate lending. The residual effect is spread across other lending segments. Stage 2 releases are largely driven by redemption of real estate lending in Personal & Corporate Banking and Global Wealth Management.
- Remeasurements with stage transfers include USD 8m releases in stage 1 and USD 7m expenses in stage 2. This mainly includes the transfer of a few large corporate and real estate financing transactions from stage 1 to 2 (i.e., releases in stage 1 and related but generally higher expenses in stage 2), driven by rating downgrades and scenario effects.
- Remeasurements without stage transfers include stage 1 releases of USD 7m and stage 2 releases of USD 14m. These
  releases of USD 21m relate to large corporate lending (USD 23m) and real estate lending (USD 14m), substantially due
  to scenario effects, partly offset by expenses to a single sovereign counterparty (USD 15m).
- Model changes: refer to Note 19b for more information.

Movements without profit or loss impact: Stages 1 and 2 allowances increased by USD 31m, almost entirely driven by FX. Stage 3 allowances decreased by USD 21m, driven by FX and other movements of USD 48m, partly offset by net write-offs / recoveries of USD 69m.

**Development of ECL allowances and provisions** 

of which: Private clients with mortgages

of which: Loans to financial advisors

Movements without profit or loss impact (write-off, FX and other)6

uncollectible or forgiven and movements in foreign exchange rates.

of which: Real estate financing

of which: SME clients

of which: Sovereigns

Movements with profit or loss impact<sup>5</sup>

of which: Other

Model changes4

of which: Large corporate clients

USD m

Balance as of 31 December 2021 (1.165)(282)(220)(662)Net movement from new and derecognized transactions<sup>1</sup> (7) (21)16 (2) of which: Private clients with mortgages 0 0 (6) (6) of which: Real estate financing 0 (3) (5) 8 11 (2) of which: Large corporate clients (1) 0 of which: SME clients (1) (1) 0 (8) 0 of which: Other (6)of which: Financial intermediaries and hedge funds 0 (2) of which: Loans to financial advisors 0 0 0 0 Remeasurements with stage transfers<sup>2</sup> (65)20 (39)(46) of which: Private clients with mortgages (10)(12)0 0 of which: Real estate financing (1) 8 (33) (28) (21) of which: Large corporate clients 16 of which: SME clients (23)(2) (22) of which: Other (6) (4) (3) of which: Financial intermediaries and hedge funds 0 0 0 0 0 of which: Loans to financial advisors Remeasurements without stage transfers<sup>3</sup> (27) 13 (8) 48

Total

(12)

13

32

(6)

(15)

(8)

(3)

30

(29)

104

Stage 1

(10)

5

0

29

20

Stage 2

(18)

10

(9)

(12)

(8)

(1)

(49)

Balance as of 31 December 2022 (1,091) (260) (267) (564)

1 Represents the increase and decrease in allowances and provisions resulting from financial instruments (including guarantees and facilities) that were newly originated, purchased or renewed and from the final derecognition of loans or facilities on their maturity date or earlier. 2 Represents the remeasurement between 12-month and lifetime ECL due to stage transfers. 3 Represents the change in allowances and provisions related to changes in model inputs or assumptions, including changes in forward-looking macroeconomic conditions, changes in the exposure profile, PD and LGD changes, and unwinding of the time value. 4 Represents the change in the allowances and provisions related to changes in models and methodologies. 5 Includes ECL movements from new and derecognized transactions, remeasurement changes, and model and methodology changes. 6 Represents the decrease in allowances and provisions resulting from write-offs of the ECL allowance against the gross carrying amount when all or part of a financial asset is deemed

As explained in Note 1a, the assessment of a significant increase in credit risk (an SICR) considers a number of qualitative and quantitative factors to determine whether a stage transfer between stage 1 and stage 2 is required, although the primary assessment considers changes in PD based on rating analyses and economic outlook. Additionally, UBS AG takes into consideration counterparties that have moved to a credit watch list and those with payments that are at least 30 days past due.

ECL stage 2 ("significant deterioration in credit risk") allowances / provisions as of 31 December 2023 – classification by trigger

				of which:
		of which:	of which:	≥30 days
USD m	Stage 2	PD layer	watch list	past due
On- and off-balance sheet	(272)	(197)	(23)	(53)
of which: Private clients with mortgages	(89)	(69)	0	(21)
of which: Real estate financing	(26)	(21)	0	(5)
of which: Large corporate clients	(66)	(48)	(15)	(2)
of which: SME clients	(38)	(23)	(5)	(9)
of which: Financial intermediaries and hedge funds	(4)	(4)	0	0
of which: Loans to financial advisors	(1)	0	0	(1)
of which: Credit cards	(13)			(13)
of which: Other	(33)	(31)	(2)	(1)

#### d) Maximum exposure to credit risk

The tables below provide UBS AG's maximum exposure to credit risk for financial instruments subject to ECL requirements and the respective collateral and other credit enhancements mitigating credit risk for these classes of financial instruments.

Stage 3

0

41

14

(8)

0

(6)

0

0

99

The maximum exposure to credit risk includes the carrying amounts of financial instruments recognized on the balance sheet subject to credit risk and the notional amounts for off-balance sheet arrangements. Where information is available, collateral is presented at fair value. For other collateral, such as real estate, a reasonable alternative value is used. Credit enhancements, such as credit derivative contracts and guarantees, are included at their notional amounts. Both are capped at the maximum exposure to credit risk for which they serve as security. The "Risk management and control" section of this report describes management's view of credit risk and the related exposures, which can differ in certain respects from the requirements of IFRS Accounting Standards.

				31.12.23				
		Collatera	a 1,2		Cre	dit enhancen	nents <sup>1</sup>	Exposure to
_		Collateralized						credit ris
Maximum	Cash					Credit	Guarantees	after collatera
exposure to	collateral		Secured by	Other			and sub-	and credi
credit risk	received	instruments	real estate	collateral <sup>3</sup>	Netting	contracts	participations	enhancement
								171.8
28.2		0.2		4.8			0.1	23.1
74 1	0.0	70.7		2.8				0.1
					22.8			9.
							2.8	18.7
		0.8	0.0	1.5				51.9
766.4	31.5	176.8	222.7	33.9	22.8	0.0	2.9	275.7
2.2								2.2
768.6	31.5	176.8	222.7	33.9	22.8	0.0	2.9	277.9
33.2	1.6	19.8	0.2	1.8			2.0	7.8
43.9	0.2	2.0	1.8	8.9		0.0	1.0	30.0
10.4		10.4						0.0
47.4	0.5	9.1	7.1	5.1			0.6	25.1
134.8	2.3	41.3	9.0	15.7	0.0	0.0	3.5	62.9
				31.12.22				
		Collatera	al <sup>1,2</sup>		Cre	dit enhancen	nents <sup>1</sup>	Exposure to
_								credit risl
Maximum	Cash					Credit	Guarantees	after collatera
exposure to	collateral	debt	Secured by	Other		derivative	and sub-	and credi
credit risk	received	instruments	real estate	collateral <sup>3</sup>	Netting	contracts	participations	enhancements
169.4								169.4
14.7		0.0					0.1	14.6
67.0	0.0	C4 F		2.4				
07.8	0.0	04.5		2.4				0.9
35.0					22.9			12.1
390.0	36.1	115.9	197.8	19.6			3.0	17.6
53.4	0.1	0.5	0.0	1.3				51.4
730.4	36.2	181.0	197.9	23.4	22.9	0.0	3.0	266.1
2.2								2.2
700.6	36.2	181.0	197.9	23.4	22.9	0.0	3.0	268.3
/32.6							1.8	7.7
<b>732.6</b> 22.1	1.2	9.3	0.1	2.0			1.0	
22.1	1.2			2.0 6.5		0.1		
		9.3 3.1	0.1 1.3	2.0 6.5		0.1	1.0	
22.1 39.9	1.2	3.1				0.1		27.8
22.1 39.9 3.8	1.2 0.2	3.1	1.3	6.5		0.1	1.0	27.8 0.0
22.1 39.9	1.2	3.1				0.1		27.8
	exposure to credit risk  171.8 28.2 74.1 32.3 405.6 54.3 766.4 2.2 768.6 33.2 43.9 10.4 47.4 134.8  Maximum exposure to credit risk  169.4 14.7 67.8 35.0 390.0 53.4	171.8   28.2   74.1   0.0   32.3   405.6   31.4   54.3   0.1   766.4   31.5   2.2   768.6   33.2   1.6   43.9   0.2   10.4   47.4   0.5   134.8   2.3   2.3	Maximum exposure to credit risk         Cash collateral received         Collateral by equity and debt instruments           171.8         28.2         0.2           74.1         0.0         70.7           32.3         32.3         32.3           405.6         31.4         105.2           54.3         0.1         0.8           766.4         31.5         176.8           2.2         2.0         176.8           43.9         0.2         2.0           10.4         10.4         47.4           47.4         0.5         9.1           134.8         2.3         41.3           Maximum exposure to credit risk         Cash collateral collateral received by equity and edebt instruments           169.4         14.7         0.0           47.8         0.0         64.5           35.0         390.0         36.1         115.9           53.4         0.1         0.5           730.4         36.2         181.0	Maximum exposure to credit risk         Cash collateral received         by equity and lebt instruments         Secured by real estate           171.8         28.2         0.2           74.1         0.0         70.7           32.3             405.6         31.4         105.2         222.7           54.3         0.1         0.8         0.0           766.4         31.5         176.8         222.7           2.2            0.0           43.9         0.2         2.0         1.8           10.4         10.4         10.4         1.8           134.8         2.3         41.3         9.0           Collateralized by equity and exposure to credit risk         collateral debt collateral received instruments         Secured by real estate           169.4          0.0         64.5           35.0         390.0         36.1         115.9         197.8           53.4         0.1         0.5         0.0           730.4         36.2         181.0         197.9	Maximum exposure to credit risk         Cash collateral received         Collateral by equity and debt instruments         Secured by real estate         Other collateral collateral received           171.8         28.2         0.2         4.8           74.1         0.0         70.7         2.8           32.3         405.6         31.4         105.2         222.7         24.9           54.3         0.1         0.8         0.0         1.5           766.4         31.5         176.8         222.7         33.9           2.2         2.2         2.0         1.8         8.9           10.4         10.4         47.4         0.5         9.1         7.1         5.1           134.8         2.3         41.3         9.0         15.7           134.8         2.3         41.3         9.0         15.7           134.8         2.3         41.3         9.0         15.7           14.7         0.0         5.0         0.1         0.0           67.8         0.0         64.5         2.4           35.0         390.0         36.1         115.9         197.8         19.6           53.4         0.1         0.5         0.0	Maximum exposure to credit risk         Collateral Coll	Collateral   Col	Collateralized collateral   Collateralized collateral   Collateralized collateral   Collateral   Collateralized collateral   Collater

<sup>1</sup> Of which: USD 1,637m for 31 December 2023 (31 December 2022: USD 1,372m) relates to total credit-impaired financial assets measured at amortized cost and USD 105m for 31 December 2023 (31 December 2022: USD 113m) to total off-balance sheet financial instruments and credit lines for credit-impaired positions. 2 Collateral arrangements generally incorporate a range of collateral, including cash, equity and debt instruments, real estate and other collateral is first allocated to the funded selement. 3 Includes but is not limited to life insurance contracts, rights in respect of subscription or capital commitments from fund partners, inventory, mortgage loans, gold and other commodities. 4 Amounts due from banks include amounts held with third-party banks on behalf of clients. The credit risk associated with these balances may be borne by those clients. 5 Included within Cash collateral receivables on derivative instruments are margin balances due from exchanges or clearing houses. Some of these margin balances reflect amounts transferred on behalf of clients who retain the associated credit risk. 6 The amount shown in the "Netting" column represents the netting potential not recognized on the balance sheet. Refer to Note 21 for more information. 7 Guarantees collateralized by equity and debt instruments include certain overnight repurchase and reverse repurchase transactions where UBS acts as a sponsoring member for eligible clients when clearing through the Fixed Income Clearing Corporation (FICC). As part of this arrangement, UBS guarantees FICC for prompt and full payment and performance of the clients' respective obligations under the FICC rules. The Group minimizes its liability under these guarantees by obtaining a security interest in the cash or high-quality securities collateral that the clients place with the clearing house; therefore, the risk of loss is expected to be remote

## e) Financial assets subject to credit risk by rating category

The table below shows the credit quality and the maximum exposure to credit risk based on UBS AG's internal credit rating system and year-end stage classification. Under IFRS 9, the credit risk rating reflects UBS AG's assessment of the probability of default of individual counterparties, prior to substitutions. The amounts presented are gross of impairment allowances.

# > Refer to the "Risk management and control" section of this report for more details regarding UBS AG's internal grading system

Financial assets subject to credit risk by rating category

USD m					31.12	2.23			
									Net carrying amount
						Credit-	Total gross		(maximum
						impaired	carrying	ECL	exposure to
Rating category <sup>1</sup>	0–1	2–3	4–5	6–8	9–13	(defaulted)	amount	allowances	credit risk)
Financial assets measured at amortized cost									
Cash and balances at central banks	171,573	215	0	0	43	0	171,832	(26)	171,806
of which: stage 1	<i>171,573</i>	215	0	0	0	0	171,788	0	171,788
of which: stage 2	0	0	0	0	43	0	43	(26)	18
Amounts due from banks	811	25,095	1,359	463	485	0	28,213	(7)	28,206
of which: stage 1	811	25,095	1,354	462	476	0	28, 198	(6)	28,191
of which: stage 2	0	0	5	1	9	0	15	(1)	14
of which: stage 3	0	0	0	0	0	0	0	0	0
Receivables from securities financing transactions	36,689	15,958	6,073	14,319	1,091	0	74,130	(2)	74,128
of which: stage 1	36,689	15,958	6,073	14,319	1,091	0	74,130	(2)	74,128
Cash collateral receivables on derivative instruments	8,009	13,575	6,423	4,095	198	0	32,300	0	32,300
of which: stage 1	8,009	13,575	6,423	4,095	198	0	32,300	0	32,300
Loans and advances to customers	5,993	196,897	82,867	89,738	28,486	2,586	406,568	(935)	405,633
of which: stage 1	5,993	195,590	80,534	82,633	20,916	0	385,666	(173)	385,493
of which: stage 2	0	1,307	2,333	7,106	7,570	0	18,316	(185)	18,131
of which: stage 3	0	0	0	0	0	2,586	2,586	(577)	2,009
Other financial assets measured at amortized cost	25,727	20,541	678	6,770	499	206	54,421	(87)	54,334
of which: stage 1	25,727	20,539	659	6,619	353	0	53,897	(16)	53,882
of which: stage 2	0	2	19	151	146	0	317	(5)	312
of which: stage 3	0	0	0	0	0	206	206	(66)	141
Total financial assets measured at amortized cost	248,802	272,281	97,400	115,386	30,802	2,792	767,462	(1,057)	766,407
On-balance sheet financial instruments									
Financial assets measured at FVOCI – debt instruments	1,222	850	0	161	0	0	2,233	0	2,233
Total on-balance sheet financial instruments	250,024	273,131	97,400	115,547	30,802	2,792	769,696	(1,057)	768,640

<sup>1</sup> Refer to the "Internal UBS rating scale and mapping of external ratings" table in the "Risk management and control" section of this report for more information on rating categories.

Off-balance sheet positions subject to expected credit loss by rating category

USD m					31.12.23			
							Total off-	
							balance sheet	
							exposure	
						Credit-	(maximum	
					0.40	impaired	exposure to	
Rating category <sup>1</sup>	0–1	2–3	4–5	6–8	9–13	(defaulted)	credit risk)	ECL provision
Off-balance sheet financial instruments	47 774	7.000	4.000	2 222	0.10	440	22.044	(40)
Guarantees	17,771	7,306	4,268	2,800	948	118	33,211	(40)
of which: stage 1	17,771	7,267	4,219	2,301	774	0	32,332	(14)
of which: stage 2	0	39	49	499	174	0	761	(7)
of which: stage 3	0	0	0	0	0	118	118	(19)
Irrevocable loan commitments	1,720	13,920	9,834	11,142	7,345	56	44,018	(95)
of which: stage 1 of which: stage 2	1,720	13,920	9,781	10,845	5,818	0	42,085	(55)
	0	0	53	298	1,527	0	1,878	(38)
of which: stage 3	0	0	0	0	0	56	56	(2)
Forward starting reverse repurchase and securities borrowing agreements	10,152	2	84	135	0	0	10,373	0
Total off-balance sheet financial instruments	29,643	21,228	14,186	14,077	8,293	174	87,601	(134)
Credit lines								
Committed unconditionally revocable credit lines	2,604	17,303	10,893	11,950	4,616	56	47,421	(49)
of which: stage 1	2,604	16,903	10,553	11,452	3,941	0	45,452	(39)
of which: stage 1 of which: stage 2	0	400	341	497	675	0	1,913	(10)
of which: stage 3	0	0	0	0	0	56	56	0
Irrevocable committed prolongation of existing loans	4	1,803	1,045	826	501	4	4,183	(4)
of which: stage 1	4	1,803	1,045	824	493	0	4, 169	(3)
of which: stage 2	0	0	0	2	9	0	11	0
of which: stage 3	0	0	0	0	0	4	4	0
Total credit lines	2,609	19,105	11,939	12,776	5,117	59	51,604	(53)

<sup>1</sup> Refer to the "Internal UBS rating scale and mapping of external ratings" table in the "Risk management and control" section of this report for more information on rating categories.

Financial assets subject to credit risk by rating category

USD m					31.12.22	2			
									Net carrying amount
						Credit-	Total gross		(maximum
D. (*	0.4	2.2	4.5		0.40	impaired	carrying	ECL	exposure to
Rating category <sup>1</sup>	0-1	2–3	4–5	6–8	9–13	(defaulted)	amount	allowances	credit risk)
Financial assets measured at amortized cost	400 505	077					460 457	(4.0)	460 445
Cash and balances at central banks	168,525	877	0	0	56	0	169,457	(12)	169,445
of which: stage 1	168,525	877	0	0	0	0		0	169,402
of which: stage 2	0	0	0	0	56	0	56	(12)	44
Amounts due from banks	862	11,150	832	996	837	0	14,676	(6)	14,671
of which: stage 1	862	11,150	832	996	836	0	14,675	(5)	14,670
of which: stage 2	0	0	0	0	1	0	1	(1)	1
of which: stage 3	0	0	0	0	0	0	0	0	0
Receivables from securities financing transactions									
measured at amortized cost	27,158	15,860	8,870	15,207	721	0	67,816	(2)	67,814
of which: stage 1	27,158	15,860	8,870	15,207	721	0	67,816	(2)	67,814
Cash collateral receivables on derivative instruments	10,613	12,978	7,138	4,157	147	0	35,034	0	35,033
of which: stage 1	10,613	12,978	7,138	4,157	147	0	35,034	0	35,033
Loans and advances to customers	6,491	216,824	68,444	76,147	20,891	2,012	390,810	(783)	390,027
of which: stage 1	6,491	215,332	66,202	69,450	<i>15,557</i>	0	373,032	(129)	372,903
of which: stage 2	0	1,493	2,242	6,698	5,334	0	15,767	(180)	15,587
of which: stage 3	0	0	0	0	0	2,012	2,012	(474)	1,538
Other financial assets measured at amortized cost	29,011	16,649	447	6,708	450	210	53,475	(86)	53,389
of which: stage 1	29,011	16,646	427	6,426	336	0	52,846	(17)	52,829
of which: stage 2	0	2	20	283	114	0	419	(6)	413
of which: stage 3	0	0	0	0	0	210	210	(63)	147
Total financial assets measured at amortized cost	242,660	274,337	85,731	103,216	23,102	2,222	731,269	(890)	730,379
On-balance sheet financial instruments									
Financial assets measured at FVOCI – debt instruments	1,307	840	0	92	0	0	2,239	0	2,239
Total on-balance sheet financial instruments	243,966	275,178	85,731	103,308	23,102	2,222	733,508	(890)	732,618

<sup>1</sup> Refer to the "Internal UBS rating scale and mapping of external ratings" table in the "Risk management and control" section of this report for more information on rating categories.

#### Off-balance sheet positions subject to expected credit loss by rating category

USD m					31.12.22			
							Total off-	
							balance sheet	
							exposure	
						Credit-	(maximum	
Rating category <sup>1</sup>	0–1	2–3	4–5	6–8	9–13	impaired (defaulted)	exposure to	ECL provisions
Off-balance sheet financial instruments	U=1	2-3	4-3	0-0	3-13	(delaulted)	Cledit (13K)	LCL provisions
Guarantees	7,252	5,961	4,772	3,049	1,025	108	22,167	(48)
of which: stage 1	7,252	5,917	3,812	2,229	596	0	19,805	(13)
of which: stage 2	0	44	960	821	429	0	2,254	(9)
of which: stage 3	0	0	0	0	0	108	108	(26)
Irrevocable loan commitments	1,770	14,912	6,986	10,097	6,107	124	39,996	(111)
of which: stage 1	1,770	14,789	6,818	9,625	4,529	0	37,531	(59)
of which: stage 2	0	123	168	472	1,578	0	2,341	(52)
of which: stage 3	0	0	0	0	0	124	124	0
Forward starting reverse repurchase and securities borrowing agreements	2,781	2	11	1,007	0	0	3,801	0
Total off-balance sheet financial instruments	11,803	20,874	11,769	14,153	7,132	233	65,964	(159)
Credit lines								
Committed unconditionally revocable credit lines	2,288	16,483	9,247	11,885	3,739	36	43,677	(40)
of which: stage 1	2,288	15,777	8,960	11,355	3,429	0	41,809	(32)
of which: stage 2	0	705	287	<i>531</i>	310	0	1,833	(8)
of which: stage 3	0	0	0	0	0	36	36	0
Irrevocable committed prolongation of existing loans	7	1,939	1,489	868	392	2	4,696	(2)
of which: stage 1	7	1,938	1,411	864	380	0	4,600	(2)
of which: stage 2	0	1	<i>78</i>	4	11	0	94	0
of which: stage 3	0	0	0	0	0	2	2	0
Total credit lines	2,295	18,421	10,736	12,753	4,131	37	48,373	(42)

<sup>1</sup> Refer to the "Internal UBS rating scale and mapping of external ratings" table in the "Risk management and control" section of this report for more information on rating categories.

## f) Sensitivity information

As outlined in Note 1a, ECL estimates involve significant uncertainties at the time they are made.

#### **ECL** models

The models applied to determine point-in-time PD and LGD rely on market and statistical data, which has been found to correlate well with historically observed defaults in sufficiently homogeneous segments. The risk sensitivities for each of the ECL reporting segments to such factors are summarized in Note 9.

#### Sustainability and climate risk

Sustainability and climate risk may negatively affect clients or portfolios due to direct or indirect transition costs, or exposure to physical risks in locations likely to be impacted by climate change. Such effects could lead to a deterioration in credit worthiness, which in turn would have an impact on ECLs. While some macroeconomic indicators used in the current PD models could be influenced by climate change, UBS currently does not use a specific sustainability and climate risk scenario in addition to the typically four general economic scenarios applied to derive the weighted-average ECL. The rationale for the approach at this point in time is the significance of model risks and challenges in calibration and probability weight assessment given the paucity of data.

Instead, UBS AG focuses on the process of vetting clients and business transactions and takes individual actions, where transition risk is deemed to be a significant driver of a counterparty's credit worthiness. This review process may lead to a downward revision of the counterparty's credit rating, or the adoption of risk mitigating actions, and hence affect the individual contribution to ECLs.

At the portfolio level, UBS has started to use stress loss assumptions to assess the extent to which sustainability and climate risk may affect the quality of the loans extended to small and medium-sized enterprises, large corporate clients and financial institutions. Initial tests were based on a set of assumptions presented by external parties (such as the Bank of England), and complemented by internally derived climate pathway scenarios. Such analysis undertaken during 2022, and reassessed during 2023, concluded that the counterparties are not expected to be significantly impacted by physical or transition risks, mainly as there are no material risk concentrations in high-risk sectors. The analysis of the corporate loan book has also shown that any potential significant impacts from transition costs or physical risks would materialize over a time horizon that exceeds in most cases the contractual lifetime of the underlying assets. Based on current information on regulatory developments, this would also apply to the portfolio of private clients' mortgages and real estate financing, given the long lead times for investments in upgrading the housing stock.

As a result of the aforementioned factors, it was assessed that the magnitude of any impact of sustainability and climate risk on the weighted-average ECL would not be material as of 31 December 2023. Therefore, no specific post-model adjustment was made in this regard.

> Refer to "UBS AG consolidated supplemental disclosures required under SEC regulations" for the maturity profile of UBS AG's core loan book

#### Forward-looking scenarios

Depending on the scenario selection and related macroeconomic assumptions for the risk factors, the components of the relevant weighted-average ECL change. This is particularly relevant for interest rates, which can move in both directions under a given growth assumption, e.g., low growth with high interest rates in a stagflation scenario, versus low growth and falling interest rates in a recession. Management generally looks for scenario narratives that reflect the key risk drivers of a given credit portfolio.

As forecasting models are complex, due to the combination of multiple factors, simple what-if analyses involving a change of individual parameters do not necessarily provide realistic information on the exposure of segments to changes in the macroeconomy. Portfolio-specific analyses based on their key risk factors would also not be meaningful, as potential compensatory effects in other segments would be ignored. The table below indicates some sensitivities to ECLs, if a key macroeconomic variable for the forecasting period is amended across all scenarios with all other factors remaining unchanged.

		100%		
460	4000/ Barallar	Stagflationary	100% Mild Debt	Mataland
USD m	100% Baseline	geopolitical crisis	Crisis	Weighted average
Change in key parameters				
Fixed income: Government bonds (absolute change)				
-0.50%	(3)	(104)	(3)	(14)
+0.50%	3	125	6	17
+1.00%	7	274	14	42
Unemployment rate (absolute change)				
-1.00%	(4)	(142)	(6)	(20)
-0.50%	(2)	(76)	(3)	(11)
+0.50%	2	89	3	13
+1.00%	5	188	7	26
Real GDP growth (relative change)				
-2.00%	10	27	11	14
-1.00%	6	13	6	8
+1.00%	(3)	(12)	(6)	(6)
+2.00%	(5)	(22)	(7)	(10)
House Price Index (relative change)				
_5.00%	16	174	25	46
-2.50%	8	84	12	21
+2.50%	(7)	(76)	(9)	(18)
+5.00%	(11)	(149)	(19)	(34)
Equity (S&P500, EuroStoxx, SMI) (relative change)	()	,,	(10)	(= -)
-10.00%	4	10	8	6
-5.00%	2	5	3	
+5.00%	(2)	(5)	(3)	(2)
+10.00%	(3)	(8)	(5)	(4)

Sensitivities can be more meaningfully assessed in the context of coherent scenarios with consistently developed macroeconomic factors. The table above outlines favorable and unfavorable effects, based on reasonably possible alternative changes to the economic conditions for stage 1 and stage 2 positions. The ECL impact is calculated for material portfolios and disclosed for each scenario.

The forecasting horizon is limited to three years, with a model-based mean reversion of PD and LGD assumed thereafter. Changes to these timelines may have an effect on ECLs: depending on the cycle, a longer or shorter forecasting horizon will lead to different annualized lifetime PD and average LGD estimations. This is currently not deemed to be material for UBS, as a large proportion of loans, including mortgages in Switzerland, have maturities that are within the forecasting horizon.

# Scenario weights and stage allocation

Potential effect on stage 1 and stage	2 positions from changing sco	enario weights o	r moving to an ECL	. lifetime calculatio	on as of 31 Decem	ber 2023
						Pro forma ECL
						allowances and
	Actual ECL					provisions,
	allowances and					assuming all
	provisions,					positions being
	including staging	Pro forr	subject to lifetime			
	(as per Note 9)	and a	ECL			
				100%		
			100% Asset price	Stagflationary	100% Mild debt	
Scenarios	Weighted average	100% Baseline	inflation	geopolitical crisis	crisis	Weighted average
USD m, except where indicated						
Segmentation						
Private clients with mortgages	(133)	(43)	(10)	(521)	(63)	(368)
Real estate financing	(52)	(34)	(21)	(200)	(36)	(125)
Large corporate clients	(152)	(108)	(53)	(252)	(146)	(234)
SME clients	(103)	(85)	(57)	(186)	(96)	(164)
Other segments	(140)	(126)	(78)	(162)	(151)	(302)
Total	(580)	(396)	(219)	(1,322)	(492)	(1,193)

Potential effect on stage 1 and stage	2 positions from changin	a scenario weights or moving	g to an ECL lifetime calculation as of 31 December 2022

						Pro forma ECL
						allowances and
	Actual ECL					provisions,
	allowances and					assuming all
	provisions,					positions being
	including staging		na ECL allowances and			subject to lifetime
	(as per Note 9)	and as	ssuming application o		ghting	ECL
				100%		
			100% Asset price	Stagflationary		
Scenarios	Weighted average	100% Baseline	inflation	geopolitical crisis	100% Global crisis	Weighted average
USD m, except where indicated						
Segmentation						
Private clients with mortgages	(136)	(25)	(13)	(523)	(184)	(473)
Real estate financing	(43)	(26)	(22)	(176)	(30)	(126)
Large corporate clients	(136)	(97)	(84)	(199)	(174)	(235)
SME clients	(86)	(67)	(66)	(162)	(97)	(153)
Other segments	(125)	(114)	(111)	(145)	(153)	(281)
Total	(526)	(329)	(295)	(1,204)	(638)	(1,267)

#### Scenario weights

ECL is sensitive to changing scenario weights, in particular if narratives and parameters are selected that are not close to the baseline scenario, highlighting the non-linearity of credit losses.

As shown in the table above, the ECLs for stage 1 and stage 2 positions would have been USD 396m (31 December 2022: USD 329m) instead of USD 580m (31 December 2022: USD 526m) if ECLs had been determined solely on the *baseline scenario*. The weighted-average ECL therefore amounted to 146% (31 December 2022: 160%) of the baseline value. The effects of weighting each of the four scenarios 100% are shown in the table above.

#### Stage allocation and SICR

The determination of what constitutes an SICR is based on management judgment, as explained in Note 1a. Changing the SICR trigger will have a direct effect on ECLs, as more or fewer positions would be subject to lifetime ECLs under any scenario.

The relevance of the SICR trigger on overall ECL is demonstrated in the table above with the indication that the ECL allowances and provisions for stage 1 and stage 2 positions would have been USD 1,193m, if all non-impaired positions across the portfolio had been measured for lifetime ECLs irrespective of their actual SICR status. This amount compares with actual stage 1 and 2 allowances and provisions of USD 580m as of 31 December 2023.

#### Maturity profile

The maturity profile is an important driver in ECLs, in particular for transactions in stage 2. A transfer of a transaction into stage 2 may therefore have a significant effect on ECLs. The current maturity profile of most lending books is relatively short.

Lending to large corporate clients is generally between one and two years, with related loan commitments up to four years. Real estate lending is generally between two and three years in Switzerland, with long-dated maturities in the US. Lombard-lending contracts typically have average contractual maturities of 12 months or less, and include callable features.

A significant portion of our lending to SMEs and Real estate financings is documented under multi-purpose credit agreements, which allow for various forms of utilization but are unconditionally cancelable by UBS at any time: (i) for drawings under such agreements with a fixed maturity, the respective term is applied for ECL calculations, or a maximum of 12 months in stage 1; (ii) for unused credit lines and all drawings that have no fixed maturity (e.g., current accounts), UBS generally applies a 12-month maturity from the reporting date, given the credit review policies, which require either continuous monitoring of key indicators and behavioral patterns for smaller positions or an annual formal review for any other limit. The ECLs for these products are sensitive to shortening or extending the maturity assumption.

#### a) Valuation principles

All financial and non-financial assets and liabilities measured or disclosed at fair value are categorized into one of three fair value hierarchy levels in accordance with IFRS Accounting Standards. The fair value hierarchy is based on the transparency of inputs to the valuation of an asset or liability as of the measurement date. In certain cases, the inputs used to measure fair value may fall within different levels of the fair value hierarchy. For disclosure purposes, the level in the hierarchy within which an instrument is classified in its entirety is based on the lowest level input that is significant to the position's fair value measurement:

- Level 1 quoted prices (unadjusted) in active markets for identical assets and liabilities;
- Level 2 valuation techniques for which all significant inputs are, or are based on, observable market data; or
- Level 3 valuation techniques for which significant inputs are not based on observable market data.

Fair values are determined using quoted prices in active markets for identical assets or liabilities, where available. Where the market for a financial instrument or non-financial asset or liability is not active, fair value is established using a valuation technique, including pricing models. Valuation adjustments may be made to allow for additional factors, including model, liquidity, credit and funding risks, which are not explicitly captured within the valuation technique, but which would nevertheless be considered by market participants when establishing a price. The limitations inherent in a particular valuation technique are considered in the determination of the classification of an asset or liability within the fair value hierarchy. Generally, the unit of account for a financial instrument is the individual instrument, and UBS AG applies valuation adjustments at an individual instrument level, consistent with that unit of account. However, if certain conditions are met, UBS AG may estimate the fair value of a portfolio of financial assets and liabilities with substantially similar and offsetting risk exposures on the basis of the net open risks.

> Refer to Note 20d for more information

## b) Valuation governance

UBS AG's fair value measurement and model governance framework includes numerous controls and other procedural safeguards that are intended to maximize the quality of fair value measurements reported in the financial statements. New products and valuation techniques must be reviewed and approved by key stakeholders from the risk and finance control functions. Responsibility for the ongoing measurement of financial and non-financial instruments at fair value is with the business divisions.

Fair value estimates are validated by the risk and finance control functions, which are independent of the business divisions. Independent price verification is performed by Finance through benchmarking the business divisions' fair value estimates with observable market prices and other independent sources. A governance framework and associated controls are in place in order to monitor the quality of third-party pricing sources where used. For instruments where valuation models are used to determine fair value, independent valuation and model control groups within Finance and Risk Control evaluate UBS AG's models on a regular basis, including valuation and model input parameters, as well as pricing. As a result of the valuation controls employed, valuation adjustments may be made to the business divisions' estimates of fair value to align with independent market data and the relevant accounting standard.

> Refer to Note 20d for more information

#### c) Fair value hierarchy

The table below provides the fair value hierarchy classification of financial and non-financial assets and liabilities measured at fair value. The narrative that follows describes valuation techniques used in measuring their fair value of different product types (including significant valuation inputs and assumptions used) and the factors considered in determining their classification within the fair value hierarchy.

During 2023, assets and liabilities that were transferred from Level 2 to Level 1, or from Level 1 to Level 2, and were held for the entire reporting period were not material. In the fourth quarter of 2023, UBS AG has prospectively amended its approach to testing for observability as part of an accounting methodology alignment following the acquisition of Credit Suisse. This methodological change enhances UBS AG's assessment of sensitivities to unobservable valuation parameters. Application of the new methodology as of 31 December 2022 would have resulted in USD 1.3bn lower Level 3 liabilities (as of 31 December 2023 the balance of affected liabilities in Level 3 was USD 1.9bn), with an offsetting impact to Level 2 liabilities.

Determination of fair values from	augted market	prices or valuet	ion tochniques1
Determination of fair values from	quotea market	prices or valuat	ion techniques:

	31.12.23					31.12.22		
USD m	Level 1	Level 2	Level 3	Total	Level 1	Level 2	Level 3	Total
Financial assets measured at fair value on a recurring basis								
Financial assets at fair value held for trading	115,345	17,936	1,817	135,098	96,263	10,284	1,488	108,034
of which: Equity instruments	99,510	<i>721</i>	140	100,372	83,095	789	126	84,010
of which: Government bills / bonds	6,843	<i>2,195</i>	14	9,052	5,496	950	18	6,464
of which: Investment fund units	8,008	1,082	9	9,098	6,673	<i>596</i>	61	7,330
of which: Corporate and municipal bonds	982	11,956	648	13,586	976	6,509	541	8,026
of which: Loans	0	1,870	904	<i>2,775</i>	0	1,179	628	1,807
of which: Asset-backed securities	3	111	101	215	22	261	114	397
Derivative financial instruments	593	129,871	1,264	131,728	769	147,876	1,464	150,109
of which: Foreign exchange	<i>317</i>	65,070	0	65,387	<i>575</i>	84,882	2	85,459
of which: Interest rate	0	<i>35,028</i>	284	<i>35,311</i>	0	39,345	460	39,805
of which: Equity / index	0	26,649	667	<i>27,317</i>	1	21,542	653	22,195
of which: Credit	0	1,452	<i>301</i>	<i>1,752</i>	0	719	318	1,038
of which: Commodities	0	1,627	12	1,639	0	1,334	30	1,365
Brokerage receivables	0	20,883	0	20,883	0	17,576	0	17,576
Financial assets at fair value not held for trading	29,529	30,124	4,101	63,754	26,572	29,110	3,725	59,408
of which: Financial assets for unit-linked investment contracts	15,814	0	0	15,814	13,071	1	0	13,072
of which: Corporate and municipal bonds	62	16,716	<i>215</i>	16,994	35	14,101	230	14,366
of which: Government bills / bonds	<i>13,262</i>	<i>3,332</i>	0	16,594	13, 103	3,638	0	16,74 i
of which: Loans	0	4,172	1,254	5,426	0	3,602	<i>736</i>	4,337
of which: Securities financing transactions	0	5,541	4	5,545	0	7,590	114	7,704
of which: Auction rate securities	0	0	1,208	1,208	0	0	1,326	1,326
of which: Investment fund units	<i>367</i>	<i>233</i>	205	804	307	178	190	675
of which: Equity instruments	24	0	1,088	1,112	57	0	792	849
Financial assets measured at fair value through other comprehensive income on a re	ecurring basis							
Financial assets measured at fair value through other comprehensive income	68	2,165	0	2,233	57	2,182	0	2,239
of which: Commercial paper and certificates of deposit	0	1,948	0	1,948	0	1,878	0	1,878
of which: Corporate and municipal bonds	<i>68</i>	207	0	276	57	278	0	335
Non-financial assets measured at fair value on a recurring basis								
Precious metals and other physical commodities	4,426	0	0	4,426	4,471	0	0	4,471
Non-financial assets measured at fair value on a non-recurring basis								
Other non-financial assets <sup>2</sup>	0	0	17	17	0	0	21	21
Total assets measured at fair value	149,962	200,979	7,198	358,139	128,132	207,028	6,698	341,858

		31.12.	23			31.12	.22	
USD m	Level 1	Level 2	Level 3	Total	Level 1	Level 2	Level 3	Total
Financial liabilities measured at fair value on a recurring basis								
Financial liabilities at fair value held for trading	25,451	6,110	151	31,712	23,578	5,823	114	29,515
of which: Equity instruments	16,310	236	87	16,632	16,521	352	<i>78</i>	16,951
of which: Corporate and municipal bonds	28	4,893	<i>58</i>	4,979	36	4,643	27	4,707
of which: Government bills / bonds	<i>8,320</i>	806	0	9,126	5,880	706	1	6,587
of which: Investment fund units	<i>794</i>	117	4	915	1,141	84	3	1,229
Derivative financial instruments	716	136,833	3,158	140,707	640	152,582	1,684	154,906
of which: Foreign exchange	400	71,322	21	71,743	587	87,897	24	88,508
of which: Interest rate	0	32,656	107	32,763	0	37,429	116	37,545
of which: Equity / index	0	30,209	2,717	32,926	0	24,963	1,184	26,148
of which: Credit	0	1,341	273	1,614	0	920	279	1,199
of which: Commodities	0	1,271	20	1,291	0	1,309	<i>52</i>	1,361
Financial liabilities designated at fair value on a recurring basis								
Brokerage payables designated at fair value	0	42,275	0	42,275	0	45,085	0	45,085
Debt issued designated at fair value	0	78,509	7,832	86,341	0	62,603	9,240	71,842
Other financial liabilities designated at fair value	0	25,069	2,297	27,366	0	30,055	1,978	32,033
of which: Financial liabilities related to unit-linked investment contracts	0	15,922	0	15,922	0	13,221	0	13,221
of which: Securities financing transactions	0	6,927	0	6,927	0	15,333	0	15,333
of which: Funding from UBS Group AG	0	1,327	1,623	2,950	0	508	1,287	1,796
of which: Over-the-counter debt instruments and other	0	892	674	1,566	0	993	691	1,684
Total liabilities measured at fair value	26 167	200 706	12 //20	229 401	2/1 210	206 1/19	12.015	222 202

<sup>1</sup> Bifurcated embedded derivatives are presented on the same balance sheet lines as their host contracts and are not included in this table. The fair value of these derivatives was not material for the periods presented. 2 Other non-financial assets primarily consist of properties and other non-current assets held for sale, which are measured at the lower of their net carrying amount or fair value less costs to sell.

#### Valuation techniques

UBS AG uses widely recognized valuation techniques for determining the fair value of financial and non-financial instruments that are not actively traded and quoted. The most frequently applied valuation techniques include discounted value of expected cash flows, relative value and option pricing methodologies.

Discounted value of expected cash flows is a valuation technique that measures fair value using estimated expected future cash flows from assets or liabilities and then discounts these cash flows using a discount rate or discount margin that reflects the credit and / or funding spreads required by the market for instruments with similar risk and liquidity profiles to produce a present value. When using such valuation techniques, expected future cash flows are estimated using an observed or implied market price for the future cash flows or by using industry-standard cash flow projection models. The discount factors within the calculation are generated using industry-standard yield curve modeling techniques and models.

Relative value models measure fair value based on the market prices of equivalent or comparable assets or liabilities, making adjustments for differences between the characteristics of the observed instrument and the instrument being valued.

Option pricing models incorporate assumptions regarding the behavior of future price movements of an underlying referenced asset or assets to generate a probability-weighted future expected payoff for the option. The resulting probability-weighted expected payoff is then discounted using discount factors generated from industry-standard yield curve modeling techniques and models. The option pricing model may be implemented using a closed-form analytical formula or other mathematical techniques (e.g., binomial tree or Monte Carlo simulation).

Where available, valuation techniques use market-observable assumptions and inputs. If such data is not available, inputs may be derived by reference to similar assets in active markets, from recent prices for comparable transactions or from other observable market data. In such cases, the inputs selected are based on historical experience and practice for similar or analogous instruments, derivation of input levels based on similar products with observable price levels, and knowledge of current market conditions and valuation approaches.

For more complex instruments, fair values may be estimated using a combination of observed transaction prices, consensus pricing services and relevant quotes. Consideration is given to the nature of the quotes (e.g., indicative or firm) and the relationship of recently evidenced market activity to the prices provided by consensus pricing services. UBS AG also uses internally developed models, which are typically based on valuation methods and techniques recognized as standard within the industry. Assumptions and inputs used in valuation techniques include benchmark interest rate curves, credit and funding spreads used in estimating discount rates, bond and equity prices, equity index prices, foreign exchange rates, levels of market volatility and correlation. Refer to Note 20e for more information. The discount curves used by UBS AG incorporate the funding and credit characteristics of the instruments to which they are applied.

# Financial instruments excluding derivatives: valuation and classification in the fair value hierarchy

Product	Valuation and	I classification in the fair value hierarchy
Government bills and bonds	Valuation	<ul> <li>Generally valued using prices obtained directly from the market.</li> <li>Instruments not priced directly using active-market data are valued using discounted cash flow valuatio techniques that incorporate market data for similar government instruments.</li> </ul>
	Fair value hierarchy	<ul> <li>Generally traded in active markets with prices that can be obtained directly from these markets, resultin in classification as Level 1, while the remaining positions are classified as Level 2 and Level 3.</li> </ul>
Corporate and municipal bonds	Valuation	<ul> <li>Generally valued using prices obtained directly from the market for the security, or similar securitie adjusted for seniority, maturity and liquidity.</li> <li>When prices are not available, instruments are valued using discounted cash flow valuation technique incorporating the credit spread of the issuer or similar issuers.</li> <li>For convertible bonds without directly comparable prices, issuances may be priced using a convertib bond model.</li> </ul>
	Fair value hierarchy	<ul> <li>Generally classified as Level 1 or Level 2, depending on the depth of trading activity behind price source</li> <li>Level 3 instruments have no suitable pricing information available.</li> </ul>
Traded loans and loans measured at fair value	Valuation	<ul> <li>Valued directly using market prices that reflect recent transactions or quoted dealer prices, where available.</li> <li>Where no market price data is available, loans are valued by relative value benchmarking using pricing derived from debt instruments in comparable entities or different products in the same entity, or by using a credit default swap valuation technique, which requires inputs for credit spreads, credit recovery rate and interest rates. Recently originated commercial real estate loans are measured using a securitization approach based on rating agency guidelines.</li> </ul>
	Fair value hierarchy	<ul> <li>Instruments with suitably deep and liquid pricing information are classified as Level 2.</li> <li>Positions requiring the use of valuation techniques, or for which the price sources have insufficient tradin depth, are classified as Level 3.</li> </ul>
Investment fund units	Valuation	<ul> <li>Predominantly exchange-traded, with readily available quoted prices in liquid markets. Where marked prices are not available, fair value may be measured using net asset values (NAVs).</li> </ul>
	Fair value hierarchy	<ul> <li>Listed units are classified as Level 1, provided there is sufficient trading activity to justify active-mark classification, while other positions are classified as Level 2.</li> <li>Positions for which NAVs are not available, or where the unit or underlying investments are illiquid a classified as Level 3.</li> </ul>
Asset-backed securities (ABS)	Valuation	<ul> <li>For liquid securities, the valuation process will use trade and price data, updated for movements in mark levels between the time of trading and the time of valuation. Less liquid instruments are measured using discounted expected cash flows incorporating price data for instruments or indices with similar risk profile</li> </ul>
	Fair value hierarchy	<ul> <li>Residential mortgage-backed securities, commercial mortgage-backed securities and other ABS a generally classified as Level 2. However, if significant inputs are unobservable, or if market or fundament data is not available, they are classified as Level 3.</li> </ul>
Auction rate securities (ARS)	Valuation	<ul> <li>ARS are valued utilizing a discounted cash flow methodology. The model captures interest rate ris emanating from the note coupon, credit risk attributable to the underlying closed-end fund investment liquidity risk as a function of the level of trading volume in these positions, and extension risk, as ARS a perpetual instruments that require an assumption regarding their maturity or issuer redemption date.</li> </ul>
	Fair value hierarchy	<ul> <li>Granular and liquid pricing information is generally not available for ARS. As a result, these securities at classified as Level 3.</li> </ul>
Equity instruments	Valuation	<ul> <li>Listed equity instruments are generally valued using prices obtained directly from the market.</li> <li>Unlisted equity holdings, including private equity positions, are initially marked at their transaction price and are revalued when reliable evidence of price movement becomes available or when the position deemed to be impaired.</li> </ul>
	Fair value hierarchy	<ul> <li>The majority of equity securities are actively traded on public stock exchanges where quoted prices at readily and regularly available, resulting in Level 1 classification.</li> <li>Equity securities less actively traded will be classified as Level 2 and illiquid positions as Level 3.</li> </ul>
Financial assets for unit-linked	Valuation	<ul> <li>The majority of assets are listed on exchanges and fair values are determined using quoted prices.</li> </ul>
investment contracts	Fair value hierarchy	<ul> <li>Most assets are classified as Level 1 if actively traded, or Level 2 if trading is not active.</li> <li>Instruments for which prices are not readily available are classified as Level 3.</li> </ul>
Securities financing transactions	Valuation	<ul> <li>These instruments are valued using discounted expected cash flow techniques. The discount rate applies is based on funding curves that are relevant to the collateral eligibility terms.</li> </ul>
u ansacutins	Fair value hierarchy	<ul> <li>Collateral funding curves for these instruments are generally observable and, as a result, these position are classified as Level 2.</li> <li>Where the collateral terms are non-standard, the funding curve may be considered unobservable ar these positions are classified as Level 3.</li> </ul>
Brokerage	Valuation	- Fair value is determined based on the value of the underlying balances.
receivables and payables	Fair value hierarchy	Due to their on-demand nature, these receivables and payables are deemed as Level 2.

Product	Valuation and	classification in the fair value hierarchy
Financial liabilities related to unit- linked investment contracts	Valuation	<ul> <li>The fair values of investment contract liabilities are determined by reference to the fair value of the corresponding assets.</li> </ul>
	Fair value hierarchy	<ul> <li>The liabilities themselves are not actively traded, but are mainly referenced to instruments that are actively traded and are therefore classified as Level 2.</li> </ul>
Precious metals and other physical commodities	Valuation	<ul> <li>Physical assets are valued using the spot rate observed in the relevant market.</li> </ul>
	Fair value hierarchy	<ul> <li>Generally traded in active markets with prices that can be obtained directly from these markets, resulting in classification as Level 1.</li> </ul>
Debt issued designated at fair value	Valuation	<ul> <li>The risk management and the valuation approaches for these instruments are closely aligned with the equivalent derivatives business and the underlying risk, and the valuation techniques used for this component are the same as the relevant valuation techniques described below.</li> </ul>
	Fair value hierarchy	The observability is closely aligned with the equivalent derivatives business and the underlying risk.
Commercial paper and certificates of deposit	Valuation	<ul> <li>Generally valued using discounted cash flow valuation techniques incorporating the spread of the issuer or similar issuers over the underlying currency risk-free curve.</li> </ul>
	Fair value hierarchy	<ul> <li>Due to the short-dated nature of the positions and liquid underlying pricing inputs, they are generally classified as Level 2.</li> </ul>

## Derivative instruments: valuation and classification in the fair value hierarchy

The curves used for discounting expected cash flows in the valuation of collateralized derivatives reflect the funding terms associated with the relevant collateral arrangement for the instrument being valued. These collateral arrangements differ across counterparties with respect to the eligible currency and interest terms of the collateral. The majority of collateralized derivatives are measured using a discount curve based on funding rates derived from overnight interest in the cheapest eligible currency for the respective counterparty collateral agreement.

Uncollateralized and partially collateralized derivatives are discounted using the alternative reference rate (the ARR) (or equivalent) curve for the currency of the instrument. As described in Note 20d, the fair value of uncollateralized and partially collateralized derivatives is then adjusted by credit valuation adjustments (CVAs), debit valuation adjustments (DVAs) and funding valuation adjustments (FVAs), as applicable, to reflect an estimation of the effect of counterparty credit risk, UBS AG's own credit risk, and funding costs and benefits.

# > Refer to Note 10 for more information about derivative instruments

Derivative product Interest rate contracts	Valuation and classification in the fair value hierarchy		
	Valuation	<ul> <li>Interest rate swap contracts are valued by estimating future interest cash flows and discounting those cash flows using a rate that reflects the appropriate funding rate for the position being measured. The yield curves used to estimate future index levels and discount rates are generated using market-standard yield curve models using interest rates associated with current market activity. The key inputs to the models are interest rate swap rates, forward rate agreement rates, short-term interest rate futures prices, basis swap spreads and inflation swap rates.</li> <li>Interest rate option contracts are valued using various market-standard option models, using inputs that include interest rate yield curves, inflation curves, volatilities and correlations.</li> <li>When the maturity of an interest rate swap or option contract exceeds the term for which standard market quotes are observable for a significant input parameter, the contracts are valued by extrapolation from the last observable point using standard assumptions or by reference to another observable comparable input parameter to represent a suitable proxy for that portion of the term.</li> </ul>	
	Fair value hierarchy	<ul> <li>The majority of interest rate swaps are classified as Level 2, as the standard market contracts that form the inputs for yield curve models are generally traded in active and observable markets.</li> <li>Options are generally treated as Level 2, as the calibration process enables the model output to be validated to active-market levels. Models calibrated in this way are then used to revalue the portfolio of both standard options and more exotic products.</li> <li>Interest rate swap or option contracts are classified as Level 3 when the terms exceed standard market-observable quotes.</li> <li>Exotic options for which appropriate volatility or correlation input levels cannot be implied from observable market data are classified as Level 3.</li> </ul>	
Credit derivative contracts	Valuation	<ul> <li>Credit derivative contracts are valued using industry-standard models based primarily on market credit spreads, upfront pricing points and implied recovery rates. Where a derivative credit spread is not directly available, it may be derived from the price of the reference cash bond.</li> <li>Asset-backed credit derivatives are valued using a valuation technique similar to that of the underlying security with an adjustment to reflect the funding differences between cash and synthetic form.</li> </ul>	
	Fair value hierarchy	<ul> <li>Single-entity and portfolio credit derivative contracts are classified as Level 2 when credit spreads and recovery rates are determined from actively traded observable market data. Where the underlying reference name(s) are not actively traded and the correlation cannot be directly mapped to actively traded tranche instruments, these contracts are classified as Level 3.</li> <li>Asset-backed credit derivatives follow the characteristics of the underlying security and are therefore distributed across Level 2 and Level 3.</li> </ul>	

Poreign exchange contracts	Valuation and classification in the fair value hierarchy		
	Valuation	<ul> <li>Open spot foreign exchange (FX) contracts are valued using the FX spot rate observed in the market.</li> <li>Forward FX contracts are valued using the FX spot rate adjusted for forward pricing points observed fron standard market-based sources.</li> <li>Over-the-counter (OTC) FX option contracts are valued using market-standard option valuation models. The models used for shorter-dated options (i.e., maturities of five years or less) tend to be different that those used for longer-dated options because the models needed for longer-dated OTC FX contracts require additional consideration of interest rate and FX rate interdependency.</li> <li>The valuation for multi-dimensional FX options uses a multi-local volatility model, which is calibrated to the observed FX volatilities for all relevant FX pairs.</li> </ul>	
	Fair value hierarchy	<ul> <li>The markets for FX spot and FX forward pricing points are both actively traded and observable and therefore such FX contracts are generally classified as Level 2.</li> <li>A significant proportion of OTC FX option contracts are classified as Level 2 as inputs are derived mostly from standard market contracts traded in active and observable markets.</li> </ul>	
Equity / index contracts	Valuation	<ul> <li>Equity forward contracts have a single stock or index underlying and are valued using market-standard models. The key inputs to the models are stock prices, estimated dividend rates and equity funding rates (which are implied from prices of forward contracts observed in the market). Estimated cash flows are ther discounted using market-standard discounted cash flow models using a rate that reflects the appropriate funding rate for that portion of the portfolio. When no market data is available for the instrument maturity they are valued by extrapolation of available data, use of historical dividend data, or use of data for a related equity.</li> <li>Equity option contracts are valued using market-standard models that estimate the equity forward level as described for equity forward contracts and incorporate inputs for stock volatility and for correlation between stocks within a basket. The probability-weighted expected option payoff generated is ther discounted using market-standard discounted cash flow models applying a rate that reflects the appropriate funding rate for that portion of the portfolio. When volatility, forward or correlation inputs are not available, they are valued using extrapolation of available data, historical dividend, correlation or volatility data, or the equivalent data for a related equity.</li> </ul>	
	Fair value hierarchy	<ul> <li>As inputs are derived mostly from standard market contracts traded in active and observable markets, a significant proportion of equity forward contracts are classified as Level 2.</li> <li>Equity option positions for which inputs are derived from standard market contracts traded in active and observable markets are also classified as Level 2. Level 3 positions are those for which volatility, forward or correlation inputs are not observable.</li> </ul>	
Commodity contracts	Valuation	<ul> <li>Commodity forward and swap contracts are measured using market-standard models that use market forward levels on standard instruments.</li> <li>Commodity option contracts are measured using market-standard option models that estimate the commodity forward level as described for commodity forward and swap contracts, incorporating inputs for the volatility of the underlying index or commodity. For commodity options on baskets of commodities or bespoke commodity indices, the valuation technique also incorporates inputs for the correlation between different commodities or commodity indices.</li> </ul>	
	Fair value hierarchy	<ul> <li>Individual commodity contracts are typically classified as Level 2, because active forward and volatility market data is available.</li> </ul>	

## d) Valuation adjustments and other items

The output of a valuation technique is always an estimate of a fair value that cannot be measured with complete certainty. As a result, valuations are adjusted where appropriate and when such factors would be considered by market participants in estimating fair value, to reflect close-out costs, credit exposure, model-driven valuation uncertainty, funding costs and benefits, trading restrictions and other factors.

## Deferred day-1 profit or loss reserves

For new transactions where the valuation technique used to measure fair value requires significant inputs that are not based on observable market data, the financial instrument is initially recognized at the transaction price. The transaction price may differ from the fair value obtained using a valuation technique, where any such difference is deferred and not initially recognized in the income statement.

Deferred day-1 profit or loss is generally released into *Other net income from financial instruments measured at fair value through profit or loss* when pricing of equivalent products or the underlying parameters becomes observable or when the transaction is closed out.

The table below summarizes the changes in deferred day-1 profit or loss reserves during the respective period.

USD m	2023	2022	2021
Reserve balance at the beginning of the year	422	418	269
Profit / (loss) deferred on new transactions	250	299	459
(Profit) / loss recognized in the income statement	(275)	(295)	(308)
Foreign currency translation	0	0	(2)
Reserve balance at the end of the year	397	422	418

#### Own credit

Own credit risk is reflected in the valuation of UBS AG's fair value option liabilities where this component is considered relevant for valuation purposes by UBS AG's counterparties and other market participants.

Changes in the fair value of financial liabilities designated at fair value through profit or loss related to own credit are recognized in *Other comprehensive income* directly within *Retained earnings, with no reclassification to the income statement in future periods.* This presentation neither creates nor increases an accounting mismatch in the income statement, as UBS AG does not hedge changes in own credit.

Own credit is estimated using own credit adjustment (OCA) curves, which incorporate observable market data, including market-observed secondary prices for UBS's debt and debt curves of peers. In the table below, the change in unrealized own credit consists of changes in fair value that are attributable to the change in UBS AG's credit spreads, as well as the effect of changes in fair values attributable to factors other than credit spreads, such as redemptions, effects from time decay and changes in interest and other market rates. Realized own credit is recognized when an instrument with an associated unrealized OCA is repurchased prior to the contractual maturity date. Life-to-date amounts reflect the cumulative unrealized change since initial recognition.

#### > Refer to Note 15 for more information about debt issued designated at fair value

#### Own credit adjustments on financial liabilities designated at fair value

	Included in Ot	Included in Other comprehensive income						
ognized during the period:  lized gain / (loss)  ealized gain / (loss),  ll gain / (loss), before tax  or  ognized on the balance sheet as of the end of the period: ealized life-to-date gain / (loss)		For the year ended						
USD m	31.12.23	31.12.22	31.12.21					
Recognized during the period:								
Realized gain / (loss)	8	1	(14)					
Unrealized gain / (loss)	(869)	866	60					
Total gain / (loss), before tax	(861)	8         1           (869)         866           (861)         867           31.12.23         31.12.22						
USD m	31.12.23	31.12.22	31.12.21					
Recognized on the balance sheet as of the end of the period:								
Unrealized life-to-date gain / (loss)	(312)	556	(315)					
of which: debt issued designated at fair value	(208)	289	(144)					
of which: other financial liabilities designated at fair value	(105)	266	(172)					

#### Credit valuation adjustments

In order to measure the fair value of OTC derivative instruments, including funded derivative instruments that are classified as *Financial assets at fair value not held for trading*, CVAs are needed to reflect the credit risk of the counterparty inherent in these instruments. This amount represents the estimated fair value of protection required to hedge the counterparty credit risk of such instruments. A CVA is determined for each counterparty, considering all exposures with that counterparty, and is dependent on the expected future value of exposures, default probabilities and recovery rates, applicable collateral or netting arrangements, break clauses, funding spreads, and other contractual factors.

#### Funding valuation adjustments

FVAs reflect the costs and benefits of funding associated with uncollateralized and partially collateralized derivative receivables and payables and are calculated as the valuation effect from moving the discounting of the uncollateralized derivative cash flows from the ARR to OCA using the CVA framework, including the probability of counterparty default. An FVA is also applied to collateralized derivative assets in cases where the collateral cannot be sold or repledged.

#### Debit valuation adjustments

A DVA is estimated to incorporate own credit in the valuation of derivatives where an FVA is not already recognized. The DVA calculation is effectively consistent with the CVA framework, being determined for each counterparty, considering all exposures with that counterparty and taking into account collateral netting agreements, expected future mark-to-market movements and UBS AG's credit default spreads.

#### Other valuation adjustments

Instruments that are measured as part of a portfolio of combined long and short positions are valued at mid-market levels to ensure consistent valuation of the long- and short-component risks. A liquidity valuation adjustment is then made to the overall net long or short exposure to move the fair value to bid or offer as appropriate, reflecting current levels of market liquidity. The bid-offer spreads used in the calculation of this valuation adjustment are obtained from market transactions and other relevant sources and are updated periodically.

Uncertainties associated with the use of model-based valuations are incorporated into the measurement of fair value through the use of model reserves. These reserves reflect the amounts that UBS AG estimates should be deducted from valuations produced directly by models to incorporate uncertainties in the relevant modeling assumptions, in the model and market inputs used, or in the calibration of the model output to adjust for known model deficiencies. In arriving at these estimates, UBS AG considers a range of market practices, including how it believes market participants would assess these uncertainties. Model reserves are reassessed periodically in light of data from market transactions, consensus pricing services and other relevant sources.

#### Balance sheet valuation adjustments on financial instruments

	As of	
USD m	31.12.23	31.12.22
Credit valuation adjustments <sup>1</sup>	(37)	(33)
Funding and debit valuation adjustments	(82)	(46)
Other valuation adjustments	(730)	(839)
of which: liquidity	(308)	(311)
of which: model uncertainty	(423)	(529)

<sup>1</sup> Amounts do not include reserves against defaulted counterparties.

## e) Level 3 instruments: valuation techniques and inputs

The table below presents material Level 3 assets and liabilities, together with the valuation techniques used to measure fair value, the inputs used in a given valuation technique that are considered significant as of 31 December 2023 and unobservable, and a range of values for those unobservable inputs.

The range of values represents the highest- and lowest-level inputs used in the valuation techniques. Therefore, the range does not reflect the level of uncertainty regarding a particular input or an assessment of the reasonableness of UBS AG's estimates and assumptions, but rather the different underlying characteristics of the relevant assets and liabilities held by UBS AG. The ranges will therefore vary from period to period and parameter to parameter based on characteristics of the instruments held at each balance sheet date. Furthermore, the ranges of unobservable inputs may differ across other financial institutions, reflecting the diversity of the products in each firm's inventory.

Valuation techniques and inputs used in the fair value measurement of Level 3 assets and liabilities

valuation techniques a	•	Fair val							Rang	e of inp	uts		
_	Assets		Liabi	ities				31.12.			31.12.	22	
USD bn	21 12 22 21	11222	24 42 22	21 12 22	Valuation technique(s)	Significant unobservable input(s) <sup>1</sup>	laur	hiah	weighted	low	hiah	weighted average <sup>2</sup>	uni+1
Financial assets and liabilities							low	high	average <sup>2</sup>	low	high	average <sup>2</sup>	unit <sup>1</sup>
	at fall value field	ioi uaui	ng and rina	iiciai asset		or trading							
Corporate and municipal bonds	0.9	0.8	0.1	0.0	Relative value to market comparable	Rond price equivalent	9	114	93	14	112	85	points
DONAS	0.9	0.0	0.1	0.0		Bond price equivalent	9	114	95	14	112	00	
					Discounted expected cash flows	Discount margin	491	491		412	412		basis points
Traded loans, loans measured at fair value, loan commitments and					Relative value to	······							
guarantees	2.3	1.7	0.0	0.0	market comparable	Loan price equivalent	6	101	98	30	100	97	points
					Discounted expected								basis
					cash flows	Credit spread	200	275	252	200	200	200	points
					Market comparable and securitization	Conditions and	162	1.040	240	1.45	1 250	222	basis
					model	Credit spread	102	1,849	318	145	1,350	322	points
Accetion mate as acception	4.2	1 2			Discounted expected	Cuadit anna d	425	205	450	115	100	1.1.1	basis
Auction rate securities	1.2	1.3			cash flows	Credit spread	135	205	150	115	196	144	points
(m. m. star a m. t. f. m. d. m. st. 2	0.2	0.3	0.0	0.0	Relative value to	Net cost color							
Investment fund units <sup>3</sup>	0.2	0.3	0.0	0.0	market comparable	Net asset value							
Fauity instruments?	1.2	0.9	0.1	0.1	Relative value to market comparable	Price							
Equity instruments <sup>3</sup> Debt issued designated at	1.2	0.9	0.1	0.1	market comparable	riice							
fair value <sup>4</sup>			7.8	9.2									
Other financial liabilities			7.0	9.2	Discounted expected								basis
designated at fair value			2.3	2.0	cash flows	Funding spread	51	201		23	175		points
Derivative financial instrument	tc		2.3	2.0	Casii ilows	runung spreau	- 31	201			173		points
Denvative manear instrument						Volatility of interest							basis
Interest rate	0.3	0.5	0.1	01	Option model	rates	84	112		75	143		points
micrest rate					Discounted expected						1.13		basis
Credit	0.3	0.3	0.3	03	cash flows	Credit spreads	1	306		9	565		points
Crear				0.5		Bond price equivalent		242		3 3	277		points
Equity / index	0.7	0.7	2.7	1 2	Option model	Equity dividend yields	0	14		0	<u>27,</u> 20		%
Lyuny / muex	0.7		2./	1.2	Option model	Volatility of equity stocks, equity and							
						other indices	4	104		4	120		%
						Equity-to-FX correlation	(40)	70		(29)	84		%
						Equity-to-equity correlation	13	100		(25)	100		%

<sup>1</sup> The ranges of significant unobservable inputs are represented in points, percentages and basis points. Points are a percentage of par (e.g., 100 points would be 100% of par). 2 Weighted averages are provided for most non-derivative financial instruments and were calculated by weighting inputs based on the fair values of the respective instruments. Weighted averages are not provided for inputs related to Other financial liabilities designated at fair value and Derivative financial instruments, as this would not be meaningful. 3 The range of inputs is not disclosed, as there is a dispersion of values given the diverse nature of the investments. 4 Debt issued designated at fair value primarily consists of UBS AG structured notes, which include variable maturity notes with various equity and foreign exchange underlying risks, as well as rates-linked and credit-linked notes, all of which have embedded derivative parameters that are considered to be unobservable. The equivalent derivative instrument parameters are presented in the respective derivative financial instruments lines in this table.

## Significant unobservable inputs in Level 3 positions

This section discusses the significant unobservable inputs used in the valuation of Level 3 instruments and assesses the potential effect that a change in each unobservable input in isolation may have on a fair value measurement. Relationships between observable and unobservable inputs have not been included in the summary below.

Input	Description
Bond price equivalent	<ul> <li>Where market prices are not available for a bond, fair value is measured by comparison with observable pricing data from similar instruments. Factors considered when selecting comparable instruments include credit quality, maturity and industry of the issuer. Fair value may be measured either by a direct price comparison or by conversion of an instrument price into a yield (either as an outright yield or as a spread to the relevant benchmark rate).</li> <li>For corporate and municipal bonds, the range represents the range of prices from reference issuances used in determining fair value. Bonds priced at 0 are distressed to the point that no recovery is expected, while prices significantly in excess of 100 or par relate to inflation-linked or structured issuances that pay a coupon in excess of the market benchmark as of the measurement date.</li> <li>For credit derivatives, the bond price range represents the range of prices used for reference instruments, which are typically converted to an equivalent yield or credit spread as part of the valuation process.</li> </ul>
Loan price equivalent	- Where market prices are not available for a traded loan or a loan commitment, fair value is measured by comparison with observable pricing data for similar instruments. Factors considered when selecting comparable instruments include industry segment, collateral quality, maturity and issuer-specific covenants. Fair value may be measured either by a direct price comparison or by conversion of an instrument price into a yield. The range represents the range of prices derived from reference issuances of a similar credit quality used to measure fair value for loans classified as Level 3. Loans priced at 0 are distressed to the point that no recovery is expected, while a current price of 100 represents a loan that is expected to be repaid in full.
Credit spread	Valuation models for many credit derivatives and other credit sensitive products require an input for the credit spread, which is a reflection of the credit quality of the associated referenced underlying. The credit spread of a particular security is quoted in relation to the yield on a benchmark security or reference rate, typically either US Treasury or ARR, and is generally expressed in terms of basis points. An increase / (decrease) in credit spread will increase / (decrease) the value of credit protection offered by credit default swaps and other credit derivative products. The income statement effect from such changes depends on the nature and direction of the positions held. Credit spreads may be negative where the asset is more creditworthy than the benchmark against which the spread is calculated. A wider credit spread represents decreasing creditworthiness. The range represents a diverse set of underlyings, with the lower end of the range representing credits of the highest quality and the upper end of the range representing greater levels of credit risk.
Discount margin	<ul> <li>The discount margin (DM) spread represents the discount rates applied to present value cash flows of an asset to reflect the market return required for uncertainty in the estimated cash flows. DM spreads are a rate or rates applied on top of a floating index (e.g., Secured Overnight Financing Rate (SOFR)) to discount expected cash flows. Generally, a decrease / (increase) in the DM in isolation would result in a higher / (lower) fair value.</li> <li>The high end of the range relates to securities that are priced low within the market relative to the expected cash flow schedule. This indicates that the market is pricing an increased risk of credit loss into the security that is greater than what is being captured by the expected cash flow generation process. The low ends of the ranges are typical of funding rates on better-quality instruments.</li> </ul>
Funding spread	<ul> <li>Structured financing transactions are valued using synthetic funding curves that best represent the assets that are pledged as collateral for the transactions. They are not representative of where UBS AG can fund itself on an unsecured basis but provide an estimate of where UBS AG can source and deploy secured funding with counterparties for a given type of collateral. The funding spreads are expressed in terms of basis points, and if funding spreads widen, this increases the effect of discounting.</li> <li>A small proportion of structured debt instruments and non-structured fixed-rate bonds within financial liabilities designated at fair value had an exposure to funding spreads that was longer in duration than the actively traded market.</li> </ul>
Volatility	<ul> <li>Volatility measures the variability of future prices for a particular instrument and is generally expressed as a percentage, where a higher number reflects a more volatile instrument, for which future price movements are more likely to occur. Volatility is a key input into option models, where it is used to derive a probability-based distribution of future prices for the underlying instrument. The effect of volatility on individual positions within the portfolio is driven primarily by whether the option contract is a long or short position. In most cases, the fair value of an option increases as a result of an increase in volatility and is reduced by a decrease in volatility. Generally, volatility used in the measurement of fair value is derived from active-market option prices (referred to as implied volatility). A key feature of implied volatility is the volatility "smile" or "skew," which represents the effect of pricing options of different option strikes at different implied volatility levels.</li> <li>Volatilities of low interest rates tend to be much higher than volatilities of high interest rates. In addition, different currencies may have significantly different implied volatilities.</li> </ul>

Input	Description
Correlation	Correlation measures the interrelationship between the movements of two variables. It is expressed as a percentage between -100% and +100%, where +100% represents perfectly correlated variables (meaning a movement of one variable is associated with a movement of the other variable in the same direction) and -100% implies that the variables are inversely correlated (meaning a movement of one variable is associated with a movement of the other variable in the opposite direction). The effect of correlation on the measurement of fair value depends on the specific terms of the instruments being valued, reflecting the range of different payoff features within such instruments.
Equity dividend yields	The derivation of a forward price for an individual stock or index is important for measuring fair value for forward or swap contracts and for measuring fair value using option pricing models. The relationship between the current stock price and the forward price is based on a combination of expected future dividend levels and payment timings, and, to a lesser extent, the relevant funding rates applicable to the stock in question. Dividend yields are generally expressed as an annualized percentage of the share price, with the lowest limit of 0% representing a stock that is not expected to pay any dividend. The dividend yield and timing represent the most significant parameter in determining fair value for instruments that are sensitive to an equity forward price.

## f) Level 3 instruments: sensitivity to changes in unobservable input assumptions

The table below summarizes those financial assets and liabilities classified as Level 3 for which a change in one or more of the unobservable inputs to reflect reasonably possible favorable and unfavorable alternative assumptions would change fair value significantly, and the estimated effect thereof. The table below does not represent the estimated effect of stress scenarios. Interdependencies between Level 1, 2 and 3 parameters have not been incorporated in the table. Furthermore, direct interrelationships between the Level 3 parameters discussed below are not a significant element of the valuation uncertainty.

Sensitivity data is estimated using a number of techniques, including the estimation of price dispersion among different market participants, variation in modeling approaches and reasonably possible changes to assumptions used within the fair value measurement process. The sensitivity ranges are not always symmetrical around the fair values, as the inputs used in valuations are not always precisely in the middle of the favorable and unfavorable range.

Sensitivity data is determined at a product or parameter level and then aggregated assuming no diversification benefit. Diversification would incorporate estimated correlations across different sensitivity results and, as such, would result in an overall sensitivity that would be less than the sum of the individual component sensitivities. However, UBS AG believes that the diversification benefit is not significant to this analysis.

## Sensitivity of fair value measurements to changes in unobservable input assumptions<sup>1</sup>

	31.12.2	3	31.12.2	2
USD m	Favorable changes	Unfavorable changes	Favorable changes	Unfavorable changes
Traded loans, loans measured at fair value, loan commitments and guarantees	22 <sup>2</sup>	(29)2	19	(12)
Securities financing transactions	24	(24)	33	(37)
Auction rate securities	67	(21)	46	(46)
Asset-backed securities	25	(22)	27	(27)
Equity instruments	189	(178)	183	(161)
Interest rate derivatives, net	27	(18)	18	(12)
Credit derivatives, net	2	(5)	3	(4)
Foreign exchange derivatives, net	5	(4)	10	(5)
Equity / index derivatives, net	358	(285)	361	(330)
Other	62	(62)	39	(62)
Total	781	(648)	738	(696)

<sup>1</sup> Sensitivity of issued and over-the-counter debt instruments is reported with the equivalent derivative or Other. 2 Includes refinements applied in estimating valuation uncertainty across various parameters.

## g) Level 3 instruments: movements during the period

The table below presents additional information about material Level 3 assets and liabilities measured at fair value on a recurring basis. Level 3 assets and liabilities may be hedged with instruments classified as Level 1 or Level 2 in the fair value hierarchy, and, as a result, realized and unrealized gains and losses included in the table may not include the effect of related hedging activity. Furthermore, the realized and unrealized gains and losses presented in the table are not limited solely to those arising from Level 3 inputs, as valuations are generally derived from both observable and unobservable parameters. Assets and liabilities transferred into or out of Level 3 are presented as if those assets or liabilities had been transferred at the beginning of the year.

USD bn	Balance at the beginning	compre- hensive	of which: related to instruments held at the end of the	Durchasas	Calac	legues -	Cottlomant	Transfers into	Transfers out of	Foreign currency	Balance at the end
	of the period	income <sup>1</sup>	period	Purchases	Sales	issuances	Settlements	Level 3	Level 3	translation	of the period
For the twelve months ended 31 Decem	iber 2023 <sup>2</sup>										
Financial assets at fair value held for	4.5	(0.4)	(0.4)	0.4	(0.0)	0.0	0.0	0.0	(0.2)	0.0	4.0
trading of which: Equity instruments	1.5 0.1	(0.1) (0.1)	(0.1) (0.1)	0.4 0.0	(0.8) (0.1)	0.8	0.0	<b>0.2</b> 0.2	(0.3) (0.0)	0.0	1.8 0.1
of which: Corporate and municipal	0.7	(0.1)	(0.1)	0.0	(0.1)	0.0	0.0	0.2	(0.0)	0.0	0.7
bonds	0.5	(0.0)	(0.0)	0.4	(0.3)	0.0	0.0	0.0	(0.0)	0.0	0.6
of which: Loans	0.6	(0.1)	(0.1)	0.1	(0.4)	0.8	0.0	0.0	(0.2)	0.0	0.9
Derivative financial instruments —											
assets	1.5	(0.3)	(0.3)	0.0	(0.0)	0.7	(0.5)	0.1	(0.3)	0.0	1.3
of which: Interest rate	0.5	0.0	(0.0)	0.0	0.0	0.1	(0.2)	0.0	(0.1)	(0.0)	0.3
of which: Equity / index of which: Credit	0.7 0.3	(0.2) (0.1)	(0.2) (0.1)	0.0 0.0	0.0 0.0	0.6 0.1	(0. 1) (0. 1)	0.0 0.1	(0.2) (0.0)	0.0 0.0	0.7 0.3
		[0.1]	10.1/			0.7	10.1)	0.7	10.0/	0.0	<i></i>
Financial assets at fair value not held for trading	3.7	0.2	0.2	0.8	(0.7)	0.0	(0.0)	0.1	(0.1)	0.0	4.1
of which: Loans	0.7	0.3	0.3	0.3	(0.0)	0.0	(0.0)	0.1	(0.1)	(0.0)	1.3
of which: Auction rate securities	1.3	0.0	0.0	0.0	(0.1)	0.0	0.0	0.0	0.0	0.0	1.2
of which: Equity instruments	0.8	0.1	0.0	0.4	(0.2)	0.0	0.0	0.1	0.0	0.0	1.1
Derivative financial instruments —											
liabilities	1.7	0.3	0.3	0.0	(0.0)	1.9	(0.6)	0.0	(0.2)	0.0	3.2
of which: Interest rate	0.1	0.0	0.0	0.0	0.0	0.0	(0.1)	0.0	(0.0)	0.0	0.1
of which: Equity / index	1.2	0.3	0.3	0.0	0.0	1.8	(0.4)	0.0	(0.2)	0.0	2.7
of which: Credit	0.3	(0.0)	0.0	0.0	0.0	0.1	0.0	0.0	(0.1)	(0.0)	0.3
Debt issued designated at fair value	9.2	0.4	0.3	0.0	0.0	3.5	(3.2)	0.5	(2.6)	0.0	7.8
Other financial liabilities designated at fair value	2.0	0.3	0.4	0.0	0.0	0.2	(0.2)	0.0	(0.0)	0.0	2.3
For the twelve months ended 31 Decem	ber 2022										
Financial assets at fair value held for											
trading	2.3	(0.3)	(0.3)	0.3	(1.8)	0.5	0.0	0.7	(0.3)	(0.0)	1.5
of which: Investment fund units	0.0	(0.0)	(0.0)	0.0	(0.0)	0.0	0.0	0.1	(0.0)	(0.0)	0.1
of which: Corporate and municipal bonds	0.6	(0.0)	(0.0)	0.3	(0.6)	0.0	0.0	0.4	(0.0)	(0.0)	0.5
of which: Loans	1.4	(0.1)	(0.1)	0.0	(1.1)	0.5	0.0	0.0	(0.2)	0.0	0.6
Derivative financial instruments –											
assets	1.1	0.6	0.3	0.0	0.0	0.4	(0.7)	0.1	(0.0)	(0.0)	1.5
of which: Interest rate	0.5	0.3	0.3	0.0	0.0	0.0	(0.2)	0.0	(0.1)	(0.0)	0.5
of which: Equity / index	0.4	0.2	0.1	0.0	0.0	0.4	(0.3)	0.1	(0.0)	(0.0)	0.7
of which: Credit	0.2	0.1	(0.1)	0.0	0.0	0.0	(0.2)	0.0	0.1	0.0	0.3
Financial assets at fair value not held											
for trading	4.2	0.1	0.1	0.7	(1.2)	0.1	(0.0)	0.2	(0.3)	(0.0)	3.7
of which: Loans	0.9	(0.0)	(0.0)	0.4	(0.4)	0.1	0.0	0.1	(0.3)	(0.0)	0.7
of which: Auction rate securities	1.6	0.1	0.0	0.0	(0.3)	0.0	0.0	0.0	0.0	0.0	1.3
of which: Equity instruments	0.7	0.0	0.0	0.1	(0.1)	0.0	0.0	0.1	0.0	(0.0)	0.8
Derivative financial instruments — liabilities	2.2	(0.8)	(0.4)	0.0	0.0	1.1	(0.9)	0.3	(0.2)	(0.1)	1.7
of which: Interest rate	0.3	(0.8)	(0.4)	0.0	0.0	0.1	(0.9)	0.0	(0.2)	(0.1)	0.1
of which: Equity / index	1.5	(0.4)	(0.3)	0.0	0.0	0.8	(0.7)	0.1	(0.2)	(0.0)	1.2
of which: Credit	0.3	(0.1)	(0.0)	0.0	0.0	0.1	(0.1)	0.1	(0.0)	(0.0)	0.3
Debt issued designated at fair value	11.9	(1.3)	(0.9)	0.0	0.0	4.7	(3.1)	0.7	(3.3)	(0.3)	9.2
Other financial liabilities designated at	1113	(1.5)	10.0/		0.0	-1.7	(5.1)	· · · ·	(5.5)	(0.5)	
fair value	3.2	(1.0)	(1.0)	0.0	0.0	0.0	(0.1)	0.1	(0.2)	(0.0)	2.0

<sup>1</sup> Net gains / losses included in comprehensive income are recognized in Net interest income and Other net income from financial instruments measured at fair value through profit or loss in the Income statement, and also in Gains / (losses) from own credit on financial liabilities designated at fair value, before tax in the Statement of comprehensive income. 2 Total Level 3 assets as of 31 December 2023 were USD 7.2bn (31 December 2022: USD 6.7bn). Total Level 3 liabilities as of 31 December 2023 were USD 13.4bn (31 December 2022: USD 13.0bn).

## h) Maximum exposure to credit risk for financial instruments measured at fair value

The tables below provide UBS AG's maximum exposure to credit risk for financial instruments measured at fair value and the respective collateral and other credit enhancements mitigating credit risk for these classes of financial instruments.

The maximum exposure to credit risk includes the carrying amounts of financial instruments recognized on the balance sheet subject to credit risk and the notional amounts for off-balance sheet arrangements. Where information is available, collateral is presented at fair value. For other collateral, such as real estate, a reasonable alternative value is used. Credit enhancements, such as credit derivative contracts and guarantees, are included at their notional amounts. Both are capped at the maximum exposure to credit risk for which they serve as security. The "Risk management and control" section of this report describes management's view of credit risk and the related exposures, which can differ in certain respects from the requirements of IFRS Accounting Standards.

#### Maximum exposure to credit risk

	31.12.23										
			Collate	ral		Cre	Exposure to				
USD bn	Maximum exposure to credit risk	Cash collateral received	Collateralized by equity and debt instruments	Secured by real estate	Other collateral	Netting	Credit derivative contracts	Guarantees and sub- participations	credit risk after collateral and credit enhancements		
Financial assets measured at fair value on the balance sheet <sup>1</sup>											
Financial assets at fair value											
held for trading – debt instruments <sup>2,3</sup>	25.6								25.6		
Derivative financial instruments <sup>4</sup>	131.7		5.1			117.6			9.1		
Brokerage receivables	20.9		20.5						0.4		
Financial assets at fair value not		•••••									
held for trading – debt instruments <sup>5</sup>	46.0		10.2						35.8		
Total financial assets measured at fair value	224.3	0.0	35.8	0.0	0.0	117.6	0.0	0.0	70.9		
Guarantees	0.1							0.1	0.0		
					31 12 22						

	31.12.22									
		Collateral				Cre	Exposure to			
	Maximum	Cash	Collateralized by equity and	6 11	0.1		Credit	Guarantees		
USD bn	exposure to credit risk	collateral received	debt instruments	Secured by real estate	Other collateral	Netting	derivative contracts	and sub- participations	and credit enhancements	
Financial assets measured at fair value on the balance sheet <sup>1</sup>										
Financial assets at fair value held for trading — debt instruments <sup>2,3</sup>	16.7								16.7	
Derivative financial instruments <sup>4</sup>	150.1		5.9		•••••	133.5			10.7	
Brokerage receivables	17.6		17.3						0.3	
Financial assets at fair value not										
held for trading – debt instruments <sup>5</sup>	44.8		11.4						33.4	
Total financial assets measured at fair value	229.2	0.0	34.6	0.0	0.0	133.5	0.0	0.0	61.2	

<sup>1</sup> The maximum exposure to loss is generally equal to the carrying amount and subject to change over time with market movements.

2 For the purpose of this disclosure, collateral and credit enhancements were not considered as these positions are generally managed under the market risk framework.

3 Does not include investment fund units.

4 The amount shown in the "Netting" column represents the netting potential not recognized on the balance sheet. Refer to Note 21 for more information.

5 Does not include unit-linked investment contracts and investment fund units. Financial assets at fair value not held for trading collateralized by equity and debt instruments consisted of structured loans and reverse repurchase and securities borrowing agreements.

0.2

0.2

0.0

#### i) Financial instruments not measured at fair value

The table below provides the estimated fair values of financial instruments not measured at fair value.

#### Financial instruments not measured at fair value

			31.12.23						31.12.22			
	Carrying amount		Fai	ir value			Carrying amount	Fair value				
USD bn	Total	Carrying amount approximates fair value <sup>1</sup>	Level 1	Level 2	Level 3	Total	Total	Carrying amount approximates fair value <sup>1</sup>	Level 1	Level 2	Level 3	Total
Assets												
Cash and balances at central banks	171.8	171.7	0.0	0.1	0.0	171.8	169.4	169.4	0.1	0.0	0.0	169.4
Amounts due from banks	28.2	12.5	0.0	15.4	0.2	28.2	14.7	13.9	0.0	0.7	0.0	14.6
Receivables from securities financing transactions measured at amortized cost Cash collateral receivables on derivative	74.1	68.7	0.0	3.9	1.5	74.1	67.8	64.3	0.0	1.8	1.7	67.8
instruments	32.3	32.3	0.0	0.0	0.0	32.3	35.0	35.0	0.0	0.0	0.0	35.0
Loans and advances to customers	405.6	131.8	0.0	44.3	220.4	396.5	390.0	136.9	0.0	45.9	195.0	377.7
Other financial assets measured at amortized												
cost	54.3	9.0	12.8	29.6	2.6	54.1	53.4	13.0	10.3	25.1	2.5	51.0
Liabilities												
Amounts due to banks	16.7	8.8	0.0	8.0	0.0	16.7	11.6	8.9	0.0	2.7	0.0	11.6
Payables from securities financing transactions measured at amortized cost	5.8	5.1	0.0	0.4	0.4	5.8	4.2	3.5	0.0	0.7	0.0	4.2
Cash collateral payables on derivative instruments	34.9	34.9	0.0	0.0	0.0	34.9	36.4	36.4	0.0	0.0	0.0	36.4
Customer deposits	555.7	482.1	0.0	74.5	0.0	556.6	527.2	493.0	0.0	33.9	0.0	526.9
Funding from UBS Group AG measured at amortized cost	67.3	3.3	0.0	64.4	0.0	67.7	56.1	2.0	0.0	53.7	0.0	55.7
Debt issued measured at amortized cost	69.8	18.1	0.0	51.7	0.0	69.8	59.5	13.4	0.0	45.5	0.0	58.9
Other financial liabilities measured at amortized cost <sup>2</sup>	9.8	9.8	0.0	0.0	0.0	9.8	7.2	7.2	0.0	0.0	0.0	7.2

<sup>1</sup> Includes certain financial instruments where the carrying amount is a reasonable approximation of the fair value due to the instruments' short-term nature (instruments that are receivable or payable on demand or with a remaining maturity (excluding the effects of callable features) of three months or less). 2 Excludes lease liabilities.

The fair values included in the table above have been calculated for disclosure purposes only. The valuation techniques and assumptions described below relate only to the fair value of UBS AG's financial instruments not measured at fair value. Other institutions may use different methods and assumptions for their fair value estimations, and therefore such fair value disclosures cannot necessarily be compared from one financial institution to another. The following principles were applied when determining fair value estimates for financial instruments not measured at fair value.

- For financial instruments with remaining maturities greater than three months, the fair value was determined from quoted market prices, if available.
- Where quoted market prices were not available, the fair values were estimated by discounting contractual cash flows
  using current market interest rates or appropriate yield curves for instruments with similar credit risk and maturity.
  These estimates generally include adjustments for counterparty credit risk or UBS AG's own credit.
- For short-term financial instruments with remaining maturities of three months or less, the carrying amount, which is net of credit loss allowances, is generally considered a reasonable estimate of fair value.

## Note 21 Offsetting financial assets and financial liabilities

UBS AG enters into netting agreements with counterparties to manage the credit risks associated primarily with repurchase and reverse repurchase transactions, securities borrowing and lending, over-the-counter derivatives, and exchange-traded derivatives. These netting agreements and similar arrangements generally enable the counterparties to set off liabilities against available assets received in the ordinary course of business and / or in the event that the counterparties to the transaction are unable to fulfill their contractual obligations.

The tables below provide a summary of financial assets and financial liabilities subject to offsetting, enforceable master netting arrangements and similar agreements, as well as financial collateral received or pledged to mitigate credit exposures for these financial instruments.

UBS AG engages in a variety of counterparty credit risk mitigation strategies in addition to netting and collateral arrangements. Therefore, the net amounts presented in the tables below do not purport to represent their actual credit risk exposure.

## Financial assets subject to offsetting, enforceable master netting arrangements and similar agreements

		Assets sul	oject to netting	arrangemer	nts				
	Netting recognized on the balance shee				otential not he balance :	recognized on sheet <sup>3</sup>	Assets not subject to netting arrangements <sup>4</sup>	Total as	ssets
As of 31.12.23, USD bn	Gross assets before netting	Netting with gross liabilities <sup>2</sup>	Net assets recognized on the balance sheet	Financial liabilities	Collateral received	Assets after consideration of netting potential	Assets recognized on the balance sheet	Total assets after consideration of netting potential	Total assets recognized on the balance sheet
Receivables from securities financing transactions measured at amortized cost	69.2	(12.2)	56.9	(1.5)	(55.2)	0.3	17.2	17.5	74.1
Derivative financial instruments	128.8	(2.5)	126.3	(99.3)	(23.4)	3.7	5.4	9.1	131.7
Cash collateral receivables on derivative instruments <sup>1</sup>	31.5	0.0	31.5	(20.4)	(2.5)	8.7	0.8	9.5	32.3
Financial assets at fair value not held for trading	96.3	(89.6)	6.7	(1.8)	(4.9)	0.0	57.1	57.1	63.8
of which: reverse repurchase agreements	95.1	(89.6)	5.5	(1.8)	(3.7)	0.0	0.0	0.0	5.5
Total assets	325.7	(104.3)	221.4	(122.9)	(85.9)	12.6	80.5	93.1	301.9
As of 31.12.22, USD bn									
Receivables from securities financing transactions measured at amortized cost	60.8	(11.1)	49.6	(3.0)	(46.4)	0.3	18.2	18.5	67.8
Derivative financial instruments	147.4	(2.5)	144.9	(110.9)	(28.5)	5.5	5.2	10.7	150.1
Cash collateral receivables on derivative instruments <sup>1</sup>	33.5	0.0	33.5	(20.9)	(1.9)	10.6	1.5	12.1	35.0
Financial assets at fair value not held for trading	85.6	(76.8)	8.7	(1.5)	(7.3)	0.0	50.7	50.7	59.4
of which: reverse repurchase agreements	84.4	(76.8)	7.6	(1.5)	(6.1)	0.0	0.1	0.1	7.7
Total assets	327.2	(90.4)	236.8	(136.3)	(84.1)	16.4	75.6	92.0	312.4

<sup>1</sup> The net amount of Cash collateral receivables on derivative instruments recognized on the balance sheet includes certain OTC derivatives that are net settled on a daily basis either legally or in substance under IAS 32 principles and exchange-traded derivatives that are economically settled on a daily basis.

2 The logic of the table results in amounts presented in the "Netting with gross liabilities" column corresponding directly to the amounts presented in the "Netting with gross assets" column in the liabilities table presented below. Netting in this column for reverse repurchase agreements presented within the lines "Receivables from securities financing transactions measured at amortized cost" and "Financial assets at fair value not held for trading" taken together corresponds to the amounts presented for repurchase agreements in the "Payables from securities financing transactions measured at amortized cost" and "Other financial liabilities designated at fair value" lines in the liabilities table presented below.

3 For the purpose of this disclosure, the amounts of financial instruments and cash collateral presented have been capped so as not to exceed the net amount of financial assets presented on the balance sheet; i.e., over-collateralization, where it exists, is not reflected in the table.

4 Includes assets not subject to enforceable netting arrangements and other out-of-scope items.

## Note 21 Offsetting financial assets and financial liabilities (continued)

Financial liabilities subject to offsetting, enforceable master netting arrangements and similar agreements

		Liabil	ities subject to n	etting arrange	ements				
	Netting potential not recognized  Netting recognized on the balance sheet on the balance sheet <sup>3</sup>					Liabilities not subject to netting arrangements <sup>4</sup>	Total liab	oilities	
As of 31.12.23, USD bn	Gross liabilities before netting	Netting with gross assets <sup>2</sup>	Net liabilities recognized on the balance sheet	Financial assets	Collateral pledged	Liabilities after consideration of netting potential	Liabilities recognized on the balance sheet	Total liabilities after consideration of netting potential	Total liabilities recognized on the balance sheet
Payables from securities financing transactions measured at amortized cost	16.1	(12.1)	4.0	(0.8)	(3.2)	0.0	1.8	1.8	5.8
Derivative financial instruments	135.9	(2.5)	133.5	(99.3)	(24.5)	9.7	7.2	16.9	140.7
Cash collateral payables on derivative instruments <sup>1</sup>	33.5	0.0	33.5	(17.2)	(3.4)	12.9	1.4	14.3	34.9
Other financial liabilities designated at fair value	97.1	(89.8)	7.3	(2.5)	(4.8)	0.0	20.1	20.1	27.4
of which: repurchase agreements	96.7	(89.8)	6.9	(2.5)	(4.4)	0.0	0.0	0.0	6.9
Total liabilities	282.6	(104.3)	178.3	(119.7)	(36.0)	22.5	30.4	53.0	208.7
As of 31.12.22, USD bn									
Payables from securities financing transactions measured at amortized cost	14.1	(11.1)	3.0	(1.3)	(1.8)	0.0	1.2	1.2	4.2
Derivative financial instruments	150.3	(2.5)	147.8	(110.9)	(26.2)	10.7	7.1	17.8	154.9
Cash collateral payables on derivative instruments <sup>1</sup>	34.9	0.0	34.9	(20.0)	(1.9)	13.0	1.6	14.5	36.4
Other financial liabilities designated at fair value	92.5	(76.9)	15.6	(3.2)	(12.4)	0.0	16.4	16.4	32.0
of which: repurchase agreements	92.1	(76.9)	<i>15.3</i>	(3.2)	(12.1)	0.0	0.1	0.1	<i>15.3</i>
Total liabilities	291.7	(90.4)	201.3	(135.3)	(42.3)	23.7	26.3	49.9	227.6

<sup>1</sup> The net amount of Cash collateral payables on derivative instruments recognized on the balance sheet includes certain OTC derivatives that are net settled on a daily basis either legally or in substance under IAS 32 principles and exchange-traded derivatives that are economically settled on a daily basis. 2 The logic of the table results in amounts presented in the "Netting with gross assets" column corresponding to the amounts presented in the "Netting with gross liabilities" column in the assets table presented above. Netting in this column for repurchase agreements presented within the lines "Payables from securities financing transactions measured at amortized cost" and "Other financial liabilities designated at fair value" taken together corresponds to the amounts presented for reverse repurchase agreements in the "Receivables from securities financing transactions measured at amortized cost" and "Financial assets at fair value not held for trading" lines in the assets table presented above. 3 For the purpose of this disclosure, the amounts of financial instruments and cash collateral presented have been capped so as not to exceed the net amount of financial liabilities presented on the balance sheet; i.e., over-collateralization, where it exists, is not reflected in the table. 4 Includes liabilities not subject to enforceable netting arrangements and other out-of-scope items.

#### Note 22 Restricted and transferred financial assets

This Note provides information about restricted financial assets (Note 22a), transfers of financial assets (Note 22b and 22c) and financial assets that are received as collateral with the right to resell or repledge these assets (Note 22d).

#### a) Restricted financial assets

Restricted financial assets consist of assets pledged as collateral against an existing liability or contingent liability and other assets that are otherwise explicitly restricted such that they cannot be used to secure funding.

Financial assets are mainly pledged as collateral in securities lending transactions, in repurchase transactions and in relation to mortgage loans, which serve as collateral against loans from Swiss mortgage institutions and US Federal Home Loan Banks and in connection with the issuance of covered bonds. Of these pledged mortgage loans, approximately USD 2.0bn as of 31 December 2023 could be withdrawn or used for future liabilities or covered bond issuances without breaching existing collateral requirements (31 December 2022: approximately USD 3.1bn). Existing liabilities against Swiss central mortgage institutions and US Federal Home Loan Banks and for existing covered bond issuances were USD 15.4bn as of 31 December 2023 (31 December 2022: USD 9.0bn).

Repurchase and securities lending arrangements are generally entered into under standard market agreements. For securities lending, the cash received as collateral may be more or less than the fair value of the securities loaned, depending on the nature of the transaction. For repurchase agreements, the fair value of the collateral sold under an agreement to repurchase is generally in excess of the cash borrowed.

Other restricted financial assets include assets protected under client asset segregation rules, assets held under unit-linked investment contracts to back related liabilities to the policy holders and assets held in certain jurisdictions to comply with explicit minimum local asset maintenance requirements. The carrying amount of the liabilities associated with these other restricted financial assets is generally equal to the carrying amount of the assets, with the exception of assets held to comply with local asset maintenance requirements, for which the associated liabilities are greater.

USD m	31.13	2.23	31.12	2.22
		of which: assets pledged as collateral that may be sold or		of which: assets pledged as collateral that may be sold of
	Restricted	repledged by	Restricted	repledged by
Financial assets pledged as collateral	financial assets	counterparties	financial assets	counterparties
Cach and halances at central hanks!	709			
Financial assets at fair value held for trading	76 579	44,524	57,435	36,742
Loans and advances to customers	28 105		15,195	
Financial assets at fair value not held for trading		2,110	1,509	1,220
Financial assets at fair value not held for trading  Debt securities classified as Other financial assets measured at amortized cost	7,043	6,299	3,432	2,685
Total financial assets pledged as collateral	115,535		77,571	
Other restricted financial assets				
Amounts due from banks	2,543		3,689	
Financial assets at fair value held for trading	169		162	
Cash collateral receivables on derivative instruments	4,685		5,155	
Loans and advances to customers	28		1,127	
Coans and advances to customers  Other financial assets measured at amortized cost	3,334 <sup>2</sup>		815	
Financial assets at fair value not held for trading	17 RAA		14,090	
Financial assets measured at fair value through other comprehensive income	1,846		1,842	
Other	249		44	
Total other restricted financial assets	30,698		26,924	
Total financial assets pledged and other restricted financial assets <sup>3</sup>	146,233		104,495	

<sup>1</sup> Assets pledged to the depositor protection system in Switzerland following new requirements that became effective in 2023. 2 Predominantly includes cash collateral provided to exchanges and clearing houses to secure securities trading activity through those counterparties. 3 Does not include assets placed with central banks related to undrawn credit lines and for payment, clearing and settlement purposes (31 December 2023: USD 9.7bn; 31 December 2022: USD 5.9bn).

In addition to the table above, USD 4.7bn were placed at central banks to meet local statutory minimum reserve requirements as of 31 December 2023 (31 December 2022: USD 4.4bn).

### Note 22 Restricted and transferred financial assets (continued)

In addition to restrictions on financial assets, UBS AG and its subsidiaries are, in certain cases, subject to regulatory requirements that affect the transfer of dividends and capital within UBS AG, as well as intercompany lending. Supervisory authorities also may require entities to measure capital and leverage ratios on a stressed basis, such as the Federal Reserve Board's Comprehensive Capital Analysis and Review (CCAR) process, which may limit the relevant subsidiaries' ability to make distributions of capital based on the results of those tests.

Supervisory authorities generally have discretion to impose higher requirements or to otherwise limit the activities of subsidiaries.

Non-regulated subsidiaries are generally not subject to such requirements and transfer restrictions. However, restrictions can also be the result of different legal, regulatory, contractual, entity- or country-specific arrangements and / or requirements.

## b) Transferred financial assets that are not derecognized in their entirety

The table below presents information for financial assets that have been transferred but are subject to continued recognition in full, as well as recognized liabilities associated with those transferred assets.

Transferred financial assets subject to continued recognition in full

USD m	31.	12.23	31.12.22		
	Carrying amount of transferred assets	Carrying amount of associated liabilities recognized on balance sheet	Carrying amount of transferred assets	Carrying amount of associated liabilities recognized on balance sheet	
Financial assets at fair value held for trading that may be sold or repledged by counterparties	44,524	23,374	36,742	16,470	
Financial assets at fair value not held for trading that may be sold or repledged by counterparties	2,110	1,976	1,220	1,050	
Debt securities classified as Other financial assets measured at amortized cost that may be sold or repledged by counterparties	6,299	5,928	2,685	2,302	
Total financial assets transferred	52,933	31,278	40,647	19,822	

Transactions in which financial assets are transferred but continue to be recognized in their entirety on UBS AG's balance sheet include securities lending and repurchase agreements, as well as other financial asset transfers. Repurchase and securities lending arrangements are, for the most part, conducted under standard market agreements and are undertaken with counterparties subject to UBS AG's normal credit risk control processes.

## > Refer to Note 1a item 2e for more information about repurchase and securities lending agreements

Financial assets at fair value held for trading that may be sold or repledged by counterparties include securities lending and repurchase agreements in exchange for cash received, securities lending agreements in exchange for securities received and other financial asset transfers.

For securities lending and repurchase agreements, a haircut of between 0% and 15% is generally applied to the transferred assets, which results in associated liabilities having a carrying amount below the carrying amount of the transferred assets. The counterparties to the associated liabilities included in the table above have full recourse to UBS AG.

In securities lending arrangements entered into in exchange for the receipt of other securities as collateral, neither the securities received nor the obligation to return them are recognized on UBS AG's balance sheet, as the risks and rewards of ownership are not transferred to UBS AG. In cases where such financial assets received are subsequently sold or repledged in another transaction, this is not considered to be a transfer of financial assets.

Other financial asset transfers primarily include securities transferred to collateralize derivative transactions, for which the carrying amount of associated liabilities is not included in the table above, because those replacement values are managed on a portfolio basis across counterparties and product types, and therefore there is no direct relationship between the specific collateral pledged and the associated liability.

Transferred financial assets that are not subject to derecognition in full but remain on the balance sheet to the extent of UBS AG's continuing involvement were not material as of 31 December 2023 and as of 31 December 2022.

#### Note 22 Restricted and transferred financial assets (continued)

## c) Transferred financial assets that are derecognized in their entirety with continuing involvement

Continuing involvement in a transferred and fully derecognized financial asset may result from contractual provisions in the particular transfer agreement or from a separate agreement, with the counterparty or a third party, entered into in connection with the transfer.

The fair value and carrying amount of UBS AG's continuing involvement from transferred positions as of 31 December 2023 and 31 December 2022 was not material. Life-to-date losses reported in prior periods primarily relate to legacy positions in securitization vehicles that have been fully marked down, with no remaining exposure to loss.

## d) Off-balance sheet assets received

The table below presents assets received from third parties that can be sold or repledged and that are not recognized on the balance sheet but that are held as collateral, including amounts that have been sold or repledged.

#### Off-balance sheet assets received

USD m	31.12.23	31.12.22
Fair value of assets received that can be sold or repledged <sup>1</sup>	489,476	434,023
of which: sold or repledged <sup>2</sup>	357,020	331,805

<sup>1</sup> Includes securities received as initial margin from its clients that UBS AG is required to remit to central counterparties, brokers and deposit banks through its exchange-traded derivative clearing and execution services. 2 Does not include off-balance sheet securities (31 December 2023: USD 16.0bn; 31 December 2022: USD 9.9bn) placed with central banks related to undrawn credit lines and for payment, clearing and settlement purposes for which there are no associated liabilities or contingent liabilities.

#### Note 23 Maturity analysis of assets and liabilities

## a) Maturity analysis of carrying amounts of assets and liabilities

The table below provides an analysis of carrying amounts of balance sheet assets and liabilities, as well as off-balance sheet exposures by residual contractual maturity as of the reporting date. The residual contractual maturity of assets includes the effect of callable features. The residual contractual maturity of liabilities and off-balance sheet exposures is based on the earliest date on which a third party could require UBS AG to pay.

Derivative financial instruments and financial assets and liabilities at fair value held for trading are presented in the *Due within 1 month* column; however, the respective contractual maturities may extend over significantly longer periods.

Assets held to hedge unit-linked investment contracts (presented within *Financial assets at fair value not held for trading*) are presented in the *Due within 1 month* column, consistent with the maturity assigned to the related amounts due under unit-linked investment contracts (presented within *Other financial liabilities designated at fair value*).

Other financial assets and liabilities with no contractual maturity, such as equity securities, are presented in the *Perpetual / Not applicable* column. Undated or perpetual instruments are classified based on the contractual notice period that the counterparty of the instrument is entitled to give. Where there is no contractual notice period, undated or perpetual contracts are presented in the *Perpetual / Not applicable* column.

Non-financial assets and liabilities with no contractual maturity are generally included in the *Perpetual / Not applicable* column.

## Note 23 Maturity analysis of assets and liabilities (continued)

	31.12.23									
		Due between	Due between			_	Perpetual /			
USD bn	Due within 1 month	1 and 3 months	3 and 12 months	Due between 1 and 2 years	Due between 2 and 5 years	Due over 5 vears	Not applicable	Total		
Assets	1 IIIOIIIII	HIOHUIS	IIIOIIUIS	i aliu z yeais	2 and 5 years	o years	applicable	TOLAI		
Total financial assets measured at amortized cost	416.2	25.6	47.6	105.2	77.8	94.0		766.4		
Amounts due from banks	12.0	0.5	5.4	10.0	0.2	0.1		28.2		
Loans and advances to customers	135.5	12.1	33.3	89.4	61.4	74.0		405.6		
Other financial assets measured at amortized cost	7.4	1.6	4.2	5.1	16.1	19.9		54.3		
Total financial assets measured at fair value through profit or	312.5	6.7	7.8	7.4	11.8	3.4	1.9	351.5		
loss	312.3	0.7	7.0	7.4	11.0	3.4	1.5	331.3		
Financial assets at fair value not held for trading	24.8	6.7	7.8	7.4	11.8	3.4	1.9	63.8		
Financial assets measured at fair value through other comprehensive income	0.1	1.1	1.0	0.1	0.0	0.0		2.2		
Total non-financial assets	6.6		0.2		1.2	0.4	27.5	35.9		
Total assets	735.4	33.4	56.5	112.7	90.8	97.8	29.5	1,156.0		
Liabilities										
Total financial liabilities measured at amortized cost	497.1	65.1	81.1	30.3	49.6	27.1	12.5	762.8		
Customer deposits	433.2	48.9	49.6	15.3	8.4	0.3		555.7		
Funding from UBS Group AG measured at amortized cost	2.5	0.8		8.2	24.3	19.0	12.5	67.3		
Debt issued measured at amortized cost	6.4	11.7	26.8	6.3	11.8	6.8		69.8		
of which: non-subordinated	6.4	11.7	24.3	6.0	11.6	6.8		66.8		
of which: subordinated			2.5	0.3	0.2			3.0		
Total financial liabilities measured at fair value through profit or loss <sup>1</sup>	250.1	11.4	22.6	23.3	8.3	12.7		328.4		
Debt issued designated at fair value	13.1	11.3	21.8	23.0	8.0	9.1		86.3		
Total non-financial liabilities	5.2	2.8	0.0	0.1	0.4	0.1	0.5	9.2		
Total liabilities	752.5	79.3	103.8	53.7	58.3	39.9	13.0	1,100.4		
Guarantees, loan commitments and forward starting transaction	ns <sup>2</sup>									
Irrevocable loan commitments	43.0	0.5	0.4	0.0	0.0			44.0		
Guarantees	33.4							33.4		
Forward starting reverse repurchase and securities borrowing agreements	10.4							10.4		
Irrevocable committed prolongation of existing loans	2.0	0.8	1.3	0.0	0.0	•••••		4.2		
Total	88.8	1.4	1.8	0.0	0.0			91.9		

				31.12.2	2			
		Due between	Due between				Perpetual /	
	Due within	1 and 3	3 and 12		Due between	Due over	Not	
USD bn	1 month	months	months	1 and 2 years	2 and 5 years	5 years	applicable	Total
Assets								
Total financial assets measured at amortized cost	425.2	28.7	34.5	78.8	70.5	92.8		730.4
Amounts due from banks	13.3	0.6	0.6	0.0	0.0	0.1		14.7
Loans and advances to customers	141.9	16.3	28.3	74.9	<i>55.6</i>	<i>73.0</i>		390.0
Other financial assets measured at amortized cost	8.8	4.2	2.8	3.0	14.8	19.7		53.4
Total financial assets measured at fair value through profit or loss	300.4	10.0	7.8	3.6	9.9	2.0	1.5	335.1
Financial assets at fair value not held for trading	24.6	10.0	7.8	3.6	9.9	2.0	1.5	59.4
Financial assets measured at fair value through other comprehensive income	0.3	0.9	0.9	0.1	0.0	0.0		2.2
Total non-financial assets	7.1		0.2		2.0	0.4	28.0	37.7
Total assets	732.9	39.5	43.4	82.4	82.4	95.1	29.6	1,105.4
Liabilities								
Total financial liabilities measured at amortized cost	524.3	40.2	49.6	20.7	35.2	23.5	11.8	705.4
Customer deposits	464.5	28.5	23.8	7.7	2.3	0.3		527.2
Funding from UBS Group AG measured at amortized cost	2.0			4.8	21.2	16.3	11.8	56.1
Debt issued measured at amortized cost	4.6	8.8	23.3	7.2	10.0	<i>5.7</i>		59.5
of which: non-subordinated	4.6	8.8	23.3	4.8	9.5	<i>5.7</i>		56.5
of which: subordinated				2.4	0.5			3.0
Total financial liabilities measured at fair value through profit or loss <sup>1</sup>	265.9	13.8	16.3	19.6	7.3	10.5		333.4
Debt issued designated at fair value	9.3	12.3	15.9	19.3	6.9	8.2		71.8
Total non-financial liabilities	6.7	2.6					0.5	9.7
Total liabilities	796.9	56.5	65.9	40.4	42.5	34.0	12.3	1,048.5
Guarantees, loan commitments and forward starting transactions	52							
Irrevocable loan commitments	39.3	0.3	0.4	0.0				40.0
Guarantees	22.4							22.4
Forward starting reverse repurchase and securities borrowing	3.8							3.8
agreements								
Irrevocable committed prolongation of existing loans	4.7			•••••			•••••	4.7
Total	70.1	0.3	0.4	0.0				70.9

<sup>1</sup> As of 31 December 2023 and 31 December 2022, the contractual redemption amount at maturity of debt issued designated at fair value through profit or loss and other financial liabilities measured at fair value through profit or loss was not materially different from the carrying amount. 2 The notional amounts associated with derivative loan commitments, as well as forward starting repurchase and reverse repurchase agreements, measured at fair value through profit or loss are presented together with notional amounts related to derivative instruments and have been excluded from the table above. Refer to Note 10 for more information.

## Note 23 Maturity analysis of assets and liabilities (continued)

## b) Maturity analysis of financial liabilities on an undiscounted basis

The table below provides an analysis of financial liabilities on an undiscounted basis, including all cash flows relating to principal and future interest payments. The residual contractual maturities for non-derivative and non-trading financial liabilities are based on the earliest date on which UBS AG could be contractually required to pay. Derivative positions and trading liabilities, predominantly made up of short sale transactions, are presented in the *Due within 1 month* column, as this provides a conservative reflection of the nature of these trading activities. The residual contractual maturities may extend over significantly longer periods.

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		Due between	Due between				Perpetual /	
	Due within	1 and 3	3 and 12	Due between	Due between	Due over	Not	
USD bn	1 month	months	months	1 and 2 years	2 and 5 years	5 years	applicable	Total
Financial liabilities recognized on balance sheet <sup>1</sup>								
Amounts due to banks	6.2	2.6	3.9	0.3	4.4	0.0		17.4
Payables from securities financing transactions	4.0	1.1	0.7					5.8
Cash collateral payables on derivative instruments	34.9							34.9
Customer deposits	433.5	49.7	51.6	16.9	9.8	0.3		561.8
Funding from UBS Group AG measured at amortized cost <sup>2</sup>	2.8	1.7	1.7	11.0	31.9	24.1	12.9	86.1
Debt issued measured at amortized cost	6.4	11.9	27.4	7.0	12.8	8.1		73.6
Other financial liabilities measured at amortized cost	6.2	0.1	0.4	0.5	1.1	1.1		9.4
of which: lease liabilities	0.0	0.1	0.4	0.5	1.1	1.1		3.3
Total financial liabilities measured at amortized cost	494.1	67.0	85.7	35.6	60.1	33.6	12.9	789.1
Financial liabilities at fair value held for trading <sup>3,4</sup>	31.7							31.7
Derivative financial instruments <sup>3,5</sup>	140.7							140.7
Brokerage payables designated at fair value	42.3							42.3
Debt issued designated at fair value <sup>6</sup>	13.1	11.8	22.5	25.7	8.1	11.8		93.0
Other financial liabilities designated at fair value	22.1	0.1	0.8	0.3	0.3	7.2		30.8
Total financial liabilities measured at fair value through								
profit or loss	249.9	11.9	23.3	26.0	8.4	19.0		338.4
Total	744.0	78.9	109.0	61.6	68.5	52.6	12.9	1,127.5
Guarantees, loan commitments and forward starting transacti	ons							
Irrevocable loan commitments <sup>7</sup>	43.0	0.5	0.4	0.0	0.0			44.0
Guarantees	33.4							33.4
Forward starting reverse repurchase and securities	10.4							10.4
borrowing agreements <sup>7</sup>								
Irrevocable committed prolongation of existing loans	2.0	0.8	1.3	0.0	0.0			4.2
Total	88.8	1.4	1.8	0.0	0.0			91.9

31.12.22

		Due between	Due between				Perpetual /	
	Due within	1 and 3	3 and 12	Due between	Due between	Due over	Not	
USD bn	1 month	months	months	1 and 2 years	2 and 5 years	5 years	applicable	Total
Financial liabilities recognized on balance sheet <sup>1</sup>								
Amounts due to banks	6.3	2.6	1.9	0.3	0.6	0.0		11.7
Payables from securities financing transactions	3.3	0.3	0.4	0.3		0.0		4.4
Cash collateral payables on derivative instruments	36.4							36.4
Customer deposits	464.6	28.8	24.5	8.2	2.6	0.3		529.0
Funding from UBS Group AG measured at amortized cost <sup>2</sup>	2.2	0.6	1.2	6.8	27.6	21.2	12.7	72.3
Debt issued measured at amortized cost	4.6	8.9	23.7	7.8	10.8	6.9		62.8
Other financial liabilities measured at amortized cost	5.6	0.1	0.4	0.5	1.2	1.3		9.2
of which: lease liabilities	0.1	0.1	0.4	0.5	1.2	1.3		3.7
Total financial liabilities measured at amortized cost	523.1	41.2	52.2	24.0	42.8	29.8	12.7	725.8
Financial liabilities at fair value held for trading <sup>3,4</sup>	29.5							29.5
Derivative financial instruments <sup>3,5</sup>	154.9					•••••	•••••	154.9
Brokerage payables designated at fair value	45.1							45.1
Debt issued designated at fair value <sup>6</sup>	9.4	12.4	16.0	19.7	7.1	12.3		76.8
Other financial liabilities designated at fair value	27.1	1.4	0.4	0.4	0.5	5.0		34.8
Total financial liabilities measured at fair value through								
profit or loss	266.0	13.8	16.4	20.0	7.5	17.3		341.1
Total	789.2	55.0	68.6	44.0	50.3	47.1	12.7	1,066.9
Guarantees, loan commitments and forward starting transacti	ons							
Irrevocable loan commitments <sup>7</sup>	39.3	0.3	0.4	0.0				40.0
Guarantees	22.4							22.4
Forward starting reverse repurchase and securities	3.8							3.8
borrowing agreements <sup>7</sup>								3.0
Irrevocable committed prolongation of existing loans	4.7							4.7
Total	70.1	0.3	0.4	0.0				70.9

<sup>1</sup> Except for financial liabilities at fair value held for trading and derivative financial instruments (see footnote 3), the amounts presented generally represent undiscounted cash flows of future interest and principal payments. 2 The time-bucket Perpetual / Not applicable includes perpetual loss-absorbing additional tier 1 capital instruments. 3 Carrying amount is fair value. Management believes that this best represents the cash flows that would have to be paid if these positions had to be settled or closed out. 4 Contractual maturities of financial liabilities at fair value held for trading are: USD 29.9bn due within 1 month (31 December 2022: USD 27.8bn), USD 1.8bn due between 1 month and 1 year (31 December 2022: USD 1.7bn) and USD 0bn due between 1 and 5 years (31 December 2022: USD 0bn). 5 Includes USD 52m (31 December 2022: USD 46m) related to fair values of derivative loan commitments and forward starting reverse repurchase agreements classified as derivatives, presented within "Due within 1 month". The full contractual committed amount of USD 65.2bn (31 December 2022: USD 34.4bn) is presented in Note 10 under notional amounts. 6 Future interest payments on variable-rate liabilities are determined by reference to the applicable interest rate prevailing as of the reporting date. Future principal payments that are variable are determined by reference to the conditions existing at the relevant reporting date. 7 Excludes derivative loan commitments and forward starting reverse repurchase agreements measured at fair value (see footnote 5).

#### Note 24 Interest rate benchmark reform

During 2023, UBS AG largely completed the transition of the USD London Interbank Offered Rate (LIBOR) contracts. The transition of the largest remaining non-derivative exposure, the US mortgage portfolio of approximately USD 9bn as of 31 December 2022, was substantially completed, with these contracts automatically converting to term Secured Overnight Financing Rate (SOFR) from their next interest rate reset date following the cessation of the respective USD LIBOR rates, i.e., 30 June 2023. Corporate loans in the Investment Bank have now also been transitioned to alternative rates.

In August 2022, to facilitate the transition of derivatives linked to the USD LIBOR Swap Rate, UBS AG adhered to the June 2022 Benchmark Module of the ISDA 2021 Fallbacks Protocol on the USD LIBOR Swap Rate. As of 31 December 2023, the transition of these USD LIBOR-linked derivatives had been materially accomplished.

The table below sets out the contracts that remained as of 31 December 2022. No contracts are included as of 31 December 2023 given transition has largely completed as noted above.

		31.12.22 1
	Measure	USD LIBOR
	iviedsure	benchmark rates
Carrying value of non-derivative financial instruments		
Total non-derivative financial assets	USD m	14,269 <sup>2</sup>
Total non-derivative financial liabilities	USD m	1,138 3
Trade count of derivative financial instruments		
Total derivative financial instruments	Trade count	32,006 4
Off-balance sheet exposures		
Total irrevocable loan commitments	USD m	4,606 <sup>5</sup>

<sup>1</sup> As of 31 December 2022, non-USD balances and trade counts were minimal. 2 Includes USD 1bn of loans related to revolving multi-currency credit lines, where IBOR transition efforts are complete, except for USD LIBOR. The remaining balances as of 31 December 2022 primarily related to US mortgages and corporate lending. 3 Relates to floating-rate notes that per their contractual terms can reset to rates linked to LIBOR, with transition dependent upon the actions of respective issuers. 4 Includes approximately 2,000 contracts having a contractual maturity after 30 June 2023, with the last USD LIBOR fixing occurring before 30 June 2023. No further contractual fixing is required for these contracts. 5 Includes approximately USD 3bn of loan commitments that can be drawn in different currencies; however, only USD LIBOR transition efforts remained open as of 31 December 2022.

In addition, as of 31 December 2023 UBS AG had approximately USD 2bn equivalent of yen- and US dollar-denominated funding from UBS Group AG that, per current contractual terms, if not called on their respective call dates, would reset based directly on JPY LIBOR and USD LIBOR. Furthermore, several contracts providing funding from UBS Group AG reference rates indirectly derived from IBORs, if they are not called on their respective call dates. These contracts have robust IBOR fallback language, and the confirmation of interest rate calculation mechanics will be communicated in advance of any rate resets.

## Note 25 Hedge accounting

### Derivatives designated in hedge accounting relationships

UBS AG applies hedge accounting to interest rate risk and foreign exchange risk, including structural foreign exchange risk related to net investments in foreign operations.

• Refer to "Market risk" in the "Risk management and control" section of this report for more information about how risks arise and how they are managed by UBS AG

## Hedging instruments and hedged risk

Interest rate swaps are designated in fair value hedges or cash flow hedges of interest rate risk arising solely from changes in benchmark interest rates. Fair value changes arising from such risk are usually the largest component of the overall change in the fair value of the hedged position in transaction currency.

Cross-currency swaps are designated as fair value hedges of foreign exchange risk. Foreign exchange forwards and foreign exchange swaps are mainly designated as hedges of structural foreign exchange risk related to net investments in foreign operations. In both cases the hedged risk arises solely from changes in the spot foreign exchange rate.

The notional of the designated hedging instruments matches the notional of the hedged items, except when the interest rate swaps are designated in cash flow hedges after the trade date, in which case the hedge ratio designated is determined based on the swap sensitivity.

#### Note 25 Hedge accounting (continued)

## Hedged items and hedge designation

## Fair value hedges of interest rate risk related to debt instruments and loan assets

Fair value hedges of interest rate risk related to debt instruments and loan assets involve swapping fixed cash flows associated with the loans to customers (including long-term fixed-rate mortgage loans in Swiss francs), debt securities held, customer deposits, funding from UBS Group AG, debt issued to floating cash flows by entering into interest rate swaps that either pay fixed and receive floating cash flows or that receive fixed and pay floating cash flows. The floating future cash flows are based on the following benchmark rates: Secured Overnight Financing Rate (SOFR), Effective Federal Funds Rate (EFFR), Swiss Average Rate Overnight (SARON), Euro Interbank Offered Rate (EURIBOR), Euro Short-Term Rate (ESTR), Sterling Overnight Index Average (SONIA), AUD London Interbank Offered Rate (AUD LIBOR), Tokyo Overnight Average Rate (TONA) and Singapore Overnight Rate Average (SORA).

#### Cash flow hedges of forecast transactions

UBS AG hedges forecast cash flows on non-trading financial assets and liabilities that bear interest at variable rates or are expected to be refinanced or reinvested in the future, due to movements in future market rates. The amounts and timing of future cash flows, representing both principal and interest flows, are projected on the basis of contractual terms and other relevant factors, including estimates of prepayments and defaults. The aggregate principal balances and interest cash flows across all portfolios over time form the basis for identifying the non-trading interest rate risk of UBS AG, which is hedged with interest rate swaps, the maximum maturity of which is 15 years. Cash flow forecasts and risk exposures are monitored and adjusted on an ongoing basis, and consequently additional hedging instruments are traded and designated, or are terminated resulting in a hedge discontinuance.

## Fair value hedges of foreign exchange risk related to issued debt instruments

Debt instruments denominated in currencies other than the US dollar are designated in fair value hedges of spot foreign exchange risk, in addition to and separate from the fair value hedges of interest rate risk. Cross-currency swaps economically convert debt instruments denominated in currencies other than the US dollar to US dollars. The hedge designations also involve intragroup debt instruments which are eliminated upon consolidation but FX gains and losses impact consolidated profit or loss.

## Hedges of net investments in foreign operations

UBS AG applies hedge accounting for certain net investments in foreign operations, which include subsidiaries, branches and associates. Upon maturity of hedging instruments, typically one to three months, the hedge relationship is terminated and new designations are made to reflect any changes in the net investments in foreign operations.

## Economic relationship between hedged item and hedging instrument

The economic relationship between the hedged item and the hedging instrument is determined based on a qualitative analysis of their critical terms. In cases where hedge designation takes place after the trade date of the hedging instrument, a quantitative analysis of the possible behavior of the hedging derivative and the hedged item during their respective terms is also performed.

## Sources of hedge ineffectiveness

In hedges of interest rate risk, hedge ineffectiveness can arise from mismatches of critical terms and / or the use of different curves to discount the hedged item and instrument, or from entering into a hedge relationship after the trade date of the hedging derivative.

In hedges of foreign exchange risk related to debt issued, hedge ineffectiveness can arise due to the discounting of the hedging instruments and undesignated risk components and lack of such discounting and risk components in the hedged items.

In hedges of net investments in foreign operations, ineffectiveness is unlikely unless the hedged net assets fall below the designated hedged amount. The exceptions are hedges where the hedging currency is not the same as the currency of the foreign operation, where the currency basis may cause ineffectiveness.

Hedge ineffectiveness from financial instruments measured at fair value through profit or loss is recognized in *Other net income from financial instruments measured at fair value through profit or loss.* 

## Derivatives not designated in hedge accounting relationships

Non-hedge-accounted derivatives are mandatorily held for trading with all fair value movements taken to *Other net income from financial instruments measured at fair value through profit or loss*, even when held as an economic hedge or to facilitate client clearing. The one exception relates to forward points on certain short- and long-duration foreign exchange contracts acting as economic hedges, which are reported in *Net interest income*.

## Note 25 Hedge accounting (continued)

#### All hedges: designated hedging instruments and hedge ineffectiveness

	As of or for the year ended									
		31.12.23								
	_	Carrying a	amount	Changes in	Changes in	Hedge				
USD m	Notional amount	Derivative financial assets	Derivative financial liabilities	fair value of hedging instruments <sup>1</sup>	fair value of hedged items <sup>1</sup>	ineffectiveness recognized in the income statement				
Interest rate risk										
Fair value hedges	114,618	0	0	2,203	(2,195)	8				
Cash flow hedges	83,333	3	0	(35)	57	22				
Foreign exchange risk										
Fair value hedges <sup>2</sup>	33,877	468	291	132	(151)	(19)				
Hedges of net investments in foreign operations	13,260	3	455	(910)	912	3				

## As of or for the year ended

		31.12.22							
	_	Carrying amount		Changes in	Changes in	Hedge			
		Derivative	Derivative	fair value of	fair value of	ineffectiveness			
	Notional	financial	financial	hedging	hedged	recognized in the			
USD m	amount	assets	liabilities	instruments <sup>1</sup>	items <sup>1</sup>	income statement			
Interest rate risk									
Fair value hedges	92,415	0	0	(5,195)	5,169	(27)			
Cash flow hedges	75,304	2	5	(5,813)	5,760	(53)			
Foreign exchange risk									
Fair value hedges <sup>2</sup>	20,566	845	3	(1,088)	1,105	18			
Hedges of net investments in foreign operations	13,844	7	528	318	(319)	(1)			

<sup>1</sup> Amounts used as the basis for recognizing hedge ineffectiveness for the period. 2 The foreign currency basis spread of cross-currency swaps designated as hedging derivatives is excluded from the hedge accounting designation and accounted for as a cost of hedging with amounts deferred in Other comprehensive income within Equity.

## Fair value hedges: designated hedged items recognized on balance sheet<sup>1</sup>

31.12.23		31.12.22	
Interest rate risk	FX risk	Interest rate risk	FX risk
15,296		14,270	
(508)		(1,249)	
(179)		(51)	
6,333		4,577	
(109)		(180)	
8,972			
<i>50</i>			
63,760	17,693	57,250	14,828
(3,174)		(5,055)	
15,243	4,636	11,279	5,737
(412)		(1 002)	
	Interest rate risk  15,296 (508) (179)  6,333 (109)  8,972 50  63,760 (3,174)	risk FX risk  15,296 (508) (179)  6,333 (109)  8,972 50  63,760 17,693 (3,174)  15,243 4,636	Interest rate risk         Interest rate risk           15,296         14,270           (508)         (1,249)           (179)         (51)           6,333         4,577           (109)         (180)           8,972         50           63,760         17,693         57,250           (3,174)         (5,055)           15,243         4,636         11,279

<sup>1</sup> In addition, as of 31 December 2023 UBS AG designated in fair value hedges of FX risk USD 12bn of intragroup debt instruments which are not recognized on consolidated balance sheet but FX gains and losses on these instruments impact consolidated profit or loss. No such designations were in place as of 31 December 2022.

#### Note 25 Hedge accounting (continued)

		31.12.23							
USD bn	Due within 1 month	Due between 1 and 3 months	Due between 3 and 12 months	Due between 1 and 5 years	Due after 5 years	Tota			
Interest rate swaps	1	6	12	62	35	115			
Cross-currency swaps	1	2	2	22	7	34			
			31.12.22						
USD bn	Due within 1 month	Due between 1 and 3 months	Due between 3 and 12 months	Due between 1 and 5 years	Due after 5 years	Tota			
Interest rate swaps	0	4	10	53	26	92			
Cross-currency swaps	0	1	2	12	5	21			
	asis				31.12.23	31.12.22			
USD m					31.12.23 (2,349)	31.12.22 (4,692)			
Cash flow hedge reserve on a pre-tax be USD m  Amounts related to hedge relationships for which h  Amounts related to hedge relationships for which h	edge accounting continues to be applied								
USD m Amounts related to hedge relationships for which h	edge accounting continues to be applied edge accounting is no longer applied	on a pre-tax basis			(2,349)	(4,692)			
USD m  Amounts related to hedge relationships for which h  Amounts related to hedge relationships for which h  Total other comprehensive income recognized direct	edge accounting continues to be applied edge accounting is no longer applied tly in equity related to cash flow hedges,	on a pre-tax basis			(2,349) (1,331)	(4,692) (540)			
Amounts related to hedge relationships for which he Amounts related to hedge relationships for which he Total other comprehensive income recognized directionships for which he Total other comprehensive income recognized directions in the comprehensive income recognized directions are supplied to the comprehensive income recognized directions a	edge accounting continues to be applied edge accounting is no longer applied tly in equity related to cash flow hedges,	on a pre-tax basis			(2,349) (1,331)	(4,692) (540)			
Amounts related to hedge relationships for which he Amounts related to hedge relationships for which he Total other comprehensive income recognized directionships currency translation reserve on USD m	edge accounting continues to be applied edge accounting is no longer applied edge accounting is no longer applied edge in equity related to cash flow hedges, a pre-tax basis	on a pre-tax basis			(2,349) (1,331) (3,680)	(4,692) (540) (5,232)			
USD m Amounts related to hedge relationships for which h Amounts related to hedge relationships for which h	edge accounting continues to be applied edge accounting is no longer applied the continues to be applied the continues to be applied appreciate basis.	on a pre-tax basis			(2,349) (1,331) (3,680)	(4,692) (540) (5,232) 31.12.22			

## Interest rate benchmark reform

In 2023, UBS AG applied the relief provided by *Interest Rate Benchmark Reform (Amendments to IFRS 9, IAS 39 and IFRS 7)*, published by the International Accounting Standards Board in September 2019, to its hedges in US dollars and Singapore dollars until they transitioned to alternative reference rate (ARR) designations in May 2023 and June 2023, respectively. The transition of fair value hedges took place following the IBOR transition for swaps with LCH (formerly the London Clearing House), with hedge relationships continuing in accordance with *Interest Rate Benchmark Reform – Phase 2 (Amendments to IFRS 9, IAS 39, IFRS 7, IFRS 4 and IFRS 16)*. Cash flow hedge relationships were discontinued and replaced with new ARR designations in May 2023.

As of 31 December 2023, there were no hedge relationships where the designated risk is LIBOR and maturing after the cessation date of the applicable interest rate benchmarks. The following table provides details on the hedging instruments in such hedge relationships as of 31 December 2022.

Hedges of net investments in foreign operations are not affected by the amendments.

- > Refer to Note 1a item 2j for more information about the relief provided by the amendments to IFRS 9 and IFRS 7 related to interest rate benchmark reform
- > Refer to Note 24 for more information about the transition progress

## **Hedging instruments referencing LIBOR**

	_	Carrying amount	
USD m	Notional amount	Derivative financial assets	Derivative financial liabilities
Interest rate risk			
Fair value hedges	20,383	0	0
Cash flow hedges	2,179	0	0

### a) Defined benefit plans

UBS AG has established defined benefit plans for its employees in various jurisdictions in accordance with local regulations and practices. The major plans are located in Switzerland, the UK, the US and Germany. The level of benefits depends on the specific plan rules. UBS AG has not been involved in the major Credit Suisse defined benefit plans.

#### Swiss pension plan

In 2017, a significant number of employees were transferred from UBS AG to UBS Business Solutions AG, which is a directly held subsidiary of UBS Group AG. There continues to be one pooled UBS Swiss pension plan in Switzerland covering the employees of UBS AG and those transferred to UBS Business Solutions AG. UBS AG and UBS Business Solutions AG both are legal sponsors of the UBS Swiss pension plan. Since the date of the employee transfer, UBS AG and UBS Business Solutions AG apply proportionate defined benefit accounting, i.e., the net pension cost and the net pension asset / liability of the UBS Swiss pension plan are allocated proportionally between UBS AG and UBS Business Solutions AG based on the aggregated net pension cost and defined benefit obligations related to their employees. The UBS Swiss pension plan offers retirement, disability and survivor benefits and is governed by a Pension Foundation Board. The responsibilities of this board are defined by Swiss pension law and the plan rules. The UBS Swiss pension plan exceeds the minimum benefit requirements under Swiss pension law.

Savings contributions to the UBS Swiss pension plan are paid by both the employer and the employee. Depending on the age of the employee, UBS AG pays a savings contribution that ranges between 6.5% and 27.5% of the contributory base salary and between 2.8% and 9% of the contributory variable compensation. Employees can choose the level of savings contributions paid by them, which vary between 2.5% and 13.5% of the contributory base salary and between 0% and 9% of the contributory variable compensation, depending on age and choice of savings contribution category. UBS AG also pays risk contributions that are used to fund disability and survivor benefits.

The plan offers to members at the normal retirement age of 65 a choice between a lifetime pension and a partial or full lump sum payment. Participants can choose to draw early retirement benefits starting from the age of 58, but they can also continue employment and remain active members of the plan until the age of 70. Employees can make additional purchases of benefits to fund early retirement benefits.

The pension amount payable to a participant is calculated by applying a conversion rate to the accumulated balance of the participant's retirement savings account at the retirement date. The balance is based on credited vested benefits transferred from previous employers, purchases of benefits, employee and employer contributions made to the participant's retirement savings account, and interest accrued. The annual interest rate credited to participants is determined by the Pension Foundation Board at the end of each year.

Although the UBS Swiss pension plan is based on a defined contribution promise under Swiss pension law, it is accounted for as a defined benefit plan under IFRS Accounting Standards, primarily because of the obligation to accrue interest on the participants' retirement savings accounts and the payment of lifetime pension benefits.

An actuarial valuation in accordance with Swiss pension law is performed regularly. Should an underfunded situation on this basis occur, the Pension Foundation Board is required to take the necessary measures to ensure that full funding can be expected to be restored within a maximum period of 10 years. If a Swiss plan were to become significantly underfunded on a Swiss pension law basis, additional employer and employee contributions could be required. In this situation, the risk is shared between employer and employees, and the employer is not legally obliged to cover more than 50% of the additional contributions required. As of 31 December 2023, the UBS Swiss pension plan had a technical funding ratio in accordance with Swiss pension law of 119.2% (31 December 2022: 119.0%).

The investment strategy of the UBS Swiss pension plan complies with Swiss pension law, including the rules and regulations relating to diversification of plan assets, and is derived from the risk budget defined by the Pension Foundation Board based on regularly performed asset and liability management analyses. The Pension Foundation Board strives for a medium- and long-term balance between assets and liabilities.

As of 31 December 2023, the UBS Swiss pension plan was in a surplus situation on an IFRS Accounting Standards measurement basis, as the fair value of the plan's assets exceeded the defined benefit obligation (DBO) by USD 3,585m (31 December 2022: USD 4,418m). However, a surplus is only recognized on the balance sheet to the extent that it does not exceed the estimated future economic benefit, which equals the difference between the present value of the estimated future net service cost and the present value of the estimated future employer contributions. As of both 31 December 2023 and 31 December 2022, the estimated future economic benefit was zero and hence no net defined benefit asset was recognized on the balance sheet.

The regular employer contributions to the UBS Swiss pension plan in 2024 are estimated at USD 315m.

#### UK pension plan

The UBS UK pension plan is a career-average revalued earnings scheme, and benefits increase automatically based on UK price inflation, subject to defined caps. The normal retirement age for most participants is 60 or 65. The plan provides guaranteed lifetime pension benefits to participants upon retirement. The UK plan has been closed to new entrants for more than 20 years and participants are no longer accruing benefits for current or future service. Instead, employees participate in the UBS UK defined contribution plan.

The governance responsibility for the UBS UK plan lies jointly with the UBS UK Pension Trustee Board and UBS AG. The plan assets are invested in a diversified portfolio of financial assets, which include longevity swaps to hedge the risk between expected and actual longevity.

In 2019, UBS AG and the UBS UK Pension Trustee Board entered an arrangement whereby a collateral pool was established to provide security for the UBS UK pension fund. The value of the collateral pool as of 31 December 2023 was USD 260m (31 December 2022: USD 292m) and includes corporate bonds, government-related debt instruments and other financial assets. The arrangement provides the Pension Trustee Board dedicated access to a pool of assets in the event of UBS AG's insolvency or not paying a required funding contribution.

In 2023, UBS AG made funding contributions of USD 19m to the UBS UK pension plan (2022: USD 5m). The employer contributions to the UBS UK pension plan in 2024 are estimated at USD 19m, subject to regular funding reviews during the year.

#### US defined benefit plans

There are two main UBS US pension plans, with a normal retirement age of 65. Both plans were closed to new entrants more than 20 years ago. Since they closed, new employees have participated in a UBS defined contribution plan.

One of the UBS defined benefit plans is a contribution-based plan in which each participant accrues a percentage of salary in a retirement savings account. The retirement savings account is credited annually with interest based on a rate that is linked to the average yield on one-year US government bonds. For the other UBS defined benefit plan, retirement benefits accrue based on the career-average earnings of each individual plan participant. Former employees with vested benefits can take a lump sum payment or a lifetime annuity.

As required under applicable pension laws, both plans have fiduciaries who, together with UBS AG, are responsible for the governance of the plans.

Each plan's fiduciaries are responsible for the investment decisions with respect to the plan assets. The plan assets of both plans are invested in diversified portfolios of financial assets.

The employer contributions to the UBS US defined benefit plans in 2024 are estimated at USD 12m.

#### German pension plans

There are two major unfunded UBS defined benefit plans in Germany. The normal retirement age is 65 and benefits are paid directly by UBS AG. In the larger of the two plans each participant accrues a percentage of salary in a retirement savings account. The accumulated account balance of the participant is credited on an annual basis with guaranteed interest at a rate of 5%. The plan has been closed to new entrants, and all participants younger than the age of 55 as of June 2021 no longer accrue benefits. In the other plan, amounts are accrued annually based on employee elections related to variable compensation. For this plan, the accumulated account balance is credited on an annual basis with a guaranteed interest rate of 6% for amounts accrued before 2010, of 4% for amounts accrued from 2010 to 2017 and of 0.9% for amounts accrued after 2017. Both plans are subject to German pension law, whereby the responsibility to pay pension benefits when they are due resides entirely with UBS AG. A portion of the pension payments is directly increased in line with price inflation.

In June 2021, UBS AG implemented a new funded UBS pension plan with interest credited to participants equal to actual investment returns with a guaranteed minimum of 0%. The plan was implemented retrospectively for new hires since June 2018 and for all eligible active participants younger than 55 from July 2021. Each participant accrues a percentage of salary in a retirement savings account.

The employer contributions to the UBS German defined benefit plans in 2024 are estimated at USD 14m.

## Financial information by plan

The tables below provide an analysis of the movement in the net asset / liability recognized on the balance sheet for defined benefit plans, as well as an analysis of amounts recognized in net profit and in *Other comprehensive income*.

Defined	benefit	plans

USD m	Swiss	plan	UK p		US and Ger	man plans	Tot	al
	31.12.23	31.12.22	31.12.23	31.12.22	31.12.23	31.12.22	31.12.23	31.12.22
Defined benefit obligation at the beginning of the year	12,539	15,480	2,166	4,105	1,375	1,740	16,080	21,324
Current service cost	236	240	0	0	5	5	241	244
Interest expense	287	195	109	67	61	35	457	297
Plan participant contributions	163	154	0	0	0	0	163	154
Remeasurements	1,901	(2,424)	96	(1,474)	33	(267)	2,031	(4,165)
of which: actuarial (gains) / losses due to changes in demographic assumptions	45	2	(75)	(6)	(2)	1	(31)	(3)
of which: actuarial (gains) / losses due to changes in financial assumptions	1,168	(2,653)	36	(1,575)	<i>37</i>	(279)	1,241	(4,506)
of which: experience (gains) / losses¹	688	226	135	107	(3)	11	<i>820</i>	344
Past service cost related to plan amendments	0	0	0	0	0	0	0	0
Curtailments	(3)	(13)	0	0	0	0	(3)	(13)
Benefit payments	(662)	(796)	(107)	(123)	(110)	(111)	(880)	(1,030)
Other movements	0	(5)	0	0	0	0	0	(5)
Foreign currency translation	1,288	(291)	114	(408)	9	(28)	1,411	(727)
Defined benefit obligation at the end of the year	15,748	12,539	2,379	2,166	1,373	1,375	19,500	16,080
of which: amounts owed to active members	9,336	7,103	73	65	209	169	9,618	7,336
of which: amounts owed to deferred members	0	0	950	656	<i>527</i>	528	1,478	1,184
of which: amounts owed to retirees	6,412	5,436	1,356	1,445	636	678	8,404	7,560
of which: funded plans	15,748	12,539	2,379	2,166	979	1,011	19,106	15,717
of which: unfunded plans	0	0	0	0	394	363	394	363
Fair value of plan assets at the beginning of the year	16,957	19,196	2,488	4,297	1,039	1,329	20,484	24,821
Return on plan assets excluding interest income	513	(1,942)	65	(1,312)	26	(223)	603	(3,476)
Interest income	393	274	126	70	48	31	568	376
Employer contributions	290	401	19	5	17	16	327	422
Plan participant contributions	163	154	0	0	0	0	163	154
Benefit payments	(662)	(796)	(107)	(123)	(110)	(111)	(880)	(1,030)
Administration expenses, taxes and premiums paid	(8)	(7)	0	0	(4)	(3)	(12)	(11)
Other movements	2	(1)	0	0	0	0	2	(1)
Foreign currency translation	1,685	(322)	130	(450)	0	0	1,815	(772)
Fair value of plan assets at the end of the year	19,333	16,957	2,720	2,488	1,017	1,039	23,070	20,484
Surplus / (deficit)	3,585	4,418	341	321	(356)	(335)	3,570	4,404
Asset ceiling effect at the beginning of the year	4,418	3,716	0	0	0	0	4,418	3,716
Interest expense on asset ceiling effect	102		0	0	0	0	102	77
Asset ceiling effect excluding interest expense and foreign currency translation on								
asset ceiling effect	(1,332)	656	0	0	0	0	(1,332)	656
Foreign currency translation	397	(31)	0	0	0	0	397	(31)
Asset ceiling effect at the end of the year	3,585	4,418	0	0	0	0	3,585	4,418
Net defined benefit asset / (liability) of major plans	0	0	341	321	(356)	(335)	(15)	(14)
Net defined benefit asset / (liability) of remaining plans							(90)	(80)
Total net defined benefit asset / (liability)							(105)	(94)
of which: Net defined benefit asset							383	355
of which: Net defined benefit liability <sup>2</sup>							(487)	(449)

<sup>1</sup> Experience (gains) / losses are a component of actuarial remeasurements of the defined benefit obligation and reflect the effects of differences between the previous actuarial assumptions and what has actually occurred. 2 Refer to Note 18c.

#### Income statement - expenses related to defined benefit plans1 UK plan US and German plans USD m Swiss plan Total For the year ended **31.12.23** 31.12.22 **31.12.23** 31.12.22 **31.12.23** 31.12.22 **31.12.23** 31.12.22 Current service cost 236 240 0 241 244 297 Interest expense related to defined benefit obligation 195 67 35 457 287 109 61 Interest income related to plan assets (274)(70) (31) (376) (393)(126)(48)(568)Interest expense on asset ceiling effect 77 77 102 0 0 0 0 102 Administration expenses, taxes and premiums paid 8 0 0 4 3 12 11 Past service cost related to plan amendments 0 0 0 0 0 0 0 0 Curtailments (3) (13)0 0 0 0 (3) (13)Net periodic expenses recognized in net profit for major plans 236 230 (17)(3)22 12 241 239 Net periodic expenses recognized in net profit for remaining plans<sup>2</sup> 19 17 Total net periodic expenses recognized in net profit 259 256

#### Other comprehensive income - gains / (losses) on defined benefit plans

USD m	Swiss	Swiss plan		lan	US and Ger	man plans	Tot	al
For the year ended	31.12.23	31.12.22	31.12.23	31.12.22	31.12.23	31.12.22	31.12.23	31.12.22
Remeasurement of defined benefit obligation	(1,901)	2,424	(96)	1,474	(33)	267	(2,031)	4,165
of which: change in discount rate assumption	(1,332)	3,078	(69)	1,451	(33)	317	(1,434)	4,846
of which: change in rate of pension increase assumption	0	0	34	123	1	(5)	<i>34</i>	118
of which: change in rate of interest credit on retirement savings assumption	<i>207</i>	(408)	0	0	(9)	(82)	198	(490)
of which: change in life expectancy	0	0	<i>75</i>	5	0	(1)	<i>75</i>	4
of which: change in other actuarial assumptions	(88)	(19)	0	1	<i>5</i>	48	(83)	30
of which: experience gains / (losses) <sup>1</sup>	(688)	(226)	(135)	(107)	<i>3</i>	(11)	(820)	(344)
Return on plan assets excluding interest income	513	(1,942)	65	(1,312)	26	(223)	603	(3,476)
Asset ceiling effect excluding interest expense and foreign currency translation	1,332	(656)	0	0	0	0	1,332	(656)
Total gains / (losses) recognized in other comprehensive income for major plans	(56)	(173)	(31)	162	(8)	43	(95)	32
Total gains / (losses) recognized in other comprehensive income for remaining plans							(8)	8
Total gains / (losses) recognized in other comprehensive income <sup>2</sup>							(103)	40

<sup>1</sup> Experience (gains) / losses are a component of actuarial remeasurements of the defined benefit obligation and reflect the effects of differences between the previous actuarial assumptions and what has actually occurred. 2 Refer to the "Statement of comprehensive income".

The table below provides information about the duration of the DBO and the timing for expected benefit payments.

	Swiss	plan	UK p	lan	US and Gern	nan plans <sup>1</sup>
	31.12.23	31.12.22	31.12.23	31.12.22	31.12.23	31.12.22
Duration of the defined benefit obligation (in years)	14.1	13.4	14.5	13.7	7.8	7.9
Maturity analysis of benefits expected to be paid						
USD m						
Benefits expected to be paid within 12 months	811	702	137	107	133	123
Benefits expected to be paid between 1 and 3 years	1,627	1,445	256	234	235	232
Benefits expected to be paid between 3 and 6 years	2,552	2,183	415	384	336	335
Benefits expected to be paid between 6 and 11 years	4,233	3,751	721	667	502	502
Benefits expected to be paid between 11 and 16 years	3,878	3,519	723	667	376	388
Benefits expected to be paid in more than 16 years	13,751	13,243	2,703	2,570	417	516

<sup>1</sup> The duration of the defined benefit obligation represents a weighted average across US and German plans.

<sup>1</sup> Refer to Note 6. 2 Includes differences between actual and estimated performance award accruals.

#### Actuarial assumptions

The actuarial assumptions used for the defined benefit plans are based on the economic conditions prevailing in the jurisdiction in which they are offered. Changes in the defined benefit obligation are most sensitive to changes in the discount rate. The discount rate is based on the yield of high-quality corporate bonds quoted in an active market in the currency of the respective plan. A decrease in the discount curve increases the DBO. UBS AG regularly reviews the actuarial assumptions used in calculating the DBO to determine their continuing relevance.

## > Refer to Note 1a item 5 for a description of the accounting policy for defined benefit plans

The tables below show the significant actuarial assumptions used in calculating the DBO at the end of the year.

# Significant actuarial assumptions of defined benefit plans

	Swiss plan		UK plan		US plans		German plans	
In %	31.12.23	31.12.22	31.12.23	31.12.22	31.12.23	31.12.22	31.12.23	31.12.22
Discount rate	1.48	2.34	4.79	5.02	4.72 <sup>1</sup>	4.92 <sup>1</sup>	3.28	3.81
Rate of pension increase	0.00	0.00	3.00	3.08	0.00	0.00	2.10	2.20
Rate of interest credit on retirement savings	2.48	3.39	0.00	0.00	6.28 <sup>2</sup>	5.73 <sup>2</sup>	0.00	0.00

<sup>1</sup> Represents weighted average across US pension plans. 2 Only applicable to one of the UBS US pension plans

#### Mortality tables and life expectancies for major plans

Country Mortality table		Life expecta	Life expectancy at age 65 for a male member currently						
		aged 65	5	aged 45	;				
	31.12.23	31.12.22	31.12.23	31.12.22					
Switzerland	BVG 2020 G with CMI 2022 projections <sup>1</sup>	21.8	21.7	23.5	23.4				
UK	S3PA with CMI 2022 projections <sup>2</sup>	22.2	23.5	23.4	24.6				
USA	Pri-2012 with MP-2021 projection scale	22.0	22.0	23.4	23.3				
Germany	Dr. K. Heubeck 2018 G	20.8	20.6	23.5	23.4				

		Life expecta	Life expectancy at age 65 for a female member currently					
Country		aged 65	5	aged 45	)			
	Mortality table	31.12.23	31.12.22	31.12.23	31.12.22			
Switzerland	BVG 2020 G with CMI 2022 projections <sup>1</sup>	23.5	23.5	25.1	25.1			
UK	S3PA with CMI 2022 projections <sup>2</sup>	24.0	25.0	25.7	26.4			
USA	Pri-2012 with MP-2021 projection scale	23.5	23.4	24.8	24.8			
Germany	Dr. K. Heubeck 2018 G	24.2	24.0	26.4	26.3			

<sup>1</sup> In 2022, BVG 2020 G with CMI 2021 projections was used. 2 In 2022, S3PA with CMI 2021 projections was used.

#### Sensitivity analysis of significant actuarial assumptions

The table below presents a sensitivity analysis for each significant actuarial assumption, showing how the DBO would have been affected by changes in the relevant actuarial assumption that were reasonably possible at the balance sheet date. Unforeseen circumstances may arise, which could result in variations that are outside the range of alternatives deemed reasonably possible. Caution should be used in extrapolating the sensitivities below on the DBO, as the sensitivities may not be linear.

#### Sensitivity analysis of significant actuarial assumptions<sup>1</sup>

Increase / (decrease) in defined benefit obligation	Swiss pl	an	UK plar	1	US and German plans	
USD m	31.12.23	31.12.22	31.12.23	31.12.22	31.12.23	31.12.22
Discount rate						
Increase by 50 basis points	(857)	(641)	(164)	(141)	(50)	(51)
Decrease by 50 basis points	973	723	183	157	54	55
Rate of pension increase						
Increase by 50 basis points	639	487	137	127	4	4
Decrease by 50 basis points	_2	_2	(129)	(118)	(4)	(3)
Rate of interest credit on retirement savings						
Increase by 50 basis points	144	106	_3	_3	9	9
Decrease by 50 basis points	(144)	(106)	_3	_3	(8)	(8)
Life expectancy						
Increase in longevity by one additional year	416	304	78	65	39	39

<sup>1</sup> The sensitivity analyses are based on a change in one assumption while holding all other assumptions constant, so that interdependencies between the assumptions are excluded. 2 As the assumed rate of pension increase was 0% as of 31 December 2023 and as of 31 December 2022, a downward change in assumption is not applicable. 3 As the UK plan does not provide interest credits on retirement savings, a change in assumption is not applicable.

## Fair value of plan assets

Swiss defined benefit plan

Real estate Foreign

Other investments

Other

The tables below provide information about the composition and fair value of plan assets of the major defined benefit plans.

#### Composition and fair value of plan assets

		31.12.23					31.12.22			
	Fai	Fair value			Plan ass air value allocation o			Fa		Plan asset allocation %
USD m	Quoted in an active market	Other	Total		Quoted in an active market	Other	Total			
Cash and cash equivalents	62	0	62	0	183	0	183	1		
Real estate / property										
Domestic	0	2,426	2,426	13	0	2,130	2,130	13		
Foreign	0	576	576	3	0	517	517	3		
Investment funds										
Equity										
Domestic	489	0	489	3	418	0	418	2		
Foreign	3,283	1,244	4,526	23	2,794	1,222	4,017	24		
Bonds <sup>1</sup>										
Domestic, AAA to BBB–	2,605	0	2,605	13	2,117	0	2,117	12		
Foreign, AAA to BBB–	4,073	0	4,073	21	3,395	0	3,395	20		
Foreign, below BBB—	668	0	668	3	598	0	598	4		

Total fair value of plan assets	12,652	6,681	19,333	100	10,724	6,233	16,957	100
			31.12.23				31.12.22	
Total fair value of plan assets			19,333				16,957	
of which: <sup>2</sup>								
Bank accounts at UBS Group AG			69				189	
UBS Group AG debt instruments			116				28	
UBS Group AG shares			26				15	
Securities lent to UBS Group AG <sup>3</sup>			467				489	
Property occupied by UBS Group AG			61				51	
Derivative financial instruments, counterparty UBS C	roup		<i>302</i>				43	

45

3,004

859

0

16

4

0

867

351

0

1,997

367

0

2,864

718

0

17 4

0

1,094

378

45

1,910

481

<sup>1</sup> The bond credit ratings are primarily based on S&P's credit ratings. Ratings AAA to BBB— and below BBB— represent investment grade and non-investment grade ratings, respectively. In cases where credit ratings from other rating agencies were used, these were converted to the equivalent rating in S&P's rating classification. 2 Bank accounts at UBS AG encompass accounts in the name of the Swiss pension fund. The other positions disclosed in the table encompass both direct investments in UBS AG instruments and UBS Group AG shares and indirect investments, i.e., those made through funds that the pension fund invests in. 3 Securities lent to UBS AG and derivative financial instruments are presented gross of any collateral. Securities lent to UBS AG were fully covered by collateral as of 31 December 2022 and 31 December 2022. Net of collateral, derivative financial instruments amounted to negative USD 19m as of 31 December 2023 (31 December 2022: negative USD 5m).

#### Composition and fair value of plan assets (continued)

UK defined benefit plan

		3	1.12.23			3	1.12.22	
	Fair	r value		Plan asset allocation %	Fai	r value		Plan asset allocation %
USD m	Quoted in an active market	Other	Total	dilocation %	Quoted in an active market	Other	Total	dilocation 76
Cash and cash equivalents	(27)	0	(27)	(1)	104	0	104	4
Bonds <sup>1</sup>								
Domestic, AAA to BBB-	2,375	0	2,375	87	1,729	0	1,729	69
Foreign, AAA to BBB–	357	0	357	13	297	0	297	12
Foreign, below BBB—	0	0	0	0	7	0	7	0
Investment funds								
Equity		•						
Domestic	9	3	12	0	19	3	22	1
Foreign	234	0	234	9	366	0	366	15
Bonds <sup>1</sup>		•						
Domestic, AAA to BBB–	310	38	348	13	367	90	457	18
Domestic, below BBB—	6	0	6	0	1	0	1	0
Foreign, AAA to BBB–	97	0	97	4	90	0	90	4
Foreign, below BBB—	93	0	93	3	114	0	114	5
Real estate								
Domestic	61	0	61	2	64	0	64	3
Foreign	4	12	16	1	6	31	36	1
Other	64	0	64	2	(280)	0	(280)	(11)
Repurchase agreements	(947)	0	(947)	(35)	(612)	0	(612)	(25)
Other investments	15	16	31	1	66	27	94	4
Total fair value of plan assets	2,652	69	2,720	100	2,336	151	2,488	100

<sup>1</sup> The bond credit ratings are primarily based on S&P's credit ratings. Ratings AAA to BBB— and below BBB— represent investment grade and non-investment grade ratings, respectively. In cases where credit ratings from other rating agencies were used, these were converted to the equivalent rating in S&P's rating classification.

## US and German defined benefit

plans								
		3	1.12.23			31	1.12.22	
				Plan asset				Plan asset
		r value		allocation %	Fair value			allocation %
	Quoted in an active				Quoted in an active			
USD m	market	Other	Total		market	Other	Total	
Cash and cash equivalents	4	0	4	0	7	0	7	1
Equity								
Domestic	54	0	54	5	55	0	55	5
Foreign	23	0	23	2	24	0	24	2
Bonds <sup>1</sup>								
Domestic, AAA to BBB–	308	0	308	30	359	0	359	35
Domestic, below BBB–	3	0	3	0	4	0	4	0
Foreign, AAA to BBB—	51	0	51	5	74	0	74	7
Foreign, below BBB—	2	0	2	0	3	0	3	0
Investment funds								
Equity								
Domestic	25	0	25	2	27	0	27	3
Foreign	43	0	43	4	33	0	33	3
Bonds <sup>1</sup>								
Domestic, AAA to BBB–	271	0	271	27	266	0	266	26
Domestic, below BBB—	172	0	172	17	109	0	109	10
Foreign, AAA to BBB—	4	0	4	0	2	0	2	0
Foreign, below BBB–	6	0	6	1	5	0	5	0
Real estate								
Domestic	0	9	9	1	0	11	11	1
Other	49	0	49	5	54	0	54	5
Other investments	(8)	1	(7)	(1)	5	1	6	1
Total fair value of plan assets	1,007	10	1,017	100	1,027	12	1,039	100

<sup>1</sup> The bond credit ratings are primarily based on S&P's credit ratings. Ratings AAA to BBB— and below BBB— represent investment grade and non-investment grade ratings, respectively. In cases where credit ratings from other rating agencies were used, these were converted to the equivalent rating in S&P's rating classification.

### b) Defined contribution plans

UBS AG sponsors several defined contribution plans, with the most significant plans in the US and the UK. UBS AG's obligation is limited to its contributions made in accordance with each plan, which may include direct contributions and matching contributions. Employer contributions to defined contribution plans are recognized as an expense and were USD 320m in 2023 and USD 299m in 2022.

> Refer to Note 6 for more information

## c) Related-party disclosure

UBS AG is the principal provider of banking services for the pension fund of UBS AG in Switzerland. In this capacity, UBS AG is engaged to execute most of the pension fund's banking activities. These activities can include, but are not limited to, trading, securities lending and borrowing and derivative transactions. The non-Swiss UBS AG pension funds do not have a similar banking relationship with UBS AG. During 2023, UBS AG received USD 20m in fees for banking services from the major post-employment benefit plans (2022: USD 20m). As of 31 December 2023, the major post-employment benefit plans held USD 396m in UBS Group AG shares (31 December 2022: USD 253m).

> Refer to the "Composition and fair value of plan assets" table in Note 26a for more information about fair value of investments in UBS AG and UBS Group AG instruments held by the Swiss pension fund

## Note 27 Employee benefits: variable compensation

## a) Plans offered

UBS has several share-based and other deferred compensation plans that align the interests of Group Executive Board (GEB) members and other employees with the interests of investors.

Share-based awards are granted in the form of notional shares and, where permitted, carry a dividend equivalent that may be paid in notional shares or cash. Awards are settled by delivering UBS shares at vesting, except in jurisdictions where this is not permitted for legal or tax reasons.

Deferred compensation awards are generally forfeitable upon, among other circumstances, voluntary termination of employment with UBS. These compensation plans are also designed to meet regulatory requirements and include special provisions for regulated employees. For the majority of variable compensation awards granted under such plans to employees of UBS AG, the grantor entity is UBS Group AG. Expenses associated with these awards are charged by UBS Group AG to UBS AG. For the purpose of this Note, references to shares refer to UBS Group AG shares.

The most significant deferred compensation plans are described below.

> Refer to Note 1a item 4 for a description of the accounting policy related to share-based and other deferred compensation plans

## **Mandatory deferred compensation plans**

## Long-Term Incentive Plan

The Long-Term Incentive Plan (LTIP) is a mandatory deferred share-based compensation plan for senior leaders of the Group (i.e., GEB members and selected senior management).

The number of notional shares delivered at vesting depends on two equally weighted performance metrics over a three-year performance period: return on common equity tier 1 (CET1) capital and relative total shareholder return, which compares the total shareholder return (TSR) of UBS with the TSR of an index consisting of listed Global Systemically Important Banks as determined by the Financial Stability Board (excluding UBS). The final number of shares vest over three years following the performance period for GEB members, and cliff-vest in the year following the performance period for selected senior management.

## Equity Ownership Plan / Fund Ownership Plan

The Equity Ownership Plan (EOP) is the deferred share-based compensation plan for employees outside of the GEB that are subject to deferral requirements. EOP awards generally vest over three years.

Certain Asset Management employees receive some or all of their EOP in the form of notional funds (Fund Ownership Plan or FOP, previously named AM EOP). This plan is generally delivered in cash and vests over three years. The amount delivered depends on the value of the underlying investment funds at the time of vesting.

### Note 27 Employee benefits: variable compensation (continued)

## Deferred Contingent Capital Plan

The Deferred Contingent Capital Plan (DCCP) is a deferred compensation plan for all employees who are subject to deferral requirements. Such employees are awarded notional additional tier 1 (AT1) capital instruments, which, at the discretion of UBS, can be settled in cash or a perpetual, marketable AT1 capital instrument. DCCP awards generally bear notional interest paid annually (except for certain regulated employees) and vest in full after five years. Awards are forfeited if a viability event occurs (i.e., if FINMA notifies the firm that the DCCP awards must be written down to mitigate the risk of insolvency, bankruptcy or failure of UBS) or if the firm receives a commitment of extraordinary support from the public sector that is necessary to prevent such an event. DCCP awards are also written down if the Group's CET1 capital ratio falls below a defined threshold. In addition, GEB members forfeit 20% of DCCP awards for each loss-making year during the vesting period.

## Financial advisor variable compensation

In line with market practice for US wealth management businesses, the compensation for US financial advisors in Global Wealth Management consists of cash compensation and deferred compensation awards, determined using a formulaic approach based on production.

Cash compensation reflects a percentage of the compensable production that each financial advisor generates. Compensable production is generally based on transaction revenue and investment advisory fees and may reflect further adjustments. The percentage rate generally varies based on the level of the production and firm tenure.

Financial advisors may also be granted annual deferred compensation. These amounts generally vest over a six-year period. The annual deferred compensation amount reflects the overall percentage rate and production.

Cash compensation and deferred compensation awards may be reduced for, among other things, errors, negligence or carelessness, or failure to comply with the firm's rules, standards, practices and / or policies, and / or applicable laws and regulations.

Financial advisors may also participate in additional programs to support promoting and developing their business or supporting the transition of client relationships where appropriate. Financial advisor compensation also includes expenses related to compensation commitments with financial advisors entered into at the time of recruitment that are subject to vesting requirements.

### b) Effect on the income statement

## Effect on the income statement for the financial year and future periods

The table below provides information about compensation expenses related to total variable compensation that were recognized in the financial year ended 31 December 2023, as well as expenses that were deferred and will be recognized in the income statement for 2024 and later. The majority of expenses deferred to 2024 and later that are related to the 2023 performance year pertain to awards granted in February 2024. The total unamortized compensation expense for unvested share-based awards granted up to 31 December 2023 will be recognized in future periods over a weighted average period of 2.6 years.

#### Variable compensation

	Expen	ses recognized in 20	)23	Expenses (	deferred to 2024 and	l later¹
USD m	Related to the 2023 performance year	Related to prior performance years	Total	Related to the 2023 performance year	Related to prior	Total
Non-deferred cash	1,884	(36)	1,848	0	0	0
Deferred compensation awards	356	637	993	537	731	1,268
of which: Equity Ownership Plan	95	319	415	180	235	416
of which: Deferred Contingent Capital Plan	124	233	357	216	436	652
of which: Long-Term Incentive Plan	121	39	160	112	33	145
of which: Fund Ownership Plan	15	45	61	28	27	55
Variable compensation — performance awards	2,240	601	2,841	537	731	1,268
Variable compensation — financial advisors <sup>2</sup>	3,761	788	4,549	1,236	3,300	4,536
of which: non-deferred cash	3,440	(4)	3,436	0	0	0
of which: deferred share-based awards	110	87	197	113	209	321
of which: deferred cash-based awards	169	<i>245</i>	414	301	1,029	1,331
of which: compensation commitments with recruited financial advisors	42	459	501	822	2,062	2,884
Variable compensation — other <sup>3</sup>	168	111	279	224	214	438
Total variable compensation	6,169	1,500	7,6694	1,997	4,245	6,242

<sup>1</sup> Estimate as of 31 December 2023. Actual amounts to be expensed in future periods may vary; e.g., due to forfeiture of awards. 2 Financial advisor compensation consists of cash and deferred compensation awards and is based on compensable revenues and firm tenure using a formulaic approach. It also includes expenses related to compensation commitments with financial advisors entered into at the time of recruitment that are subject to vesting requirements. 3 Consists of replacement payments, forfeiture credits, severance payments, retention plan payments and interest expense related to the Deferred Contingent Capital Plan. 4 Includes USD 818m in expenses related to share-based compensation (performance awards: USD 575m; other variable compensation: USD 46m; financial advisor compensation: USD 197m). A further USD 135m in expenses related to share-based compensation was recognized within other expense categories included in Note 6 (salaries: USD 4m related to role-based allowances; social security: USD 109m; other personnel expenses: USD 22m related to the Equity Plus Plan).

## Note 27 Employee benefits: variable compensation (continued)

#### Variable compensation (continued)

	Expen	ses recognized in 2	022	Expenses (	deferred to 2023 and	later1
	Related to the 2022 performance	Related to prior performance		Related to the 2022 performance	Related to prior performance	
USD m	year	years	Total	year	years	Total
Non-deferred cash	2,012	(9)	2,003	0	0	0
Deferred compensation awards	346	561	907	582	730	1,312
of which: Equity Ownership Plan	191	225	416	294	240	534
of which: Deferred Contingent Capital Plan	123	211	334	238	395	634
of which: Long-Term Incentive Plan	11	30	41	30	40	70
of which: Fund Ownership Plan	21	95	116	20	54	74
Variable compensation – performance awards	2,358	552	2,910	582	730	1,312
Variable compensation – financial advisors <sup>2</sup>	3,799	709	4,508	1,290	2,652	3,942
of which: non-deferred cash	3,481	0	3,481	0	0	0
of which: deferred share-based awards	104	62	166	122	180	302
of which: deferred cash-based awards	185	215	400	588	636	1,224
of which: compensation commitments with recruited financial advisors	29	432	461	580	1,836	2,416
Variable compensation — other <sup>3</sup>	146	72	217	230	189	419
Total variable compensation	6,304	1,332	7,6364	2,101	3,571	5,672

<sup>1</sup> Estimate as of 31 December 2022. Actual amounts to be expensed in future periods may vary; e.g., due to forfeiture of awards. 2 Financial advisor compensation consists of cash and deferred compensation awards and is based on compensable revenues and firm tenure using a formulaic approach. It also includes expenses related to compensation commitments with financial advisors entered into at the time of recruitment that are subject to vesting requirements. 3 Consists of replacement payments, forfeiture credits, severance payments, retention plan payments and interest expense related to the Deferred Contingent Capital Plan. 4 Includes USD 680m in expenses related to share-based compensation (performance awards: USD 457m; other variable compensation: USD 56m; financial advisor compensation: USD 166m). A further USD 80m in expenses related to share-based compensation was recognized within other expense categories included in Note 6 (salaries: USD 4m related to role-based allowances; social security: USD 57m; other personnel expenses: USD 19m related to the Equity Plus Plan).

#### Variable compensation (continued)

	Expens	ses recognized in 20	)21	Expenses	deferred to 2022 and	later1
lico.	Related to the 2021 performance	Related to prior performance	T I	Related to the 2021 performance		T
USD m	year	years	Total	year	years	Total
Non-deferred cash	2,136	(8)	2,128	0	0	0
Deferred compensation awards	389	399	788	767	606	1,373
of which: Equity Ownership Plan	<i>175</i>	174	350	374	180	553
of which: Deferred Contingent Capital Plan	134	151	<i>285</i>	290	318	608
of which: Long-Term Incentive Plan	51	17	69	48	<i>32</i>	79
of which: Fund Ownership Plan	29	55	84	56	77	133
Variable compensation – performance awards	2,525	391	2,916	767	606	1,373
Variable compensation — financial advisors <sup>2</sup>	4,175	685	4,860	1,097	2,323	3,419
of which: non-deferred cash	3,858	(6)	3,853	0	0	C
of which: deferred share-based awards	106	51	157	123	146	269
of which: deferred cash-based awards	170	202	372	311	495	806
of which: compensation commitments with recruited financial advisors	41	438	479	662	1,682	2,344
Variable compensation – other <sup>3</sup>	163	33	196	210	178	388
Total variable compensation	6,863	1,109	7,9734	2,074	3,107	5,181

<sup>1</sup> Estimate as of 31 December 2021. Actual amounts expensed may vary; e.g., due to forfeiture of awards. 2 Financial advisor compensation consists of cash and deferred compensation awards and is based on compensable revenues and firm tenure using a formulaic approach. It also includes expenses related to compensation commitments with financial advisors entered into at the time of recruitment that are subject to vesting requirements. 3 Consists of replacement payments, forfeiture credits, severance payments, retention plan payments and interest expense related to the Deferred Contingent Capital Plan. 4 Includes USD 631m in expenses related to share-based compensation (performance awards: USD 419m; other variable compensation: USD 56m; financial advisor compensation: USD 157m). A further USD 77m in expenses related to share-based compensation was recognized within other expense categories included in Note 6 (salaries: USD 5m related to role-based allowances; social security: USD 59m; other personnel expenses: USD 13m related to the Equity Plus Plan).

#### Note 27 Employee benefits: variable compensation (continued)

## c) Outstanding share-based compensation awards

#### Share and performance share awards

Movements in outstanding share-based awards granted by UBS AG and its subsidiaries to employees during 2023 and 2022 are provided in the table below.

#### Movements in outstanding share-based compensation awards

	Weighted		Weighted
	average grant		average grant
Number of shares	date fair	Number of shares	date fair
2023	value (USD)	2022	value (USD)
614,428	17	295,921	15
279,310	20	358,424	19
(132,770)	15	(37,994)	14
(4,043)	19	(1,923)	15
756,925	19	614,428	17
217,420		174,329	
	2023 614,428 279,310 (132,770) (4,043) 756,925	Number of shares         date fair value (USD)           614,428         17           279,310         20           (132,770)         15           (4,043)         19           756,925         19	Number of shares         date fair value (USD)         Number of shares           2023         value (USD)         2022           614,428         17         295,921           279,310         20         358,424           (132,770)         15         (37,994)           (4,043)         19         (1,923)           756,925         19         614,428

The total carrying amount of the liability related to cash-settled share-based awards as of 31 December 2023 and 31 December 2022 was USD 14m and USD 7m, respectively.

#### d) Valuation

#### **UBS** share awards

UBS measures compensation expense based on the average market price of UBS shares on the grant date as quoted on the SIX Swiss Exchange, taking into consideration post-vesting sale and hedge restrictions, non-vesting conditions and market conditions, where applicable. The fair value of the share awards subject to post-vesting sale and hedge restrictions is discounted on the basis of the duration of the post-vesting restriction and is referenced to the cost of purchasing an at-the-money European put option for the term of the transfer restriction. The grant date fair value of notional shares without dividend entitlements also includes a deduction for the present value of future expected dividends to be paid between the grant date and distribution.

#### Note 28 Interests in subsidiaries and other entities

#### a) Interests in subsidiaries

UBS AG defines its significant subsidiaries as those entities that, either individually or in aggregate, contribute significantly to UBS AG's financial position or results of operations, based on a number of criteria, including the subsidiaries' equity and contribution to UBS AG's total assets and profit or loss before tax, in accordance with the requirements set by IFRS 12, Swiss regulations and the rules of the US Securities and Exchange Commission (the SEC).

## Individually significant subsidiaries

The table below lists UBS AG's individually significant subsidiaries as of 31 December 2023. Unless otherwise stated, the subsidiaries listed below have share capital consisting solely of ordinary shares held entirely by UBS AG and the proportion of ownership interest held is equal to the voting rights held by UBS AG.

The country where the respective registered office is located is also the principal place of business. UBS AG operates through a global branch network and a significant proportion of its business activity is conducted outside Switzerland, including in the UK, the US, Singapore, the Hong Kong SAR and other countries. UBS Europe SE has branches and offices in a number of EU Member States, including Germany, Italy, Luxembourg, France and Spain. Share capital is provided in the currency of the legally registered office.

### Note 28 Interests in subsidiaries and other entities (continued)

#### Individually significant subsidiaries of UBS AG as of 31 December 20231

Company	Registered office	Primary business	Share cap	ital in million	Equity interest accumulated in %
UBS Americas Holding LLC	Wilmington, Delaware, USA	Group Items	USD	2,900.02	100.0
UBS Americas Inc.	Wilmington, Delaware, USA	Group Items	USD	0.0	100.0
UBS Asset Management AG	Zurich, Switzerland	Asset Management	CHF	43.2	100.0
UBS Bank USA	Salt Lake City, Utah, USA	Global Wealth Management	USD	0.0	100.0
UBS Europe SE	Frankfurt, Germany	Global Wealth Management	EUR	446.0	100.0
UBS Financial Services Inc.	Wilmington, Delaware, USA	Global Wealth Management	USD	0.0	100.0
UBS Securities LLC	Wilmington, Delaware, USA	Investment Bank	USD	1,283.1 <sup>3</sup>	100.0
UBS Switzerland AG	Zurich, Switzerland	Personal & Corporate Banking	CHF	10.0	100.0

<sup>1</sup> Includes direct and indirect subsidiaries of UBS AG. 2 Consists of common share capital of USD 1,000 and non-voting preferred share capital of USD 2,900,000,000. 3 Consists of common share capital of USD 100,000 and non-voting preferred share capital of USD 1,283,000,000.

### Other subsidiaries

The table below lists other direct and indirect subsidiaries of UBS AG that are not individually significant but contribute to UBS AG's total assets and aggregated profit before tax thresholds and are thus disclosed in accordance with requirements set by the SEC.

#### Other subsidiaries of UBS AG as of 31 December 2023

Company	Registered office	Primary business	Share ca	pital in million	Equity interest accumulated in %
UBS Asset Management (Americas) Inc.	Wilmington, Delaware, USA	Asset Management	USD	0.0	100.0
UBS Asset Management (Hong Kong) Limited	Hong Kong SAR, China	Asset Management	HKD	153.8	100.0
UBS Asset Management Life Ltd	London, United Kingdom	Asset Management	GBP	15.0	100.0
UBS Asset Management Switzerland AG	Zurich, Switzerland	Asset Management	CHF	0.5	100.0
UBS Business Solutions US LLC	Wilmington, Delaware, USA	Group Items	USD	0.0	100.0
UBS Credit Corp.	Wilmington, Delaware, USA	Global Wealth Management	USD	0.0	100.0
UBS Fund Management (Luxembourg) S.A.	Luxembourg, Luxembourg	Asset Management	EUR	13.7	100.0
UBS Fund Management (Switzerland) AG	Basel, Switzerland	Asset Management	CHF	1.0	100.0
UBS (Monaco) S.A.	Monte Carlo, Monaco	Global Wealth Management	EUR	49.2	100.0
UBS O'Connor LLC	Wilmington, Delaware, USA	Asset Management	USD	1.0	100.0
UBS Realty Investors LLC	Boston, Massachusetts, USA	Asset Management	USD	9.0	100.0
UBS Securities Australia Ltd	Sydney, Australia	Investment Bank	AUD	0.3 <sup>1</sup>	100.0
UBS Securities Hong Kong Limited	Hong Kong SAR, China	Investment Bank	HKD	2,841.6	100.0
UBS Securities Japan Co., Ltd.	Tokyo, Japan	Investment Bank	JPY	34,708.7	100.0
UBS SuMi TRUST Wealth Management Co., Ltd.	Tokyo, Japan	Global Wealth Management	JPY	5,165.0	51.0

<sup>1</sup> Includes a nominal amount relating to redeemable preference shares.

#### Consolidated structured entities

Consolidated structured entities (SEs) include certain investment funds, securitization vehicles and client investment vehicles. UBS AG has no individually significant subsidiaries that are SEs.

In 2023 and 2022, UBS AG did not enter into any contractual obligation that could require UBS AG to provide financial support to consolidated SEs. In addition, UBS AG did not provide support, financial or otherwise, to a consolidated SE when UBS AG was not contractually obligated to do so, nor does UBS AG currently have any intention to do so in the future. Furthermore, UBS AG did not provide support, financial or otherwise, to a previously unconsolidated SE that resulted in UBS AG controlling the SE during the reporting period.

#### Note 28 Interests in subsidiaries and other entities (continued)

## b) Interests in associates and joint ventures

As of 31 December 2023 and 31 December 2022, no associate or joint venture was individually material to UBS AG. Also, there were no significant restrictions on the ability of associates or joint ventures to transfer funds to UBS AG or its subsidiaries as cash dividends or to repay loans or advances made. There were no quoted market prices for any associates or joint ventures of UBS AG.

Investments in associates and joint ventures

investments in associates and joint ventures		
USD m	2023	2022
Carrying amount at the beginning of the year	1,101	1,243
Additions	1	3
Reclassifications	0	(44)
Share of comprehensive income	(180)	(41)
of which: share of net profit / (loss) <sup>1</sup>	(163)	32
of which: share of other comprehensive income <sup>2</sup>	(17)	(73)
Share of changes in retained earnings	(1)	0
Dividends received	(35)	(31)
Foreign currency translation	97	(30)
Carrying amount at the end of the year	983	1,101
of which: associates	980	1,098
of which: SIX Group AG, Zurich <sup>3</sup>	<i>826</i>	954
of which: other associates	<i>154</i>	144
of which: joint ventures	3	

<sup>1</sup> For 2023, consists of negative USD 163m from associates (for 2022, consists of USD 27m from associates and USD 5m from joint ventures). 2 For 2023, consists of negative USD 17m from associates (for 2022, consists of negative USD 73m from associates). 3 In 2023, UBS AG's legal equity interest amounted to 17%. UBS AG is represented on the Board of Directors.

## c) Unconsolidated structured entities

UBS AG is considered to sponsor another entity if, in addition to ongoing involvement with that entity, it had a key role in establishing that entity or in bringing together relevant counterparties for a transaction facilitated by that entity. During 2023, UBS AG sponsored the creation of various SEs and interacted with a number of non-sponsored SEs, including securitization vehicles, client vehicles and certain investment funds, that UBS AG did not consolidate as of 31 December 2023 because it did not control them.

## Interests in unconsolidated structured entities

The table below presents UBS AG's interests in and maximum exposure to loss from unconsolidated SEs, as well as the total assets held by the SEs in which UBS had an interest as of year-end, except for investment funds sponsored by third parties, for which the carrying amount of UBS's interest as of year-end has been disclosed.

As a consequence of the acquisition of the Credit Suisse Group and the resulting increase in interests in structured entities, interests in client vehicles sponsored by UBS are presented separately to other vehicles sponsored by third parties, to clearly distinguish the different types of entities that UBS is involved with. Further, bonds issued by US government-sponsored entities included within Group Treasury's HQLA portfolio have been excluded given UBS does not absorb significant risk and third-party funding vehicles of large multi-nationals have been excluded as they are no longer considered structured entities. Prior periods have been restated to reflect these changes. As a consequence of these changes, UBS AG does not disclose any interest in other vehicles sponsored by third parties.

## Sponsored unconsolidated structured entities in which UBS did not have an interest at year-end

During 2023 and 2022, UBS AG did not earn material income from sponsored unconsolidated SEs in which UBS did not have an interest at year-end.

During 2023 and 2022, UBS AG and third parties did not transfer any assets into sponsored securitization vehicles created in the year. UBS AG and third parties transferred assets, alongside deposits and debt issuances (which are assets from the perspective of the vehicle), of USD 0.5bn and USD 0.5bn, respectively, into sponsored client vehicles created in 2023 (2022: USD 1bn and USD 3bn, respectively). For sponsored investment funds, transfers arose during the period as investors invested and redeemed positions, thereby changing the overall size of the funds, which, when combined with market movements, resulted in a total closing net asset value of USD 44bn (31 December 2022: USD 38bn).

24	40	22	

763

956

798

USD m, except where indicated	Securitization vehicles <sup>1</sup>	Client Vehicles sponsored by UBS <sup>2</sup>	Investment funds	Total	Maximum exposure to loss <sup>3</sup>
Financial assets at fair value held for trading	88	37	7,413	7,538	7,538
Derivative financial instruments	2	147	66	215	215
Loans and advances to customers	0	0	200	200	200
Financial assets at fair value not held for trading	0	0	143	143	143
Financial assets measured at fair value through other comprehensive income	0	0	0	0	0
Other financial assets measured at amortized cost	188	0	0	188	438
Total assets	278	185	7,821	8,285	8,534
Derivative financial instruments	1	8	590	598	2
Total liabilities	1	8	590	598	2
Assets held by the unconsolidated structured entities in which UBS AG had an interest (USD bn)	174	2 <sup>5</sup>	118 <sup>6</sup>		

		31.12.22		
Securitization vehicles <sup>1,2</sup>	Client Vehicles sponsored by UBS <sup>2</sup>	Investment funds	Total	Maximum exposure to loss <sup>3</sup>
263	2	5,884	6,149	6,149
3	160	115	278	278
0	0	119	119	119
0	0	108	108	108
0	0	0	0	0
0	0	2	3	252
266	162	6,228	6,657	6,907
1	35	763	798	2
	vehicles <sup>1,2</sup> 263 3 0 0 0	vehicles <sup>1,2</sup> sponsored by UBS <sup>2</sup> 263         2           3         160           0         0           0         0           0         0           0         0           0         0	vehicles¹.²         sponsored by UBS²         funds           263         2         5,884           3         160         115           0         0         119           0         0         108           0         0         0           0         0         2           266         162         6,228	vehicles¹-2         sponsored by UBS²         funds         Total           263         2         5,884         6,149           3         160         115         278           0         0         119         119           0         0         108         108           0         0         0         0           0         0         0         0           0         0         2         3           266         162         6,228         6,657

AG had an interest (USD bn) 394 1 Includes securities issued by securitization structured entities sponsored by both UBS and third parties. 2 Client vehicles sponsored by UBS are structured entities that do not qualify as a securitization in line with regulatory requirements and are not considered an investment fund. Effective from 31 December 2023, bonds issued by US government-sponsored entities included in Group Treasury's HQLA and interests in thirdparty funding vehicles of large multi-nationals have been excluded, with prior periods restated. The restatement resulted in a decrease in interests in securitization vehicles of USD 852m and a decrease in interests in client vehicles of USD 5,057m as of 31 December 2022. There was a corresponding decrease in assets held by securitization vehicles in which UBS has an interest of USD 11bn and a decrease in assets held by client

UBS AG retains or purchases interests in unconsolidated SEs in the form of direct investments, financing, guarantees, letters of credit and derivatives, as well as through management contracts. UBS AG's maximum exposure to loss is generally equal to the carrying amount of UBS AG's interest in the given SE, with this subject to change over time with market movements. Guarantees, letters of credit and credit derivatives are an exception, with the given contract's

notional amount, adjusted for losses already incurred, representing the maximum loss that UBS AG is exposed to.

vehicles in which UBS has an interest of USD 105bn as of 31 December 2022. 3 For the purpose of this disclosure, maximum exposure to loss amounts do not consider the risk-reducing effects of collateral or other credit enhancements. 4 Represents the principal amount outstanding. 5 Represents the market value of total assets. 6 Represents the net asset value of the investment funds sponsored by UBS and the carrying amount of UBS's interests in the investment funds not sponsored by UBS.

The maximum exposure to loss disclosed in the table above does not reflect UBS AG's risk management activities, including effects from financial instruments that may be used to economically hedge risks inherent in the given unconsolidated SE or risk-reducing effects of collateral or other credit enhancements.

In 2023 and 2022, UBS AG did not provide support, financial or otherwise, to any unconsolidated SE when not contractually obligated to do so, nor does UBS AG currently have any intention to do so in the future.

In 2023 and 2022, income and expenses from interests in unconsolidated SEs primarily resulted from mark-to-market movements recognized in Other net income from financial instruments measured at fair value through profit or loss, which were generally hedged with other financial instruments, as well as fee and commission income received from UBSsponsored funds.

#### Interests in securitization vehicles

Total liabilities

Assets held by the unconsolidated structured entities in which UBS

As of 31 December 2023 and 31 December 2022, UBS AG held interests, both retained and acquired, in various securitization vehicles that relate to financing, underwriting, secondary market and derivative trading activities.

### Note 28 Interests in subsidiaries and other entities (continued)

The numbers outlined in the table above may differ from the securitization positions presented in the 31 December 2023 Pillar 3 Report, available under "Pillar 3 disclosures" at *ubs.com/investors*, for the following reasons: (i) exclusion of synthetic securitizations transacted with entities that are not SEs and transactions in which UBS AG did not have an interest because it did not absorb any risk; (ii) a different measurement basis in certain cases (e.g., IFRS Accounting Standards carrying amount within the table above compared with net exposure amount at default for Pillar 3 disclosures); and (iii) different classification of vehicles viewed as sponsored by UBS AG versus sponsored by third parties.

> Refer to the 31 December 2023 Pillar 3 Report, available under "Pillar 3 disclosures" at ubs.com/investors, for more information

## Interests in client vehicles sponsored by UBS

UBS-sponsored client vehicles are established predominantly for clients to gain exposure to specific assets or risk exposures. Such vehicles may enter into derivative agreements, with UBS or a third party, to align the cash flows of the entity with the investor's intended investment objective, or to introduce other desired risk exposures.

As of 31 December 2023 and 31 December 2022, UBS AG retained interests in client vehicles sponsored by UBS that relate to financing, secondary market and derivative trading activities, and to hedge structured product offerings.

#### Interests in investment funds

Investment funds have a collective investment objective, and are either passively managed, so that any decision-making does not have a substantive effect on variability, or are actively managed and investors or their governing bodies do not have substantive voting or similar rights.

UBS AG holds interests in a number of investment funds, primarily resulting from seed investments or in order to hedge structured product offerings. In addition to the interests disclosed in the table above, UBS AG manages the assets of various pooled investment funds and receives fees based, in whole or in part, on the net asset value of the fund and / or the performance of the fund. The specific fee structure is determined based on various market factors and considers the fund's nature and the jurisdiction of incorporation, as well as fee schedules negotiated with clients. These fee contracts represent an interest in the fund, as they align UBS AG's exposure with investors, providing a variable return based on the performance of the entity. Depending on the structure of the fund, these fees may be collected directly from the fund's assets and / or from the investors. Any amounts due are collected on a regular basis and are generally backed by the fund's assets. Therefore, interest in such funds is not represented by the on-balance sheet fee receivable but rather by the future exposure to variable fees. The total assets of such funds were USD 356bn and USD 336bn as of 31 December 2023 and 31 December 2022, respectively, and have been excluded from the table above. UBS AG did not have any material exposure to loss from these interests as of 31 December 2023 or as of 31 December 2022.

#### Note 29 Changes in organization and acquisitions and disposals of subsidiaries and businesses

#### Disposals of subsidiaries and businesses

#### Sale of UBS Hana Asset Management Co., Ltd.

In the fourth quarter of 2023, UBS AG completed the sale of its 51% stake in UBS Hana Asset Management Co., Ltd. to Hana Securities. Upon completion of the sale, UBS AG recorded a pre-tax gain of USD 23m (net of a foreign currency translation loss) in Asset Management which was recognized in *Other income*.

## **Changes in organization**

### Legal structure integration

In December 2023, the Board of Directors of UBS Group AG approved the merger of UBS AG and Credit Suisse AG, and both entities entered into a definitive merger agreement. The completion of the merger is subject to regulatory approvals and is expected to occur by the end of the second quarter of 2024.

UBS also expects to complete the transition to a single US intermediate holding company in the second quarter of 2024 and the planned merger of UBS Switzerland AG and Credit Suisse (Schweiz) AG in the third quarter of 2024.

#### Note 30 Related parties

Related parties of UBS AG are:

- entities within UBS Group, i.e., the parent entity, UBS Group AG, and fellow subsidiaries consolidated within UBS Group (including Credit Suisse subsidiaries from the date of the acquisition of the Credit Suisse Group);
- associates (entities that are under the significant influence of UBS AG or other group entities consolidated within UBS Group);
- joint ventures (entities in which UBS AG or other group entity consolidated within UBS Group shares control with another party);
- post-employment benefit plans for the benefit of UBS AG's employees or employees of entities related to UBS AG;
- key management personnel and close family members of key management personnel; and
- entities over which key management personnel or their close family members have solely or jointly a direct or indirect significant influence.

Key management personnel are those persons having authority and responsibility for planning, directing, and controlling the activities of the Group, directly or indirectly. UBS AG considers the members of the Board of Directors (the BoD) and the Executive Board (the EB) of UBS AG and the members of the Board of Directors (the BoD) and the Group Executive Board (the GEB) of UBS Group AG to constitute key management personnel.

## a) Remuneration of key management personnel

The Vice Chairman of the BoD has a specific management employment contract and receives pension benefits upon retirement. Total remuneration of the Chairman and the Vice Chairman of the BoD and all EB members is included in the table below.

## Remuneration of key management personnel

USD m, except where indicated	31.12.23	31.12.22	31.12.21
Base salaries and other cash payments <sup>1</sup>	35	26	30
Incentive awards – cash <sup>2</sup>	24	16	17
Annual incentive award under DCCP	36	23	26
Employer's contributions to retirement benefit plans	3	2	2
Benefits in kind, fringe benefits (at market value)	1	1	1
Share-based compensation <sup>3</sup>	63	42	45
Total	162	110	122
Total (CHF m) <sup>4</sup>	147	106	112

<sup>1</sup> May include role-based allowances in line with market practice and regulatory requirements. 2 The cash portion may also include blocked shares in line with regulatory requirements. 3 Compensation expense is based on the share price on grant date taking into account performance conditions. Refer to Note 27 for more information. For EB members, share-based compensation for 2023, 2022 and 2021 was entirely composed of LTIP awards. For the Chairman of the BoD, the share-based compensation for 2023, 2022 and 2021 was entirely composed of UBS shares. 4 Swiss franc amounts disclosed represent the respective US dollar amounts translated at the applicable performance award currency exchange rates (2023: USD / CHF 0.91; 2022: USD / CHF 0.96; 2021: USD / CHF 0.92).

The independent members of the BoD, including the Chairman, do not have employment or service contracts with UBS AG, and thus are not entitled to benefits upon termination of their service on the BoD. Payments to these individuals for their services as independent members of the BoD amounted to USD 11.7m (CHF 10.6m) in 2023, USD 11.1m (CHF 10.7m) in 2022 and USD 7.5m (CHF 6.9m) in 2021.

## b) Equity holdings of key management personnel

Equity holdings of key management personnel <sup>1</sup>		
	31.12.23	31.12.22
Number of UBS Group AG shares held by members of the BoD, EB and parties closely linked to them <sup>2</sup>	5,121,564	2,443,580

<sup>1</sup> No options were held in 2023 and 2022 by non-independent members of the BoD and any EB member or any of its related parties. 2 Excludes shares granted under variable compensation plans with forfeiture provisions.

Of the share totals above, no shares were held by close family members of key management personnel on 31 December 2023 and 31 December 2022. No shares were held by entities that are directly or indirectly controlled or jointly controlled by key management personnel or their close family members on 31 December 2023 and 31 December 2022. As of 31 December 2023, no member of the BoD or EB was the beneficial owner of more than 1% of the shares in UBS Group AG.

#### c) Loans, advances, mortgages and deposit balances with key management personnel

The non-independent members of the BoD and EB members are granted loans, fixed advances and mortgages in the ordinary course of business on substantially the same terms and conditions that are available to other employees, including interest rates and collateral, and neither involve more than the normal risk of collectability nor contain any other unfavorable features for the firm. Independent BoD members are granted loans and mortgages in the ordinary course of business at general market conditions.

Outstanding balances with key management personnel were as follows.

#### Loans, advances and mortgages to key management personnel<sup>1</sup>

USD m, except where indicated	2023	2022
Balance at the beginning of the year	28	28
Balance at the end of the year <sup>2</sup>	55	28
Balance at the end of the year (CHF m) <sup>2, 3</sup>	46	26

<sup>1</sup> All loans are secured loans. 2 There were USD 14m (CHF 12m) unused uncommitted credit facilities as of 31 December 2023 and no unused uncommitted credit facilities as of 31 December 2022. 3 Swiss franc amounts disclosed represent the respective US dollar amounts translated at the relevant year-end closing exchange rate.

In addition, there were USD 21m (CHF 18m) outstanding deposit balances with key management personnel as of 31 December 2023.

#### d) Other related-party transactions with entities controlled by key management personnel

In 2023 and 2022, UBS AG did not enter into transactions with entities, over whom key management personnel or their close family members have solely or jointly a direct or indirect significant influence and as of 31 December 2023, 31 December 2022 and 31 December 2021, there were no outstanding balances related to such transactions. Furthermore, in 2023 and 2022, such entities did not sell any goods or provide any services to UBS AG, and therefore did not receive any fees from UBS AG. UBS AG also did not provide services to such entities in 2023 and 2022, and therefore also received no fees.

#### e) Transactions with associates and joint ventures

USD m	2023	2022
Carrying amount at the beginning of the year	217	251
Additions	664	402
Reductions	(716)	(438)
Foreign currency translation	18	1
Carrying amount at the end of the year	183	217
of which: unsecured loans and receivables	174	209

#### Other transactions with associates and joint ventures

	As of or for th	As of or for the year ended		
USD m	31.12.23	31.12.22		
Payments to associates and joint ventures for goods and services received	155	138		
Fees received for services provided to associates and joint ventures	10	4		
Liabilities to associates and joint ventures	103	90		
Commitments and contingent liabilities to associates and joint ventures	8	7		

Refer to Note 28 for an overview of investments in associates and joint ventures

#### Note 30 Related parties (continued)

#### f) Receivables and payables from / to UBS Group AG and other subsidiaries of UBS Group AG

USD m	31.12.23	31.12.22
Receivables		
Amounts due from banks <sup>1</sup>	14,752	0
Cash collateral receivables on derivative instruments	312	1
Loans and advances to customers	4,889	2,807
Other financial assets measured at amortized cost	232	147
Financial assets at fair value held for trading	325	146
Derivative financial instruments	3,031	1
Payables		
Amounts due to banks	364	0
Cash collateral payables on derivative instruments	1,447	0
Customer deposits	3,069	2,119
Funding from UBS Group AG measured at amortized cost	67,282	56,147
Other financial liabilities measured at amortized cost	2,574	1,985
Derivative financial instruments	2,032	0
Other financial liabilities designated at fair value <sup>2</sup>	2,995	1,796

<sup>1</sup> Reflects funding provided to Credit Suisse. 2 Mainly represents funding recognized from UBS Group AG that is designated at fair value. Refer to Note 18b for more information.

#### Note 31 Invested assets and net new money

The following disclosures provide a breakdown of UBS AG's invested assets and a presentation of their development, including net new money, as required by the Swiss Financial Market Supervisory Authority (FINMA).

#### **Invested assets**

Invested assets consist of all client assets managed by or deposited with UBS AG for investment purposes. Invested assets include managed fund assets, managed institutional assets, discretionary and advisory wealth management portfolios, fiduciary deposits, time deposits, savings accounts, and wealth management securities or brokerage accounts. All assets held for purely transactional purposes and custody-only assets, including corporate client assets held for cash management and transactional purposes, are excluded from invested assets, as UBS AG only administers the assets and does not offer advice on how they should be invested. Also excluded are non-bankable assets (e.g., art collections) and deposits from third-party banks for funding or trading purposes.

Discretionary assets are defined as client assets that UBS AG decides how to invest. Other invested assets are those where the client ultimately decides how the assets are invested. When a single product is created in one business division and sold in another, it is counted in both the business division managing the investment and the one distributing it. This results in double counting within UBS AG's total invested assets and net new money, as both business divisions are independently providing a service to their respective clients, and both add value and generate revenue.

#### **Net new money**

Net new money in a reporting period is the amount of invested assets entrusted to UBS AG by new and existing clients, less those withdrawn by existing clients and clients who terminated relationships with UBS AG.

Net new money is calculated using the direct method, under which inflows and outflows to / from invested assets are determined at the client level, based on transactions. Interest and dividend income from invested assets are not counted as net new money inflows. Market and currency movements, as well as fees, commissions and interest on loans charged, are excluded from net new money, as are effects resulting from any acquisition or divestment of a UBS subsidiary or business. Reclassifications between invested assets and custody-only assets as a result of a change in service level delivered are generally treated as net new money flows. However, where the change in service level directly results from an externally imposed regulation or a strategic decision by UBS AG to exit a market or specific service offering, the one-time net effect is reported as *Other effects*.

The Investment Bank does not track invested assets and net new money. However, when a client is transferred from the Investment Bank to another business division, this may produce net new money even though the client's assets were already with UBS AG.

In 2023 UBS AG has changed its accounting policy for net new money and invested assets to include its share of net new money and invested assets from associates, to better reflect the business strategy and aligned with the equity method accounting applied to these entities. Comparative figures in the tables below have been restated to reflect this change, resulting in an increase to invested assets as of 31 December 2022 of USD 24bn and an increase to net new money for 2022 of USD 8bn, all relating to Asset Management.

#### Note 31 Invested assets and net new money (continued)

#### Invested assets and net new money

	As of or for the y	year ended
USD bn	31.12.23	31.12.22 <b>1</b>
Fund assets managed by UBS	429	390
Discretionary assets	1,674	1,464
Other invested assets	2,402	2,127
Total invested assets <sup>2</sup>	4,505	3,981
of which: double counts	411	340
Net new money <sup>2</sup>	112	76

<sup>1</sup> Comparative figures have been restated to include net new money and invested assets from associates. 2 Includes double counts.

#### **Development of invested assets**

USD bn	31.12.23	31.12.22 <b>1</b>
Total invested assets at the beginning of the year <sup>2</sup>	3,981	4,614
Net new money	112	76
Market movements <sup>3</sup>	379	(596)
Foreign currency translation	69	(74)
Other effects	(37)	(40)
of which: acquisitions / (divestments)	(25)	(19)
Total invested assets at the end of the year <sup>2</sup>	4,505	3,981

<sup>1</sup> Comparative figures have been restated to include net new money and invested assets from associates. 2 Includes double counts. 3 Includes interest and dividend income.

#### Note 32 Currency translation rates

The following table shows the rates of the main currencies used to translate the financial information of UBS AG's operations with a functional currency other than the US dollar into US dollars.

	Closing exchar	Closing exchange rate  As of		werage rate <sup>1</sup>	
	As of			the year ended	
	31.12.23	31.12.22	31.12.23	31.12.22	31.12.21
1 CHF	1.19	1.08	1.11	1.05	1.09
1 EUR	1.10	1.07	1.08	1.05	1.18
1 GBP	1.28	1.21	1.25	1.23	1.37
100 JPY	0.71	0.76	0.71	0.76	0.91

<sup>1</sup> Monthly income statement items of operations with a functional currency other than the US dollar are translated into US dollars using month-end rates. Disclosed average rates for a year represent an average of twelve month-end rates, weighted according to the income and expense volumes of all operations of UBS AG with the same functional currency for each month. Weighted average rates for individual business divisions may deviate from the weighted average rates for UBS AG.

#### Note 33 Main differences between IFRS Accounting Standards and Swiss GAAP

The consolidated financial statements of UBS AG are prepared in accordance with IFRS Accounting Standards. The Swiss Financial Market Supervisory Authority (FINMA) requires financial groups presenting financial statements under IFRS Accounting Standards to provide a narrative explanation of the main differences between IFRS Accounting Standards and Swiss generally accepted accounting principles (GAAP) (the FINMA Accounting Ordinance, FINMA Circular 2020/1 "Accounting – banks" and the Banking Ordinance (the BO)). Included in this Note are the significant differences in the recognition and measurement between IFRS Accounting Standards and the provisions of the BO and the guidelines of FINMA governing true and fair view financial statement reporting pursuant to Art. 25 to Art. 42 of the BO.

#### 1. Consolidation

Under IFRS Accounting Standards, all entities that are controlled by the holding entity are consolidated. Under Swiss GAAP controlled entities deemed immaterial to a group or those held only temporarily are exempt from consolidation, but instead are recorded as participations accounted for under the equity method of accounting or as financial investments measured at the lower of cost or market value.

#### 2. Classification and measurement of financial assets

Under IFRS Accounting Standards, debt instruments are measured at amortized cost, fair value through other comprehensive income (FVOCI) or fair value through profit or loss (FVTPL), depending on the nature of the business model within which the particular asset is held and the characteristics of the contractual cash flows of the asset. Equity instruments are accounted for at FVTPL by UBS. Under Swiss GAAP, trading assets and derivatives are measured at FVTPL, in line with IFRS Accounting Standards. However, non-trading debt instruments are generally measured at amortized cost, even when the assets are managed on a fair value basis. In addition, the measurement of financial assets in the form of securities depends on the nature of the asset: debt instruments not held to maturity, i.e., instruments available for sale, and equity instruments with no permanent holding intent, are classified as *Financial investments* and measured at the lower of (amortized) cost or market value. Market value adjustments up to the original cost amount and realized gains or losses upon disposal of the investment are recorded in the income statement as *Other income from ordinary activities*. Equity instruments with a permanent holding intent are classified as participations in *Non-consolidated investments in subsidiaries and other participations* and are measured at cost less impairment. Impairment losses are recorded in the income statement as *Impairment of investments in non-consolidated subsidiaries and other participations*. Reversals of impairments up to the original cost amount and realized gains or losses upon disposal of the investment are recorded as *Extraordinary income I Extraordinary expenses*.

#### 3. Fair value option applied to financial liabilities

Under IFRS Accounting Standards, UBS applies the fair value option to certain financial liabilities not held for trading. Instruments for which the fair value option is applied are accounted for at FVTPL. The amount of change in the fair value attributable to changes in UBS's own credit is presented in *Other comprehensive income* directly within *Retained earnings*. The fair value option is applied primarily to issued structured debt instruments, certain non-structured debt instruments, certain payables under repurchase agreements and cash collateral on securities lending agreements, amounts due under unit-linked investment contracts, and brokerage payables.

Under Swiss GAAP, the fair value option can only be applied to structured debt instruments consisting of a debt host contract and one or more embedded derivatives that do not relate to own equity. Furthermore, unrealized changes in fair value attributable to changes in UBS's own credit are not recognized, whereas realized own credit is recognized in *Net trading income*.

#### 4. Allowances and provisions for credit losses

Swiss GAAP permit use of IFRS Accounting Standards for accounting for allowances and provisions for credit losses based on an expected credit loss (ECL) model. UBS has chosen to apply the IFRS 9 ECL approach to those exposures that are in the ECL scope of both frameworks, IFRS Accounting Standards and Swiss GAAP.

For the small residual exposures within the scope of Swiss GAAP ECL requirements, which are not subject to ECL under IFRS Accounting Standards due to classification differences, UBS applies alternative approaches.

- For exposures for which Pillar 1 internal ratings-based models are applied to measure credit risk, ECL is determined by the regulatory expected loss (EL), with an add-on for scaling up to the residual maturity of exposures maturing beyond the next 12 months, as appropriate. For detailed information on regulatory EL, refer to the "Risk management and control" section of this report.
- For exposures for which the Pillar 1 standardized approach is used to measure credit risk, ECL is determined using a
  portfolio approach that derives a conservative probability of default (PD) and a conservative loss given default (LGD)
  for the entire portfolio.

#### 5. Hedge accounting

Under IFRS Accounting Standards, when cash flow hedge accounting is applied, the fair value gain or loss on the effective portion of a derivative designated as a cash flow hedge is recognized initially in equity and reclassified to the income statement when certain conditions are met. When fair value hedge accounting is applied, the fair value change of the hedged item attributable to the hedged risk is reflected in the measurement of the hedged item and is recognized in the income statement along with the change in the fair value of the hedging derivative. Under Swiss GAAP, the effective portion of the fair value change of a derivative instrument designated as a cash flow or as a fair value hedge is deferred on the balance sheet as *Other assets* or *Other liabilities*. The carrying amount of the hedged item designated in fair value hedges is not adjusted for fair value changes attributable to the hedged risk.

#### 6. Goodwill and intangible assets

Under IFRS Accounting Standards, goodwill acquired in a business combination is not amortized but tested annually for impairment. Intangible assets with an indefinite useful life are also not amortized but tested annually for impairment. Under Swiss GAAP, goodwill and intangible assets with indefinite useful lives are amortized over a period not exceeding five years, unless a longer useful life, which may not exceed 10 years, can be justified. In addition, these assets are tested annually for impairment.

#### 7. Post-employment benefit plans

Swiss GAAP permit the use of IFRS Accounting Standards or Swiss accounting standards for post-employment benefit plans, with the election made on a plan-by-plan basis.

UBS has elected to apply IAS 19 for the non-Swiss defined benefit plans in the UBS AG standalone financial statements and Swiss GAAP (FER 16) for the Swiss pension plan in the UBS AG and the UBS Switzerland AG standalone financial statements. The requirements of Swiss GAAP are better aligned with the specific nature of Swiss pension plans, which are hybrid in that they combine elements of defined contribution and defined benefit plans, but are treated as defined benefit plans under IFRS Accounting Standards. Key differences between Swiss GAAP and IFRS Accounting Standards include the treatment of dynamic elements, such as future salary increases and future interest credits on retirement savings, which are not considered under the static method used in accordance with Swiss GAAP. Also, the discount rate used to determine the defined benefit obligation in accordance with IFRS Accounting Standards is based on the yield of high-quality corporate bonds of the market in the respective pension plan country. The discount rate used in accordance with Swiss GAAP (i.e., the technical interest rate) is determined by the Pension Foundation Board based on the expected returns of the Board's investment strategy.

For defined benefit plans, IFRS Accounting Standards require the full defined benefit obligation net of the plan assets to be recorded on the balance sheet subject to the asset ceiling rules, with changes resulting from remeasurements recognized directly in equity. However, for non-Swiss defined benefit plans for which IFRS Accounting Standards are elected, changes due to remeasurements are recognized in the income statement of UBS AG standalone under Swiss GAAP

Swiss GAAP require employer contributions to the pension fund to be recognized as personnel expenses in the income statement. Swiss GAAP also require an assessment of whether, based on the pension fund's financial statements prepared in accordance with Swiss accounting standards (FER 26), an economic benefit to, or obligation of, the employer arises from the pension fund that is recognized in the balance sheet when conditions are met. Conditions for recording a pension asset or liability would be met if, for example, an employer contribution reserve is available or the employer is required to contribute to the reduction of a pension deficit (on an FER 26 basis).

#### 8. Leasing

Under IFRS Accounting Standards, a single lease accounting model applies that requires UBS to record a right-of-use (RoU) asset and a corresponding lease liability on the balance sheet when UBS is a lessee in a lease arrangement. The RoU asset and the lease liability are recognized when UBS acquires control of the physical use of the asset. The lease liability is measured based on the present value of the lease payments over the lease term, discounted using UBS's unsecured borrowing rate. The RoU asset is recorded at an amount equal to the lease liability but is adjusted for rent prepayments, initial direct costs, any costs to refurbish the leased asset and / or lease incentives received. The RoU asset is depreciated over the shorter of the lease term or the useful life of the underlying asset.

Under Swiss GAAP, leases that transfer substantially all the risks and rewards, but not necessarily legal title in the underlying assets, are classified as finance leases. All other leases are classified as operating leases. Whereas finance leases are recognized on the balance sheet and measured in line with IFRS Accounting Standards, operating leases are not recognized on the balance sheet, with payments recognized as *General and administrative expenses* on a straight-line basis over the lease term, which commences with control of the physical use of the asset. Lease incentives are treated as a reduction of rental expense and recognized on a consistent basis over the lease term.

#### 9. Netting of derivative assets and liabilities

Under IFRS Accounting Standards, derivative assets, derivative liabilities and related cash collateral not settled to market are reported on a gross basis unless the restrictive netting requirements under IFRS Accounting Standards are met: (i) existence of master netting agreements and related collateral arrangements that are unconditional and legally enforceable, in both the normal course of business and the event of default, bankruptcy or insolvency of UBS and its counterparties; and (ii) UBS's intention to either settle on a net basis or to realize the asset and settle the liability simultaneously. Under Swiss GAAP, derivative assets, derivative liabilities and related cash collateral not settled to market are generally reported on a net basis, provided the master netting and the related collateral agreements are legally enforceable in the event of default, bankruptcy or insolvency of UBS's counterparties.

#### Note 33 Main differences between IFRS Accounting Standards and Swiss GAAP (continued)

#### 10. Negative interest

Under IFRS Accounting Standards, negative interest income arising on a financial asset does not meet the definition of interest income and, therefore, negative interest on financial assets and negative interest on financial liabilities are presented within interest expense and interest income, respectively. Under Swiss GAAP, negative interest on financial assets is presented within interest income and negative interest on financial liabilities is presented within interest expense.

#### 11. Extraordinary income and expense

Certain non-recurring and non-operating income and expense items, such as realized gains or losses from the disposal of participations, fixed and intangible assets, and reversals of impairments of participations and fixed assets, are classified as extraordinary items under Swiss GAAP. This distinction is not available under IFRS Accounting Standards.

#### Note 34 Supplemental guarantor information required under SEC regulations

#### Joint liability of UBS Switzerland AG

In 2015, the Personal & Corporate Banking and Wealth Management businesses booked in Switzerland were transferred from UBS AG to UBS Switzerland AG through an asset transfer in accordance with the Swiss Merger Act. Under the terms of the asset transfer agreement, UBS Switzerland AG assumed joint liability for contractual obligations of UBS AG existing on the asset transfer date, including the full and unconditional guarantee of certain registered debt securities issued by UBS AG. To reflect this joint liability, UBS Switzerland AG is presented in a separate column as a subsidiary coguarantor.

The joint liability of UBS Switzerland AG for contractual obligations of UBS AG decreased in 2023 by USD 1.0bn to USD 3.3bn as of 31 December 2023. The decrease substantially relates to a combination of contractual maturities, early extinguishments, fair value movements and foreign currency effects.

#### Supplemental guarantor consolidated income statement

USD m		UBS		-1	
Far the way and od 24 December 2022	UBS AG	Switzerland AG	Other	Elimination	UBS AG
For the year ended 31 December 2023  Interest income from financial instruments measured at amortized cost and	(standalone) <sup>1</sup>	(standalone) <sup>1</sup>	subsidiaries <sup>2</sup>	entries	(consolidated)
fair value through other comprehensive income	11,181	7,229	9.057	(5,022)	22,444
Interest expense from financial instruments measured at amortized cost	(14,797)	(3,055)	(7,699)	5,907	(19,643)
Net interest income from financial instruments measured at fair value through	(14,737)	(3,033)	(7,033)	3,307	(13,043)
profit or loss and other	891	785	952	(864)	1,765
Net interest income	(2,725)	4,959	2,310	22	4,566
Other net income from financial instruments measured at fair value through	(-,,	4			
profit or loss	7,879	1,031	1,105	(81)	9,934
Fee and commission income	2,581	5,067	13,350	(598)	20,399
Fee and commission expense	(705)	(456)	(1,214)	585	(1,790)
Net fee and commission income	1,876	4,611	12,136	(13)	18,610
Other income	2,994	228	1,542	(4,198)	566
Total revenues	10,023	10,829	17,092	(4,269)	33,675
Credit loss expense / (release)	18	57	31	37	143
Personnel expenses	3,356	2,201	10,097	0	15,655
General and administrative expenses	3,951	3,840	6,155	(2,828)	11,118
Depreciation, amortization and impairment of non-financial assets	888	411	1,048	(109)	2,238
Operating expenses	8,195	6,452	17,301	(2,937)	29,011
Operating profit / (loss) before tax	1,810	4,320	(240)	(1,370)	4,521
Tax expense / (benefit)	251	779	224	(48)	1,206
Net profit / (loss)	1,559	3,540	(463)	(1,321)	3,315
Net profit / (loss) attributable to non-controlling interests	0	0	25	0	25
Net profit / (loss) attributable to shareholders	1,559	3,540	(488)	(1,321)	3,290

<sup>1</sup> Amounts presented for UBS AG standalone and UBS Switzerland AG standalone represent IFRS standalone information. Refer to the UBS AG standalone and UBS Switzerland AG standalone financial statements under "Complementary financial information" at ubs.com/investors for information prepared in accordance with Swiss GAAP. 2 The "Other subsidiaries" column includes consolidated information for the UBS Americas Holding LLC, UBS Europe SE and UBS Asset Management AG significant sub-groups, as well as standalone information for other subsidiaries.

USD m		UBS		-1	
For the year ended 31 December 2023	UBS AG (standalone) <sup>1</sup>	Switzerland AG (standalone) <sup>1</sup>	Other subsidiaries <sup>2</sup>	Elimination entries	UBS AG (consolidated)
Comprehensive income attributable to shareholders					
Net profit / (loss)	1,559	3,540	(488)	(1,321)	3,290
Other comprehensive income					
Other comprehensive income that may be reclassified to the income statement					
Foreign currency translation, net of tax	79	1,523	222	(975)	849
Financial assets measured at fair value through other comprehensive income, net of tax <sup>3</sup>	4		1	0	5
Cash flow hedges, net of tax	707	679	23	(9)	1,400
Cost of hedging, net of tax	(19)		0		(19)
Total other comprehensive income that may be reclassified to the income statement, net of tax	771	2,202	245	(984)	2,235
Other comprehensive income that will not be reclassified to the income statement					
Defined benefit plans, net of tax	(82)	(36)	(19)	0	(136)
Own credit on financial liabilities designated at fair value, net of tax	(790)				(790)
Total other comprehensive income that will not be reclassified to the income statement, net of tax	(872)	(36)	(19)	0	(927)
Total other comprehensive income	(101)	2,167	226	(984)	1,308
Total comprehensive income attributable to shareholders	1,458	5,707	(262)	(2,305)	4,598
Total comprehensive income attributable to non-controlling interests			27		27
Total comprehensive income	1,458	5,707	(235)	(2,305)	4,625

Amounts presented for UBS AG standalone and UBS Switzerland AG standalone represent IFRS standalone information. Refer to the UBS AG standalone and UBS Switzerland AG standalone financial statements under "Complementary financial information" at ubs.com/investors for information prepared in accordance with Swiss GAAP. 2 The "Other subsidiaries" column includes consolidated information for the UBS Americas Holding LLC, UBS Europe SE and UBS Asset Management AG significant sub-groups, as well as standalone information for other subsidiaries. 3 Effective 1 April 2022, a portfolio of assets previously classified as Financial assets measured at fair value through other comprehensive income was reclassified to Other financial assets measured at amortized cost. Refer to Note 13a for more information.

USD m	UBS AG	UBS Switzerland AG	Other	Elimination	UBS AG
As of 31 December 2023	(standalone) <sup>1</sup>	(standalone) <sup>1</sup>	subsidiaries <sup>2</sup>	entries	(consolidated)
Assets					
Cash and balances at central banks	49,620	87,044	35,142		171,806
Amounts due from banks	61,579	6,241	16,696	(56,311)	28,206
Receivables from securities financing transactions measured at amortized cost	61,116	63	37.022	(24,073)	74,128
Cash collateral receivables on derivative instruments	34,048	1,640	9,124	(12,512)	32,300
Loans and advances to customers	91,940	255,205	93,581	(35,093)	405,633
Other financial assets measured at amortized cost	24,403	9,149	23,429	(2,647)	54,334
Total financial assets measured at amortized cost	322,705	359,343	214,995	(130,636)	766,407
Financial assets at fair value held for trading	121,947	101	14,463	(1,412)	135,098
of which: assets pledged as collateral that may be	121,547	101	17,703	(1,412)	155,050
sold or repledged by counterparties	<i>51,325</i>	0	5,930	(12,731)	44,524
Derivative financial instruments	126,916	5,845	40,190	(41,223)	131,728
Brokerage receivables	12,924		7,959	0	20,883
Financial assets at fair value not held for trading	46,658	10,022	29,688	(22,613)	63,754
Total financial assets measured at fair value through profit or loss	308,444	15,968	92,300	(65,249)	351,463
Financial assets measured at fair value					
through other comprehensive income	1,957	27	276	(54.400)	2,233
Investments in subsidiaries and associates	52,134	37	2	(51,190)	983
Property, equipment and software	5,842	1,798	3,687	(284)	11,044
Goodwill and intangible assets	212		5,974	79	6,265
Deferred tax assets	1,488	147	7,633	(24)	9,244
Other non-financial assets	5,366	1,748	1,256	7	8,377
Total assets	698,149	379,042	326,124	(247,298)	1,156,016
Liabilities					
Amounts due to banks	55,680	44,170	58,769	(141,898)	16,720
Payables from securities financing transactions measured at amortized cost	14,329	336	15,288	(24,171)	5,782
Cash collateral payables on derivative instruments	35,148	1,076	11,091	(12,430)	34,886
Customer deposits	108,279	293,133	118,168	36,094	555,673
Funding from UBS Group AG measured at amortized cost	67,282				67,282
Debt issued measured at amortized cost	58,729	11,042	12	0	69,784
Other financial liabilities measured at amortized cost	6,589	2,974	6,147	(2,997)	12,713
Total financial liabilities measured at amortized cost	346,036	352,731	209,475	(145,402)	762,840
Financial liabilities at fair value held for trading	27,280	248	5,508	(1,325)	31,712
Derivative financial instruments	135,272	6,223	40,436	(41,225)	140,707
Brokerage payables designated at fair value	30,724		11,552	0	42,275
Debt issued designated at fair value	85,424		986	(69)	86,341
Other financial liabilities designated at fair value	14,392		21,081	(8,107)	27,366
Total financial liabilities measured at fair value through profit or loss	293,092	6,471	79,564	(50,726)	328,401
Provisions	1,903	208	413	(1)	2,524
Other non-financial liabilities	1,572	1,377	3,688	46	6,682
Total liabilities	642,602	360,788	293,140	(196,083)	1,100,448
	<u> </u>	·	·		
Equity attributable to shareholders	55,546	18,254	32,649	(51,215)	55,234
Equity attributable to non-controlling interests	FF FAC	10.254	335		335
Total equity	55,546	18,254	32,984	(51,215)	55,569
Total liabilities and equity	698,149	379,042	326,124	(247,298)	1,156,016

<sup>1</sup> Amounts presented for UBS AG standalone and UBS Switzerland AG standalone represent IFRS standalone information. Refer to the UBS AG standalone and UBS Switzerland AG standalone financial statements, available under "Complementary financial information" at ubs.com/investors, for information prepared in accordance with Swiss GAAP. 2 The "Other subsidiaries" column includes consolidated information for the UBS Americas Holding LLC, UBS Europe SE and UBS Asset Management AG significant sub-groups, as well as standalone information for other subsidiaries.

USD m		UBS	Other	UBS AG
For the year ended 31 December 2023	UBS AG <sup>1</sup>	Switzerland AG <sup>1</sup>	subsidiaries <sup>1</sup>	(consolidated)
Net cash flow from / (used in) operating activities	(23,275)	(3,041)	(1,886)	(28,202)
Cash flow from / (used in) investing activities				
Purchase of subsidiaries, associates and intangible assets		(1)	(3)	(4)
Disposal of subsidiaries, associates and intangible assets <sup>2</sup>	109			109
Purchase of property, equipment and software	(427)	(287)	(569)	(1,283)
Disposal of property, equipment and software	33			33
Net (purchase) / redemption of financial assets measured at fair value through other comprehensive income	15		15	30
Purchase of debt securities measured at amortized cost	(9,561)	(1,431)	(3,251)	(14,244)
Disposal and redemption of debt securities measured at amortized cost	4,890	1,625	3,920	10,435
Net cash flow from / (used in) investing activities	(4,942)	(94)	112	(4,924)
Cash flow from / (used in) financing activities				
Net short-term debt issued / (repaid)	7,138	(1)	44	7,181
Distributions paid on UBS AG shares	(6,000)			(6,000)
Issuance of debt designated at fair value and long-term debt measured at amortized cost <sup>3</sup>	101,956	2,007	588	104,551
Repayment of debt designated at fair value and long-term debt measured at amortized cost <sup>3</sup>	(84,366)	(1,017)	(159)	(85,541)
Net cash flows from other financing activities	(249)		(251)	(501)
Net activity related to group internal capital transactions and dividends	3,698	(2,944)	(754)	0
Net cash flow from / (used in) financing activities	22,177	(1,954)	(532)	19,690
Total cash flow				
Cash and cash equivalents at the beginning of the year	63,608	86,232	45,359	195,200
Net cash flow from / (used in) operating, investing and financing activities	(6,040)	(5,089)	(2,306)	(13,435)
Effects of exchange rate differences on cash and cash equivalents	591	7,860	253	8,704
Cash and cash equivalents at the end of the year <sup>4</sup>	58,159	89,003	43,307	190,469
of which: cash and balances at central banks <sup>4</sup>	49,537	87,044	35,142	171,723
of which: amounts due from banks <sup>4</sup>	<i>2,763</i>	1,448	7,866	12,078
of which: money market paper <sup>4,5</sup>	<i>5,858</i>	<i>511</i>	299	6,668

<sup>1</sup> Cash flows generally represent a third-party view from a UBS AG consolidated perspective, except for Net activity related to group internal capital transactions and dividends. 2 Includes dividends received from associates. 3 Includes funding from UBS Group AG to UBS AG. 4 Balances with an original maturity of three months or less. USD 4,553m of cash and cash equivalents were restricted. 5 Money market paper is included in the balance sheet under Financial assets at fair value not held for trading, Other financial assets measured at amortized cost and Financial assets at fair value held for trading.

#### Supplemental guarantor consolidated income statement

USD m	UBS AG	UBS Switzerland AG	Other	Elimination	UBS AG
For the year ended 31 December 2022	(standalone) <sup>1</sup>	(standalone) <sup>1</sup>	subsidiaries <sup>2</sup>	entries	(consolidated)
Interest income from financial instruments measured at amortized cost and					
fair value through other comprehensive income	4,824	3,894	4,661	(1,575)	11,803
Interest expense from financial instruments measured at amortized cost	(5,449)	(736)	(2,604)	2,093	(6,696)
Net interest income from financial instruments measured at fair value through	204	5.46		(4.40)	
profit or loss and other	881	546	431	(449)	1,410
Net interest income	257	3,704	2,488	68	6,517
Other net income from financial instruments measured at fair value through	F F 41	000	040	112	7 400
profit or loss	5,541	900	940	112	7,493
Fee and commission income	2,875	4,865	13,766	(660)	20,846
Fee and commission expense	(684)	(464)	(1,327)	652	(1,823)
Net fee and commission income	2,191	4,401	12,439	(8)	19,023
Other income	6,732	203	3,329	(8,382)	1,882
Total revenues	14,721	9,208	19,197	(8,210)	34,915
Credit loss expense / (release)	(17)	50	(3)	(1)	29
Personnel expenses	3,251	1,995	9,835	0	15,080
General and administrative expenses	3,374	3,258	5,029	(2,660)	9,001
Depreciation, amortization and impairment of non-financial assets	871	340	744	(109)	1,845
Operating expenses	7,496	5,592	15,607	(2,769)	25,927
Operating profit / (loss) before tax	7,242	3,566	3,592	(5,440)	8,960
Tax expense / (benefit)	(28)	638	1,083	151	1,844
Net profit / (loss)	7,270	2,928	2,509	(5,592)	7,116
Net profit / (loss) attributable to non-controlling interests	0	0	32	0	32
Net profit / (loss) attributable to shareholders	7,270	2,928	2,477	(5,592)	7,084

<sup>1</sup> Amounts presented for UBS AG standalone and UBS Switzerland AG standalone represent IFRS standalone information. Refer to the UBS AG standalone and UBS Switzerland AG standalone financial statements under "Complementary financial information" at ubs.com/investors for information prepared in accordance with Swiss GAAP. 2 The "Other subsidiaries" column includes consolidated information for the UBS Americas Holding LLC, UBS Europe SE and UBS Asset Management AG significant sub-groups, as well as standalone information for other subsidiaries.

#### Supplemental guarantor consolidated statement of comprehensive income

USD m		UBS	0:1	FI	
For the year ended 31 December 2022	UBS AG (standalone) <sup>1</sup>	Switzerland AG (standalone) <sup>1</sup>	Other subsidiaries <sup>2</sup>	Elimination entries	UBS AG (consolidated)
Comprehensive income attributable to shareholders					
Net profit / (loss)	7,270	2,928	2,477	(5,592)	7,084
Other comprehensive income					
Other comprehensive income that may be reclassified to the income statement					
Foreign currency translation, net of tax	(114)	(197)	(506)	298	(519)
Financial assets measured at fair value through other comprehensive income, net of tax <sup>3</sup>	(3)	0	9	0	6
Cash flow hedges, net of tax	(2,791)	(1,359)	(631)	(12)	(4,793)
Cost of hedging, net of tax	45				45
Total other comprehensive income that may be reclassified to the income statement, net of tax	(2,863)	(1,555)	(1,128)	286	(5,260)
Other comprehensive income that will not be reclassified to the income statement					
Defined benefit plans, net of tax	170	(112)	23	0	81
Own credit on financial liabilities designated at fair value, net of tax	796				796
Total other comprehensive income that will not be reclassified to the income statement, net of tax	966	(112)	23	0	877
Total other comprehensive income	(1,897)	(1,667)	(1,104)	286	(4,383)
Total comprehensive income attributable to shareholders	5,373	1,261	1,373	(5,306)	2,701
Total comprehensive income attributable to non-controlling interests			18		18
Total comprehensive income	5,373	1,261	1,391	(5,306)	2,719

<sup>1</sup> Amounts presented for UBS AG standalone and UBS Switzerland AG standalone represent IFRS standalone information. Refer to the UBS AG standalone and UBS Switzerland AG standalone financial statements under "Complementary financial information" at ubs.com/investors for information prepared in accordance with Swiss GAAP. 2 The "Other subsidiaries" column includes consolidated information for the UBS Americas Holding LLC, UBS Europe SE and UBS Asset Management AG significant sub-groups, as well as standalone information for other subsidiaries. 3 Effective 1 April 2022, a portfolio of assets previously classified as Financial assets measured at fair value through other comprehensive income was reclassified to Other financial assets measured at amortized cost. Refer to Note 13a for more information.

upplemental	quarantor	consolidated	balance sheet	

Supplemental guarantor consolidated balance sheet					
USD m	UBS AG	UBS Switzerland AG	Other	Elimination	UBS AG
As of 31 December 2022	(standalone) <sup>1</sup>	(standalone) <sup>1</sup>	subsidiaries <sup>2</sup>	entries	(consolidated)
Assets					
Cash and balances at central banks	48,689	84,465	36,291	0	169,445
Amounts due from banks	39,691	6,357	19,063	(50,441)	14,671
Receivables from securities financing transactions measured at					
amortized cost	51,493	903	34,110	(18,691)	67,814
Cash collateral receivables on derivative instruments	35,594	1,221	10,074	(11,856)	35,033
Loans and advances to customers	90,168	229,861	101,231	(31,233)	390,027
Other financial assets measured at amortized cost	24,005	9,532	21,880	(2,029)	53,389
Total financial assets measured at amortized cost	289,641	332,339	222,649	(114,250)	730,379
Financial assets at fair value held for trading	95,810	173	13,899	(1,848)	108,034
of which: assets pledged as collateral that may be					
sold or repledged by counterparties	41,056	0	5,578	(9,892)	36,742
Derivative financial instruments	149,447	5,925	35,106	(40,368)	150,109
Brokerage receivables	9,763	0	7,814	0	17,576
Financial assets at fair value not held for trading	45,302	4,354	26,843	(17,091)	59,408
Total financial assets measured at fair value through profit or loss	300,321	10,453	83,661	(59,308)	335,127
Financial assets measured at fair value				_	
through other comprehensive income	1,953	0	286	0 (52.255)	2,239
Investments in subsidiaries and associates	54,323	33	0	(53,255)	1,101
Property, equipment and software	5,852	1,654	4,077	(267)	11,316
Goodwill and intangible assets	213	0	6,050	5	6,267
Deferred tax assets	1,624	276	7,470	(16)	9,354
Other non-financial assets	6,930	1,768	951	4	9,652
Total assets	660,856	346,522	325,144	(227,087)	1,105,436
Liabilities					
Amounts due to banks	41,395	37,123	51,555	(118,477)	11,596
Payables from securities financing transactions measured at					
amortized cost	9,425	247	13,303	(18,774)	4,202
Cash collateral payables on derivative instruments	35,528	1,518	11,191	(11,800)	36,436
Customer deposits	98,628	273,316	132,619	22,608	527,171
Funding from UBS Group AG measured at amortized cost	56,147	0		0	56,147
Debt issued measured at amortized cost	50,706	8,965	1	(173)	59,499
Other financial liabilities measured at amortized cost	4,903	2,221	5,554	(2,287)	10,391
Total financial liabilities measured at amortized cost	296,733	323,391	214,222	(128,903)	705,442
Financial liabilities at fair value held for trading	25,059	183	5,843	(1,570)	29,515
Derivative financial instruments	153,778	6,177	35,314	(40,363)	154,906
Brokerage payables designated at fair value	32,346	0	12,746	(7)	45,085
Debt issued designated at fair value	71,444	0	508	(110)	71,842
Other financial liabilities designated at fair value	17,888	0	17,074	(2,928)	32,033
Total financial liabilities measured at fair value through profit or loss	300,514	6,360	71,484	(44,977)	333,382
Provisions	1,904	239	1,041	(2)	3,183
Other non-financial liabilities	1,630	1,019	3,742	98	6,489
Total liabilities	600,782	331,009	290,490	(173,785)	1,048,496
Equity attributable to shareholders	60,075	15,513	34,313	(53,303)	56,598
Equity attributable to non-controlling interests			342	0	342
Total equity	60,075	15,513	34,655	(53,303)	56,940
Total liabilities and equity	660,856	346,522	325,144	(227,087)	1,105,436
Total national or and equity	300,030	370,322	323,177	\221,0011	,, 100,700

<sup>1</sup> Amounts presented for UBS AG standalone and UBS Switzerland AG standalone represent IFRS standalone information. Refer to the UBS AG standalone and UBS Switzerland AG standalone financial statements, available under "Complementary financial information" at ubs.com/investors, for information prepared in accordance with Swiss GAAP. 2 The "Other subsidiaries" column includes consolidated information for the UBS Americas Holding LLC, UBS Europe SE and UBS Asset Management AG significant sub-groups, as well as standalone information for other subsidiaries.

USD m		UBS	Other	UBS AG
For the year ended 31 December 2022	UBS AG1	Switzerland AG <sup>1</sup>	subsidiaries <sup>1</sup>	(consolidated)
Net cash flow from / (used in) operating activities	17,286	(1,165)	(5,491)	10,630
Cash flow from / (used in) investing activities				
Purchase of subsidiaries, associates and intangible assets		(3)		(3)
Disposal of subsidiaries, associates and intangible assets <sup>2</sup>	157	453	1,120	1,729
Purchase of property, equipment and software	(562)	(292)	(624)	(1,478)
Disposal of property, equipment and software	161			161
Net (purchase) / redemption of financial assets measured at fair value through other comprehensive income	(943)		244	(699)
Purchase of debt securities measured at amortized cost	(22,602)	(2,690)	(5,500)	(30,792)
Disposal and redemption of debt securities measured at amortized cost	14,442	870	3,487	18,799
Net cash flow from / (used in) investing activities	(9,346)	(1,663)	(1,274)	(12,283)
Cash flow from / (used in) financing activities				
Net short-term debt issued / (repaid)	(12,215)	(3)	(31)	(12,249)
Distributions paid on UBS AG shares	(4,200)			(4,200)
Issuance of debt designated at fair value and long-term debt measured at amortized cost <sup>3</sup>	78,866	550	41	79,457
Repayment of debt designated at fair value and long-term debt measured at amortized cost <sup>3</sup>	(66,526)	(860)	(284)	(67,670)
Net cash flows from other financing activities	(258)		(337)	(595)
Net activity related to group internal capital transactions and dividends	5,217	(2,088)	(3,128)	0
Net cash flow from / (used in) financing activities	884	(2,401)	(3,740)	(5,257)
Total cash flow				
Cash and cash equivalents at the beginning of the year	57,895	92,799	57,061	207,755
Net cash flow from / (used in) operating, investing and financing activities	8,824	(5,229)	(10,505)	(6,911)
Effects of exchange rate differences on cash and cash equivalents	(3,111)	(1,338)	(1,196)	(5,645)
Cash and cash equivalents at the end of the year <sup>4</sup>	63,608	86,232	45,359	195,200
of which: cash and balances at central banks <sup>4</sup>	48,607	84,465	36,291	169,363
of which: amounts due from banks4	2,957	1,550	8,821	13,329
of which: money market paper <sup>4,5</sup>	12,044	216	248	12,508

<sup>1</sup> Cash flows generally represent a third-party view from a UBS AG consolidated perspective, except for Net activity related to group internal capital transactions and dividends. 2 Includes cash proceeds from the sales of: UBS AG's shareholding in Mitsubishi Corp.-UBS Realty Inc.; UBS AG's wholly owned subsidiary UBS Swiss Financial Advisers AG (including a loan portfolio in UBS Switzerland AG); UBS AG's US alternative investments administration business; and UBS AG's domestic wealth management business in Spain. Also includes dividends received from associates. 3 Includes funding from UBS Group AG to UBS AG. 4 Balances with an original maturity of three months or less. USD 4,253m of cash and cash equivalents were restricted. 5 Money market paper is included in the balance sheet under Financial assets at fair value held for trading, Financial assets measured at fair value through other comprehensive income, Financial assets at fair value not held for trading and Other financial assets measured at amortized cost.

#### Supplemental guarantor consolidated income statement

	UBS	0.1	-u · ·	
				UBS AG (consolidated)
(Staridatorie)	(Standarone)	Substatuties	citiles	(corisonaatea)
3,130	3,652	2,456	(703)	8,534
(2,847)	(520)	(1,024)	1,025	(3,366)
1,229	254	228	(274)	1,437
1,512	3,386	1,660	48	6,605
3,751	807	1,369	(83)	5,844
3,837	5,204	16,151	(770)	24,422
(810)	(481)	(1,450)	755	(1,985)
3,027	4,723	14,702	(14)	22,438
7,555	221	1,560	(8,396)	941
15,845	9,137	19,291	(8,445)	35,828
(65)	(98)	(10)	24	(148)
3,401	2,098	10,161	1	15,661
4,255	3,442	4,474	(2,696)	9,476
949	285	755	(114)	1,875
8,605	5,825	15,390	(2,809)	27,012
7,305	3,409	3,910	(5,660)	8,964
203	622	1,090	(11)	1,903
7,102	2,788	2,820	(5,649)	7,061
0	0	29	0	29
7,102	2,788	2,792	(5,649)	7,032
	(2,847)  1,229 1,512  3,751 3,837 (810) 3,027 7,555 15,845 (65) 3,401 4,255 949 8,605 7,305 203 7,102 0 7,102	UBS AG (standalone) <sup>1</sup> Switzerland AG (standalone) <sup>1</sup> 3,130 3,652 (2,847) (520)  1,229 254 1,512 3,386  3,751 807 3,837 5,204 (810) (481) 3,027 4,723 7,555 221 15,845 9,137 (65) (98) 3,401 2,098 4,255 3,442 949 285 8,605 5,825 7,305 3,409 203 622 7,102 2,788 0 0 0 7,102 2,788	UBS AG (standalone)¹         Switzerland AG (standalone)¹         Other subsidiaries²           3,130         3,652         2,456           (2,847)         (520)         (1,024)           1,229         254         228           1,512         3,386         1,660           3,751         807         1,369           3,837         5,204         16,151           (810)         (481)         (1,450)           3,027         4,723         14,702           7,555         221         1,560           15,845         9,137         19,291           (65)         (98)         (10)           3,401         2,098         10,161           4,255         3,442         4,474           949         285         755           8,605         5,825         15,390           7,305         3,409         3,910           203         622         1,090           7,102         2,788         2,820           0         0         29           7,102         2,788         2,792	UBS AG (standalone)¹         Switzerland AG (standalone)¹         Other subsidiaries²         Elimination entries           3,130         3,652         2,456         (703)           (2,847)         (520)         (1,024)         1,025           1,229         254         228         (274)           1,512         3,386         1,660         48           3,751         807         1,369         (83)           3,837         5,204         16,151         (770)           (810)         (481)         (1,450)         755           3,027         4,723         14,702         (14)           7,555         221         1,560         (8,396)           15,845         9,137         19,291         (8,445)           (65)         (98)         (10)         24           3,401         2,098         10,161         1           4,255         3,442         4,474         (2,696)           949         285         755         (114)           8,605         5,825         15,390         (2,809)           7,305         3,409         3,910         (5,660)           203         622         1,090         (11)

<sup>1</sup> Amounts presented for UBS AG standalone and UBS Switzerland AG standalone represent IFRS standalone information. Refer to the UBS AG standalone and UBS Switzerland AG standalone financial statements under "Complementary financial information" at ubs.com/investors for information prepared in accordance with Swiss GAAP. 2 The "Other subsidiaries" column includes consolidated information for the UBS Americas Holding LLC, UBS Europe SE and UBS Asset Management AG significant sub-groups, as well as standalone information for other subsidiaries.

#### Supplemental guarantor consolidated statement of comprehensive income

USD m		UBS	0.1	en i	
For the year ended 31 December 2021	UBS AG (standalone) <sup>1</sup>	Switzerland AG (standalone) <sup>1</sup>	Other subsidiaries <sup>2</sup>	Elimination entries	UBS AG (consolidated)
Comprehensive income attributable to shareholders					
Net profit / (loss)	7,102	2,788	2,792	(5,649)	7,032
Other comprehensive income					
Other comprehensive income that may be reclassified to the income statement					
Foreign currency translation, net of tax		(419)	(607)	517	(510)
Financial assets measured at fair value through other comprehensive income, net of tax	0		(157)	0	(157)
Cash flow hedges, net of tax	(1 129)	(279)	(250)	(17)	(1,675)
Cost of hedging, net of tax	(26)				(26)
Total other comprehensive income that may be reclassified to the income statement, net of tax	(1,155)	(699)	(1,014)	500	(2,368)
Other comprehensive income that will not be reclassified to the income statement					
Defined benefit plans, net of tax	170	(135)	67	0	102
Own credit on financial liabilities designated at fair value, net of tax	46				46
Total other comprehensive income that will not be reclassified to the income statement, net of tax	217	(135)	67	0	148
Total other comprehensive income	(939)	(834)	(947)	500	(2,220)
Total comprehensive income attributable to shareholders	6,163	1,954	1,845	(5,149)	4,813
Total comprehensive income attributable to non-controlling interests			13		13
Total comprehensive income	6,163	1,954	1,858	(5,149)	4,826

<sup>1</sup> Amounts presented for UBS AG standalone and UBS Switzerland AG standalone represent IFRS standalone information. Refer to the UBS AG standalone and UBS Switzerland AG standalone financial statements under "Complementary financial information" at ubs.com/investors for information prepared in accordance with Swiss GAAP. 2 The "Other subsidiaries" column includes consolidated information for the UBS Americas Holding LLC, UBS Europe SE and UBS Asset Management AG significant sub-groups, as well as standalone information for other subsidiaries.

USD m		UBS	Other	UBS AG
For the year ended 31 December 2021	UBS AG <sup>1</sup>	Switzerland AG <sup>1</sup>	subsidiaries <sup>1</sup>	(consolidated)
Net cash flow from / (used in) operating activities	5,714	2,131	22,718	30,563
Cash flow from / (used in) investing activities				
Purchase of subsidiaries, associates and intangible assets		(1)		(1)
Disposal of subsidiaries, associates and intangible assets <sup>2</sup>	16	0	577	593
Purchase of property, equipment and software	(656)	(276)	(650)	(1,581)
Disposal of property, equipment and software	294		1	295
Net (purchase) / redemption of financial assets measured at fair value through other comprehensive income	(817)		67	(750)
Purchase of debt securities measured at amortized cost	(1,840)	(45)	(3,038)	(4,922)
Disposal and redemption of debt securities measured at amortized cost	1,033	817	2,658	4,507
Net cash flow from / (used in) investing activities	(1,970)	495	(385)	(1,860)
Cash flow from / (used in) financing activities				
Net short-term debt issued / (repaid)	(3,073)	(21)	0	(3,093)
Distributions paid on UBS AG shares	(4,539)			(4,539)
Issuance of debt designated at fair value and long-term debt measured at amortized cost <sup>3</sup>	97,250	1,177	193	98,619
Repayment of debt designated at fair value and long-term debt measured at amortized cost <sup>3</sup>	(78,385)	(1,093)	(320)	(79,799)
Net cash flows from other financing activities	(280)		20	(261)
Net activity related to group internal capital transactions and dividends	5,240	(537)	(4,702)	0
Net cash flow from / (used in) financing activities	16,212	(475)	(4,811)	10,927
Total cash flow				
Cash and cash equivalents at the beginning of the year	39,400	93,342	40,689	173,430
Net cash flow from / (used in) operating, investing and financing activities	19,957	2,151	17,523	39,630
Effects of exchange rate differences on cash and cash equivalents	(1,462)	(2,693)	(1,151)	(5,306)
Cash and cash equivalents at the end of the year4	57,895	92,799	57,061	207,755
of which: cash and balances at central banks <sup>4</sup>	53,729	91,031	47,946	192,706
of which: amounts due from banks4	3,258	1,588	8,975	13,822
of which: money market paper <sup>4,5</sup>	908	179	139	1,227

<sup>1</sup> Cash flows generally represent a third-party view from a UBS AG consolidated perspective, except for Net activity related to group internal capital transactions and dividends. 2 Includes cash proceeds from the sale of the minority stake in Clearstream Fund Centre AG and dividends received from associates. 3 Includes funding from UBS Group AG to UBS AG. 4 Balances with an original maturity of three months or less. USD 3,408m of cash and cash equivalents were restricted. 5 Money market paper is included in the balance sheet under Financial assets at fair value held for trading, Financial assets measured at fair value through other comprehensive income, Financial assets at fair value not held for trading and Other financial assets measured at amortized cost.

# Additional regulatory information

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## UBS AG consolidated supplemental disclosures required under SEC regulations

#### A – Introduction

The following pages contain supplemental UBS AG disclosures that are required under US Securities and Exchange Commission (SEC) regulations. UBS AG's consolidated financial statements have been prepared in accordance with IFRS Accounting Standards as issued by the International Accounting Standards Board (the IASB) and are denominated in US dollars.

#### B – Selected financial data

#### **Selected information**

	As o	As of or for the year ended			
	31.12.23	31.12.22	31.12.21		
Registered ordinary shares (number)	3,858,408,466	3,858,408,466	3,858,408,466		
Treasury shares (number)	0	0	0		

#### Dividends received from investments in subsidiaries and associates

In 2023, UBS AG received dividends of USD 5,430m (2022: USD 6,465m; 2021: USD 6,401m) from its subsidiaries and associates. Dividends disclosed have been translated to US dollars from the functional currency of the entity paying the dividend, using the closing exchange rate of the month the dividend was received.

#### **Balance sheet data**

USD m	31.12.23	31.12.22	31.12.21
Assets			
Cash and balances at central banks	171,806	169,445	192,817
Amounts due from banks	28,206	14,671	15,360
Receivables from securities financing transactions at amortized cost	74,128	67,814	75,012
Cash collateral receivables on derivative instruments	32,300	35,033	30,514
Loans and advances to customers	405,633	390,027	398,693
Other financial assets measured at amortized cost	54,334	53,389	26,236
Total financial assets measured at amortized cost	766,407	730,379	738,632
Financial assets at fair value held for trading	135,098	108,034	131,033
of which: assets pledged as collateral that may be sold or repledged by counterparties	44,524	36,742	43,397
Derivative financial instruments	131,728	150,109	118,145
Brokerage receivables	20,883	17,576	21,839
Financial assets at fair value not held for trading	63,754	59,408	59,642
Total financial assets measured at fair value through profit or loss	351,463	335,127	330,659
Financial assets measured at fair value through other comprehensive income	2,233	2,239	8,844
Investments in associates	983	1,101	1,243
Property, equipment and software	11,044	11,316	11,712
Goodwill and intangible assets	6,265	6,267	6,378
Deferred tax assets	9,244	9,354	8,839
Other non-financial assets	8,377	9,652	9,836
Total assets	1,156,016	1,105,436	1,116,145
Liabilities Amounts due to banks	16,720	11,596	13,101
Payables from securities financing transactions at amortized cost	5,782	4,202	5,533
	34,886	26.426	
Cash collateral payables on derivative instruments	34,000	36,436	31,801
	555,673	36,436 527,171	
Customer deposits			544,834
Cash collateral payables on derivative instruments  Customer deposits  Funding from UBS Group AG measured at amortized cost  Debt issued measured at amortized cost	555,673	527,171	544,834 57,295
Customer deposits Funding from UBS Group AG measured at amortized cost	555,673 67,282	527,171 56,147	544,834 57,295 82,432
Customer deposits Funding from UBS Group AG measured at amortized cost Debt issued measured at amortized cost	555,673 67,282 69,784	527,171 56,147 59,499	544,834 57,295 82,432 9,765
Customer deposits Funding from UBS Group AG measured at amortized cost Debt issued measured at amortized cost Other financial liabilities measured at amortized cost Total financial liabilities measured at amortized cost	555,673 67,282 69,784 12,713	527,171 56,147 59,499 10,391	544,834 57,295 82,432 9,765 744,762
Customer deposits Funding from UBS Group AG measured at amortized cost  Debt issued measured at amortized cost Other financial liabilities measured at amortized cost  Total financial liabilities measured at amortized cost  Financial liabilities at fair value held for trading	555,673 67,282 69,784 12,713 762,840	527,171 56,147 59,499 10,391 705,442	544,834 57,295 82,432 9,765 744,762 31,688
Customer deposits  Funding from UBS Group AG measured at amortized cost  Debt issued measured at amortized cost  Other financial liabilities measured at amortized cost  Total financial liabilities measured at amortized cost  Financial liabilities at fair value held for trading  Derivative financial instruments	555,673 67,282 69,784 12,713 762,840 31,712	527,171 56,147 59,499 10,391 705,442 29,515	544,834 57,295 82,432 9,765 744,762 31,688 121,309
Customer deposits Funding from UBS Group AG measured at amortized cost  Debt issued measured at amortized cost Other financial liabilities measured at amortized cost  Total financial liabilities measured at amortized cost  Financial liabilities at fair value held for trading  Derivative financial instruments  Brokerage payables designated at fair value	555,673 67,282 69,784 12,713 762,840 31,712 140,707	527,171 56,147 59,499 10,391 705,442 29,515 154,906	544,834 57,295 82,432 9,765 744,762 31,688 121,309 44,045
Customer deposits Funding from UBS Group AG measured at amortized cost  Debt issued measured at amortized cost Other financial liabilities measured at amortized cost  Total financial liabilities measured at amortized cost  Financial liabilities at fair value held for trading Derivative financial instruments  Brokerage payables designated at fair value	555,673 67,282 69,784 12,713 762,840 31,712 140,707 42,275	527,171 56,147 59,499 10,391 705,442 29,515 154,906 45,085	544,834 57,295 82,432 9,765 744,762 31,688 121,309 44,045 71,460
Customer deposits  Funding from UBS Group AG measured at amortized cost  Debt issued measured at amortized cost  Other financial liabilities measured at amortized cost  Total financial liabilities measured at amortized cost  Financial liabilities at fair value held for trading  Derivative financial instruments  Brokerage payables designated at fair value  Debt issued designated at fair value	555,673 67,282 69,784 12,713 762,840 31,712 140,707 42,275 86,341	527,171 56,147 59,499 10,391 705,442 29,515 154,906 45,085 71,842	544,834 57,295 82,432 9,765 744,762 31,688 121,309 44,045 71,460
Customer deposits  Funding from UBS Group AG measured at amortized cost  Debt issued measured at amortized cost  Other financial liabilities measured at amortized cost  Total financial liabilities measured at amortized cost  Financial liabilities at fair value held for trading  Derivative financial instruments  Brokerage payables designated at fair value  Debt issued designated at fair value  Other financial liabilities designated at fair value	555,673 67,282 69,784 12,713 762,840 31,712 140,707 42,275 86,341 27,366	527,171 56,147 59,499 10,391 705,442 29,515 154,906 45,085 71,842 32,033	544,834 57,295 82,432 9,765 744,762 31,688 121,309 44,045 71,460 32,414 300,916
Customer deposits Funding from UBS Group AG measured at amortized cost  Debt issued measured at amortized cost Other financial liabilities measured at amortized cost  Total financial liabilities measured at amortized cost  Financial liabilities at fair value held for trading Derivative financial instruments  Brokerage payables designated at fair value Debt issued designated at fair value Other financial liabilities designated at fair value  Total financial liabilities measured at fair value through profit or loss	555,673 67,282 69,784 12,713 762,840 31,712 140,707 42,275 86,341 27,366 328,401	527,171 56,147 59,499 10,391 705,442 29,515 154,906 45,085 71,842 32,033 333,382	544,834 57,295 82,432 9,765 744,762 31,688 121,309 44,045 71,460 32,414 300,916 3,452
Customer deposits Funding from UBS Group AG measured at amortized cost  Debt issued measured at amortized cost Other financial liabilities measured at amortized cost  Total financial liabilities measured at amortized cost  Financial liabilities at fair value held for trading Derivative financial instruments  Brokerage payables designated at fair value Debt issued designated at fair value Other financial liabilities designated at fair value  Total financial liabilities measured at fair value through profit or loss  Provisions	555,673 67,282 69,784 12,713 762,840 31,712 140,707 42,275 86,341 27,366 328,401 2,524	527,171 56,147 59,499 10,391 705,442 29,515 154,906 45,085 71,842 32,033 333,382 3,183	544,834 57,295 82,432 9,765 744,762 31,688 121,309 44,045 71,460 32,414 300,916 3,452 8,572
Customer deposits Funding from UBS Group AG measured at amortized cost  Debt issued measured at amortized cost Other financial liabilities measured at amortized cost  Total financial liabilities at fair value held for trading Derivative financial instruments Brokerage payables designated at fair value Debt issued designated at fair value Other financial liabilities measured at fair value Total financial liabilities measured at fair value Total financial liabilities measured at fair value through profit or loss Provisions Other non-financial liabilities Total liabilities	555,673 67,282 69,784 12,713 762,840 31,712 140,707 42,275 86,341 27,366 328,401 2,524 6,682	527,171 56,147 59,499 10,391 705,442 29,515 154,906 45,085 71,842 32,033 333,382 3,183 6,489	544,834 57,295 82,432 9,765 744,762 31,688 121,309 44,045 71,460 32,414 300,916 3,452 8,572 1,057,702
Customer deposits Funding from UBS Group AG measured at amortized cost  Debt issued measured at amortized cost Other financial liabilities measured at amortized cost  Total financial liabilities measured at amortized cost  Financial liabilities at fair value held for trading Derivative financial instruments  Brokerage payables designated at fair value Debt issued designated at fair value Other financial liabilities designated at fair value  Total financial liabilities measured at fair value through profit or loss  Provisions Other non-financial liabilities  Total liabilities  Equity attributable to shareholders	555,673 67,282 69,784 12,713 762,840 31,712 140,707 42,275 86,341 27,366 328,401 2,524 6,682 1,100,448	527,171 56,147 59,499 10,391 705,442 29,515 154,906 45,085 71,842 32,033 333,382 3,183 6,489 1,048,496	544,834 57,295 82,432 9,765 744,762 31,688 121,309 44,045 71,460 32,414 300,916 3,452 8,572 1,057,702 58,102
Customer deposits Funding from UBS Group AG measured at amortized cost  Debt issued measured at amortized cost Other financial liabilities measured at amortized cost  Total financial liabilities measured at amortized cost  Financial liabilities at fair value held for trading Derivative financial instruments  Brokerage payables designated at fair value Debt issued designated at fair value Other financial liabilities measured at fair value  Total financial liabilities measured at fair value through profit or loss  Provisions Other non-financial liabilities	555,673 67,282 69,784 12,713 762,840 31,712 140,707 42,275 86,341 27,366 328,401 2,524 6,682 1,100,448 55,234	527,171 56,147 59,499 10,391 705,442 29,515 154,906 45,085 71,842 32,033 333,382 3,183 6,489 1,048,496 56,598	31,801 544,834 57,295 82,432 9,765 744,762 31,688 121,309 44,045 71,460 32,414 300,916 3,452 8,572 1,057,702 58,102 340 58,442

## C – Information about the company

#### Property, plant and equipment

As of 31 December 2023, UBS AG operated in about 644 business and banking locations worldwide, of which approximately 33% were in Switzerland, 50% in the Americas, 9% in the rest of Europe, the Middle East and Africa, and 8% in Asia Pacific. Of the business and banking locations in Switzerland, 22% were owned directly by UBS AG, with the remainder, along with most of UBS AG's offices outside Switzerland, being held under commercial leases. These premises are subject to continuous maintenance and upgrading and are considered suitable and adequate for current and anticipated operations.

#### D – Information required by Subpart 1400 of Regulation S-K

#### Selected statistical information

The tables below set forth selected statistical information regarding UBS AG's banking operations extracted from its financial statements. Unless otherwise indicated, average balances for the years ended 31 December 2023, 31 December 2022 and 31 December 2021 are calculated from monthly data. Unless otherwise indicated, the distinction between domestic (Swiss) and foreign (non-Swiss) is generally based on the booking location.

#### Average balances and interest rates

The tables below set forth average interest-earning assets and average interest-bearing liabilities, along with the average yield, for 2023, 2022 and 2021. Refer to "Note 3 Net interest income and other net income from financial instruments measured at fair value through profit or loss" in the "Consolidated financial statements" section of this report for more information about interest income and interest expense.

For the year ended	31.12.23		31.12.22			31.12.21			
USD m, except where indicated	Average balance	Interest income	Average yield (%)	Average balance	Interest income	Average yield (%)	Average balance	Interest income	Average yield (%)
Assets			-						
Balances at central banks									
Domestic	84,775	1,267	1.5	99,777	92 595	0.1	98,804	(105)	(0.1)
Foreign	70,892	2,946	4.2	88,267	595	0.7	71,529	(31)	0.0
Amounts due from banks									
Domestic Foreign	7,370	323	4.4	2,966	50	1.7	3,158	40	1.3
	10,937	48	0.4	12,205	8	0.1	12,961	12	0.1
Receivables from securities financing transactions measured at amortized cost <sup>1</sup>									
Domestic	3,592	167	4.6	6,431	30	0.5	9,435	(28)	(0.3)
Foreign	75,553	3,016	4.0	70,942	1,105	1.6	79,297	234	0.3
Loans and advances to customers									
Domestic	243,241	5,868	2.4	225,540	3,212	1.4	229,794	3,214	1.4
Foreign	150,165	7,472	5.0	160,496	4,824	3.0	160,869	2,698	1.7
Financial assets at fair value <sup>1,2</sup>									
Domestic	6,970	199	2.9	5,922	50	0.8	10,023	11	0.1
Foreign	172,570	6,782	3.9	151,672	2,113	1.4	169,368	1,203	0.7
Other interest-earning assets									
Domestic	8,840	181	2.1	8,226	125	1.5	7,477	121	1.6
Foreign	71,488	2,171	3.0	63,108	858	1.4	47,042	298	0.6
Total interest-earning assets <sup>3</sup>	906,393	30,440	3.4	895,553	13,064	1.5	899,757	7,666	0.9
Net interest income on swaps		2,253			1,812			1,558	
Interest income on off-balance sheet securities and other		747			677			472	
Interest income and average interest-earning assets	906,393	33,440 <sup>4</sup>	3.7	895,553	15,553 <sup>4</sup>	1.7	899,757	9,695 <sup>4</sup>	1.1
Non-interest-earning assets <sup>5</sup>	282,137			297,691			296,300		
Total average assets	1,188,531			1,193,244			1,196,057		

<sup>1</sup> Reverse repurchase agreements are presented on a gross basis and therefore, for the purpose of this disclosure, do not reflect the effect of netting permitted under IFRS Accounting Standards. 2 Includes financial assets at fair value held for trading, financial assets at fair value held for trading, financial assets at fair value not held for trading, financial assets at fair value through other comprehensive income and brokerage receivables. 3 Non-taxable positions and amounts were not material for the years presented. 4 For the purpose of this disclosure, negative interest income on assets is presented as a reduction to interest income, while in the consolidated income statement negative interest income on assets is presented as interest expense. Refer to "Note 3 Net interest income and other net income from financial instruments measured at fair value through profit or loss" in the "Consolidated financial statements" section of this report for more information. 5 Mainly includes derivative financial instruments, equity instruments at fair value held for trading and financial assets for unit-linked investment contracts.

#### Average balances and interest rates (continued)

For the year ended	31.12.23			31.12.22			31.12.21		
USD m, except where indicated	Average balance	Interest expense	Average interest rate (%)	Average balance	Interest expense	Average interest rate (%)	Average balance	Interest expense	Average interest rate (%)
Liabilities and equity	bularice	САРСПЭС	1410 (70)	balance	схрепьс	1010 (70)	balance	схрепьс	1010 (70)
Amounts due to banks									
Domestic	9,890	158	1.6	10,733	3	0.0	10,369	(32)	(0.3)
Foreign	5,026	174	3.5	3,255	44	1.3	2,897	18	0.6
Payables from securities financing transactions measured at amortized cost <sup>1</sup>	-,								
Domestic	3,225	163	5.0	3,357	40	1.2	4,786	1	0.0
Foreign	16,552	853	5.2	13,351	289	2.2	14,161	209	1.5
Customer deposits	······································			······································					
Domestic	276,288	1,663	0.6	275,270	(61)	0.0	293,028	(281)	(0.1)
of which: demand deposits	119,796	500	0.4	149,357	(141)	(0.1)	162,016	(273)	(0.2)
of which: savings and sweep deposits	122,954	243	0.2	119,685	<i>6</i>	0.0	126,290	4	0.0
of which: time deposits	33.538	920	2.7	6.227	74	1.2	4.721	(12)	(0.3)
Foreign	243,413	7,722	3.2	246,072	1,820	0.7	232,165	107	0.0
of which: demand deposits	38,043	626	1.6	66,987	120	0.2	82,226	(31)	0.0
of which: savings and sweep deposits	75,671	2,176	2.9	111,130	578	0.5	99,847	81	0.1
of which: time deposits	129,698	4,920	3.8	67,956	1,121	1.7	50,092	58	0.1
Funding from UBS Group AG									
Domestic	61,922	2,416	3.9	56,884	1,875	3.3	56,008	1,699	3.0
Commercial paper					•••••••••••			••••••••••	
Domestic	1	0	0.0	1	0	0.0	292	0	0.0
Foreign	20,858	1,097	5.3	20,452	256	1.3	24,461	33	0.1
Other short-term debt issued measured at amortized cost									
Domestic	322	4	1.3	366	4	1.2	13	0	(0.1)
Foreign	12,023	610	5.1	11,927	124	1.0	18,473	37	0.2
Long-term debt issued measured at amortized cost									
Domestic	11,830	211	1.8	11,538	184	1.6	12,352	192	1.6
Foreign	17,177	492	2.9	22,929	439	1.9	27,820	491	1.8
Financial liabilities at fair value (excluding debt issued designated at fair value) <sup>1,2</sup>									
Domestic	374	11	3.0	289	11	3.7	421	3	0.8
Foreign	154,909	5,578	3.6	141,526	1,476	1.0	139,374	81	0.1
Debt issued designated at fair value									
Domestic	7,304	209	2.9	7,400	43	0.6	7,806	(20)	(0.3)
Foreign	72,610	3,451	4.8	63,470	1,283	2.0	60,388	429	0.7
Other interest-bearing liabilities									
Domestic	2,174	62	2.8	2,872	14	0.5	2,884	(7)	(0.2)
Foreign	33,639	1,229	3.7	38,838	429	1.1	34,833	101	0.3
Total interest-bearing liabilities	949,537	26,104	2.7	930,531	8,273	0.9	942,531	3,060	0.3
Swap interest on hedged debt instruments and other swaps		2,061			40			(765)	
Interest expense on off-balance sheet securities and other		710			723			797	
Interest expense and average interest-bearing liabilities	949,537	28,874 <sup>3</sup>	3.0	930,531	9,035 <sup>3</sup>	1.0	942,531	3,091 <sup>3</sup>	0.3
Non-interest-bearing liabilities <sup>4</sup>	183,979			206,337			196,273		
Total liabilities	1,133,517			1,136,868			1,138,804		
Total equity	55,014			56,376			57,254		
Total average liabilities and equity	1,188,531			1,193,244			1,196,057		
Net interest income		4,566			6,517			6,604	
Net yield on interest-earning assets			0.5			0.7			0.7

<sup>1</sup> Repurchase agreements are presented on a gross basis and therefore, for the purpose of this disclosure, do not reflect the effect of netting permitted under IFRS Accounting Standards. 2 Includes financial liabilities at fair value held for trading, other financial liabilities designated at fair value and brokerage payables designated at fair value. 3 For the purpose of this disclosure, negative interest expense on liabilities is presented as a reduction to interest expense, while in the consolidated income statement negative interest income on liabilities is presented as interest income. Refer to "Note 3 Net interest income and other net income from financial instruments measured at fair value through profit or loss" in the "Consolidated financial statements" section of this report for more information.

4 Mainly includes derivative financial instruments, equity instruments at fair value held for trading and financial liabilities related to unit-linked investment contracts.

The percentage of total average interest-earning assets attributable to foreign activities was 61% for 2023 (2022: 61%; 2021: 60%). The percentage of total average interest-bearing liabilities attributable to foreign activities was 61% for 2023 (2022: 60%; 2021: 59%). All assets and liabilities are translated into US dollars at uniform month-end rates. Interest income and expense are translated at monthly average rates.

Average rates earned and paid on assets and liabilities can change from period to period based on the changes in interest rates in general, but are also affected by changes in the currency mix included in the assets and liabilities. Tax-exempt income is not recorded on a tax-equivalent basis. For all three years presented, tax-exempt income is considered to be insignificant, and the effect from such income is therefore negligible.

#### Analysis of changes in interest income and expense

The tables below provide information, by categories of interest-earning assets and interest-bearing liabilities, about the changes in interest income and expense due to changes in volume and interest rates for the year ended 31 December 2023 compared with the year ended 31 December 2022, and for the year ended 31 December 2022 compared with the year ended 31 December 2021. The change in average volume represents the change in the current average balance compared with the average balance from the prior year with respect to the average rate of the prior year. The change in average rate represents the difference between the net change in interest income and expense and the change in average volume.

	2023 compared with 2022			2022 compared with 2021		
	Increase / (decrease) due to changes in <sup>1</sup>			Increase / (decrease) due to changes in		
USD m	Average volume	Average interest rate	Net change	Average volume	Average interest rate	Net change
Interest income from interest-earning assets	Volumo	111010011010	anange	70141116	c.est rate	change
Balances at central banks						
Domestic	(14)	1,189	1,175	(1)	198	197
Foreign	(117)	2,467	2,350	(7)	633	626
Amounts due from banks						
Domestic	75	198	273	(2)	12	10
Foreign	(1)	42	41	(1)	(3)	(4)
Receivables from securities financing transactions measured at amortized cost						
Domestic	(13)	149	136	9	49	58
Foreign	72	1,839	1,911	(25)	896	871
Loans and advances to customers						
Domestic	252	2,403	2,655	(59)	58	(1)
Foreign	(311)	2,959	2,648	(6)	2,133	2,127
Financial assets at fair value						
Domestic	9	140	149	(5)	44	39
Foreign	291	4,378	4,669	(126)	1,036	910
Other interest-earning assets						
Domestic	9	47	56	12	(8)	4
Foreign	114	1,199	1,313	102	458	560
Interest income						
Domestic	318	4,126	4,444	(46)	354	308
Foreign	48	12,884	12,932	(63)	5,154	5,091
Total interest income from interest-earning assets	366	17,010	17,376	(109)	5,507	5,398
Net interest income on swaps			441			254
Interest income on off-balance sheet securities and other			70			205
Total interest income			17,887			5,858

<sup>1</sup> In 2023, the Swiss franc and the euro strengthened significantly against the US dollar. This effect is included within the variances disclosed in this table.

#### Analysis of changes in interest income and expense (continued)

	2023 compared with 2022			2022 compared with 2021			
	Increase / due to ch			Increase / ( due to ch			
	Average	Average	Net	Average	Average	Net	
USD m	volume	interest rate	change	volume	interest rate	change	
Interest expense on interest-bearing liabilities							
Amounts due to banks							
Domestic	0	155	155	(1)	36	35	
Foreign	24	106	130	2	23	25	
Payables from securities financing transactions measured at amortized cost							
Domestic	(2)	124	122	0	39	39	
Foreign	69	495	564	(12)	92	80	
Customer deposits							
Domestic	351	1,373	1,724	17	203	220	
of which: demand deposits	<i>28</i>	<i>613</i>	641	21	111	132	
of which: savings and sweep deposits	0	<i>237</i>	<i>237</i>	0	2	2	
of which: time deposits	<i>323</i>	<i>523</i>	846	(4)	90	86	
Foreign	(20)	5,923	5,903	6	1,707	1,713	
of which: demand deposits	(52)	<i>558</i>	<i>506</i>	6	145	151	
of which: savings and sweep deposits	(184)	1,782	1,598	9	488	497	
of which: time deposits	1,019	2,779	<i>3,798</i>	21	1,043	1,064	
Funding from UBS Group AG							
Domestic	166	375	541	27	149	176	
Commercial paper							
Domestic	0	0	0	0	0	0	
Foreign	5	836	841	(5)	228	223	
Other short-term debt issued measured at amortized cost							
Domestic	(1)	1	0	0	5	5	
Foreign	1	485	486	(13)	100	87	
Long-term debt issued measured at amortized cost							
Domestic	5	22	27	(13)	5	(8)	
Foreign	(110)	163	53	(86)	34	(52)	
Financial liabilities at fair value (excluding debt issued designated at fair value)							
Domestic	3	(2)	1	(1)	8	7	
Foreign	140	3,962	4,102		1,395	1,396	
Debt issued designated at fair value		······································	······				
Domestic	(1)	167	166	1	61	62	
Foreign	185	1,983	2,168	22	832	854	
Other interest-bearing liabilities							
Domestic	(3)	51	48	0	21	21	
Foreign	(57)	858	801	12	316	328	
Interest expense	(5.7)						
Domestic	518	2,265	2,783	30	529	559	
Foreign	237	14,811	15,048	(73)	4,727	4,654	
Total interest expense on interest-bearing liabilities	755	17,076	17,831	(43)	5,256	5,213	
Swap interest on hedged debt instruments and other swaps	, , , ,	17,070	2,021	(43)	الر ۲٫۷	805	
Interest expense on off-balance sheet securities and other			(12)			(74)	
•			19,839			5,944	
Total interest expense			13,033			5,944	

<sup>1</sup> In 2023, the Swiss franc and the euro strengthened significantly against the US dollar. This effect is included within the variances disclosed in this table.

#### **Deposits**

The table below analyzes average deposits and average rates on each deposit category for the years ended 31 December 2023, 31 December 2022 and 31 December 2021. For the purpose of this disclosure, foreign deposits represent deposits from depositors who are based outside of Switzerland. Deposits by foreign depositors in domestic offices were USD 60,596m as of 31 December 2023 (31 December 2022: USD 59,897m; 31 December 2021: USD 77,070m).

	31.12.23		31.12.22		31.12.21	
USD m, except where indicated	Average deposits	Average rate (%)	Average deposits	Average rate (%)	Average deposits	Average rate (%)
Due to banks						
Domestic						
Demand deposits	766	(0.1)	908	(0.3)	927	(0.5)
Time deposits	2,301	2.7	2,793	0.5	3,026	0.0
Total domestic	3,067	2.0	3,700	0.3	3,953	(0.1)
Foreign <sup>1</sup>						
Demand deposits	5,118	1.0	5,774	0.0	5,414	(0.6)
Time deposits	6,731	3.3	4,513	0.8	3,899	0.5
Total Foreign	11,849	2.3	10,288	0.3	9,313	(0.1)
Total due to banks	14,916	2.2	13,988	0.3	13,266	(0.1)
Customer deposits  Domestic						
Demand deposits	88,794	0.6	97,217	(0.1)	103,267	(0.2)
Savings and sweep deposits	111,750	0.2	109,039	0.0	114,792	0.0
Time deposits	31,742	2.4	9,715	0.4	10,306	(0.2)
Total domestic	232,285	0.7	215,971	0.0	228,366	(0.1)
Foreign <sup>1</sup>						
Demand deposits	69,046	0.9	119,127	0.1	140,975	(0.1)
Savings and sweep deposits	86,875	2.5	121,776	0.5	111,345	0.1
Time deposits	131,494	3.9	64,468	1.8	44,507	0.1
Total foreign	287,415	2.7	305,370	0.6	296,826	0.0
Total customer deposits	519,701	1.8	521,342	0.3	525,192	0.0

<sup>1</sup> For the purpose of this table, the distinction between foreign and domestic deposits is based on the domicile of the depositor, while foreign and domestic deposits disclosed in previous tables are based on the booking location.

#### **Uninsured deposits**

From the combined total of Due to banks and Customer deposits as of 31 December 2023, total estimated uninsured deposits were USD 415bn (31 December 2022: USD 365bn; 31 December 2021: USD 395bn). Uninsured deposits are deposits that are in excess of local deposit insurance or protection scheme limits in the key locations in which UBS AG operates, calculated based on the respective local regulations, as well as deposits in uninsured accounts. The main deposit insurance schemes applicable to UBS AG deposits are the Swiss depositor protection scheme in Switzerland (which protects applicable deposits up to a maximum of CHF 100,000 per client and per bank or securities firm), the Compensation Scheme of German Banks in combination with the Deposit Protection Fund of the Association of German Banks in Germany (which protects applicable deposits up to a maximum of EUR 5m per client and EUR 50m per business) and the Federal Deposit Insurance Corporation (the FDIC) scheme in the Americas (which protects applicable deposits up to a maximum of USD 250,000 per depositor, per insured bank, for each account ownership category).

The table below presents the maturity of estimated uninsured time deposits as of 31 December 2023. Where a depositor holds multiple accounts, which in aggregate are in excess of a deposit insurance or protection limit, the insured amount is first allocated to the account with the shortest time to maturity.

USD m	Uninsured time deposits <sup>1</sup>
Within 3 months	141,142
3 to 6 months	23,182
6 to 12 months	21,263
Over 12 months	13,704
Total uninsured time deposits as of 31 December 2023	199.292

<sup>1</sup> Amounts are estimated based on the methodologies defined in each local jurisdiction. As of 31 December 2023, there were no US time deposits subject to the FDIC scheme that were in excess of the FDIC insurance

#### Investments in debt instruments

The table below presents the carrying amount and weighted average yield of debt instruments presented within Financial assets measured at fair value through other comprehensive income and Other financial assets measured at amortized cost on the balance sheet by contractual maturity bucket. The yield for each range of maturities is calculated by dividing the annualized interest income by the average balance of the investment per contractual maturity bucket. The maturity information presented does not consider any early redemption features, and debt instruments without fixed maturities are not included.

	Within	1 year	1 to 5	/ears	5 to 10	years	Over 10	years	
USD m, except where indicated	Carrying amount	Yield (%)	Carrying amount	Yield (%)	Carrying amount	Yield (%)	Carrying amount	Yield (%)	Total Carrying amount
Debt instruments measured at fair value									
through other comprehensive income									
Government bills / bonds	10	0.86							10
Corporate and other	2,151	4.65	72	2.56					2,223
Subtotal as of 31 December 2023	2,161		72						2,233
Debt securities measured at amortized cost									
Asset-backed securities			289	1.56	1,569	2.57	6,662	2.87	8,520
Government bills / bonds	4,354	1.96	6,605	2.20	4,005	2.03	2,302	3.78	17,266
Corporate and other	1,315	1.17	12,739	2.27	3,405	2.37			17,459
Subtotal as of 31 December 2023	5,669		19,633		8,979		8,964		43,245
Total as of 31 December 2023	7,830		19,705		8,979		8,964		45,478

#### Loan portfolio

The table below provides the maturity profile of UBS AG's core loan portfolio as of 31 December 2023. The contractual maturity is based on carrying amounts and includes the effect of callable features. For loans due after one year, a breakdown between fixed and adjustable or floating interest rates is also provided.

USD m				31.12.23			
	Within 1 year	1 to 5 years	5 to 15 years	Over 15 years	Total	of which: over 1 year	
						Fixed rate	Adjustable or floating rate
Private clients with mortgages	14,071	99,663	32,527	28,138	174,400	82,007	78,321
Real estate financing	22,843	22,822	8,595	44	54,305	<i>18,759</i>	12,702
Large corporate clients	5,382	7,867	1,181	0	14,431	<i>3,231</i>	5,817
SME clients	7,126	4,408	1,161	0	12,694	3,160	2,408
Lombard	111,361	6,277	287	0	117,924	<i>5,962</i>	602
Credit cards	2,041	0	0	0	2,041	0	0
Commodity trade finance	2,718	172	0	0	2,889	<i>89</i>	82
Other loans and advances to customers	15,356	9,504	2,027	62	26,949	1,486	10,107
Loans to financial advisors	92	711	1,497	316	2,615	2,524	0
Total	180,989	151,424	47,275	28,560	408,248	117,218	110,041

#### Allowance for credit losses

For the years ended 31 December 2023, 31 December 2022 and 31 December 2021, the ratio of net charge-offs (i.e., write-offs of expected credit loss allowances to gross carrying amount of the average loans outstanding) during the period was not material for UBS AG's core loan portfolio, both on an overall basis and on an individual loan category basis. Total write-offs for 31 December 2023 were USD 77m (31 December 2022: USD 95m, 31 December 2021: USD 137m). Refer to the coverage ratio tables in "Note 9 Financial assets at amortized cost and other positions in scope of expected credit loss measurement" in the "Consolidated financial statements" section of this report for the ratio of expected credit loss allowances to total loans outstanding at each period end.

## **Appendix**

## Alternative performance measures

#### Alternative performance measures

An alternative performance measure (an APM) is a financial measure of historical or future financial performance, financial position or cash flows other than a financial measure defined or specified in the applicable recognized accounting standards or in other applicable regulations. A number of APMs are reported in the discussion of the financial and operating performance of the external reports (annual, quarterly and other reports). APMs are used to provide a more complete picture of operating performance and to reflect management's view of the fundamental drivers of the business results. A definition of each APM, the method used to calculate it and the information content are presented in alphabetical order in the table below. These APMs may qualify as non-GAAP measures as defined by US Securities and Exchange Commission (SEC) regulations.

APM label	Calculation	Information content			
Active Digital Banking clients in Corporate & Institutional Clients (%) – Personal & Corporate Banking	Calculated as the average number of active clients for each month in the relevant period divided by the average number of total clients. "Clients" refers to the number of unique business relationships or legal entities operated by Corporate & Institutional Clients, excluding clients that do not have an account, monoproduct clients and clients that have defaulted on loans or credit facilities. At the end of each month, any client that has logged on at least once in that month is determined to be "active" (a log-in time stamp is allocated to all business relationship numbers or per legal entity in a digital banking contract).	proportion of active Digital Banking clients in the total number of UBS clients (within the aforementioned meaning) which are serviced by Corporate & Institutional Clients.			
Active Digital Banking clients in Personal Banking (%) – Personal & Corporate Banking	Calculated as the average number of active clients for each month in the relevant period divided by the average number of total clients. "Clients" refers to the number of unique business relationships operated by Personal Banking, excluding persons under the age of 15, clients who do not have a private account, clients domiciled outside Switzerland and clients who have defaulted on loans or credit facilities. At the end of each month, any client that has logged on at least once in that month is determined to be "active" (a log-in time stamp is allocated to all business relationship numbers in a digital banking contract).	This measure provides information about the proportion of active Digital Banking clients in the total number of UBS clients (within the aforementioned meaning) who are serviced by Personal Banking.			
Active Mobile Banking clients in Personal Banking (%) – Personal & Corporate Banking	Calculated as the average number of active clients for each month in the relevant period divided by the average number of total clients. "Clients" refers to the number of unique business relationships operated by Personal Banking, excluding persons under the age of 15, clients who do not have a private account, clients domiciled outside Switzerland and clients who have defaulted on loans or credit facilities. At the end of each month, any client that has logged on via the mobile app at least once in that month is determined to be "active" (a log-in time stamp is allocated to all business relationship numbers in a digital banking contract).	This measure provides information about the proportion of active Mobile Banking clients in the total number of UBS clients (within the aforementioned meaning) who are serviced by Personal Banking.			
Cost / income ratio (%)	Calculated as operating expenses divided by total revenues.	This measure provides information about the efficiency of the business by comparing operating expenses with gross income.			
Fee and trading income for Corporate & Institutional Clients (USD and CHF) – Personal & Corporate Banking	Calculated as the total of recurring net fee and transaction-based income for Corporate & Institutional Clients.	This measure provides information about the amount of fee and trading income for Corporate & Institutional Clients.			

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APM label	Calculation	Information content
Fee-generating assets (USD) – Global Wealth Management	Calculated as the sum of discretionary and nondiscretionary wealth management portfolios (mandate volume) and assets where generated revenues are predominantly of a recurring nature, i.e., mainly investment, mutual, hedge and private-market funds where we have a distribution agreement, including client commitments into closed-ended private-market funds from the date that recurring fees are charged. Assets related to our Global Financial Intermediaries business are excluded, as are assets of sanctioned clients.	This measure provides information about the volume of invested assets that create a revenue stream, whether as a result of the nature of the contractual relationship with clients or through the fee structure of the asset. An increase in the level of fee-generating assets results in an increase in the associated revenue stream. Assets of sanctioned clients are excluded from fee-generating assets.
Fee-pool-comparable revenues (USD) – the Investment Bank	Calculated as the total of revenues from: merger-and-acquisition-related transactions; Equity Capital Markets, excluding derivatives; Leveraged Capital Markets, excluding the impact of mark-to-market movements on loan portfolios; and Debt Capital Markets, excluding revenues related to debt underwriting of UBS instruments.	This measure provides information about the amount of revenues in the Investment Bank that are comparable with the relevant global fee pools.
Gross margin on invested assets (bps)  – Asset Management	Calculated as total revenues (annualized as applicable) divided by average invested assets.	This measure provides information about the total revenues of the business in relation to invested assets.
Impaired Ioan portfolio as a percentage of total Ioan portfolio, gross (%) – Global Wealth Management, Personal & Corporate Banking	Calculated as impaired loan portfolio divided by total gross loan portfolio.	This measure provides information about the proportion of impaired loan portfolio in the total gross loan portfolio.
Integration-related expenses (USD)	Generally include costs of internal staff and contractors substantially dedicated to integration activities, retention awards, redundancy costs, incremental expenses from the shortening of useful lives of property, equipment and software, and impairment charges relating to these assets. Classification as integration-related expenses does not affect the timing of recognition and measurement of those expenses or the presentation thereof in the income statement. Integration-related expenses incurred by Credit Suisse also included expenses associated with restructuring programs that existed prior to the acquisition.	This measure provides information about expenses that are temporary, incremental and directly related to the integration of Credit Suisse into UBS.
Invested assets (USD and CHF)  – Global Wealth Management, Personal & Corporate Banking, Asset Management	Calculated as the sum of managed fund assets, managed institutional assets, discretionary and advisory wealth management portfolios, fiduciary deposits, time deposits, savings accounts, and wealth management securities or brokerage accounts.	This measure provides information about the volume of client assets managed by or deposited with UBS for investment purposes.
Investment products for Personal Banking (USD and CHF) – Personal & Corporate Banking	Calculated as the sum of investment funds (including UBS Vitainvest third-pillar pension funds, as well as money market funds), mandates and third-party life insurance operated in Personal Banking.	This measure provides information about the volume of investment funds (including UBS Vitainvest third-pillar pension funds, as well as money market funds), mandates and third-party life insurance operated in Personal Banking.
Net interest margin (bps)  – Personal & Corporate Banking	Calculated as net interest income (annualized as applicable) divided by average loans.	This measure provides information about the profitability of the business by calculating the difference between the price charged for lending and the cost of funding, relative to loan value.
Net new assets (USD) – Global Wealth Management	Calculated as the net amount of inflows and outflows of invested assets (as defined in UBS policy) recorded during a specific period, plus interest and dividends. Excluded from the calculation are movements due to market performance, foreign exchange translation, fees, and the effects on invested assets of strategic decisions by UBS to exit markets or services.	This measure provides information about the development of invested assets during a specific period as a result of net new asset flows, plus the effect of interest and dividends.
Net new assets growth rate (%)  – Global Wealth Management	Calculated as the net amount of inflows and outflows of invested assets (as defined in UBS policy) recorded during a specific period (annualized as applicable), plus interest and dividends, divided by total invested assets at the beginning of the period.	This measure provides information about the growth of invested assets during a specific period as a result of net new asset flows.

APM label	Calculation	Information content
Net new fee-generating assets (USD)  – Global Wealth Management	Calculated as the net amount of fee-generating asset inflows and outflows, including dividend and interest inflows into mandates and outflows from mandate fees paid by clients during a specific period. Excluded from the calculation are the effects on fee-generating assets of strategic decisions by UBS to exit markets or services.	This measure provides information about the development of fee-generating assets during a specific period as a result of net flows, excluding movements due to market performance and foreign exchange translation, as well as the effects on feegenerating assets of strategic decisions by UBS to exit markets or services.
Net new investment products for Personal Banking (USD and CHF) – Personal & Corporate Banking	Calculated as the net amount of inflows and outflows of investment products during a specific period.	This measure provides information about the development of investment products during a specific period as a result of net new investment product flows.
Net new money (USD)  – Global Wealth Management, Asset Management	Calculated as the net amount of inflows and outflows of invested assets (as defined in UBS policy) recorded during a specific period. Excluded from the calculation are movements due to market performance, foreign exchange translation, dividends, interest and fees, as well as the effects on invested assets of strategic decisions by UBS to exit markets or services. Net new money is not measured for Personal & Corporate Banking.	This measure provides information about the development of invested assets during a specific period as a result of net new money flows.
Net new money growth rate (%) - Global Wealth Management	Calculated as the net amount of inflows and outflows of invested assets (as defined in UBS policy) recorded during a specific period (annualized as applicable) divided by total invested assets at the beginning of the period.	This measure provides information about the growth of invested assets during a specific period as a result of net new money flows.
Net profit growth (%)	Calculated as the change in net profit attributable to shareholders from continuing operations between current and comparison periods divided by net profit attributable to shareholders from continuing operations of the comparison period.	This measure provides information about profit growth since the comparison period.
Operating expenses (underlying) (USD)	Calculated by adjusting operating expenses as reported in accordance with IFRS Accounting Standards for items that management believes are not representative of the underlying performance of the businesses.  • Refer to the "Group performance" section of the UBS Group Annual Report 2023 for more information	This measure provides information about the amount of operating expenses, while excluding items that management believes are not representative of the underlying performance of the businesses.
Operating profit / (loss) before tax (underlying) (USD)	Calculated by adjusting operating profit / (loss) before tax as reported in accordance with IFRS Accounting Standards for items that management believes are not representative of the underlying performance of the businesses.  • Refer to the "Group performance" section of the UBS Group Annual Report 2023 for more information	This measure provides information about the amount of operating profit / (loss) before tax, while excluding items that management believes are not representative of the underlying performance of the businesses.
Pre-tax profit growth (%)  – Global Wealth Management, Personal & Corporate Banking, Asset Management, the Investment Bank	Calculated as the change in net profit before tax attributable to shareholders from continuing operations between current and comparison periods divided by net profit before tax attributable to shareholders from continuing operations of the comparison period.	This measure provides information about pre-tax profit growth since the comparison period.
Pre-tax profit growth (underlying) (%)  – Global Wealth Management, Personal & Corporate Banking, Asset Management, the Investment Bank	Calculated as the change in net profit before tax attributable to shareholders from continuing operations between current and comparison periods divided by net profit before tax attributable to shareholders from continuing operations of the comparison period. Net profit before tax attributable to shareholders from continuing operations excludes items that management believes are not representative of the underlying performance of the businesses and also excludes related tax impact.	This measure provides information about pre-tax profit growth since the comparison period, while excluding items that management believes are not representative of the underlying performance of the businesses.
Recurring net fee income (USD and CHF) – Global Wealth Management, Personal & Corporate Banking	Calculated as the total of fees for services provided on an ongoing basis, such as portfolio management fees, asset-based investment fund fees and custody fees, which are generated on client assets, and administrative fees for accounts.	This measure provides information about the amount of recurring net fee income.

APM label	Calculation	Information content
Return on attributed equity (%)	Calculated as annualized business division operating profit before tax divided by average attributed equity.	This measure provides information about the profitability of the business divisions in relation to attributed equity.
Return on common equity tier 1 capital (%)	Calculated as annualized net profit attributable to shareholders divided by average common equity tier 1 capital.	This measure provides information about the profitability of the business in relation to common equity tier 1 capital.
Return on equity (%)	Calculated as annualized net profit attributable to shareholders divided by average equity attributable to shareholders.	This measure provides information about the profitability of the business in relation to equity.
Return on leverage ratio denominator, gross (%)	Calculated as annualized total revenues divided by average leverage ratio denominator.	This measure provides information about the revenues of the business in relation to the leverage ratio denominator.
Return on tangible equity (%)	Calculated as annualized net profit attributable to shareholders divided by average equity attributable to shareholders less average goodwill and intangible assets.	This measure provides information about the profitability of the business in relation to tangible equity.
Tangible book value per share (USD)	Calculated as equity attributable to shareholders less goodwill and intangible assets divided by the number of shares outstanding.	This measure provides information about tangible net assets on a per-share basis.
Total book value per share (USD)	Calculated as equity attributable to shareholders divided by the number of shares outstanding.	This measure provides information about net assets on a per-share basis.
Total revenues (underlying) (USD)	Calculated by adjusting total revenues as reported in accordance with IFRS Accounting Standards for items that management believes are not representative of the underlying performance of the businesses.  • Refer to the "Group performance" section of the UBS Group Annual Report 2023 for more information	This measure provides information about the amount of total revenues, while excluding items that management believes are not representative of the underlying performance of the businesses.
Transaction-based income (USD and CHF) – Global Wealth Management, Personal & Corporate Banking	Calculated as the total of the non-recurring portion of net fee and commission income, mainly composed of brokerage and transaction-based investment fund fees, and credit card fees, as well as fees for payment and foreign-exchange transactions, together with other net income from financial instruments measured at fair value through profit or loss.	This measure provides information about the amount of the non-recurring portion of net fee and commission income, together with other net income from financial instruments measured at fair value through profit or loss.
Underlying cost / income ratio (%)	Calculated as underlying operating expenses (as defined above) divided by underlying total revenues (as defined above).	This measure provides information about the efficiency of the business by comparing operating expenses with total revenues, while excluding items that management believes are not representative of the underlying performance of the businesses.
Underlying net profit growth (%)	Calculated as the change in net profit attributable to shareholders from continuing operations between current and comparison periods divided by net profit attributable to shareholders from continuing operations of the comparison period. Net profit attributable to shareholders from continuing operations excludes items that management believes are not representative of the underlying performance of the businesses and also excludes related tax impact.	This measure provides information about profit growth since the comparison period, while excluding items that management believes are not representative of the underlying performance of the businesses.
Underlying return on common equity tier 1 capital (%)	Calculated as annualized net profit attributable to shareholders divided by average common equity tier 1 capital. Net profit attributable to shareholders excludes items that management believes are not representative of the underlying performance of the businesses and also excludes related tax impact.	This measure provides information about the profitability of the business in relation to common equity tier 1 capital, while excluding items that management believes are not representative of the underlying performance of the businesses.
Underlying return on tangible equity (%)	Calculated as annualized net profit attributable to shareholders divided by average equity attributable to shareholders less average goodwill and intangible assets. Net profit attributable to shareholders excludes items that management believes are not representative of the underlying performance of the businesses and also excludes related tax impact.	This measure provides information about the profitability of the business in relation to tangible equity, while excluding items that management believes are not representative of the underlying performance of the businesses.

This is a general list of the APMs used in our financial reporting. Not all of the APMs listed above may appear in this particular report.

## Abbreviations frequently used in our financial reports

		CDM	Protein de la Pro-	ECD	E' '   C   L'II'   D   L
A		CRM	credit risk mitigation (credit	FSB	Financial Stability Board
ABS	asset-backed securities		risk) or comprehensive risk	FTA	Swiss Federal Tax
AG	Aktiengesellschaft		measure (market risk)		Administration
AGM	Annual General Meeting of	CST	combined stress test	FVA	funding valuation
	shareholders	CUSIP	Committee on Uniform		adjustment
A-IRB	advanced internal ratings-		Security Identification	FVOCI	fair value through other
	based		Procedures		comprehensive income
AIV	alternative investment	CVA	credit valuation adjustment	FVTPL	fair value through profit or
	vehicle	_		=> /	loss
ALCO	Asset and Liability	D		FX	foreign exchange
	Committee	DBO	defined benefit obligation		
AMA	advanced measurement	DCCP	Deferred Contingent	G	
	approach		Capital Plan	GAAP	generally accepted
AML	anti-money laundering	DE&I	diversity, equity and		accounting principles
AoA	Articles of Association		inclusion	GBP	pound sterling
APM	alternative performance	DFAST	Dodd–Frank Act Stress Test	GCRG	Group Compliance,
	measure	DM	discount margin		Regulatory & Governance
ARR	alternative reference rate	DOJ	US Department of Justice	GDP	gross domestic product
ARS	auction rate securities	DTA	deferred tax asset	GEB	Group Executive Board
ASF	available stable funding	DVA	debit valuation adjustment	GHG	greenhouse gas
AT1	additional tier 1			GIA	Group Internal Audit
AuM	assets under management	E		GRI	Global Reporting Initiative
, talvi	assets affact management	EAD	exposure at default	G-SIB	global systemically
В		EB	Executive Board	0 510	important bank
BCBS	Basel Committee on	EC	European Commission		important bank
DCD3	Banking Supervision	ECB		Н	
DIC	= :	ECL	European Central Bank		high quality liquid assets
BIS	Bank for International		expected credit loss	HQLA	high-quality liquid assets
D D	Settlements	EGM	Extraordinary General		
BoD	Board of Directors	EID	Meeting of shareholders	1	
_		EIR	effective interest rate	IAS	International Accounting
C		EL	expected loss		Standards
CAO	Capital Adequacy Ordinance	EMEA	Europe, Middle East and Africa	IASB	International Accounting Standards Board
CCAR	Comprehensive Capital	EOP	Equity Ownership Plan	IBOR	interbank offered rate
	Analysis and Review	EPS	earnings per share	IFRIC	International Financial
CCF	credit conversion factor	ESG	environmental, social and		Reporting Interpretations
CCP	central counterparty		governance		Committee
CCR	counterparty credit risk	ESR	environmental and social	IFRS	Accounting Standards
CCRC	Corporate Culture and	23.1	risk		issued by the IASB
	Responsibility Committee	ETD	exchange-traded derivatives	Standards	.55464 276 11 .52
CDS	credit default swap	ETF	exchange-traded fund	IRB	internal ratings-based
CEA	Commodity Exchange Act	EU	European Union	IRRBB	interest rate risk in the
CEO	Chief Executive Officer	EUR	euro	IIIIIDD	banking book
CET1	common equity tier 1	EURIBOR	Euro Interbank Offered Rate	ISDA	International Swaps and
	Chief Financial Officer			ISDA	· · · · · · · · · · · · · · · · · · ·
CFO CGU		EVE	economic value of equity	ICINI	Derivatives Association
	cash-generating unit	EY	Ernst & Young Ltd	ISIN	International Securities
CHF	Swiss franc	_			Identification Number
CIO	Chief Investment Office	F	financial addices		
C&ORC	Compliance & Operational	FA	financial advisor		
	Risk Control	FCA	UK Financial Conduct Authority		
		FDIC	Federal Deposit Insurance Corporation		
		FINMA	Swiss Financial Market		
		FIINIVIA	Supervisory Authority		
		FMIA	Swiss Financial Market		
			Infrastructure Act		

## Abbreviations frequently used in our financial reports (continued)

KRT Key Risk Taker RBC RbM risk-based capital TBTF TCFD too big to fail Task Force on Climaterelated Financial Disclosures REIT real estate investment trust residential mortgage liquidity coverage ratio loss given default LIBOR London Interbank Offered Rate LIBOR London Interbank Offered Rate LICC limited liability company Inc Interbank Offered Rate RoCET1 return on CET1 capital TCC through the cycle right-tof-use relative total shareholder return on CET1 capital TCC USD US dollar right-tof-use relative total shareholder return on CET1 capital TCC USD US dollar right-tof-use return on CET1 capital TCC USD US dollar right-tof-use return on CET1 capital TCC USD US dollar right-tof-use return on CET1 capital TCC USD US dollar right-tof-use return on CET1 capital TCC USD US dollar right-tof-use return on CET1 capital TCC USD US dollar right-tof-use return on CET1 capital TCC USD US dollar right-tof-use return on CET1 capital TCC USD US dollar right-tof-use return on CET1 capital TCC USD US dollar right-tof-use return on CET1 capital TCC USD US dollar right-tof-use return on CET1 capital TCC USD US dollar right-tof-use value added tax value adde	K		R		Т	
L L liquidity-adjusted stress liquidity coverage ratio		Key Risk Taker		risk-based capital		too big to fail
LCR liquidity-adjusted stress LCR liquidity coverage ratio loss given default Ripidity coverage ratio loss given default Rate look of the loss given default Rate look of liquidity coverage ratio loss given default Rate look of liquidity coverage ratio loss given default Rate look of liquidity coverage ratio denominator large look lines of defense length lines deposite total shareholder return on CET1 capital right-of-use length lines of defense length lines of defense length lines of defense length lines and exclusion length lines length lines and exclusion length lines		•	RbM		TCFD	
LCR   liquidity coverage ratio   LGD   loss given default   London Interbank Offered Rate   RoCET1   return on CET1 capital   TIC   through the cycle   right-of-use   return on CET1 capital   TIC   through the cycle   right-of-use   return on CET1 capital   TIC   through the cycle   right-of-use   return on CET1 capital   TIC   through the cycle   right-of-use   return   TID   USD   US dollar   USD   US	L		REIT	real estate investment trust		related Financial Disclosures
LIGD loss given default Raiv risks not in VaR TLAC total loss-absorbing capacity return on CET1 capital TTC through the cycle right-of-use return on CET1 capital Capital Sharp right-of-use return on CET1 capital right-of-use return on CET1 capital risks as the content of the content capital capital and right-of-use return on CET1 capital right-	LAS	liquidity-adjusted stress	RMBS	residential mortgage-	TIBOR	Tokyo Interbank Offered
LIBOR Rate Rate ROU right-of-use relative total shareholder return on CET1 capital TTC through the cycle right-of-use relative total shareholder return return USD US dollar right-of-use return USD USD US dollar return return uson USD US dollar return return uson USD US dollar return return uson USD US dollar return value added tax societé anonyme sacrate approach or société anonyme sacrate approach or vAT value added tax société anonyme sacrate approach or vAT value added tax société anonyme sacrate approach or société anonyme sacrate approach or vAT value added tax société anonyme sacrate approach or vAT value added tax société anony	LCR	liquidity coverage ratio		backed securities		Rate
Rate limited liability company ITSR relative total shareholder return return USD USD US dollar return visk-weighted assets V USD US dollar return visk-weighted assets V V V V V V V V V V V V V V V V V V V						
LLC limited liability company in TSR relative total shareholder return r	LIBOR				TTC	through the cycle
LDD lines of defense return leverage ratio denominator large return large return leverage ratio denominator leverage ratio denominator large return large re				5		
LRD Long-Term Incentive Plan LTP Long-Term Incentive Plan LTV loan-to-value  S SA Standardized approach or société anonyme  M&A mergers and acquisitions MRT Material Risk Taker  NII net interest income NSFR net stable funding ratio NYSE New York Stock Exchange  OCA own credit adjustment of other comprehensive income income OCI Organisation for Economic Co-operation and Development Development OTC Over-the-counter OTC Over-the-counter DTC Durchased credit impaired PD D probability of default PT PT Dint in time PPA PCCP QCCP Qualifying central Counterparty Campail SACCCR Standardized approach or voar value added tax SAC SACCR Standardized approach or voar value added tax VAT Value-at-risk VAT Value added tax Value-at-risk VAT Value-at-risk Value-at-risk VAT Value-at-risk Value-at-risk VAT Value-			rTSR			
LTIP Long-Term Incentive Plan LTV loan-to-value S S			5		USD	US dollar
ITV loan-to-value SA standardized approach or VAR value added tax  M scociété anonyme  M&A mergers and acquisitions MRT Material Risk Taker  NI Material Risk Taker  SAR Special Administrative Region of the People's Republic of China  NSFR net stable funding ratio SDG Sustainable Development GOal  NYSE New York Stock Exchange  OCA own credit adjustment of the comprehensive income SFT securities financing transaction income  OCI Organisation for Economic Co-operation and Development  OTC over-the-counter SICR significant increase in credit risk  PCI purchased credit impaired PD probability of default PIT point in time SMF Senior Management FPA purchase price allocation PRAL profit or loss  NMB SWiss National Bank Singapore Interest Counterparty  SRM Specific risk standardized approach or VAT value added tax value added t		9	RWA	risk-weighted assets		
M       SA       standardized approach or société anonyme       VAT       value added tax         M&A       mergers and acquisitions       SA-CCR       standardized approach for counterparty credit risk       VAT       value added tax         MRT       Material Risk Taker       SAR       Special Administrative Region of the People's Republic of China       VAT       VAT         NII       net interest income NSFR       Republic of China       VAT       VAT         NYSE       New York Stock Exchange       SDG       Sustainable Development         NYSE       New York Stock Exchange       Goal       SEC       US Securities and Exchange         OCA       Own credit adjustment other comprehensive income       SFT       securities financing transaction       VAT       VAT         OCA       Own credit adjustment other comprehensive income       SEC       US Securities and Exchange       VAT       VAT         OCA       Own credit adjustment other comprehensive income       SEC       US Securities and Exchange       VAT       VAT       VAT         OCA       Own credit adjustment other comprehensive income       SEC       US Securities and Exchange       VAT       VAT </td <td></td> <td>=</td> <td>-</td> <td></td> <td>=</td> <td></td>		=	-		=	
MASA mergers and acquisitions MRT Material Risk Taker SAR Special Administrative Region of the People's Republic of China NSFR net stable funding ratio NYSE New York Stock Exchange SCC US Securities and Exchange OCA own credit adjustment income SFT securities financing transaction other comprehensive income OCCD Organisation for Economic Co-operation and Development OTC over-the-counter SICR Significant increase in credit make probability of default PT point in time SMF Senior Management FPA purchase price allocation PSL SRM Singapore Swap Offer Rate SCR SCR SCR SCR Singapore Swap Offer Rate SCR	LIV	ioan-to-value		-t		
M&A       mergers and acquisitions Material Risk Taker       SA-CCR counterparty credit risk       standardized approach for counterparty credit risk         N       SAR       Special Administrative Region of the People's         NII       net interest income       SAR       Special Administrative         NSFR       net stable funding ratio       SDG       Sustainable Development         NYSE       New York Stock Exchange       Goal         SEC       US Securities and Exchange         OCA       own credit adjustment       SFT       securities financing         OCI       other comprehensive income       SFT       securities financing         OCI       other comprehensive income       SI       sustainable investing or         OECD       Organisation for Economic Co-operation and Development       SIBOR       Singapore Interbank Offered Rate         OTC       Over-the-counter       SICR       significant increase in credit risk         P       SIX       SX SiX Swiss Exchange         PCI       purchased credit impaired probability of default PPA       SME       Small and medium-sized entities         PPA       purchase price allocation PRA       SMF       Senior Management         PPA       SVMS National Bank	B.A		SA		VAI	value added tax
MRT Material Risk Taker  SAR Special Administrative Region of the People's NII net interest income NSFR net stable funding ratio NYSE New York Stock Exchange OCA own credit adjustment SFT Securities financing OCI other comprehensive income income OCCO-operation and SIBOR Singapore Interbank Development OTC over-the-counter  PCI purchased credit impaired PD probability of default PIT point in time PPA purchase price allocation PSMF SINB SWISS Indianable PCCP QCCP Qualifying central COUNTER SRB Systemically relevant bank SRM SPECI interest SRB Systemically relevant bank SRM Specific risk measure		morgars and acquisitions	SA-CCB	-		
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QCCP Qualifying central and interest counterparty SRB systemically relevant bank specific risk measure		•				
QCCP Qualifying central and interest counterparty SRB systemically relevant bank SRM specific risk measure	Q					
SRM specific risk measure		Qualifying central		and interest		
· ·		counterparty				
SVaR stressed value-at-risk						
			SVaR	stressed value-at-risk		

This is a general list of the abbreviations frequently used in our financial reporting. Not all of the listed abbreviations may appear in this particular report.

## Information sources

#### **Reporting publications**

#### **Annual publications**

*UBS AG Annual Report*: Published in English, this report provides descriptions of: the UBS AG (consolidated) performance; the strategy and performance of the business divisions and Group Items; risk, treasury and capital management; corporate governance; and financial information, including the financial statements.

Compensation Report: This report discusses the compensation framework and provides information about compensation for the Board of Directors and the Group Executive Board members. It is available in English and German ("Vergütungsbericht") and represents a component of the UBS Group Annual Report.

Sustainability Report: Published in English, the Sustainability Report provides disclosures on environmental, social and governance topics related to the UBS Group. It also provides certain disclosures related to diversity, equity and inclusion.

#### **Quarterly publications**

Quarterly financial report: This report provides an update on performance and strategy (where applicable) for the respective quarter. It is available in English.

The annual and quarterly publications are available in .pdf and online formats at *ubs.com/investors*, under "Financial information." Starting with the Annual Report 2022, printed copies, in any language, of the aforementioned annual publications are no longer provided.

#### Other information

#### Website

The "Investor Relations" website at *ubs.com/investors* provides the following information about UBS: results-related news releases; financial information, including results-related filings with the US Securities and Exchange Commission (the SEC); information for shareholders, including UBS share price charts, as well as data and dividend information, and for bondholders; the corporate calendar; and presentations by management for investors and financial analysts. Information is available online in English, with some information also available in German.

#### Results presentations

Quarterly results presentations are webcast live. Recordings of most presentations can be downloaded from ubs.com/presentations.

#### Messaging service

Email alerts to news about UBS can be subscribed for under "UBS News Alert" at *ubs.com/global/en/investor-relations/contact/investor-services.html*. Messages are sent in English, German, French or Italian, with an option to select theme preferences for such alerts.

#### Form 20-F and other submissions to the US Securities and Exchange Commission

UBS files periodic reports with and submits other information to the SEC. Principal among these filings is the annual report on Form 20-F, filed pursuant to the US Securities Exchange Act of 1934. The filing of Form 20-F is structured as a wraparound document. Most sections of the filing can be satisfied by referring to the UBS AG Annual Report. However, there is a small amount of additional information in Form 20-F that is not presented elsewhere and is particularly targeted at readers in the US. Readers are encouraged to refer to this additional disclosure. Any document that filed with the SEC is available on the SEC's website: *sec.gov*. Refer to *ubs.com/investors* for more information.

Cautionary statement regarding forward-looking statements I This report contains statements that constitute "forward-looking statements," including but not limited to management's outlook for UBS's financial performance, statements relating to the anticipated effect of transactions and strategic initiatives on UBS's business and future development and goals or intentions to achieve climate, sustainability and other social objectives. While these forward-looking statements represent UBS's judgments, expectations and objectives concerning the matters described, a number of risks, uncertainties and other important factors could cause actual developments and results to differ materially from UBS's expectations. In particular, terrorist activity and conflicts in the Middle East, as well as the continuing Russia-Ukraine war, may have significant impacts on global markets, exacerbate global inflationary pressures, and slow global growth. In addition, the ongoing conflicts may continue to cause significant population displacement, and lead to shortages of vital commodities, including energy shortages and food insecurity outside the areas immediately involved in armed conflict. Governmental responses to the armed conflicts, including, with respect to the Russia-Ukraine war, coordinated successive sets of sanctions on Russia and Belarus, and Russian and Belarusian entities and nationals, and the uncertainty as to whether the ongoing conflicts will widen and intensify, may continue to have significant adverse effects on the market and macroeconomic conditions, including in ways that cannot be anticipated. UBS's acquisition of the Credit Suisse Group has materially changed our outlook and strategic direction and introduced new operational challenges. The integration of the Credit Suisse entities into the UBS structure is expected to take between three and five years and presents significant risks, including the risks that UBS Group AG may be unable to achieve the cost reductions and other benefits contemplated by the transaction. This creates significantly greater uncertainty about forward-looking statements. Other factors that may affect our performance and ability to achieve our plans, outlook and other objectives also include, but are not limited to: (i) the degree to which UBS is successful in the execution of its strategic plans, including its cost reduction and efficiency initiatives and its ability to manage its levels of risk-weighted assets (RWA) and leverage ratio denominator (LRD), liquidity coverage ratio and other financial resources, including changes in RWA assets and liabilities arising from higher market volatility and the size of the combined Group; (ii) the degree to which UBS is successful in implementing changes to its businesses to meet changing market, regulatory and other conditions, including as a result of the acquisition of the Credit Suisse Group; (iii) increased inflation and interest rate volatility in major markets; (iv) developments in the macroeconomic climate and in the markets in which UBS operates or to which it is exposed, including movements in securities prices or liquidity, credit spreads, currency exchange rates, deterioration or slow recovery in residential and commercial real estate markets, the effects of economic conditions, including increasing inflationary pressures, market developments, increasing geopolitical tensions, and changes to national trade policies on the financial position or creditworthiness of UBS's clients and counterparties, as well as on client sentiment and levels of activity; (v) changes in the availability of capital and funding, including any adverse changes in UBS's credit spreads and credit ratings of UBS, Credit Suisse, sovereign issuers, structured credit products or credit-related exposures, as well as availability and cost of funding to meet requirements for debt eligible for total loss-absorbing capacity (TLAC), in particular in light of the acquisition of the Credit Suisse Group; (vi) changes in central bank policies or the implementation of financial legislation and regulation in Switzerland, the US, the UK, the EU and other financial centers that have imposed, or resulted in, or may do so in the future, more stringent or entity-specific capital, TLAC, leverage ratio, net stable funding ratio, liquidity and funding requirements, heightened operational resilience requirements, incremental tax requirements, additional levies, limitations on permitted activities, constraints on remuneration, constraints on transfers of capital and liquidity and sharing of operational costs across the Group or other measures, and the effect these will or would have on UBS's business activities; (vii) UBS's ability to successfully implement resolvability and related regulatory requirements and the potential need to make further changes to the legal structure or booking model of UBS in response to legal and regulatory requirements and any additional requirements due to its acquisition of the Credit Suisse Group, or other developments; (viii) UBS's ability to maintain and improve its systems and controls for complying with sanctions in a timely manner and for the detection and prevention of money laundering to meet evolving regulatory requirements and expectations, in particular in current geopolitical turmoil; (ix) the uncertainty arising from domestic stresses in certain major economies; (x) changes in UBS's competitive position, including whether differences in regulatory capital and other requirements among the major financial centers adversely affect UBS's ability to compete in certain lines of business; (xi) changes in the standards of conduct applicable to our businesses that may result from new regulations or new enforcement of existing standards, including measures to impose new and enhanced duties when interacting with customers and in the execution and handling of customer transactions; (xii) the liability to which UBS may be exposed, or possible constraints or sanctions that regulatory authorities might impose on UBS, due to litigation, contractual claims and regulatory investigations, including the potential for disqualification from certain businesses, potentially large fines or monetary penalties, or the loss of licenses or privileges as a result of regulatory or other governmental sanctions, as well as the effect that litigation, regulatory and similar matters have on the operational risk component of our RWA, including as a result of its acquisition of the Credit Suisse Group, as well as the amount of capital available for return to shareholders; (xiii) the effects on UBS's business, in particular cross-border banking, of sanctions, tax or regulatory developments and of possible changes in UBS's policies and practices; (xiv) UBS's ability to retain and attract the employees necessary to generate revenues and to manage, support and control its businesses, which may be affected by competitive factors; (xv) changes in accounting or tax standards or policies, and determinations or interpretations affecting the recognition of gain or loss, the valuation of goodwill, the recognition of deferred tax assets and other matters; (xvi) UBS's ability to implement new technologies and business methods, including digital services and technologies, and ability to successfully compete with both existing and new financial service providers, some of which may not be regulated to the same extent; (xvii) limitations on the effectiveness of UBS's internal processes for risk management, risk control, measurement and modeling, and of financial models generally; (xviii) the occurrence of operational failures, such as fraud, misconduct, unauthorized trading, financial crime, cyberattacks, data leakage and systems failures, the risk of which is increased with cyberattack threats from both nation states and nonnation-state actors targeting financial institutions; (xix) restrictions on the ability of UBS Group AG and UBS AG to make payments or distributions, including due to restrictions on the ability of its subsidiaries to make loans or distributions, directly or indirectly, or, in the case of financial difficulties, due to the exercise by FINMA or the regulators of UBS's operations in other countries of their broad statutory powers in relation to protective measures, restructuring and liquidation proceedings; (xx) the degree to which changes in regulation, capital or legal structure, financial results or other factors may affect UBS's ability to maintain its stated capital return objective; (xxi) uncertainty over the scope of actions that may be required by UBS, governments and others for UBS to achieve goals relating to climate, environmental and social matters, as well as the evolving nature of underlying science and industry and the possibility of conflict between different governmental standards and regulatory regimes; (xxiii) the ability of UBS to access capital markets; (xxiii) the ability of UBS to successfully recover from a disaster or other business continuity problem due to a hurricane, flood, earthquake, terrorist attack, war, conflict (e.g., the Russia–Ukraine war), pandemic, security breach, cyberattack, power loss, telecommunications failure or other natural or man-made event, including the ability to function remotely during long-term disruptions such as the COVID-19 (coronavirus) pandemic; (xxiv) the level of success in the absorption of Credit Suisse, in the integration of the two groups and their businesses, and in the execution of the planned strategy regarding cost reduction and divestment of any non-core assets, the existing assets and liabilities of Credit Suisse, the level of resulting impairments and write-downs, the effect of the consummation of the integration on the operational results, share price and credit rating of UBS – delays, difficulties, or failure in closing the transaction may cause market disruption and challenges for UBS to maintain business, contractual and operational relationships; and (xxx) the effect that these or other factors or unanticipated events, including media reports and speculations, may have on our reputation and the additional consequences that this may have on our business and performance. The sequence in which the factors above are presented is not indicative of their likelihood of occurrence or the potential magnitude of their consequences. Our business and financial performance could be affected by other factors identified in our past and future filings and reports, including those filed with the US Securities and Exchange Commission (the SEC). More detailed information about those factors is set forth in documents furnished by UBS and filings made by UBS with the SEC, including the UBS Group AG and UBS AG Annual Reports on Form 20- F for the year ended 31 December 2023. UBS is not under any obligation to (and expressly disclaims any obligation to) update or alter its forward-looking statements, whether as a result of new information, future events, or otherwise.

**Rounding I** Numbers presented throughout this report may not add up precisely to the totals provided in the tables and text. Percentages and percent changes disclosed in text and tables are calculated on the basis of unrounded figures. Absolute changes between reporting periods disclosed in the text, which can be derived from numbers presented in related tables, are calculated on a rounded basis.

**Tables I** Within tables, blank fields generally indicate non-applicability or that presentation of any content would not be meaningful, or that information is not available as of the relevant date or for the relevant period. Zero values generally indicate that the respective figure is zero on an actual or rounded basis. Values that are zero on a rounded basis can be either negative or positive on an actual basis.

**Websites** I In this report, any website addresses are provided solely for information and are not intended to be active links. UBS is not incorporating the contents of any such websites into this report.

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# Articles of Association UBS AG

4 April 2023

The present text is a translation of the original German Articles of Association ("Statuten") which constitute the definitive text and are binding in law.

In these Articles of Association, references to the generic masculine equally apply to both sexes.

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## Section 1

# Name, registered office, business object and duration of the Corporation

#### Article 1

## Name, registered office

A corporation limited by shares under the name of UBS AG / UBS SA / UBS Inc. is established with a registered office in Zurich and Basel.

#### **Article 2**

#### **Business object**

- <sup>1</sup> The purpose of the Corporation is the operation of a bank. Its scope of operations extends to all types of banking, financial, advisory, trading and service activities in Switzerland and abroad.
- <sup>2</sup> The Corporation may establish branches and representative offices as well as banks, finance companies and other enterprises of any kind in Switzerland and abroad, hold
- equity interests in these companies, and conduct their management.
- <sup>3</sup> The Corporation is authorized to acquire, mortgage and sell real estate and building rights in Switzerland and abroad.
- <sup>4</sup> The Corporation may borrow and invest money on the capital markets.
- <sup>5</sup> The Corporation is part of the group of companies controlled by the group parent company UBS Group AG. It may promote the interests of the group parent company or other group companies. It may provide loans, guarantees and other kinds of financing and security for group companies.

#### Article 3

#### **Duration**

The duration of the Corporation shall not be limited by time.

## Section 2 Share capital

### Article 4

### Share capital

The share capital of the Corporation is USD 385,840,846.60, divided into 3,858,408,466 registered shares with a par value of USD 0.10 each. The share capital is fully paid up.

### Article 4a

# Conditional capital

The share capital may be increased in an amount not to exceed USD 38,000,000 by the issuance of up to 380,000,000 fully paid registered shares with a nominal value of USD 0.10 each through the voluntary or mandatory exercise of conversion rights and / or warrants granted in connection with the issuance of bonds or similar financial instruments by the Corporation or one of its group companies on national or international capital markets. The preemptive rights of the shareholders shall be excluded. The then current owners of conversion rights and / or warrants shall be entitled to subscribe for the new shares. The conditions of the conversion rights and / or warrants shall be determined by the Board of Directors. The acquisition of shares through voluntary or mandatory exercise of conversion rights and / or warrants, as well as each subsequent transfer of the shares, shall be subject to the registration requirements set forth in Article 5 of the Articles of Association.

In connection with the issuance of convertible bonds or bonds with warrants or similar financial instruments, the Board of Directors shall be authorized to restrict or exclude the advance subscription rights of shareholders if such instruments are issued (i) on national or international capital markets or (ii) to one or more financial investors. If the advance subscription rights are restricted or excluded by the Board of Directors, the following shall apply: the issuance of such instrument shall be made at prevailing market conditions, and the new shares shall be issued pursuant to the relevant conditions of that financial instrument. Conversion rights may be exercised during a maximum 10year period, and warrants may be exercised during a maximum 7-year period, in each case from the date of the respective issuance. The issuance of the new shares upon voluntary or mandatory exercise of conversion rights and / or warrants shall be made at conditions taking into account the market price of the shares and / or comparable instruments with a market price at the time of the issuance of the relevant financial instrument.

### Article 5

# Share register and nominees

- <sup>1</sup> A share register is maintained for the registered shares, in which owners' and usufructuaries' family and given names or the name of legal entities are entered, with their complete address and nationality or, in case of legal entities with their registered office. Shares held in joint accounts may be registered jointly with voting rights if all registered owners of the shares provide the declaration requested in paragraph 3 below.
- <sup>2</sup> If the mailing address or registered office of a shareholder changes, the new address must be communicated to the Corporation. As long as this has not been done, all written communications will be sent to the address entered in the share register, this being valid according to the requirements of the law.
- <sup>3</sup> Those who acquire registered shares shall, upon request, be entered in the share register as shareholders with voting rights if they expressly declare that they acquired these registered shares in their own names and for their own account. If the party acquiring the shares is not prepared to provide such a declaration, the Board of Directors may refuse to allow the shares to be entered with voting rights.
- <sup>4</sup> The restriction on registration under paragraph 3 above also applies to shares acquired by the exercise of preemptive, option or conversion rights.
- <sup>5</sup> The Board of Directors is authorized, after hearing the position of the registered shareholder or nominee affected, to strike the entry of a shareholder with voting rights from the share register retroactively with effect to the date of the entry, if it was obtained under false pretences. The party affected must be informed of the action immediately. <sup>6</sup> The Board of Directors formulates general principles relating to the registration of fiduciaries / nominees and issues the necessary regulations to ensure compliance with the above provisions.

### Article 6

### Form of shares

- <sup>1</sup> Registered shares of the Corporation will be, subject to paragraph 2, in the form of uncertificated securities (in the sense of the Swiss Code of Obligations) and intermediaryheld securities (in the sense of the Intermediary-Held Securities Act).
- <sup>2</sup> Following his registration in the share register, the shareholder may request the Corporation to issue a written statement in respect of his registered shares at any time; however, he has no entitlement to the printing and delivery of share certificates. In contrast, the Corporation may print and deliver share certificates for registered shares (single certificates, certificates representing multiples of shares or global certificates) at any time. It may withdraw registered shares issued as intermediary-held securities from the respective custody system. With the consent of the shareholder, the Corporation may cancel issued certificates which are returned to it without replacement.

### Article 7

### **Exercise of rights**

- <sup>1</sup> The Corporation recognizes only one representative per share.
- <sup>2</sup> Voting rights and associated rights may only be exercised in relation to the Corporation by a party entered in the share register as having the right to vote.

## Section 3 Corporate bodies

### A. General Meeting of Shareholders

### Article 8

### **Authority**

The General Meeting of Shareholders is the Corporation's supreme corporate body.

### Article 9

### Types of General Meetings a. Annual General Meeting

The Annual General Meeting takes place every year within six months after the close of the financial year. The annual report and the report of the Auditors must be available to shareholders at least twenty days before the meeting.

### Article 10

# b. ExtraordinaryGeneral Meeting

<sup>1</sup> Extraordinary General Meetings are convened whenever the Board of Directors or the Auditors consider it necessary. <sup>2</sup> Such a meeting must also be convened if demanded by a resolution of the shareholders in General Meeting or by a written request from one or more shareholders, representing together at least one tenth of the share capital, specifying the items to be included on the agenda and the proposals to be put forward.

### Article 10a

### Venue

- <sup>1</sup> The Board of Directors may also provide that shareholders who are not present at the venue(s) of the General Meeting may exercise their rights by electronic means.
- <sup>2</sup> Alternatively, the Board of Directors may provide that the General Meeting shall be held by electronic means without a venue.

### Article 11

### Convening

- <sup>1</sup> The General Meeting shall be called by the Board of Directors, or if need be by the Statutory Auditors, at least twenty days before the meeting is to take place in accordance with Article 35 of these Articles of Association.
- <sup>2</sup> The notice to convene the General Meeting shall specify
  - a) the date, beginning, mode and venue;
  - b) the agenda items;
  - c) the motions of the Board of Directors;
  - d) the motions from shareholders together with a brief statement of the reasons, if any;
  - e) the name and address of the independent proxy, if any; and
  - f) in the event of elections, the names of the proposed candidates.
- <sup>3</sup> However, unless there is any opposition, the owners of all shares or their duly authorized representatives are empowered to hold a General Meeting without observance of the said formalities of notice. As long as the owners of all shares participate in person or by proxy, such meeting may discuss or validly pass resolutions on all matters within the powers of a General Meeting.
- <sup>4</sup> A General Meeting may also be held without observance of the said formalities of notice if the resolutions are adopted in writing or electronically, unless a shareholder or his representative request an oral deliberation.

### Article 12

# Placing of items on the agenda

- <sup>1</sup> Shareholders representing shares with an aggregate par value of at least USD 62,500 may submit requests for items to be placed on the agenda for consideration by the General Meeting or that motions relating to agenda items be included in the notice to convene the General Meeting. Their requests for agenda items or motions shall be submitted in writing within the deadline published by the Corporation and specify the requests for agenda items or motions to be put forward.
- <sup>2</sup> No resolutions may be passed concerning items which have not been duly placed on the agenda, except on a motion put forward at the General Meeting to call an Extraordinary General Meeting or a motion for a special investigation to be carried out.

### Article 13

# Chairmanship, tellers, minutes

<sup>1</sup> The Chairman of the Board of Directors or, if the Chairman cannot attend, a Vice Chairman or another member designated by the Board of Directors, shall preside over the General Meeting and appoint a secretary and the necessary tellers.

<sup>2</sup> Minutes are kept of the proceedings and must be signed by the presiding chair of the meeting and the secretary.

### Article 14

# Shareholder proxies

- <sup>1</sup> The Board of Directors issues procedural rules for participation and representation of shareholders at the General Meeting.
- <sup>2</sup> A shareholder may be represented at the General Meeting by his legal representative or, under a written power of attorney, by another person who need not be a shareholder.
- <sup>3</sup> The presiding chair of the meeting decides whether to recognize the power of attorney.

### Article 15

### **Voting right**

Each share conveys the right to cast one vote.

### Article 16

# Resolutions, elections

<sup>1</sup> Resolutions and elections are decided at the General Meeting by a majority of the votes represented, excluding blank and invalid ballots, subject to these Articles of Association and the compulsory provisions of the law.

<sup>2</sup> A resolution to change article 18 of the Articles of Association, to remove one fourth or more of the members of the Board of Directors, or to delete or modify this article 16 paragraph 2 of the Articles of Association, must receive at least two thirds of the votes represented.

<sup>3</sup> The presiding chair of the meeting shall decide how voting on resolutions and elections are conducted.

### Article 17

### **Powers**

The General Meeting has the following powers:

- a) to establish and amend the Articles of Association;
- b) to elect the members and the Chairman of the Board of Directors;
- c) to elect the Auditors;

- d) to approve the annual report and to decide upon the appropriation of the net profit shown in the balance sheet;
- e) to determine interim dividends and approve the interim financial statements required for this purpose;
- f) to take the decision on the repayment of the statutory capital reserve;
- g) to give the members of the Board of Directors and of the Executive Board a discharge;
- h) to de-list equity securities of the Corporation; and
- i) to take decisions on all matters reserved to the General Meeting by law or by the Articles of Association, or which are placed before it by the Board of Directors.

### B. Board of Directors

### Article 18

### Number of Board members

The Board of Directors shall consist of at least five and no more than twelve members.

### Article 19

### Term of office

<sup>1</sup> The members of the Board of Directors and its Chairman are individually elected for a term of office which ends with the completion of the next Annual General Meeting.
<sup>2</sup> Members whose term of office has expired are immediately eligible for re-election.

### Article 20

### Organization

- <sup>1</sup> Except for the election of the Chairman by the General Meeting, the Board of Directors shall constitute itself. It shall elect at least one Vice Chairman from among its members.
- <sup>2</sup> The Board of Directors shall appoint its secretary, who need not be a member of the Board.
- <sup>3</sup> If the office of the Chairman is vacant, the Board of Directors shall appoint a new Chairman from among its members for the remaining term of office.

### Article 21

# Convening, participation

- <sup>1</sup> The Chairman shall convene the Board of Directors as often as business requires.
- <sup>2</sup> The Board of Directors shall also be convened if one of its members or the President of the Executive Board submits a written request (including by e-mail or other electronic means) to the Chairman to hold such a meeting.

### Article 22

### **Decisions**

- <sup>1</sup> Decisions of the Board of Directors are taken by a majority of the votes present. In case of a tie, the presiding chair of the meeting shall cast the deciding vote.
- <sup>2</sup> The number of members who must be present to constitute a quorum, and the modalities for the passing of resolutions shall be laid down by the Board of Directors in the Organization Regulations. No such quorum is required for decisions implementing, confirming and amending resolutions relating to changes to capital and changes in currency of the share capital.

### Article 23

### **Duties, powers**

<sup>1</sup> The Board of Directors has ultimate responsibility for the management of the Corporation and the supervision and control of its executive management.

<sup>2</sup> The Board of Directors may also take decisions on all matters which are not expressly reserved to the General Meeting or to another corporate body by law or by the Articles of Association.

### Article 24

# Ultimate responsibility for the management of the Corporation

The ultimate responsibility for the management of the Corporation comprises in particular:

- a) preparing of and deciding on proposals to be placed before the General Meeting;
- b) issuing the regulations necessary for the conduct of business and for the delineation of authority, in particular the Organization Regulations and the regulations governing the Internal Audit;
- c) laying down the principles for the accounting, financial and risk controls and financial planning, in particular the allocation of equity resources and risk capital for business operations;
- d) decisions on the strategy and other matters reserved to the Board of Directors under the Organization Regulations;
- e) appointment and removal of (i) the President of the Executive Board, (ii) such other members of the Executive Board as the Organization Regulations require to be appointed by the Board of Directors, and (iii) the Internal Audit Executive; and
- f) decisions on increasing or decreasing the share capital, to the extent this falls within the authority of the Board of Directors, on the report concerning an increase in capital and on the ascertainment of changes to capital and the corresponding amendments to the Articles of Association.

### Article 25

# Supervision, control

Supervision and control of the business management comprises in particular the following:

- a) review and approval of the annual report;
- b) acceptance of regular reports covering the course of business and the position of the Corporation, the status and development of country, counterparty and market risks and the extent to which equity and risk capital are tied up due to business operations; and
- c) consideration of reports prepared by the Auditors.

### Article 26

### Delegation, Organization Regulations

The Board of Directors may delegate part of its authority to one or more of its members or to third parties subject to articles 24 and 25 of the Articles of Association. The allocation of authority and functions shall be defined in the Organization Regulations.

### Article 27

### **Signatures**

The due and valid representation of the Corporation by members of the Board of Directors or further persons shall be determined in the Organization Regulations and in a special directive.

### Article 28

### Compensation

The Board of Directors shall determine the compensation of its members.

### C. Executive Board

### Article 29

### **Organization**

The Executive Board is composed of the President of the Executive Board and at least three other members as further set forth in the Organization Regulations.

### Article 30

# Functions, authorities

<sup>1</sup> The Executive Board, acting under the leadership of the President of the Executive Board, is responsible for the management of the Corporation. It is the supreme executive body as defined by the Swiss Federal Law on Banks and Savings Banks. It implements the strategy decided by the Board of Directors and ensures the execution of the decisions of the Board of Directors. It is responsible for the Corporation's results.

<sup>2</sup> The responsibilities and authorities of the Executive Board and other management units designated by the Board of Directors are set forth in the Organization Regulations.

### D. Auditors

# Term of office, authority and duties

### Article 31

- <sup>1</sup> An auditing company subject to governmental supervision as required by law is to be appointed as Auditors.
- <sup>2</sup> The shareholders in the General Meeting shall elect the Auditors for a term of office of one year. The rights and duties of the Auditors are determined by the provisions of the law.
- <sup>3</sup> The General Meeting may appoint Special Auditors for a term of three years who provide the attestations required for capital increases.

### Section 4

# Financial statements and appropriation of profit, reserves

### Article 32

### Financial year

The statutory financial statements are closed on 31 December of each year.

### Article 33

# Appropriation of disposable profit

<sup>1</sup> At least 5% of the profit for the year after set-off of balance sheet losses, if any, is allocated to the statutory reserve from retained earnings until such time as said reserve, together with the statutory capital reserve, amounts to 50% of the share capital.

<sup>2</sup> The remaining profit is, subject to the provisions of the Swiss Code of Obligations and of the Federal Banking Act, at the disposal of the shareholders in General Meeting who may also use it for the formation of free or special reserves.

### Article 34

### Reserves

The General Meeting determines the utilization of the statutory capital reserve in accordance with the legal provisions acting upon the recommendations of the Board of Directors.

## Section 5 Notices and jurisdiction

### Article 35

# Official means of publication

- <sup>1</sup> The official means of publication of the Corporation shall be the Swiss Official Gazette of Commerce.
- <sup>2</sup> Notices by the Corporation to the shareholders may, at the choice of the Board of Directors, be validly given by publication in the Swiss Official Gazette of Commerce or, in a form that allows proof by text. The Board of Directors may designate further means of publications as well.

### Article 36

### Jurisdiction

Jurisdiction for any disputes arising out of the corporate relationship shall be at both the registered offices of the Corporation, with the exception of legal actions in connection with the contestation or nullity of decisions of the General Meeting or the nullity of Board of Directors' decisions, where jurisdiction shall exclusively be with the courts of Zurich.

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# Organization Regulations

of UBS AG

Valid as of 1 March 2024

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# Abbreviations and definitions

Whenever the context may require, any pronoun shall include the corresponding masculine, feminine and neuter forms.

AC	Audit Committee
AGM	Annual General Meeting of the shareholders of UBS AG
ALCO	Asset and Liability Committee
AoA	Articles of Association of UBS AG
BD(s)	Business division(s), organizational units of the business as set out in the UBS Group AG Organization Regulations
Board/BoD	Board of Directors of UBS AG; non-executive Board members who do not perform management functions within UBS AG
<b>Business Regulations</b>	Regulations issued by the Executive Board
CCGO	Chief Compliance and Governance Officer of UBS AG
CFO	Chief Financial Officer of UBS AG
Chairman	Chairman of the Board
Chairpersons	Board members who chair the Committees
СО	Swiss Code of Obligations
Committees	Committees of the Board as set out in section 2.1
Committees' charter	Charter of the Committees of the Board setting out the objectives, composition, authorities and responsibilities of the permanent Committees
<b>Company Secretary</b>	Company Secretary of the Board
CompCo	Compensation Committee
Corporate Bodies	The Board and bodies of UBS AG exercising delegated Board functions, such as the Committees, the EB, committees established by the EB, IA of UBS AG or other bodies mentioned herein
сото	Chief Operations and Technology Officer of UBS AG
CRO	Chief Risk Officer of UBS AG
Divisional President/DP	Divisional Presidents are the heads of the respective BDs, as set out in the UBS Group AG Organization Regulations
EGM	Extraordinary General Meeting of the shareholders of UBS AG
Executive Board / EB	Executive Board of UBS AG
EB Committees	Committees of the EB as set out in section 26
Financial statements	Quarterly and annual financial statements of UBS AG
FINMA	Swiss Financial Market Supervisory Authority
FRC	Finance and Risk Committee
Functional Head / FH	CFO, COTO, CRO, GC, CCGO, Head HR&CS and IO
GC	General Counsel of UBS AG
GF	Group Functions, which comprises the functions as set out in the UBS Group AG Organization Regulations
Group CEO	Group Chief Executive Officer
Group IA	Internal Audit of the Group
Head HR&CS	Head Human Resources & Corporate Services of UBS AG
HR	Human Resources
IA	Internal Audit of UBS AG under the oversight of the IA Executive UBS AG
IA Executive UBS AG	IA Executive of UBS AG
ICAAP	Internal Capital Adequacy Assessment Process
Ю	Integration Officer of UBS AG
ORs	Organization Regulations of UBS AG including annexes
	2

Other UBS Entities	Entities of the Group which are neither Significant Group Entities nor Significant Regional Entities
PRA	Prudential Regulation Authority (Bank of England)
President of the EB	President of the Executive Board of UBS AG
RC	Risk Committee
Regional President / RP	Regional Presidents as set out in the UBS Group AG Organization Regulations and in the RP terms or reference
Risk Authorities	Internal document setting out the high-level delegated authorities for risk management and control for UBS AG
Shareholders	Shareholders of UBS AG
Significant Branches	Branches of subsidiaries of the Group subject to enhanced standards of corporate governance as designated by the Group CEO
Significant Group Entities / SGEs	Significant subsidiaries of the Group subject to enhanced standards of corporate governance as designated by the UBS Group AG Governance and Nominating Committee
Significant Regional Entities / SREs	Subsidiaries of the Group subject to enhanced standards of corporate governance as designated by the Group CEO
sox	Sarbanes–Oxley Act
Stakeholders	Persons, groups or organizations that have a direct or indirect stake in UBS AG and may, as a result, affect or be affected by UBS AG's actions, objectives and policies
UBS/Group	UBS Group AG and its subsidiaries; the UBS group of companies
UBS AG Entities	All subsidiaries (excluding Special Purpose Entities) which are either wholly or majority, directly or indirectly owned or otherwise controlled by UBS AG and which are intended to be held indefinitely
UBS Group AG	UBS Group AG; the listed parent company of the Group
Vice Chairman	The Vice Chairman of the Board as set out in section 11

### Introduction

### 1 Basis and purpose

#### 1.1 Basis

These ORs are enacted by the Board of UBS AG pursuant to article 716b of the CO and articles 24 and 26 of the AoA.

### 1.2 Purpose

The purpose of these ORs is:

- (i) to implement and supplement requirements contained in applicable laws, regulations and the AoA having regard to pertinent codes of best practice; and
- (ii) to define the functions, responsibilities and authorities of UBS AG's Corporate Bodies and their members.

Mandatory provisions of applicable laws, rules and regulations or rules contained in the AoA take precedence over the ORs.

### 2 Organization of UBS AG

### 2.1 Organization in general

UBS AG and its business are organized as follows:

- (i) The Board, under the leadership of the Chairman, has the ultimate responsibility for the direction, supervision and control of UBS AG, and performs the other duties described herein or as prescribed by mandatory provisions of law. The Board is responsible for deciding all matters and taking business decisions where such decisions exceed the authority delegated by the Board to the Committees, the
- EB or the President of the EB.

  (ii) As provided by mandatory law, rules and regulations, the AoA or these ORs, the executive management of UBS AG is delegated to the EB under the leadership of the
- executive management of UBS AG is delegated to the EB under the leadership of the President of the EB. Under consideration of applicable regulatory requirements, the President of the Executive Board of UBS Switzerland AG may not be a member of the UBS AG EB.
- (iii) The following permanent Committees assist the Board in the performance of its responsibilities:
  - (a) the Audit Committee;
  - (b) the Compensation Committee; and
  - (c) the Risk Committee.
- (iv) The following permanent EB Committees assist the EB in the performance of its responsibilities:
  - (a) the Asset and Liability Committee; and
  - (b) the Finance and Risk Committee.

### 2.2 Group steering

UBS Group AG, as the listed parent company of the Group, controls directly or indirectly all subsidiaries, including UBS AG, and leads the Group by setting a harmonized strategic direction. UBS Group AG further sets principles and organizational structures to enable efficient and coordinated management of the Group and control of its subsidiaries. Notwithstanding this, the legal independence of UBS AG, including formal decision-making by the Corporate Bodies as required under applicable constitutional documents, and the provisions of applicable local laws, rules and regulations relating to UBS AG, must be observed to the extent legally required.

### 2.3 UBS AG as a subsidiary of UBS Group AG

UBS AG is a subsidiary of UBS Group AG. As such it may fulfill strategic, financial and management functions not only for itself, but also with respect to the Group. In view of this function, the Corporate Bodies of UBS AG may have to resolve on matters that pertain both to UBS AG and the Group. To this end. UBS AG:

- (i) develops and implements its business strategies and business plans, as well as appropriate risk management and internal control frameworks, in accordance with strategies, targets and policies defined by the Group;
- (ii) manages its subsidiaries in accordance with the UBS entity framework. UBS AG issues the necessary regulations, policies and instructions, ensures logistical support, maintains commensurate control functions and allocates the authority necessary for an orderly and efficient conduct of the business of its subsidiaries; and
- (iii) works closely with the BDs and the GF of the Group in order to identify and benefit from synergies and to realize earnings potential and cost savings.

### 2.4 Banking business of UBS AG

The banking business and support operations of UBS AG are performed by itself and its direct or indirect subsidiaries. Each subsidiary has its own constitutional documents, which must be in line with applicable local laws, rules and regulations.

### 2.5 Transparency, collaboration and reporting within the Group

Subject to and in accordance with applicable local laws, rules and regulations, Corporate Bodies are bound to ensure transparency and collaboration within the Group and may have additional responsibilities and reporting lines within the Group in addition to their reporting lines within UBS AG. Any resulting conflicts of interest shall be governed by the provisions of the Organization Regulations (or similar constitutional documents) of the companies concerned.

### **Board of Directors**

### 3 Membership

### 3.1 Election proposal

In consultation with the Chairman, the Board proposes candidates for election by the shareholders

#### 3.2 Independence of Board members

The Board's proposal for election ensures that one-third of the Board members will be independent. For this purpose, independence is determined in accordance with FINMA circular 2017/1 "Corporate governance – banks." Furthermore, there must be a sufficient number of Board members who meet the independence criteria for the Committee members set out in the annex "Charter of the Committees of the Board." The Chairman does not need to be independent.

#### 3.3 Notification duty

Each Board member must notify the Chairman immediately if circumstances change in a manner that may affect their independence.

### 3.4 Expectations of the Board members

The Board, as a group, must have the necessary qualifications, skills and diversity to perform all Board duties. In particular, the Board must together possess financial literacy, experience in banking and risk management, as well as international experience, including experience of international financial matters, and knowledge of the duties of directors.

Candidates for election to the Board shall be considered in light of their personal experience and abilities, including any specialist knowledge or skills required to fulfill specific Board functions as outlined herein, as well as their ability to contribute to building a complementary and effective Board.

### 4 Constitution

### 4.1 Number of members

The Board consists of five to twelve Board members as per article 18 of the AoA.

#### 4.2 Term of office

The term of office for each Board member is one year, pursuant to article 19 of the AoA. Subject to election by shareholders, Board members are normally expected to serve for a minimum of three years. No Board member may serve for more than 10 consecutive terms of office, in exceptional circumstances the Board can extend this limit.

#### 4.3 Constitutional meeting

The Board constitutes itself at its first meeting following the AGM. In this meeting

- (i) the Vice Chairmen;
- (ii) the Chairpersons of the Committees; and
- (iii) the Committee members are appointed by the Board.

The Board may remove these Board members from their special functions at any time.

### 5 Responsibilities and authorities

#### 5.1 In general

In addition to mandatory provisions of law, rules, regulations and the AoA, the Board has the responsibilities and authorities set out in these ORs.

### 5.2 Supervision

The Board is responsible for the overall direction, supervision and control of UBS AG and its management, as well as for supervising compliance with applicable laws, rules and regulations.

### 5.3 Ultimate responsibility

The Board has ultimate responsibility for the success of UBS AG and for delivering sustainable shareholder value within a framework of prudent and effective controls and subject to the parameters set by the Group. It decides on UBS AG's strategy and the necessary financial and human resources upon recommendation of the President of the EB and sets UBS AG's values and standards to ensure that its obligations to shareholders and other stakeholders are met.

### 5.4 Strategy and financial success

Taking into account the Group's overall strategy and interests, the Board's ultimate responsibility for strategy and financial success includes in particular:

- (i) deciding the strategy of UBS AG upon recommendation of the President of the EB, taking into account the proposals and alternatives presented;
- (ii) approving the risk management and control framework of UBS AG, including the overall risk appetite;
- (iii) deciding whether UBS AG should enter substantial new business areas or exit an existing business area, in cases where the entry or exit is not covered by the current approved strategic framework; and
- (iv) approving major acquisitions, mergers, disposals or capital expenditure, including decisions on major changes to the company structure, major changes in its Significant Group Entities, and other projects of strategic importance for UBS AG.

#### 5.5 Finance

With respect to the ultimate responsibility for the financial situation, the Board has in particular the following duties:

- approving the applicable accounting standards and financial control frameworks, as well as significant changes to them;
- (ii) annually reviewing and approving the three-year strategic plan and one-year operating plan of UBS AG, including the financial objectives and a capital allocation framework, as well as the capital and liquidity plans;
- (iii) annually reviewing and approving of the ICAAP of UBS AG;
- (iv) reviewing and approving the annual financial statements of UBS AG and, where applicable, the guarterly financial statements; and
- (v) reviewing and approving the consolidated annual and quarterly financial statements, and the consolidated annual report of UBS AG prior to its submission to the AGM.

### 5.6 Organization

The Board is responsible for establishing an appropriate business organization, including in particular:

- (i) approving and regularly reviewing the governance principles and the management structures as set out herein;
- (ii) appointing and removing EB members, the Company Secretary and the IA Executive UBS AG and reviewing their performance;
- (iii) overseeing the effectiveness of the business organization and management information system implemented by the EB;
- (iv) supervising the internal control system;
- (v) approving the charter for IA and monitoring IA; and
- (vi) approving the compensation and benefits principles of UBS AG.

### 5.7 Meetings of shareholders

The Board has a duty to convene AGMs and EGMs, prepare the agenda for such meetings and implement resolutions adopted by the shareholders.

### 5.8 Loss of equity

In case of financial difficulties or insufficient equity, the Board must undertake all steps required under applicable law.

### 5.9 Delegation

Within the limits of applicable law, regulations and the AoA, the Board may delegate part of its responsibilities and authorities to:

- (i) the Committees;
- (ii) individual Board members;
- (iii) the EB; and
- (iv) individual EB members.

### 5.10 Advice from third parties

The Board and the Committees may, in performing their duties, take advice from third parties.

### 6 Meetings

### 6.1 Number of meetings

The Board meets as often as business requires, and at least six times a year.

### 6.2 Convening meetings

Board meetings are convened by the Chairman. Upon written request, including reasons, of any Board member or the President of the EB addressed to the Chairman, he shall convene a Board meeting in accordance with sections 6.3 and 6.4.

### 6.3 Invitation

The Chairman or, if absent, one of the Vice Chairmen invites the Board members to the Board meetings in writing (including by e-mail or other electronic means).

### 6.4 Agenda and notice period

The invitation contains the agenda and must be sent to Board members and other attendees as a rule at least five business days prior to the date of the Board meeting together with all necessary supporting material. In exceptional cases, supporting material may be sent later to allow the Board to receive the latest available information. This applies in particular to updates on financial data.

In time-critical cases (as determined at the Chairman's discretion), a Board meeting may be held and the supporting material may be sent at shorter notice.

#### 6.5 Chair

Board meetings are chaired by the Chairman or, if absent, by one of the Vice Chairman or, in their absence, by another Board member selected by the Board members present.

#### 6.6 Attendees

The Board may hold Board meetings as determined by the Chairman:

- (i) with or without the participation of the President of the EB and all or some of the other EB members; and
- (ii) with the participation of other persons, who are invited to attend.

#### 6.7 Meeting format

Board meetings may be held in person or by audio or video conference.

### 6.8 Minutes of Board meetings

The minutes (including its annexes as presented to the Board) contain all Board resolutions made and reflect in a general manner the considerations which led to the decisions made. Dissenting opinions of and votes cast by Board members must also be reflected in the minutes.

### 6.9 Form of minutes, inspection rights

The minutes must be signed by the Board member chairing the meeting (in accordance with section 6.5) and the keeper of the minutes and must be made available for review prior to the next Board meeting at which these shall be approved. Board members are entitled to examine the minutes of any Board meeting at any time.

### 7 Resolutions

### 7.1 Quorum of attendance

The presence of either the Chairman or one of the Vice Chairmen as well as of the majority of the Board members is required to pass valid Board resolutions. If this quorum is not present, the Chairman can seek a circular resolution of the Board (see section 7.4). No such quorum is required for decisions confirming, implementing and amending resolutions relating to capital increases (article 22(2) of the AoA).

### 7.2 Quorum of resolutions, decisive vote

Board resolutions are passed by an absolute majority of the votes of Board members present; in case of a tie, the Chairman's vote is decisive (article 22(1) of the AoA).

### 7.3 Resolutions on items not on agenda

If time-critical matters arise after a Board meeting has already been convened, such matters may be discussed at the Board meeting and Board resolutions made if a majority of all Board members present agree. If feasible, a revised agenda will be sent to all Board members prior to the meeting. Absent Board members are informed of the resolution made after the Board meeting.

### 7.4 Circular resolutions

Board resolutions may be passed in writing (including by e-mail or other electronic means) if no material discussions are required, the matter is time-critical or has been prediscussed. A proposal for a circular resolution must be communicated to all Board members and is only deemed to have passed if:

- (i) more than two-thirds of all Board members cast a vote or give written notice that they abstain: and
- (ii) an absolute majority of all Board members participating in this circular resolution approve the proposed resolution; and
- (iii) no Board member requests a Board meeting in relation to the subject matter of the proposed Board resolution within three business days of receiving notice of the proposal.

### 7.5 Effect of circular resolutions

A circular resolution is as binding as a Board resolution adopted at a Board meeting and must be recorded under a separate heading in the Board minutes prepared pursuant to sections 6.8 and 6.9 for the next Board meeting.

### 8 Information rights

### 8.1 Right of information

Board members have the right to access all information concerning the business and the affairs of UBS AG as may be necessary or helpful for them to fulfill their duties as Board members

### 8.2 Request for information during Board meetings

At Board meetings, any Board member is entitled to request information on any matter relating to UBS AG regardless of the agenda, and the Board or EB members present must provide such information to the best of their knowledge.

### 8.3 Request for information outside of Board meetings

Should a Board member require information or wish to review documents outside a Board meeting, such request must be routed through the Company Secretary and addressed to the Chairman.

# 8.4 Request for information outside of Committee meetings

Should a Chairperson require information or wish to review documents outside a Committee meeting, they can, within the range of responsibilities of their Committee, address their request to a member of the EB directly, to the IA or to external auditors. The Chairman and the President of the EB must be informed as appropriate.

### 9 Self-assessment

### 9.1 Board self-assessment

At least annually, the Board reviews its own performance, as well as the performance of each of the Committees. Such a review seeks to determine whether the Board and the Committees function effectively and efficiently.

### 9.2 Performance evaluation

In light of the annual performance evaluation, the Board must consider whether any changes should be made to the membership of the Board or Committees.

### 10 Chairman

#### 10.1 Election

The Board proposes the Chairman who in turn is elected by shareholders at the general meeting.

### 10.2 In general

The Chairman leads the Board. He further coordinates the tasks within the Board and, in particular, calls Board meetings and sets their agenda.

### 10.3 Shareholders' meetings

In accordance with article 13 of the AoA the Chairman presides over the AGMs and FGMs

### 10.4 Coordination of Committee work and Chairman's attendance

The Chairman coordinates, together with the Chairpersons, the work of all Committees. In consultation with the relevant Chairperson, the Chairman or one of the Vice Chairman may attend meetings of the Committees.

#### 10.5 External communication

The Chairman, together with the President of the EB, undertakes responsibility for UBS AG's reputation, is further closely involved in and responsible for ensuring effective communication with shareholders and stakeholders, including government officials, regulators and public organizations.

The Chairman is the primary representative of the Board and, together with the President of the EB, of UBS AG with the media.

### 10.6 Relationship with Board and EB

The Chairman establishes and maintains close and constructive working relationships with and promotes open communication between the Board and the President of the EB and the other EB members, providing advice and support to them while respecting that executive management responsibility is delegated to the EB. Where appropriate, the Chairman ensures effective challenge of the President of the EB and the EB by the Board and the Committees and fosters ongoing and effective monitoring of performance.

### 10.7 Further responsibilities and authorities

Further details of the responsibilities and authorities delegated to the Chairman are set out in the annexes to these ORs.

#### 11 Vice Chairmen

### **Appointment and** authorities

The Board appoints one or more Vice Chairmen. A Vice Chairman is required to lead the Board in the absence of the Chairman, to provide support and advice to the Chairman and to undertake such specific additional duties or functions as the Board may entrust to him from time to time.

#### **Further responsibilities** 11.2 and authorities

Further details of the responsibilities and authorities delegated to the Vice Chairmen are set out in the annexes to these ORs.

#### Company Secretary 12

**Appointment and function** At the constitutional meeting of the Board, the Board appoints a Company Secretary, who acts as secretary to the Board and its Committees.

#### 12.2 Responsibilities and authorities

The Company Secretary prepares the agenda for each Board meeting, keeps the Board minutes and the Committees' minutes and assists the Board and its members in coordinating and fulfilling their duties. In accordance with section 8.3, the Company Secretary coordinates requests for information from the members of the Board outside of Board meetings and informs the President of the EB of such requests as appropriate.

#### Reporting 12.3 The Company Secretary reports to the Chairman.

#### Official documents 12.4

The Company Secretary is responsible for keeping UBS AG's official company documents and records including their certification.

#### 13 **Board Committees**

### Permanent and other **Committees**

The Board establishes the AC, the Compensation Committee and the RC as permanent Committees. The Board may set up other Committees, including ad hoc Committees, if deemed appropriate or necessary.

### **Appointment**

From among its members the Board appoints the Committee members and the respective Chairpersons.

#### 13.3 Responsibilities and authorities

Based on articles 24 and 26 of the AoA, the Board delegates certain responsibilities and authorities to the Committees pursuant to the annexes to these ORs. The overall responsibility for such delegated competences remains with the Board.

### **Executive Board**

### 14 Delegation

### 14.1 Delegation of management

The Board delegates the executive management of UBS AG as set out in section 2.1(ii).

### 14.2 Further delegation by the EB

The President of the EB and the EB may further delegate certain responsibilities and authorities and may empower further delegation of such responsibilities and authorities. Such delegations must be in writing, and clear rules on responsibilities, authorities and accountabilities must be established. Specific responsibilities and authorities delegated by the EB to an EB Committee will be set forth in a resolution adopted or a charter approved by the EB.

### 14.3 Time-critical matters

The EB will establish arrangements to ensure that decisions are made in a time-critical business matter, should the responsible EB member be unable to act.

### 15 Executive Board

### 15.1 Composition and appointment

Under the leadership of the President of the EB, the EB is comprised of the members detailed in sections 16 to 25 of these ORs and such further EB members as appointed by the Board upon proposal of the President of the EB.

### 15.2 Responsibilities and authorities

Under the leadership of the President of the EB, the EB has executive management responsibility for UBS AG and its business. This includes, but is not limited to, developing and implementing UBS AG strategies approved by the Board and which take into account the Group's strategies, budgeting, planning and resource allocation, and evaluating and monitoring business performance. This also includes ensuring the efficient use of the financial resources of UBS AG in accordance with Group guidelines, policies and governance over intra-divisional treasury allocations.

The EB develops, implements and maintains an appropriate and adequate business organization designed to ensure compliance with applicable laws and regulations and an appropriate management information system.

The EB is also responsible for ensuring effective management and coordination of issues on behalf of UBS AG which arise from interactions and interdependencies between UBS AG and all entities of the Group or UBS AG and the BDs or GF. Notwithstanding this, the legal independence of UBS AG and the provisions of applicable local laws, rules and regulations must be observed to the extent legally required.

#### 15.3 EB as risk council

The EB acts as the risk council of UBS AG. It has overall responsibility for establishing and implementing risk management and control within UBS AG. It manages the risk profile of UBS AG as determined by the Board and the RC and is supported by the FRC. The EB determines its requirements for risk reporting, including improvements and changes to the reports, and receives periodic updates on risk data limitations.

### 15.4 Preparation of Board decisions

Where proposals for decisions must be made to the Board, the EB prepares such proposals and supports the Board in its decision-making process.

### 15.5 Further duties

The EB is furthermore responsible for all management matters not reserved under the AoA or the ORs to any other person or Corporate Body.

### 15.6 Meetings, agenda and notice period

The EB meets at least once every month or as appropriate. The agenda must be sent to the EB members at least five calendar days prior to the date of the EB meeting together with all necessary supporting material. In time-critical cases, an EB meeting (called by the President of the EB as required or at the request of one EB member addressed to the President of the EB) may be held and the supporting material may be sent on shorter notice. EB meetings are chaired by the President of the EB or, if absent, by the nominated deputy President of the EB. EB meetings may be held in person or by audio or video conference.

#### **Ouorum of attendance** 15.7

The presence, either in person or by audio or video conference, of a majority of the EB members is required to pass valid EB resolutions.

### 15.8 Quorum of resolutions

The resolutions of the EB are passed by the majority of the votes of the EB members present. The President of the EB has the power to overrule any EB resolution. If the President of the EB exercises this power, he must inform the Chairman as well as the EB immediately.

### Minutes of EB meetings

Minutes are taken of all EB meetings. They contain all resolutions made by the EB. The minutes are sent to all EB members and to the Chairman. Board members may inspect the EB minutes in accordance with section 8. Section 6.9 applies mutatis mutandis to the FB minutes

#### 15.10 Circular resolutions

With respect to circular resolutions of the EB, sections 7.4 and 7.5 apply mutatis mutandis.

### 15.11 Matters requiring immediate attention

With regard to matters which require immediate attention, and if it is not feasible to convene an audio or video conference or to proceed by circular resolution within the time available, the President of the EB may, together with two other EB members, make decisions, which have the effect of EB resolutions. EB members who could not be reached in time must be informed together with the Chairman as soon as possible. Section 7.5 applies mutatis mutandis to such resolutions.

#### 15.12 Assessment

At least annually the President of the EB assesses the performance of the EB. Such a review seeks to determine whether the EB functions effectively and efficiently. In light of the annual assessment, the President of the EB must consider whether any changes should be made to the composition of the EB.

### 15.13 Further duties of EB members

In addition, to the responsibilities for each EB member set out below, further details of the responsibilities and key authorities delegated to the EB members are set out in the annexes to these ORs and the relevant Business Regulations or terms of reference.

#### President of the Executive Board 16

#### 16.1 **Appointment**

The President of the EB is appointed by the Board upon proposal of the Chairman.

#### **Function, substitution** 16.2

The President of the EB is the highest executive officer of UBS AG and has responsibility and accountability for the management and performance of UBS AG. The President of the EB nominates a deputy from within the EB, who is confirmed by the Board. The deputy President of the EB shall temporarily exercise all responsibilities and authorities if the President of the EB should be incapacitated or unavailable to exercise the function as President of the EB.

#### 16.3 Main responsibilities and authorities

The President of the EB has the overall day-to-day management responsibility for UBS AG. In particular, he is responsible for:

- convening and presiding over the EB meetings;
- leading the business and strategic planning and forecasting; (ii)
- (iii) the financial results of UBS AG;
- (iv) exercising all authorities allocated to UBS AG which are not otherwise delegated;
- providing regular updates on the business to the Group CEO, as required;
- effective management of UBS AG's financial resources, people, infrastructure and risks; and
- (vii) ensuring effective collaboration with the Group.

The President of the EB assumes a leading role in preparing the Board's consideration of UBS AG's strategy, risk and compensation principles. Together with the Chairman, he has the responsibility for UBS AG's reputation.

16.4 Right to overrule decisions The President of the EB has an all-encompassing right to information about and examination of all matters handled in the business. He has the power to overrule any decisions made by any management body, including any resolution by the EB (see section

### 16.5 Reporting to the Board

The President of the EB ensures that the Chairman and the Board are kept informed in a timely and appropriate manner on all matters falling within the scope of their responsibilities as well as important business developments, issues or decisions taken by the EB in particular with regard to matters which may have a material financial, operational or reputational impact on UBS AG.

Further, the President of the EB (either personally or through any other EB member) regularly informs the Board on:

- (i) key performance indicators and other relevant financial data of UBS AG;
- (ii) existing and emerging risks, issues and mitigating measures;
- (iii) updates on developments in important markets and on peers; and
- (iv) information on all issues which may affect the supervisory or control function of the Board.

### 16.6 Reporting by EB members

Each member of the EB detailed in sections 17 to 25 below reports directly to the President of the EB and the relevant function within the Group and shall inform the President of the EB or EB as appropriate of material matters and key developments within the scope of their responsibilities. The Functional Heads have an obligation to advise the Chairman and relevant Committees on significant issues arising in the field of their responsibilities.

### 17 Chief Financial Officer

### 17.1 Responsibilities and authorities

The CFO has in particular the following responsibilities:

- (i) managing UBS AG's financial accounting, controlling, forecasting, planning and reporting processes;
- (ii) ensuring transparency in and assessing the financial performance of UBS AG;
- (iii) developing UBS AG's inorganic strategy in collaboration with the EB and supporting the EB members in mergers and acquisitions, as well as equity investment topics, by monitoring the progress of key inorganic growth initiatives;
- (iv) managing and controlling UBS AG's tax affairs, treasury and capital management, including funding and liquidity risk, and UBS AG's regulatory capital ratios;
- ensuring asset and liability management by balancing consumption of UBS AG's financial resources;
- (vi) consulting with the AC to make proposals to the Board regarding the standards for accounting to be adopted by UBS AG and defining the standards for financial reporting and disclosure; and
- (vii) under the supervision of the AC, coordinating the working relationships with the external auditors.

### 18 Chief Operations and Technology Officer

### 18.1 Responsibilities and authorities

The COTO has in particular the following responsibilities:

- formulating the approach, objectives, financial and execution plans for the Operations and Technology Office area in support of the BDs and GF operating out of UBS AG;
- (ii) driving digitalization, delivering IT services, tools and infrastructure, including cyber protection and IT security, in line with the needs of the BDs and GF operating out of UBS AG:
- (iii) overseeing the prioritization of the technology enabled change initiatives;
- (iv) directing and governing all IT development and engineering management activities; and
- (v) delivering operational services, maintaining and overseeing UBS AG's crisis management operations and providing data governance.

### 19 Chief Risk Officer

### 19.1 Responsibilities and authorities

The CRO has in particular the following responsibilities:

- (i) the development of UBS AG's risk management and control framework (including risk principles and risk appetite) for the credit, market, country, liquidity, funding, model and environmental and social risk categories, as well as the implementation of independent control frameworks for these risk categories, on the basis of and in accordance with the framework approved by the Board, including:
  - (a) risk measurement, aggregation, portfolio controls and risk reporting; and
  - (b) taking decisions on transactions, positions, exposures, portfolio limits and allowances in accordance with the risk control authorities delegated to the CRO; and
- (ii) monitoring and challenging UBS AG's risk-taking activities for the risk categories under CRO responsibility.

### 20 General Counsel

### 20.1 Responsibilities and authorities

The GC has in particular the following responsibilities:

- (i) managing UBS AG's legal affairs and ensuring effective and timely assessment of legal matters impacting UBS AG or its businesses;
- (ii) providing the legal advice required by UBS AG; and
- (iii) management and reporting of all litigation and other significant contentious matters, including all legal proceedings which involve UBS AG.

### 21 Chief Compliance and Governance Officer

### 21.1 Responsibilities and authorities

The CCGO has in particular the following responsibilities:

- developing UBS AG's risk management and control framework (including taxonomies and risk appetite) for non-financial risks as well as implementing the independent control frameworks for these risks:
- (ii) developing UBS AG's governmental policy and regulatory approach;
- (iii) coordinating external governmental and regulatory relations and overseeing important regulatory matters, including key regulatory change programs across UBS AG:
- (iv) managing the firm's new business governance process;
- (v) developing global and local recovery and resolution plans and defining adequate resolvability improvement measures;
- (vi) developing UBS AG's organization and legal entity structure, as well as corporate governance standards; and
- (vii) governing UBS AG's internal and external investigations portfolio and performing important investigations.

### 22 Head Human Resources & Corporate Services

### 22.1 Responsibilities and authorities

The Head HR&CS has in particular the following responsibilities:

- (i) defining and executing an HR strategy aligned to UBS AG's objectives, positioning UBS AG as employer of choice and providing HR services to employees as well as strategic advice to line managers and EB members supporting them to attract, engage, develop and retain talent;
- (ii) supplying real estate infrastructure and general administrative services to UBS AG;
   and
- (iii) directing and controlling all supply and demand management activities, supporting UBS AG with its third-party risk and sourcing strategies and managing UBS AG's near-/offshore, outsourcing and supplier-related processes.

### 23 Integration Officer

### 23.1 Responsibilities and authorities

The IO has in particular the following responsibilities:

- (i) developing integration strategy with regard to Credit Suisse within agreed design principles and in accordance with the UBS AG and Group strategy;
- (ii) coordinating with integration teams and, if required, other EB members to ensure coherent and consistent execution of integration plans and milestones;
- (iii) prioritizing integration activities and monitoring overall progress, coordinating management of operational and execution risks and issues, as well as overseeing development of migration plans and interdependencies;
- (iv) ensuring regular communication and appropriate escalation to the EB, or other relevant governance bodies; and
- (v) challenging timelines, operating models, synergies, and deliverables, as appropriate.

#### Regional Presidents 24

#### Responsibilities and 24.1 authorities

The Regional Presidents have in particular the following responsibilities:

- cross-divisional collaboration; and
- (ii) representing UBS AG to the broader public in their region.

#### 25 **Divisional Presidents**

#### 25.1 Responsibilities and authorities

The Divisional Presidents have in particular the following responsibilities:

- proposing BD strategies in line with the UBS AG and Group strategy taking into account input from the Regional Presidents;
- the operation and management of their BD; and
- (iii) controlling and administering the dedicated financial resources, risk appetite, people and infrastructure of the BD.

#### 26 Committees

#### 26.1 **EB Committees**

Pursuant to section 14.2 the EB establishes

- (i) the ALCO; and
- (ii) the FRC

as permanent EB Committees.

#### Composition 26.2

26.3

The composition is specified in dedicated terms of reference for each EB Committee.

### **Appointment** Responsibilities and 26.4 authorities

The appointment is specified in dedicated terms of reference for each EB Committee.

The EB Committees have the responsibilities and authorities as set out in the terms of reference of the respective committee:

- the ALCO is responsible for managing UBS AG's assets and liabilities in line with the UBS AG and Group strategy and regulatory requirements;
- the FRC is responsible for supervising and controlling UBS AG's business, financial and risk profile of the overall UBS AG standalone as well as the entity's business activities in Switzerland and cross-jurisdictional branch-related matters, in line with the UBS AG and Group strategy and regulatory requirements. The FRC is also responsible for ensuring the financial and risk profile of UBS AG standalone complies with the agreed risk appetite, by ascertaining that appropriate and timely actions are

#### **Meetings and resolutions** 26.5

The sections 15.6 to 15.12 apply mutatis mutandis.

#### 26.6 Reporting

The EB Committees report to the EB.

### Internal Audit

### 27 Scope, responsibilities, authorities and reporting

#### 27.1 Scope

IA is the internal audit function for UBS AG.

#### 27.2 Responsibilities

IA independently, objectively and systematically assesses in particular the:

- (i) soundness of UBS AG's risk and control culture;
- (ii) reliability and integrity of financial and operational information, including whether activities are properly, accurately and completely recorded, and the quality of underlying data and models; and
- (iii) design, operating effectiveness and sustainability of:
  - (a) processes to define strategy and risk appetite as well as the overall adherence to the approved strategy;
  - (b) governance processes;
  - (c) risk management, including whether risks are appropriately identified and managed:
  - (d) internal controls, specifically whether they are commensurate with the risks taken;
  - (e) remediation activities; and
  - (f) processes to comply with legal and regulatory requirements, internal policies, and UBS AG's constitutional documents and contracts.

IA also conducts special audits at the request of the AC, or other Board members, Committees or the President of the EB in consultation with the AC.

#### 27.3 Charter

Details of the role, responsibilities and authorities of IA are set out in the charter for Group IA. The charter is also to be endorsed by the Board for its applicability to UBS AG.

#### 27.4 Access rights

IA possesses unrestricted auditing rights within UBS AG; it has access at all times to all accounts, books, records, systems, property and personnel to fulfill its auditing responsibilities. The IA Executive UBS AG has open, direct and unrestricted access to the Chairman, the RC and the AC, as well as to the President of the EB.

### 27.5 Independence

IA is independent in determining its activities, in particular when defining audit scope and executing audit engagements. IA reports are not subject to any instructions or restrictions, and its authority to audit is unrestricted.

### 28 IA Fxecutive UBS AG

### 28.1 Reporting

The IA Executive UBS AG reports directly to the Chairman. In addition, the IA Executive UBS AG has a functional reporting line to the AC, as well as to the Head Group IA, as set forth in the AC charter.

The IA Executive UBS AG must inform the AC of the results of the annual internal audit plan and the status of annual internal audit objectives and must be in regular contact with the AC.

### 28.2 Appointment

The IA Executive UBS AG is appointed by the Board in consultation with the Chairman and the AC, based on a proposal by the Head Group IA.

## Special provisions

### 29 Authority to sign

### 29.1 In general

Signing in the name of UBS AG requires two authorized signatures to be binding. Any employee of UBS AG having one of the following ranks or functions is authorized to sign, jointly with another authorized signatory, on behalf of UBS AG:

- (i) the Chairman and each of the Vice Chairmen;
- (ii) each of the EB members;
- (iii) the IA Executive UBS AG and the Company Secretary;
- (iv) each of the Managing Directors, Executive Directors and Directors or senior employees with equivalent ranks;
- (v) each of the Associate Directors (including "Prokuristen," as applicable); and
- (vi) for specified locations, each of the Authorized Officers (including "Handlungs-bevollmächtigte," as applicable).

### 29.2 Signing policy

The GC issues a signing policy for UBS AG, specifying all details, including the scope of signature authorities and possible extensions, exceptions to the joint signature authority principle, and the possibility for signatories of the Group to sign on behalf of UBS AG. In addition, UBS AG Entities establish their own rules, according to mandatory provisions of local laws, rules and regulations.

### 30 Form of signature

### 30.1 Signature form

All authorized signatories sign by adding their signature to the name of the legal entity on whose behalf they act.

### 31 Conduct of Board and EB members

### 31.1 Duty of care and loyalty

Each member of the Board and the EB is under a duty to carry out their responsibilities with due care and to safeguard and further the interests of UBS AG and of all of its shareholders.

### 31.2 Conflicts of interest

The Board and EB members must arrange their personal and business affairs, including their affairs with regard to a related person or company, so as to avoid, as much as possible, an actual, perceived or potential conflict of interest.

### 31.3 Disclosure of conflict of interest

Each Board member must disclose to the Chairman, and each EB member must disclose to the President of the EB, any conflict of interest generally arising or relating to any matter to be discussed at a meeting, as soon as the Board or EB member becomes aware of its existence.

### 31.4 Procedural measures

Unless exceptional circumstances dictate that in the best interests of UBS AG a Board or EB member with a conflict of interest shall not participate in the discussions and decision-making involving the interest at stake, the Board or EB member with a conflict of interest shall participate in discussions and:

- a double vote (a vote with and a vote without the conflicted individual) shall take place;
- (ii) a binding decision on the matter requires the same outcome in both votes;
- (iii) the Chairman or the President of the EB must advise the respective Corporate Body of the conflict of interest; and
- (iv) the existence of the conflict must be recorded in the meeting minutes.

In the event of doubt, the Chairman or the President of the EB shall request the respective Corporate Body to determine whether a conflict of interest or exceptional circumstances exist. Further, section 2.5 applies where EB members have additional reporting lines within legal entities of the Group.

### 31.5 Duty of confidentiality

Except for information already in the public domain, each Board and EB member shall handle all information relating to UBS AG learned during the performance of their duties with the utmost discretion at all times. Such information may only be disclosed to third parties with prior written clearance from the Chairman or the President of the EB. This obligation and duty continues even after the term of office of the Board or EB member has expired for as long as the relevant information remains confidential.

### 31.6 Benefits of Board and EB members

If a Board or EB member becomes aware of the fact that they may receive a financial or non-financial benefit other than any salary, remuneration or other benefit from UBS AG, as a result of employment with UBS AG, that person must:

- promptly inform the Board, in the case of a Board member or the President of the EB; and
- (ii) promptly inform the President of the EB, in the case of an EB member other than the President of the EB.

### 32 Entry into force, amendments

### 32.1 Entry into force

These ORs replace the former regulations of 12 June 2023 governing the internal organization of UBS AG and come into effect on 1 March 2024, based on a Board resolution of UBS AG dated 25 January 2024.

#### 32.2 Amendments

These ORs may be amended by the Board only with the approval of FINMA.

# Annex A – Organizational chart of UBS AG

# Organizational chart of UBS AG

UBS Group AG (shareholder) Board of Directors of Chairman of the Board **UBS AG Board Committees** Audit Compensation Risk Committee Committee Committee **Executive Board of** President of the EB **UBS AG** Asset and Liability Finance and Risk Committee Committee

# Annex B — Charter of the Committees of the Board

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# Introduction

## 1 Basis and purpose

1.1 Basis

This Committees' charter is enacted by the Board pursuant to articles 716–716b CO, articles 24 and 26 of the AoA and sections 5.9 and 13.3 of the ORs.

1.2 Purpose

The purpose of this Committees' charter is to set out the objectives, composition and responsibilities of the permanent Board Committees, being:

- (i) the Audit Committee;
- (ii) the Compensation Committee; and
- (iii) the Risk Committee.

# Membership and constitution

#### 2 Number of Committee members and their independence

#### 2.1 Minimum number of **Committee members**

Each Committee must have at least three Committee members.

Independence 2.2

Each Committee must consist of members of the Board who:

- (i) with respect to the AC, are all independent as defined by section 3.2 of the ORs; with respect to the Compensation Committee and RC, are independent, in a
  - majority, as defined by section 3.2 of the ORs.

At least one member of the RC must also be a member of the Compensation Committee.

2.3 Presence of the Chairman The Chairman may, in consultation with the relevant Chairperson, attend the meetings of Committees as a non-voting guest.

Constitution 3

by the Board

Appointment and removal The Chairperson and the Committee members are appointed pursuant to section 4.3 of the ORs, and the Board may remove any Committee member or any Chairperson at any time. Should a vacancy arise on any Committee, even if the minimum number of Committee members pursuant to section 2.1 of this Committees' charter is still met, the Board may appoint the missing member from among its members for the remaining term of office.

# Responsibilities and authorities

#### 4 Delegation of responsibilities and authorities

#### 4.1 In general

Pursuant to section 13.3 of the ORs, the Committees have the responsibilities and authorities set out in the annexes to the ORs.

#### 5 Audit Committee

#### 5.1 In general

The function of the AC is to support the Board in fulfilling its oversight duty relating to financial reporting and internal controls over financial reporting, the effectiveness of the external and internal audit functions as well as of whistleblowing procedures.

Management is responsible for the preparation, presentation and integrity of the financial statements, while the external auditors are responsible for auditing financial statements. The AC's responsibility is one of oversight and review.

## 5.2 Responsibilities and authorities

The AC's responsibilities and authorities are to:

- (i) Financial statements:
  - (a) monitor the integrity of the financial statements and any announcements related to financial performance, and review significant financial reporting judgements contained in them, before recommending their approval to the Board;
  - advise the Board on whether the annual report and financial statements, taken as a whole, are fair, balanced and understandable, and provide the information necessary for shareholders to assess the company's position and performance, business model and strategy;
  - (c) review the organization and completeness of the financial-reporting process including UBS AG's internal control system and procedures as they relate to the integrity of the financial statements, taking into account the reports provided by the EB, the external auditors, IA, regulators or other information as determined by the Committee to be appropriate;
  - (d) review management's SOX 404 report in relation to internal controls over financial reporting:
  - (e) review significant accounting policies and practices, and compliance with accounting standards; and
  - review arrangements for compliance with UBS AG's legal, regulatory and other requirements (including tax matters) as they relate to the integrity of the financial statements or financial report;

#### (ii) External audit

- (a) oversee the relationship with and assess the qualifications, expertise, effectiveness, independence and performance of the external auditors and their lead audit partner; support the Board in reaching a decision in relation to the appointment, reappointment or dismissal of the external auditors and the rotation of the lead audit partner;
- (b) approve the engagement letter of the external auditors, including the scope of the audit and the fees and terms for the planned audit work;
- (c) oversee all audit and permitted non-audit services provided by the external auditors and establish such policies as the Committee deems appropriate;
- (d) annually review the external auditors' summary of adjusted and unadjusted differences; and
- (e) review the regulatory audit plan and the results of regulatory audits;

- (iii) IA:
  - (a) monitor and assess the effectiveness, independence and performance of the IA Executive UBS AG and IA;
  - (b) approve IA's annual audit plan and objectives including subsequent important amendments;
  - (c) monitor IA's discharge of its annual audit objectives; and
  - (d) order special audits to be conducted either by IA or by mandating third parties and review and approve such request from other Board members, Committees or the President of the EB;
- (iv) Whistleblowing and investigations:
  - (a) review the effectiveness of the firm's whistleblowing policies and procedures and ensure that appropriate whistleblowing mechanisms are in place;
  - (b) review on a quarterly basis the levels of new and pending whistleblowing cases and reports on complaints made regarding accounting, auditing or other matters;
  - (c) review on a quarterly basis reports on internal investigations; and
  - (d) conduct or direct any investigation, including the retention of external advisors and consultants (at UBS AG's expense), as it considers necessary to discharge its responsibilities; and
- (v) Human Resources:
  - (a) annually provide input on the performance of the CFO, GC, CRO and CCGO to the President of the EB; and
  - b) review and make recommendations to the Board regarding decisions relating to the hiring and dismissal of the CFO.

#### 6 Compensation Committee

#### 6.1 In general

The function of the Compensation Committee is to support the Board in its duties to set guidelines on compensation and benefits, to oversee implementation thereof, to approve certain compensation and to scrutinize executive performance.

## 6.2 Responsibilities and authorities

The Compensation Committee's responsibilities and authorities are to:

- (i) Compensation strategy and principles:
  - (a) periodically review the compensation strategy and principles and propose any material changes to the Board for approval; and
  - (b) evaluate the effectiveness of pay for performance results of UBS AG;
- (ii) EB performance targets and objectives:
  - (a) propose, upon proposal of the Chairman, financial and non-financial performance targets and objectives for the President of the EB for approval by the Board;
  - (b) review, upon proposal of the President of the EB, the performance framework for the other EB members; and
  - inform the Board of the President of the EB's financial and non-financial performance targets and objectives, as well as the performance framework for the other EB members;
- (iii) EB performance assessments:
  - (a) propose upon proposal of the Chairman, the President of the EB's performance assessment for approval by the Board;
  - (b) propose upon proposal of the President of the EB the performance assessments of the other EB members for approval by the Board; and
  - (c) inform the Board of the performance assessments of all EB members, including the President of the EB;
- (iv) Compensation framework and plans:
  - (a) approve key features of the compensation framework and plans for the nonindependent Board members and EB members;
  - (b) be informed of key features of the compensation framework and plans for employees other than EB members;
  - approve key terms of any new or amended compensation plans or other compensation arrangements with a material financial, reputational or strategic impact or significant use of UBS Group AG shares;
  - (d) be informed of key terms of any new or amended pension and benefit plans with a material financial, reputational or strategic impact;
  - (e) approve the share ownership policy for EB members; and
  - (f) propose, upon proposal of the Chairman, the remuneration/fee framework for independent Board members for approval by the Board.

- Compensation governance:
  - approve key terms for material individual variations to standard employment and termination agreements for non-independent Board members and, upon proposal of the Chairman, for the President of the EB and, upon proposal of the President of the EB. for other EB members:
  - (b) approve the engagement of and fees for any external advisors/consultants retained by the Compensation Committee; considering factors relevant to the advisors' independence from management;
  - approve material public disclosures on UBS AG compensation matters;
  - (d) meet with the RC annually to ensure that the compensation framework supports appropriate risk awareness and management as well as appropriate risk-taking; and
  - be informed of major regulatory developments, shareholder initiatives and best practices in executive compensation;
- (vi) Other compensation competences:
  - (a) for employees within UBS AG, approve the aggregated and/or total individual compensation of certain employees (including independent control functions) based on regulatory requirements; and
  - (b) review business performance and other variables that impact annual variable compensation; and
- (vii) Other competences related to specific regulatory requirements:
  - (a) review and approve the Remuneration Policy Statement to be submitted annually to the PRA;
  - (b) review and approve as appropriate any information provided to UBS AG shareholders with respect to the approval of the ratio between variable and fixed compensation for employees in the European Union; and
  - make recommendations as appropriate where it becomes aware of any event or matter that would justify the operation of malus or clawback for UBS AG London Branch staff in accordance with compensation plan rules.

#### 7 Risk Committee

#### 7.1 In general

The function of the RC is to oversee and support the Board in fulfilling its duty to supervise and set an appropriate risk management and control framework in the areas of:

- financial and non-financial risks; and
- balance sheet, treasury and capital management, including funding, liquidity and equity attribution.

The RC considers the potential effects of the aforementioned risks on UBS AG's reputation.

#### 7.2 Responsibilities and authorities

The RC's responsibilities and authorities are to:

- Risk management and control:
  - (a) review and propose to the Board the guiding principles and framework for risk management and control (including risk appetite, delegation of risk authorities and major risk limits) relative to UBS AG's operations, assess management's respective proposals and recommend any required changes to the Board;
  - (b) review and approve the risk appetite (including objectives and binding scenarios) relative to UBS AG's activities and risk profiles, including allocation of responsibilities within the risk management and control framework;
  - (c) review and propose to the Board the risk, capital, liquidity and funding, and balance sheet section of the annual report of UBS AG;
  - periodically assess the appropriateness of major policies and procedures adopted by the EB relating to the risk management and control of significant risks;
  - review and make recommendations to the Board based on proposals from the EB in relation to material risk limits and periodically review allocations and authority levels relating to those limits. Material risk limits include those relating to portfolios, concentrations, products, sectors or other categories relevant to the strategy, risk profile and risk capacity of UBS AG as approved by the Board;
  - review and approve the principal characteristics of UBS AG's risk measurement framework (including changes thereto) used to identify, model, measure, monitor and report risks;
  - monitor and oversee the risk profile of UBS AG within the context of the Boarddetermined risk profile, risk capacity and limit structure;
  - systematically review high-risk areas of UBS AG and assess the effectiveness of the steps taken by the EB to manage or mitigate such risks;
  - review and assess the asset and liability management framework, liquidity and funding;

- review regulatory framework reforms affecting areas within the scope of the RC's mandate and recommend any required changes to the Board;
- consider UBS AG's strategy to deal with anticipated or existing high-level risks and assist the Board by reviewing and assessing management's proposals in relation to strategy:
- review management's assessments of UBS AG's non-financial risk exposures and related risk-oriented activity plans;
- (m) periodically review material communications (including formal assessments) between UBS AG and its principal regulators;
- review projects and remediation activities (as determined by the RC) undertaken by the management to address critical changes to the risk management/control environment; and
- periodically meet with the Compensation Committee to ensure that the compensation framework appropriately reflects risk awareness and management, and ensures appropriate risk-taking;
- Risk reporting:
  - (a) determine risk reporting requirements that allow for an effective oversight by the RC and communicate changes to report owners if reporting requirements are not
  - (b) review risk reports, including reports from management that assess the likelihood of risks materializing, the monitoring of emerging trends via forecasts or stress tests, the adequacy and appropriateness of the internal controls to manage those risks and that contain agreed measures to reduce risks or deal with specific risk situations including stress situations; and
  - receive periodic updates on limitations that prevent full risk data aggregation in the risk reports; and
- (iii) Human Resources:
  - (a) annually provide input on the performance of the CRO, CFO, GC and CCGO to the President of the EB; and
  - review and make recommendations to the Board regarding decisions relating to the hiring and dismissal of the CRO and the CCGO.
- 8 Further responsibilities and authorities
- 8.1 **Further responsibilities** and authorities

The Board may entrust further powers and duties to the Committees by Board resolution.

- 9 Delegation to a member or subcommittee
- 9.1 Further delegation by the Committees

Each Committee may delegate some of its tasks to one of its members or to a subcommittee comprised of two or more of its members. Such delegations shall be recorded in the Committee's minutes and the Chairman must be informed.

- 10 Information rights
- 10.1 **Committees**

In accordance with the procedure set out in section 8.4 of the ORs, each Committee may request any relevant information or special reports from any EB member or IA on matters relating to its respective responsibilities set out in this Committees' charter.

10.2 **Committee members**  For the information rights of each Board member, see section 8 of the ORs.

- 11 Meeting with third parties
- 11.1

Meeting with third parties The Committees may, in performing their duties, take advice from and meet as a body with third parties. In consultation with the President of the EB, they may meet with regulators. The Chairperson shall inform the Chairman accordingly.

# Meetings and resolutions of the Committees

#### 12 Meetings

#### 12.1 Number of meetings

Each Committee meets as often as its business requires, but at least four times a year for the AC, the Compensation Committee and the RC.

The AC and RC hold at least four joint meetings a year.

The Compensation Committee and RC periodically hold joint meetings.

# 12.2 Request, invitation, agenda, notice period, chair and format

Committee meetings, including joint meetings, are called and held in compliance with the rules set out in the ORs (sections 6.2 to 6.5 and 6.7 of the ORs to be applied mutatis mutandis).

## 12.3 Presence of third parties at Committee meetings

Each Chairperson may, on their own motion or upon request of any Committee member or the Chairman, invite EB members, as well as other persons, to attend Committee meetings. The President of the EB will be informed accordingly.

#### 12.4 Special rules for the AC

The AC holds Committee meetings:

- normally with the participation of the IA Executive UBS AG, representatives of the external auditors, the President of the EB, the CFO and the Controller and Chief Accounting Officer; and
- (ii) periodically, only with the participation of the IA Executive UBS AG, the external auditors, or with members of management, or a combination of any of the aforementioned.

#### 12.5 Special rules for the RC

Generally, the President of the EB, the CFO, the CRO, the GC, the CCGO, the IA Executive UBS AG and representatives of the external auditors participate (to the extent necessary) in each meeting of the RC. The invitation of other persons is at the discretion of the RC.

#### 12.6 Resolutions

Resolutions are passed by an absolute majority of the Committee members present; in case of a tie, the decision is passed on to the Board and decided in accordance with section 7.2 of the ORs. Sections 7.2 to 7.4 of the ORs apply mutatis mutandis with regard to circular resolutions.

#### 12.7 Minutes

The minutes of Committee meetings, including joint meetings, must fulfill the conditions set out in sections 6.8, 6.9 and 7.5 of the ORs and be distributed to the Chairman.

#### 13 Resolutions and information rights

## 13.1 Resolutions and information rights

Sections 7, 8.2, 8.3 and 8.4 of the ORs apply mutatis mutandis to the decision-making process and the information rights of the Committees and the Committee members.

# Reporting

#### 14 Regular reporting

#### 14.1 In general

Each Chairperson ensures that the Chairman and the Board are kept informed in a timely and appropriate manner. Each Chairperson (either personally or through another Committee member) regularly reports to the Board at the Board meetings on the current activities of their Committee and on important Committee issues, including all matters falling within the duties and responsibilities of the Board, namely:

- (i) proposals for resolutions to be considered, or other action to be taken by the Board;
- (ii) resolutions and decisions made by the Committee and the material considerations that led to such resolutions and decisions; and
- (iii) activities and important findings of the Committee.

## 14.2 Submitting of proposals and recommendations

Each Chairperson submits, in writing, the proposals and resolutions mentioned in sections 14.1(i) and (ii) of this annex to the Board unless such proposals are contained in the Committee minutes; the remaining reporting is generally done orally.

## 14.3 Annual reporting of the Committees

Each Committee annually submits a report to the Board, detailing the activities of the Committee during the previous twelve months.

#### 15 Special reporting

#### 15.1 AC

Following the completion of the audit and the annual financial statements, the AC Chairperson submits annually to the Chairman, for the attention of the Board:

- the AC's assessment of the qualification, independence and performance of the external auditors;
- (ii) the AC's assessment of the design of UBS AG's internal control system for financial reporting and the coordination and interaction between IA and the external auditors;
- (iii) a recommendation regarding the audited financial statements in UBS AG's annual report.

# Special provisions

## 16 Confidentiality

16.1 Special rule

The deliberations of the Compensation Committee are handled with the utmost discretion and are to be communicated outside of the Committee only to the extent permitted by the Chairperson. The Chairman is exempted with regard to the confidentiality of deliberations.

### 17 Self-assessment and adequacy review

17.1 Self-assessment and adequacy review

Each Committee reviews the adequacy of its charter at regular intervals, but at least annually, and recommends to the Board any changes considered to be necessary or appropriate. For the self-assessment, section 9 of the ORs is to be applied mutatis mutandis.

**UBS AG** 

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#### **UBS AG**

DESCRIPTION OF SECURITIES REGISTERED UNDER SECTION 12 OF THE SECURITIES EXCHANGE ACT OF 1934

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#### Medium-Term Notes, Series A

#### **Description of Debt Securities We May Offer**

Please note that in this section entitled "Description of Debt Securities We May Offer," references to UBS, we, our and us refer only to UBS AG and not to its consolidated subsidiaries. Also, in this section, references to "holders" and "you" mean those who own debt securities registered in their own names on the books that we or the trustee maintain for this purpose, and not those who own beneficial interests in debt securities registered in street name or in debt securities issued in book-entry form through one or more depositaries. Owners of beneficial interests in the debt securities should read the section below entitled "Legal Ownership and Book-Entry Issuance."

References herein to "this prospectus" are deemed to refer to this section "Medium-Term Notes, Series A" and references to "your prospectus supplement" are deemed to refer to the individual description of notes issuances contained below in this exhibit.

#### The Debt Indenture

As required by U.S. federal law for publicly offered bonds and notes, the debt securities are governed by a document called an indenture. The debt indenture is a contract between us and U.S. Bank Trust National Association, which acts as trustee.

The trustee has two main roles:

- First, the trustee can enforce your rights against us if we default. There are limitations on the extent to which the trustee acts on your behalf, which we describe below under "—Default, Remedies and Waiver of Default."
- > Second, the trustee performs administrative duties for us, such as sending you interest payments and notices.

See "—Our Relationship with the Trustee" below for more information about the trustee.

#### We May Issue Many Series of Debt Securities Under the Debt Indenture

We may issue as many distinct series of debt securities under the debt indenture as we wish. This section summarizes terms of the debt securities that apply generally to all series. The provisions of the debt indenture allow us not only to issue debt securities with terms different from those of debt securities previously issued under the debt indenture, but also to "reopen" a previous issue of a series of debt securities and issue additional debt securities of that series. Most of the financial and other specific terms of your series, will be described in the prospectus supplement accompanying this prospectus. Those terms may vary from the terms described here.

We may issue debt securities separately or together with other debt securities.

As you read this section, please remember that the specific terms of your debt security as described in your prospectus supplement will supplement and, if applicable, may modify or replace the general terms described in this section. If there are any differences between your prospectus supplement and this prospectus, your prospectus supplement will control. Thus, the statements we make in this section may not apply to your debt security.

When we refer to a series of debt securities, we mean a series issued under the debt indenture. When we refer to your prospectus supplement, we mean the prospectus supplement describing the specific terms of the debt security you purchase. The terms used in your prospectus supplement will have the meanings described in this prospectus, unless otherwise specified.

Unless we indicate otherwise in your prospectus supplement, the debt securities we issue to you will be part of the series of debt securities referred to as our "medium-term notes, Series A." The Series A notes are a single distinct series under the debt indenture, and we may issue Series A notes in such amounts, at such times and on such terms as we wish. The Series A notes will differ from one another, and from any other series, in their terms, but all of the Series A notes together will constitute a single series for all purposes under the debt indenture pursuant to which they will be issued.

#### **Amounts That We May Issue**

The debt indenture does not limit the aggregate amount of debt securities that we may issue or the number of series or the aggregate amount of any particular series. We have already issued Series A notes, many of which are currently outstanding. We intend to issue additional Series A notes, and may issue additional Series A notes at any time, without your consent and without notifying you. We may also issue debt securities and other securities at any time without your consent and without notifying you.

The debt indenture and the debt securities do not limit our ability to incur other indebtedness or to issue other securities. Also, we are not subject to financial or similar restrictions by the terms of the debt securities.

#### **Principal Amount, Stated Maturity and Maturity**

The principal amount of a debt security means the principal amount payable at its stated maturity, unless that amount is not determinable, in which case the principal amount of a debt security is its face amount.

The term "stated maturity" with respect to any debt security means the day on which the principal amount of your debt security is scheduled to become due. The principal may become due sooner, by reason of redemption or acceleration after a default or otherwise in accordance with the terms of the debt security. The day on which the principal actually becomes due, whether at the stated maturity or earlier, is called the "maturity" of the principal.

We also use the terms "stated maturity" and "maturity" to refer to the days when other payments become due. For example, we may refer to a regular interest payment date when an installment of interest is scheduled to become due as the "stated maturity" of that installment.

When we refer to the "stated maturity" or the "maturity" of a debt security without specifying a particular payment, we mean the stated maturity or maturity, as the case may be, of the principal.

#### This Section Is Only a Summary

The debt indenture and its associated documents, including your debt security, contain the full legal text governing the matters described in this section and your prospectus supplement. We have filed a copy of the debt indenture with the SEC as an exhibit to our registration statement. See "Where You Can Find More Information" above for information on how to obtain a copy.

This section and your prospectus supplement summarize all the material terms of the debt indenture and your debt security. They do not, however, describe every aspect of the debt indenture and your debt security. For example, in this section and your prospectus supplement, we use terms that have been given special meaning in the debt indenture, but we describe the meaning of only the more important of those terms.

#### **Governing Law**

The debt indenture is, and the debt securities will be, governed by New York law.

#### **Currency of Debt Securities**

Amounts that become due and payable on your debt security in cash will be payable in a currency, composite currency, basket of currencies or currency unit or units specified in your prospectus supplement. We refer to this currency, composite currency, basket of currencies or currency unit or units as a "specified currency." The specified currency for your debt security will be U.S. dollars, unless your prospectus supplement states otherwise. Some debt securities may have different specified currencies for principal and interest. You will have to pay for your debt securities by delivering the requisite amount of the specified currency to UBS Securities LLC, UBS Financial Services Inc. or another firm that we name in your prospectus supplement, unless other arrangements have been made between you and us or you and that firm. We will make payments on your debt securities in the specified currency, except as described below in "—Payment Mechanics for Debt Securities." See "Considerations Relating to Securities Denominated or Payable in or Linked to a Non-U.S. Dollar Currency" below for more information about risks of investing in this kind of debt securities.

#### Co-obligation of UBS Switzerland AG

UBS Switzerland AG is fully, unconditionally and irrevocably liable, jointly and severally, with UBS AG, for UBS AG's obligations under and with respect to the debt securities with respect to the due and punctual payment of the principal of and any premium, interest and other amounts payable on, under or in respect of such securities and the due performance and observance of every covenant of the indenture to be performed or observed by UBS AG with respect to such securities.

The obligations of UBS Switzerland AG as a co-obligor are primary and not merely those of a surety. UBS Switzerland AG waives the right to require holders to proceed first against UBS AG and UBS Switzerland AG shall be subrogated to all rights of the holder of a security of a series against UBS AG in respect of any amounts paid to such holder by it pursuant to the terms of the indenture.

#### **Types of Debt Securities**

We may issue any of the three types of debt securities described below. A debt security may have elements of each of the three types of debt securities described below. For example, a debt security may bear interest at a fixed rate for some periods and at a floating rate in others. Similarly, a debt security may provide for a payment of principal at maturity linked to an index and also bear interest at a fixed or floating rate.

#### Fixed Rate Debt Securities

A debt security of this type will bear interest at a fixed rate described in the applicable prospectus supplement. This type includes zero coupon debt securities, which bear no interest and are instead issued at a price lower than the principal amount. See "—Original Issue Discount Debt Securities" below for more information about zero coupon and other original issue discount debt securities.

Each fixed rate debt security, except any zero coupon debt security, will bear interest from its original issue date or from the most recent date to which interest on the debt security has been paid or made available for payment. Interest will accrue on the principal of a fixed rate debt security at the fixed yearly rate stated in the applicable prospectus supplement, until the principal is paid or made available for payment or the security has been converted or exchanged. Each payment of interest due on an interest payment date or the date of maturity will include interest accrued from and including the last date to which interest has been paid, or made available for payment, or from the issue date if none has been paid or made available for payment, to but excluding the interest payment date or the date of maturity. We will compute interest on fixed rate debt securities on the basis of a 360-day year of twelve 30-day months. We will pay interest on each interest payment date and at maturity as described below under "—Payment Mechanics for Debt Securities."

#### Floating Rate Debt Securities

**Interest Rate Formulas.** A debt security of this type will bear interest at rates that are determined by reference to an interest rate formula. In some cases, the rates may also be adjusted by adding or subtracting a spread or multiplying by a spread multiplier and may be subject to a minimum rate or a maximum rate. If your debt security is a floating rate debt security, the formula and any adjustments that apply to the interest rate will be specified below.

Each floating rate debt security will bear interest from its original issue date or from the most recent date to which interest on the debt security has been paid or made available for payment. Interest will accrue on the principal of a floating rate debt security at the yearly rate determined according to the interest rate formula stated in the applicable prospectus supplement, until the principal is paid or made available for payment. We will pay interest on each interest payment date and at maturity as described below under "—Payment Mechanics for Debt Securities."

Calculation of Interest. Calculations relating to floating rate debt securities will be made by the calculation agent, an institution that we appoint as our agent for this purpose. That institution may include any affiliate of ours, such as UBS Securities LLC. The prospectus supplement for a particular floating rate debt security will name the institution that we have appointed to act as the calculation agent for that debt security as of its original issue date. We may appoint a different institution to serve as calculation agent from time to time after the original issue date of the debt security without your consent and without notifying you of the change. Absent manifest error, all determinations of the calculation will be final and binding on you and us, without any liability on the part of the calculation agent.

For each floating rate debt security, the calculation agent will determine, on the corresponding interest calculation or determination date, as described in the applicable prospectus supplement, the interest rate that takes effect on each interest reset date. In addition, the calculation agent will calculate the amount of interest that has accrued during each interest period—*i.e.*, the period from and including the original issue date, or the last date to which interest has been paid or made available for payment, to but excluding the payment date. For each interest period, the calculation agent will calculate the amount of accrued interest by multiplying the face or other specified amount of the floating rate debt security by an accrued interest factor for the interest period. This factor will equal the sum of the interest factors calculated for each day during the interest period. The interest factor for each day will be expressed as a decimal and will be calculated by dividing the interest rate, also expressed as a decimal, applicable to that day by 360 or by the actual number of days in the year, as specified in the applicable prospectus supplement.

Upon the request of the holder of any floating rate debt security, the calculation agent will provide the interest rate then in effect for that debt security—and, if determined, the interest rate that will become effective on the next interest reset date. The calculation agent's determination of any interest rate, and its calculation of the amount of interest for any interest period, will be final and binding in the absence of manifest error.

All percentages resulting from any calculation relating to a debt security will be rounded upward or downward, as appropriate, to the next higher or lower one hundred-thousandth of a percentage point, *e.g.*, 9.876541% (or .09876541) being rounded down to 9.87654% (or .0987654) and 9.876545% (or .09876545) being rounded up to 9.87655% (or .0987655). All amounts used in or resulting from any calculation relating to a floating rate debt security will be rounded upward or downward, as appropriate, to the nearest cent, in the case of U.S. dollars, or to the nearest corresponding hundredth of a unit, in the case of a currency other than U.S. dollars, with one-half cent or one-half of a corresponding hundredth of a unit or more being rounded upward.

In determining the base rate that applies to a floating rate debt security during a particular interest period, the calculation agent may obtain rate quotes from various banks or dealers active in the relevant market, as described in the applicable prospectus supplement. Those reference banks and dealers may include the calculation agent itself and its affiliates, as well as any underwriter, dealer or agent participating in the distribution of the relevant floating rate debt securities and its affiliates, and they may include UBS AG or its affiliates.

#### **Indexed Debt Securities**

A debt security of this type provides that the principal amount payable at its maturity, and/or the amount of interest payable on an interest payment date, will be determined by reference to:

- > securities of one or more issuers:
- > one or more currencies;
- > one or more commodities;
- any other financial, economic or other measure or instrument, including the occurrence or non-occurrence of any event or circumstance; and/or
- > one or more indices or baskets of the items described above.

If you are a holder of an indexed debt security, you may receive an amount at maturity (including upon acceleration following an event of default) that is greater than or less than the face amount of your debt security depending upon the formula used to determine the amount payable and the value of the applicable index at maturity. The value of the applicable index will fluctuate over time.

An indexed debt security may provide either for cash settlement or for physical settlement by delivery of the underlying property or another property of the type listed above. An indexed debt security may also provide that the form of settlement may be determined at our option or at the holder's option. Some indexed debt securities may be convertible, exercisable or exchangeable, at our option or the holder's option, into or for securities of an issuer other than UBS AG.

If you purchase an indexed debt security, your prospectus supplement will include information about the relevant index, about how amounts that are to become payable will be determined by reference to the price or value of that index and about the terms on which the security may be settled physically or in cash. The prospectus supplement will also identify the calculation agent that will calculate the amounts payable with respect to the indexed debt security and may exercise significant discretion in doing so. The calculation agent may be UBS Securities LLC or another of our affiliates. See "Considerations Relating to Indexed Securities" for more information about risks of investing in debt securities of this type.

#### **Original Issue Discount Debt Securities**

A fixed rate debt security, a floating rate debt security or an indexed debt security may be an original issue discount debt security. A debt security of this type is issued at a price lower than its principal amount and provides that, upon redemption or acceleration of its maturity, an amount less than its principal amount will be payable. An original issue discount debt security may be a zero coupon debt security. A debt security issued at a discount to its principal may, for U.S. federal income tax purposes, be considered an original issue discount debt security, regardless of the amount payable upon redemption or acceleration of maturity. See "U.S. Tax Considerations—Taxation of Debt Securities—Original Issue Discount" below for a brief description of the U.S. federal income tax consequences of owning an original issue discount debt security.

#### **Information in Your Prospectus Supplement**

Your prospectus supplement will describe the specific terms of your debt security, which will include some or all of the following:

- > any limit on the total principal amount of the debt securities of the same series;
- > the stated maturity;
- the specified currency or currencies for principal and interest, if not U.S. dollars;
- the price at which we originally issue your debt security, expressed as a percentage of the principal amount, and the original issue date;
- whether your debt security is a fixed rate debt security, a floating rate debt security or an indexed debt security;
- > if your debt security is a fixed rate debt security, the yearly rate at which your debt security will bear interest, if any, and the interest payment dates;
- if your debt security is a floating rate debt security, the interest rate basis; any applicable index currency or maturity, spread or spread multiplier or initial base rate, maximum rate or minimum rate; the interest reset, determination, calculation and payment dates; the day count used to calculate interest payments for any period; the business day convention; and the calculation agent;
- if your debt security is an indexed debt security, the principal amount, if any, we will pay you at maturity, the amount of interest, if any, we will pay you on an interest payment date or the formula we will use to calculate these amounts, if any, and the terms on which your debt security will be exchangeable for or payable in cash, securities or other property;
- if your debt security may be converted into or exercised or exchanged for debt or equity securities of one or more third parties, the terms on which conversion, exercise or exchange may occur, including whether conversion, exercise or exchange is mandatory, at the option of the holder or at our option, the period during which conversion, exercise or exchange may occur, the initial conversion, exercise or exchange price or rate and the circumstances or manner in which the amount of securities issuable upon conversion, exercise or exchange may be adjusted;
- > if your debt security is also an original issue discount debt security, the yield to maturity;
- if applicable, the circumstances under which your debt security may be redeemed at our option or repaid at the holder's option before the stated maturity, including any redemption commencement date, repayment date(s), redemption price(s) and redemption period(s);
- the authorized denominations, if other than \$1,000 and integral multiples of \$1,000;
- the depositary for your debt security, if other than DTC, and any circumstances under which the holder may request securities in non-global form, if we choose not to issue your debt security in book-entry form only;
- > if your debt security will be issued in bearer form, any special provisions relating to bearer securities;
- if applicable, the circumstances under which we will pay additional amounts on any debt securities held by a person who is not a United States person for tax purposes and under which we can redeem the debt securities if we have to pay additional amounts;
- the names and duties of any co-trustees, depositaries, authenticating agents, paying agents, transfer agents or registrars for your debt security, as applicable; and
- > any other terms of your debt security, which could be different from those described in this prospectus.

If you purchase your debt security—or any of our other securities we describe in this prospectus—in a market-making transaction, you will receive information about the price you pay and your trade and settlement dates in a separate confirmation of sale. A market-making transaction is one in which we, UBS Securities LLC, UBS Financial Services Inc. or another of our affiliates resells a security that it has previously acquired from another holder. A market-making transaction in a particular security occurs after the original issuance and sale of the security.

#### **Extension of Maturity**

If specified in the applicable prospectus supplement, we will have the option to extend the stated maturity of your debt security for one or more periods of whole years up to but not beyond the final maturity date specified in the prospectus supplement. We call a debt security whose maturity we may extend an extendible debt security. We call the period of time as to which we may extend the maturity the extension period. The following procedures will apply to extendible debt securities, unless otherwise indicated in the applicable prospectus supplement.

We may extend the maturity of an extendible debt security by notifying the paying agent between 45 and 60 days before the stated maturity then in effect. The stated maturity may be the original stated maturity, as described in the prospectus supplement, or a maturity that we previously extended by following these procedures. If we notify the paying agent that we will extend the maturity, the paying agent will send a notice to each holder by first class mail, postage prepaid, or by other means agreed upon between us and the paying agent, at least 30 days before the stated maturity then in effect. The notice sent by the paying agent will provide the following information:

- > our election to extend the maturity of the extendible debt security;
- the extended maturity date or, if the maturity date had previously been extended, the new extended maturity date;
- the interest rate that will apply during the extension period or, in the case of a floating rate debt security, the spread and/or spread multiplier, if any, applicable during the extension period; and
- the provisions, if any, for redemption and repayment during the extension period.

Once the paying agent has mailed the notice to each holder, the extension of the maturity date will take place automatically. All of the terms of the debt security will be the same as the terms of the debt security as originally issued, except those terms that are described in the notice sent by the paying agent to each holder and except as described in the following paragraph.

Not later than 10:00 a.m., New York City time, on the twentieth calendar day before the maturity date then in effect for an extendible debt security or, if that day is not a business day, on the next succeeding business day, we may revoke the interest rate set forth in the extension notice sent by the paying agent to each holder and establish a higher interest rate for the extension period. If we elect to establish a higher interest rate, the paying agent will send a notice to each holder by first class mail, postage prepaid, or by other means agreed between us and the paying agent, of the higher interest rate in the case of a floating rate debt security, the higher spread and/or spread multiplier, if any. The notice of the higher rate cannot be revoked. All extendible debt securities as to which the maturity date has been extended will bear the higher rate for the extension period, whether or not tendered for repayment.

If we elect to extend the maturity date of an extendible debt security, each holder may elect repayment of all or part of its debt security on the maturity date then in effect at a price equal to the principal amount plus any accrued and unpaid interest to that date. To elect repayment, a holder must give notice to the paying agent between 25 and 35 days before the maturity date in effect. The notice must consist of either:

- > the debt security along with the completed form entitled "Option to Elect Repayment," which will be attached to your debt security.
- a telegram, facsimile transmission or letter from a member of a national securities exchange, the Financial Industry Regulatory Authority, Inc. or a commercial bank or trust company in the United States setting forth the name of the holder, the principal amount of the debt security, the principal amount of the debt security to be repaid, the certificate number or a description of the tenor and terms of the debt security, a statement that the option to elect repayment is being elected and a guarantee that the debt security, together with the completed form entitled "Option to Elect Repayment" will be received by the paying agent no later than the fifth business day after the date of the telegram, facsimile transmission or letter. The telegram, facsimile transmission or letter will become effective upon receipt, by that fifth business day, of the debt security and complete form.

The holder may revoke the election of repayment by sending to the paying agent written notice by 3:00 p.m., New York City time, on the twentieth day before the maturity date then in effect or, if that day is not a business day, on the next succeeding business day.

If an extendible debt security is represented by a global debt security, the depositary or its nominee, as the holder, will be the only person that can exercise the right to elect repayment or revoke such an election. Any indirect owners who own beneficial interests in the global debt security and wish to make such an election must give proper and timely instructions to the banks or brokers through which they hold their interests, requesting that they notify the depositary to make a repayment election or revoke such an election on their behalf. Different firms have different deadlines for accepting instructions from their customers, and you should take care to act promptly enough to ensure that your request is given effect by the depositary before the applicable deadline for exercise.

#### **Redemption and Repayment**

Unless otherwise indicated in your prospectus supplement, your debt security will not be entitled to the benefit of any sinking fund—that is, we will not deposit money on a regular basis into any separate custodial account to repay your debt securities. In addition, we will not be entitled to redeem your debt security before its stated maturity (except for certain tax reasons, as described below) unless your prospectus supplement specifies a redemption date or redemption commencement date. You will not be entitled to require us to buy your debt security from you, before its stated maturity, unless your prospectus supplement specifies one or more repayment dates.

If your prospectus supplement specifies one or more redemption dates, a redemption commencement date or a repayment date, it will also specify one or more redemption prices or repayment prices, which may be expressed as a percentage of the principal amount of your debt security. It may also specify one or more redemption periods during which the redemption prices relating to a redemption of debt securities during those periods will apply.

If your prospectus supplement specifies one or more redemption dates, your debt security will be redeemable at our option on any of those dates. If your prospectus supplement specifies a redemption commencement date, your debt security will be redeemable at our option at any time on or after that date. If we redeem your debt security, we will do so at the specified redemption price. If different prices are specified for different redemption periods, the price we pay will be the price that applies to the redemption period during which your debt security is redeemed.

If your prospectus supplement specifies a repayment date, your debt security will be repayable at your option on the specified repayment date at the specified repayment price, together with interest accrued to the repayment date.

If we exercise an option to redeem any debt security, we will give the trustee and the holders written notice of the principal amount of the debt security to be redeemed, not less than 5 business days nor more than 60 days before the applicable redemption date unless otherwise specified in your prospectus supplement. We will give the notice in the manner described below in "—Notices."

If a debt security represented by a global debt security is subject to repayment at the holder's option, the depositary or its nominee, as the holder, will be the only person that can exercise the right to repayment. Any indirect holders who own beneficial interests in the global debt security and wish to exercise a repayment right must give proper and timely instructions to the banks or brokers through which they hold their interests, requesting that they notify the depositary to exercise the repayment right on their behalf. Different firms have different deadlines for accepting instructions from their customers, and you should take care to act promptly enough to ensure that your request is given effect by the depositary before the applicable deadline for exercise.

Street name and other indirect holders should contact their banks or brokers for information about how to exercise a repayment right in a timely manner.

We or our affiliates may purchase debt securities from investors who are willing to sell from time to time, either in the open market at prevailing prices or in private transactions at negotiated prices. Debt securities that we or they purchase may, at our discretion, be held, resold or cancelled.

#### **Optional Tax Redemption**

In addition to the situations described above under "—Redemption and Repayment," we also have the option to redeem the debt securities in two situations described below, unless otherwise indicated in your prospectus supplement. The redemption price for the debt securities, other than original issue discount debt securities, will be equal to the principal amount of the debt securities being redeemed plus accrued interest and any additional amounts due on the date fixed for redemption. The redemption price for original issue discount debt securities will be specified below. Furthermore, we must give you between 10 and 60 days' notice before redeeming the debt securities unless otherwise specified in your prospectus supplement.

- The first situation is where, as a result of a change in, execution of or amendment to any laws or treaties or the official application or interpretation of any laws or treaties, we would be required to pay additional amounts as described below under "—Payment of Additional Amounts."
  - This applies only in the case of changes, executions, amendments, applications or interpretations that occur on or after the date specified in the prospectus supplement for the applicable debt securities and in a relevant jurisdiction, as defined in "—Payment of Additional Amounts" below. If UBS is succeeded by another entity, the applicable jurisdiction will be the jurisdiction in which the successor entity is organized, and the applicable date will be the date the entity became a successor.
  - We would not have the option to redeem in this case if we could have avoided the payment of additional amounts or the deduction or withholding by using reasonable measures available to us.
- The second situation is where a person located outside of a relevant jurisdiction into which UBS is merged or to whom it has conveyed, transferred or leased its property is required to pay an additional amount. We would have the option to redeem the debt securities even if we are required to pay additional amounts immediately after the merger, conveyance, transfer or lease. We are not required to use reasonable measures to avoid the obligation to pay additional amounts in this situation.

#### **Payment of Additional Amounts**

A relevant jurisdiction may require UBS to withhold amounts from payments on the principal or interest on a debt security for taxes or any other governmental charges. If the relevant jurisdiction requires a withholding of this type, UBS may be required to pay you an additional amount so that the net amount you receive will be the amount specified in the debt security to which you are entitled.

By relevant jurisdiction, we mean Switzerland or a jurisdiction in which the UBS branch through which debt securities are issued is located. UBS will not have to pay additional amounts in respect of taxes or other governmental charges that are required to be deducted or withheld by any paying agent from a payment on a debt security, if such payment can be made without such deduction or withholding by any other paying agent, or in respect of taxes or other governmental charges that would not have been imposed but for

- the existence of any present or former connection between you and the relevant jurisdiction, other than the mere holding of the debt security and the receipt of payments on it;
- any estate, inheritance, gift, sales, transfer or personal property tax or any similar tax, duty, assessment or governmental charge;
- ➤ a failure to comply with any reasonable certification, documentation, information or other reporting requirement concerning your nationality, residence, identity or connection with the relevant jurisdiction, if such compliance is required as a precondition to relief or exemption from such taxes or other governmental charges (including, without limitation, a certification that you are not resident in the relevant jurisdiction or are not an individual resident of a member state of the European Union);
- any taxes which would not have been imposed but for your presentation, or a presentation on your behalf, of a debt security payment on a date more than 15 days after the date on which such payment on the debt security becomes due and payable or on which the payment is duly provided for, whichever occurs later; or
- > any combination of the items listed above.

In addition, no additional amounts will be required to be paid on account of any deduction or withholding imposed or required pursuant to Sections 1471 through 1474 of the Internal Revenue Code (as defined below under "U.S. Tax Considerations"), any current or future regulations or official interpretations thereof, any agreement entered into pursuant to Section 1471(b) of the Internal Revenue Code, or any fiscal or regulatory legislation, rules or practices adopted pursuant to any intergovernmental agreement entered into in connection with the implementation of such Sections of the Internal Revenue Code.

These provisions will also apply to any taxes or governmental charges imposed by any jurisdiction in which a successor to UBS is organized. The prospectus supplement relating to the debt security may describe additional circumstances in which UBS would not be required to pay additional amounts.

#### **Mergers and Similar Transactions**

We are generally permitted to merge or consolidate with another firm. We are also permitted to sell our assets substantially as an entirety to another firm. With regard to any series of debt securities, we may not take any of these actions, however, unless all the following conditions are met:

- If the successor firm in the transaction is not UBS, the successor firm must be organized as a corporation, partnership or trust and must expressly assume our obligations under the debt securities of that series and the debt indenture. The successor firm must be organized under the laws of Switzerland.
- Immediately after the transaction, no default under the debt securities of that series has occurred and is continuing. For this purpose, "default under the debt securities of that series" means an event of default with respect to that series or any event that would be an event of default with respect to that series if the requirements for giving us default notice and for our default having to continue for a specific period of time were disregarded. We describe these matters below under "—Default, Remedies and Waiver of Default."

If the conditions described above are satisfied with respect to the debt securities of any series, we will not need to obtain the approval of the holders of those debt securities in order to merge or consolidate or to sell our assets. Also, these conditions will apply only if we wish to merge or consolidate with another firm or sell our assets substantially as an entirety to another firm. We will not need to satisfy these conditions if we enter into other types of transactions, including any transaction in which we acquire the stock or assets of another firm, any transaction that involves a change of control of UBS but in which we do not merge or consolidate and any transaction in which we sell less than substantially all our assets.

Also, if we merge, consolidate or sell our assets substantially as an entirety and the successor firm is a non-Swiss entity, neither we nor any successor would have any obligation to compensate you for any resulting adverse tax consequences to the debt securities.

#### **Defeasance and Covenant Defeasance**

If indicated in the applicable prospectus supplement for a debt security, the provisions for full defeasance and covenant defeasance described below will apply to that debt security. In general, we expect these provisions to apply to each debt security that has a specified currency of U.S. dollars and is not a floating rate or indexed debt security.

#### Full Defeasance

If there is a change in U.S. federal tax law, as described below, we can legally release ourselves from all payment and other obligations on your debt security. This is called full defeasance. To do so, each of the following must occur:

We must deposit in trust for the benefit of all holders of those debt securities, money, U.S. government or U.S. government agency notes or bonds or a combination of money and U.S. government or U.S. government agency notes or bonds that will, in each case, in the opinion of a nationally recognized firm of independent public accountants, generate enough cash to make interest, principal and any other payments on those debt securities on their various due dates.

- There must be a change in current U.S. federal tax law or an Internal Revenue Service ruling that lets us make the above deposit without causing the holders to be taxed on those debt securities any differently than if we did not make the deposit and just repaid the debt securities ourselves. Under current federal tax law, the deposit and our legal release from your debt securities would be treated as though we took back your debt security and gave you your share of the cash and notes or bonds deposited in trust. In that event, you could recognize gain or loss on your debt security.
- We must deliver to the trustee a legal opinion of our counsel confirming the tax law change described above.

If we ever fully defease your debt security, you would have to rely solely on the trust deposit for payments on your debt security. You would not be able to look to us for payment in the event of any shortfall.

#### Covenant Defeasance

Under current U.S. federal tax law, we can make the same type of deposit described above and be released from any restrictive covenants relating to your debt security that may be described in your prospectus supplement. This is called covenant defeasance. In that event, you would lose the protection of those restrictive covenants. In order to achieve covenant defeasance for any debt securities, we must do both of the following:

- We must deposit in trust for the benefit of all holders of those debt securities, money, U.S. government or U.S. government agency notes or bonds or a combination of money and U.S. government or U.S. government agency notes or bonds that will, in each case, in the opinion of a nationally recognized firm of independent public accountants, generate enough cash to make interest, principal and any other payments on those debt securities on their various due dates.
- We must deliver to the trustee a legal opinion of our counsel confirming that under U.S. federal income tax law as then in effect we may make the above deposit without causing you to be taxed on those debt securities any differently than if we did not make the deposit and just repaid those debt securities ourselves.

If we accomplish covenant defeasance with regard to your debt security, the following provisions of the debt indenture and your debt security would no longer apply:

- Any covenants that your prospectus supplement may state are applicable to your debt security; and
- The events of default resulting from a breach of covenants, described below in the fourth bullet point under "—Default, Remedies and Waiver of Default—Events of Default."

Any right we have to redeem will survive covenant defeasance with regard to those debt securities.

If we accomplish covenant defeasance on your debt security, you can still look to us for repayment of your debt security in the event of any shortfall in the trust deposit. You should note, however, that if one of the remaining events of default occurred, such as our bankruptcy, and your debt security became immediately due and payable, there may be a shortfall. Depending on the event causing the default you may not be able to obtain payment of the shortfall.

#### **Default, Remedies and Waiver of Default**

You will have special rights if an event of default with respect to your series of debt securities occurs and is not cured, as described in this subsection.

#### Events of Default

Unless your prospectus supplement says otherwise, when we refer to an event of default with respect to any series of debt securities, we mean any of the following:

- We do not pay the principal or any premium (including delivering any security or other property deliverable) on any debt security of that series at its maturity;
- We do not pay interest on any debt securities of that series within 30 days after it becomes due and payable;
- We do not deposit a sinking fund payment with regard to any debt securities of that series on its due date, but only if the payment is required in the applicable prospectus supplement;
- We remain in breach of any other covenant we make in the debt indenture for the benefit of the debt securities of that series, for 60 days after we receive a notice of default stating that we are in breach and requiring us to remedy the breach. The notice must be sent by the trustee or the holders of not less than 10% in principal amount of the relevant series of debt securities then outstanding;
- > We file for bankruptcy or certain other bankruptcy, insolvency or reorganization events relating to UBS occur; or
- If the applicable prospectus supplement states that any additional event of default applies to your series, that event of default occurs.

#### Remedies If an Event of Default Occurs

If an event of default has occurred with respect to any series of debt securities and has not been cured or waived, the trustee or the holders of not less than 25% in principal amount of all debt securities of that series then outstanding may declare the entire principal amount of the debt securities of that series to be due immediately. If an event of default occurs because of bankruptcy, insolvency or reorganization events relating to UBS, the entire principal amount of the debt securities of that series will be automatically accelerated, without any action by the trustee or any holder.

Each of the situations described above is called an acceleration of the maturity of the affected series of debt securities. If the maturity of any series is accelerated and a judgment for payment has not yet been obtained, the holders of a majority in principal amount of the debt securities of that series may cancel the acceleration for the entire series.

If an event of default occurs, the trustee will have special duties. The trustee will be obligated to use those of its rights and powers under the debt indenture, and to use the same degree of care and skill in doing so, that a prudent person would use in that situation in conducting his or her own affairs.

Except as described in the prior paragraph, the trustee is not required to take any action under the debt indenture at the request of any holders unless the holders offer the trustee reasonable protection from expenses and liability. This is called an indemnity. If the trustee is provided with an indemnity reasonably satisfactory to it, the holders of a majority in principal amount of all debt securities of the relevant series may direct the time, method and place of conducting any lawsuit or other formal legal action seeking any remedy available to the trustee with respect to that series. These majority holders may also direct the trustee in performing any other action under the debt indenture with respect to the debt securities of that series.

Before you bypass the trustee and bring your own lawsuit or other formal legal action or take other steps to enforce your rights or protect your interests relating to any debt security, all of the following must occur:

- > The holder of your debt security must give the trustee written notice that an event of default has occurred, and the event of default must not have been cured or waived.
- The holders of not less than 25% in principal amount of all debt securities of your series must make a written request that the trustee take action because of the default, and they or other holders must offer to the trustee indemnity reasonably satisfactory to the trustee against the cost and other liabilities of taking that action.
- The trustee must not have taken action for 60 days after the above steps have been taken.
- During those 60 days, the holders of a majority in principal amount of the debt securities of your series must not have given the trustee directions that are inconsistent with the written request of the holders of not less than 25% in principal amount of all debt securities of your series.

You are, however, entitled at any time to bring a lawsuit for the payment of money due on your debt security on or after its due date

#### Waiver of Default

The holders of not less than a majority in principal amount of the debt securities of any series may waive a default for all debt securities of that series. If this happens, the default will be treated as if it has not occurred. No one can waive a payment default on your debt security, however, without the approval of the particular holder of that debt security.

We Will Give the Trustee Information About Defaults Annually

We will furnish to the trustee every year a written statement of two of our officers certifying that to their knowledge we are in compliance with the debt indenture and the debt securities, or else specifying any default under the debt indenture.

Book-entry and other indirect holders should consult their banks or brokers for information on how to give notice or direction to or make a request of the trustee and how to declare or cancel an acceleration of the maturity of the debt securities. Bookentry and other indirect owners are described below under "Legal Ownership and Book-Entry Issuance."

#### **Modification and Waiver of Covenants**

There are three types of changes we can make to the debt indenture and the debt securities of any series.

Changes Requiring Each Holder's Approval

First, there are changes that cannot be made without the approval of each holder of a debt security affected by the change. Here is a list of those types of changes:

- > change the stated maturity for any principal or interest payment on a debt security;
- reduce the principal amount, the amount payable on acceleration of the maturity after a default, the interest rate or the redemption price for a debt security;
- > permit redemption of a debt security if not previously permitted;
- impair any right a holder may have to require repayment of his or her debt security;
- impair any right that a holder of an indexed or any other debt security may have to exchange or convert the debt security for or into securities or other property;
- > change the currency of any payment on a debt security other than as permitted by the debt security;
- > change the place of payment on a debt security, if it is in non-global form;
- impair a holder's right to sue for payment of any amount due on his or her debt security;
- reduce the percentage in principal amount of the debt securities of any one or more affected series, taken separately or together, as applicable, the approval of whose holders is needed to change the debt indenture or those debt securities;
- reduce the percentage in principal amount of the debt securities of any one or more affected series, taken separately or together, as applicable, the consent of whose holders is needed to waive our compliance with the debt indenture or to waive defaults; and
- > change the provisions of the debt indenture dealing with modification and waiver in any other respect, except to increase any required percentage referred to above or to add to the provisions that cannot be changed or waived without approval of the holder of each affected debt security.

#### Changes Not Requiring Approval of Holders

The second type of change does not require any approval by holders of the debt securities of an affected series. This type of change is limited to clarifications and changes that would not adversely affect the debt securities of that series in any material respect. We also do not need any approval to make changes that affect only debt securities to be issued under the debt indenture after the changes take effect.

We may also make changes or obtain waivers that do not adversely affect a particular debt security, even if they affect other debt securities. In those cases, we do not need to obtain the approval of the holder of the unaffected debt security; we need only obtain any required approvals from the holders of the affected debt securities.

Changes Requiring Majority Approval

Any other change to the debt indenture and the debt securities would require the following approval:

- ➤ If the change affects only the debt securities of a particular series, it must be approved by the holders of 66⅔% in principal amount of the debt securities of that series.
- If the change affects the debt securities of more than one series of debt securities issued under the debt indenture, it must be approved by the holders of 66% in principal amount of all series affected by the change, with the debt securities of all the affected series voting together as one class for this purpose (and of any affected series that by its terms is entitled to vote separately as a series, as described below).

In each case, the required approval must be given by written consent.

Majority approval would be required for us to obtain a waiver of any of our covenants in the debt indenture. Our covenants include the promises we make about merging, which we describe above under "—Mergers and Similar Transactions." If the holders approve a waiver of a covenant, we will not have to comply with that covenant. The holders, however, cannot approve a waiver of any provision in a particular debt security, or in the debt indenture as it affects that debt security, that we cannot change without the approval of the holder of that debt security as described above under "—Changes Requiring Each Holder's Approval," unless that holder approves the waiver.

Book-entry and other indirect holders should consult their banks or brokers for information on how approval may be granted or denied if we seek to change the debt indenture or the debt securities or request a waiver.

#### **Special Rules for Action by Holders**

When holders take any action under the debt indenture, such as giving a notice of default, declaring an acceleration, approving any change or waiver or giving the trustee an instruction, we will apply the following rules.

Only Outstanding Debt Securities Are Eligible

Only holders of outstanding debt securities of the applicable series will be eligible to participate in any action by holders of debt securities of that series. Also, we will count only outstanding debt securities in determining whether the various percentage requirements for taking action have been met. For these purposes, a debt security will not be "outstanding":

- if it has been surrendered for cancellation:
- if we have deposited or set aside, in trust for its holder, money for its payment or redemption;
- if we have fully defeased it as described above under "—Defeasance and Covenant Defeasance—Full Defeasance"; or
- if we or one of our affiliates, such as UBS Securities LLC or UBS Financial Services Inc., is the beneficial owner.

#### Special Series Voting Rights

We may issue series of debt securities that are entitled, by their terms, to vote separately on matters (for example, modification or waiver of provisions in the debt indenture) that would otherwise require a vote of all affected series, voting together as a single class. Any such series would be entitled to vote together with all other affected series, voting together as one class, and would also be entitled to vote separately, as a series only. These special voting rights will be described in the applicable prospectus supplement. For a series that does not have these special rights, voting will occur as described in the preceding section, but subject to any separate voting rights of any series having special rights. We may issue a series having these or other special voting rights without obtaining the consent of or giving notice to holders of outstanding series.

#### Eligible Principal Amount of Some Debt Securities

In some situations, we may follow special rules in calculating the principal amount of a debt security that is to be treated as outstanding for the purposes described above. This may happen, for example, if the principal amount is payable in a non-U.S. dollar currency, increases over time or is not to be fixed until maturity. For any debt security of the kind described below, we will decide how much principal amount to attribute to the debt security as follows:

- For an original issue discount debt security, we will use the principal amount that would be due and payable on the action date if the maturity of the debt security were accelerated to that date because of a default.
- For a debt security whose principal amount is not known, we will use any amount that we indicate in the prospectus supplement for that debt security. The principal amount of a debt security may not be known, for example, because it is based on an index that changes from time to time and the principal amount is not to be determined until a later date.
- For debt securities with a principal amount denominated in one or more non-U.S. dollar currencies or currency units, we will use the U.S. dollar equivalent, which we will determine.

#### Determining Record Dates for Action by Holders

We will generally be entitled to set any day as a record date for the purpose of determining the holders that are entitled to take action under the debt indenture. In certain limited circumstances, only the trustee will be entitled to set a record date for action by holders. If we or the trustee set a record date for an approval or other action to be taken by holders, that vote or action may be taken only by persons or entities who are holders on the record date and must be taken during the period that we specify for this purpose, or that the trustee specifies if it sets the record date. We or the trustee, as applicable, may shorten or lengthen this period from time to time. This period, however, may not extend beyond the 180th day after the record date for the action. In addition, record dates for any global debt security may be set in accordance with procedures established by the depositary from time to time. Accordingly, record dates for global debt securities may differ from those for other debt securities.

#### Form, Exchange and Transfer of Debt Securities

We will issue each debt security in global—*i.e.*, book-entry—form only, unless we specify otherwise in the applicable prospectus supplement. Debt securities in book-entry form will be represented by a global security registered in the name of a depositary, which will be the holder of all the debt securities represented by the global security. Those who own beneficial interests in a global debt security will do so through participants in the depositary's securities clearance system, and the rights of these indirect owners will be governed solely by the applicable procedures of the depositary and its participants. We describe book-entry securities below under "Legal Ownership and Book-Entry Issuance." Unless we specify otherwise in the applicable prospectus supplement, The Depository Trust Company, New York, New York, known as DTC, will be the depositary for all debt securities in global form.

In addition, we will generally issue each debt security in registered form, without coupons, unless we specify otherwise in the applicable prospectus supplement. If we issue a debt security in bearer form, the applicable prospectus supplement will describe the provisions that would apply to that security.

If a debt security is issued as a global debt security, only the depositary—*e.g.*, DTC, Euroclear and Clearstream—will be entitled to transfer and exchange the debt security or exercise any other rights of a holder as described in this subsection, since the depositary will be the sole holder of the debt security.

If any debt securities cease to be issued in global form, then unless we indicate otherwise in your prospectus supplement, they will be issued:

- > only in fully registered form;
- > without interest coupons; and
- > unless we indicate otherwise in your prospectus supplement, in denominations of \$1,000 and integral multiples of \$1,000.

Holders may exchange their debt securities for debt securities of smaller denominations (subject to the limit above) or combined into fewer debt securities of larger denominations, as long as the total principal amount is not changed. You may not exchange your debt securities for securities of a different series or having different terms, unless your prospectus supplement says you may.

Holders may exchange or transfer their debt securities at the office of the trustee. They may also replace lost, stolen, destroyed or mutilated debt securities at that office. We have appointed the trustee to act as our agent for registering debt securities in the names of holders and transferring and replacing debt securities. We may appoint another entity to perform these functions or perform them ourselves.

Holders will not be required to pay a service charge to transfer or exchange their debt securities, but they may be required to pay for any tax or other governmental charge associated with the exchange or transfer. The transfer or exchange, and any replacement, will be made only if our transfer agent is satisfied with the holder's proof of legal ownership. The transfer agent may require an indemnity before replacing any debt securities.

If we have designated additional transfer agents for your debt security, they will be named in your prospectus supplement. We may appoint additional transfer agents or cancel the appointment of any particular transfer agent. We may also approve a change in the office through which any transfer agent acts.

If the debt securities of any series are redeemable and we redeem less than all those debt securities, we may block the transfer or exchange of those debt securities during the period beginning 15 days before the day we mail the notice of redemption and ending on the day of that mailing or during any other period specified in the applicable prospectus supplement, in order to freeze the list of holders who will receive the mailing. We may also refuse to register transfers of or exchange any debt security selected for redemption, except that we will continue to permit transfers and exchanges of the unredeemed portion of any debt security being partially redeemed.

The rules for exchange described above apply to exchanges of debt securities for other debt securities of the same series and kind. If a debt security is convertible, exercisable or exchangeable into or for a different kind of security, such as one that we have not issued, or for other property, the rules governing that type of conversion, exercise or exchange will be described in the applicable prospectus supplement.

#### **Payment Mechanics for Debt Securities**

#### Who Receives Payments?

If interest is due on a debt security on an interest payment date, we will pay the interest to the person in whose name the debt security is registered at the close of business on the regular record date described below relating to the interest payment date. If interest is due at maturity but on a day that is not an interest payment date, we will pay the interest to the person entitled to receive the principal of the debt security. If principal or another amount besides interest is due on a debt security at maturity, we will pay the amount to the holder of the debt security against surrender of the debt security at a proper place of payment (or, in the case of a global debt security, in accordance with the applicable policies of the depositary).

#### **Payment Dates and Regular Record Dates for Interest**

Unless we specify otherwise in the applicable prospectus supplement, interest on any fixed rate debt security will be payable semiannually each May 15 and November 15 and at maturity, and the regular record date relating to an interest payment date for any fixed rate debt security will be the May 1 or November 1 next preceding that interest payment date. The regular record date relating to an interest payment date for any floating rate debt security will be the 15th calendar day before that interest payment date. These record dates will apply whether or not a particular record date is a business day. For the purpose of determining the holder at the close of business on a regular record date when business is not being conducted, the close of business will mean 5:00 P.M., New York City time, on that day.

The term "business day" means, for any debt security, a day that meets all the following applicable requirements:

- for all debt securities, is a Monday, Tuesday, Wednesday, Thursday or Friday that is not a day on which banking institutions in New York City generally are authorized or obligated by law, regulation or executive order to close and that satisfies any other criteria specified in your prospectus supplement;
- ➤ if the debt security is a floating rate debt security whose interest rate is based on LIBOR, is also a day on which dealings in the relevant index currency specified in the applicable prospectus supplement are transacted in the London interbank market;
- > if the debt security is a floating rate debt security whose interest rate is based on SOFR, is also any day except for a Saturday, a Sunday or a day on which the Securities Industry and Financial Markets Association recommends that the fixed income departments of its members be closed for the entire day for purposes of trading in U.S. government securities;
- if the debt security has a specified currency other than U.S. dollars or euros, is also a day on which banking institutions are not authorized or obligated by law, regulation or executive order to close in the principal financial center of the country issuing the specified currency;
- if the debt security either is a floating rate debt security whose interest rate is based on EURIBOR or has a specified currency of euros, is also a day on which the Trans-European Automated Real-time Gross settlement Express Transfer (TARGET) System, or any successor system, is open for business;
- if the debt security is held through Euroclear, is also not a day on which banking institutions in Brussels, Belgium are generally authorized or obligated by law, regulation or executive order to close; and
- if the debt security is held through Clearstream, is also not a day on which banking institutions in Luxembourg are generally authorized or obligated by law, regulation or executive order to close.

#### How We Will Make Payments Due in U.S. Dollars

We will follow the practices described in this subsection when paying amounts due in U.S. dollars. Payments of amounts due in other currencies will be made as described in the next subsection.

Payments on Global Debt Securities. We will make payments on a global debt security in accordance with the applicable policies of the depositary as in effect from time to time. Under those policies, we will pay directly to the depositary, or its nominee, and not to any indirect owners who own beneficial interests in the global debt security. An indirect owner's right to receive those payments will be governed by the rules and practices of the depositary and its participants, as described under "Legal Ownership and Book-Entry Issuance—What Is a Global Security?"

Payments on Non-Global Debt Securities. We will make payments on a debt security in non-global, registered form as follows. We will pay interest that is due on an interest payment date by check mailed on the interest payment date to the holder at his or her address shown on the trustee's records as of the close of business on the regular record date. We will make all other payments by check at the paying agent described below, against surrender of the debt security. All payments by check will be made in next-day funds—that is, in funds that become available on the day after the check is cashed.

Alternatively, if a non-global debt security has a face amount of at least \$1,000,000 and the holder asks us to do so, we will pay any amount that becomes due on the debt security by wire transfer of immediately available funds to an account at a bank in New York City, on the due date. To request wire payment, the holder must give the paying agent appropriate wire transfer instructions at least five business days before the requested wire payment is due. In the case of any interest payment due on an interest payment date, the instructions must be given by the person who is the holder on the relevant regular record date. In the case of any other payment, payment will be made only after the debt security is surrendered to the paying agent. Any wire instructions, once properly given, will remain in effect unless and until new instructions are given in the manner described above.

Book-entry and other indirect owners should consult their banks or brokers for information on how they will receive payments on their debt securities.

#### How We Will Make Payments Due in Other Currencies

We will follow the practices described in this subsection when paying amounts that are due in a specified currency other than U.S. dollars.

**Payments on Global Debt Securities.** We will make payments on a global debt security in accordance with the applicable policies of the depositary as in effect from time to time. We understand that these policies, as currently in effect at DTC, are as follows:

Unless otherwise indicated in your prospectus supplement, if you are an indirect owner of global debt securities denominated in a specified currency other than U.S. dollars and if you have the right to elect to receive payments in that other currency and you do make that election, you must notify the participant through which your interest in the global debt security is held of your election:

- on or before the applicable regular record date, in the case of a payment of interest, or
- > on or before the 16th day prior to stated maturity, or any redemption or repayment date, in the case of payment of principal or any premium.

You may elect to receive all or only a portion of any interest, principal or premium payment in a specified currency other than U.S. dollars.

Your participant must, in turn, notify DTC of your election on or before the third DTC business day after that regular record date, in the case of a payment of interest, and on or before the 12th DTC business day prior to stated maturity, or on the redemption or repayment date if your debt security is redeemed or repaid earlier, in the case of a payment of principal or any premium.

DTC, in turn, will notify the paying agent of your election in accordance with DTC's procedures.

If complete instructions are received by the participant and forwarded by the participant to DTC, and by DTC to the paying agent, on or before the dates noted above, the paying agent, in accordance with DTC's instructions, will make the payments to you or your participant by wire transfer of immediately available funds to an account maintained by you or your participant with a bank located in the country issuing the specified currency or in another jurisdiction acceptable to us and the paying agent.

If the foregoing steps are not properly completed, we expect DTC to inform the paying agent that payment is to be made in U.S. dollars. In that case, we or our agent will convert the payment to U.S. dollars in the manner described below under "— Conversion to U.S. Dollars." We expect that we or our agent will then make the payment in U.S. dollars to DTC, and that DTC in turn will pass it along to its participants.

Book-entry and other indirect holders of a global debt security denominated in a currency other than U.S. dollars should consult their banks or brokers for information on how to request payment in the specified currency.

Payments on Non-Global Debt Securities. Except as described in the second to last paragraph under this heading, we will make payments on debt securities in non-global form in the applicable specified currency. We will make these payments by wire transfer of immediately available funds to any account that is maintained in the applicable specified currency at a bank designated by the holder and is acceptable to us and the trustee. To designate an account for wire payment, the holder must give the paying agent appropriate wire instructions at least five business days before the requested wire payment is due. In the case of any interest payment due on an interest payment date, the instructions must be given by the person who is the holder on the regular record date. In the case of any other payment, the payment will be made only after the debt security is surrendered to the paying agent. Any instructions, once properly given, will remain in effect unless and until new instructions are properly given in the manner described above.

If a holder fails to give instructions as described above, we will notify the holder at the address in the trustee's records and will make the payment within five business days after the holder provides appropriate instructions. Any late payment made in these circumstances will be treated under the debt indenture as if made on the due date, and no interest will accrue on the late payment from the due date to the date paid.

Although a payment on a debt security in non-global form may be due in a specified currency other than U.S. dollars, we will make the payment in U.S. dollars if the holder asks us to do so. To request U.S. dollar payment, the holder must provide appropriate written notice to the trustee at least five business days before the next due date for which payment in U.S. dollars is requested. In the case of any interest payment due on an interest payment date, the request must be made by the person who is the holder on the regular record date. Any request, once properly made, will remain in effect unless and until revoked by notice properly given in the manner described above.

Indirect owners of a non-global debt security with a specified currency other than U.S. dollars should contact their banks or brokers for information about how to receive payments in the specified currency or in U.S. dollars.

Conversion to U.S. Dollars. When we are asked by a holder to make payments in U.S. dollars of an amount due in another currency, either on a global debt security or a non-global debt security as described above, we will determine the U.S. dollar amount the holder receives as follows. The exchange rate agent described below will request currency bid quotations expressed in U.S. dollars from three or, if three are not available, then two, recognized foreign exchange dealers in New York City, any of which may be the exchange rate agent, which may be UBS Securities LLC, an affiliate of UBS, as of 11:00 A.M., New York City time, on the second business day before the payment date. Currency bid quotations will be requested on an aggregate basis, for all holders of debt securities requesting U.S. dollar payments of amounts due on the same date in the same specified currency. The U.S. dollar amount the holder receives will be based on the highest acceptable currency bid quotation received by the exchange rate agent. If the exchange rate agent determines that at least two acceptable currency bid quotations are not available on that second business day, the payment will be made in the specified currency.

To be acceptable, a quotation must be given as of 11:00 A.M., New York City time, on the second business day before the due date and the quoting dealer must commit to execute a contract at the quotation in the total amount due in that currency on all series of debt securities. If some but not all of the relevant debt securities are LIBOR debt securities, SOFR debt securities or EURIBOR debt securities, the second preceding business day will be determined for this purpose as if none of those debt securities were LIBOR debt securities, SOFR debt securities or EURIBOR debt securities.

A holder that requests payment in U.S. dollars will bear all associated currency exchange costs, which will be deducted from the payment.

When the Specified Currency Is Not Available. If we are obligated to make any payment in a specified currency other than U.S. dollars, and the specified currency or any successor currency is not available to us or cannot be paid to you due to circumstances beyond our control—such as the imposition of exchange controls or a disruption in the currency markets—we will be entitled to satisfy our obligation to make the payment in that specified currency by making the payment in U.S. dollars, on the basis specified in the applicable prospectus supplement.

For a specified currency other than U.S. dollars, the exchange rate will be the noon buying rate for cable transfers of the specified currency in New York City as quoted by the Federal Reserve Bank of New York on the then-most recent day on which that bank has quoted that rate.

The foregoing will apply to any debt security, whether in global or non-global form, and to any payment, including a payment at maturity. Any payment made under the circumstances and in a manner described above will not result in a default under any debt security or the debt indenture.

**Exchange Rate Agent.** If we issue a debt security in a specified currency other than U.S. dollars, we will appoint a financial institution to act as the exchange rate agent and will name the institution initially appointed when the debt security is originally issued in the applicable prospectus supplement. We may select UBS Securities LLC or another of our affiliates to perform this role. We may change the exchange rate agent from time to time after the original issue date of the debt security without your consent and without notifying you of the change.

All determinations made by the exchange rate agent will be at its sole discretion unless we state in your prospectus supplement that any determination is subject to our approval. In the absence of manifest error, those determinations will be conclusive for all purposes and binding on you and us, without any liability on the part of the exchange rate agent.

#### **Payment When Offices Are Closed**

If any payment is due on a debt security on a day that is not a business day, we will make the payment on the next day that is a business day. Unless specified otherwise in the applicable prospectus supplement, payments postponed to the next business day in this situation will be treated under the debt indenture as if they were made on the original due date. Postponement of this kind will not result in a default under any debt security or the debt indenture, and no interest will accrue on the postponed amount from the original due date to the next day that is a business day. The term business day has a special meaning, which we describe above under "—Payment Dates and Regular Record Dates for Interest."

#### **Paying Agent**

We may appoint one or more financial institutions to act as our paying agents, at whose designated offices debt securities in non-global entry form may be surrendered for payment at their maturity. We call each of those offices a paying agent. We may add, replace or terminate paying agents from time to time. We may also choose to act as our own paying agent. Initially, we have appointed the trustee, at its corporate trust office in New York City, as the paying agent. We must notify the trustee of changes in the paying agents.

#### **Settlement Mechanics**

The settlement mechanics applicable to debt securities calling for physical settlement will be described in the applicable prospectus supplement.

#### **Unclaimed Payments**

Regardless of who acts as paying agent, all money paid by us to a paying agent that remains unclaimed at the end of two years after the amount is due to a holder will be repaid to us. After that two-year period, the holder may look only to us for payment and not to the trustee, any other paying agent or anyone else.

#### **Notices**

Notices to be given to holders of a global debt security will be given only to the depositary, in accordance with its applicable policies as in effect from time to time. Notices to be given to holders of debt securities not in global form will be sent by mail to the respective addresses of the holders as they appear in the trustee's records, and will be deemed given when mailed. Neither the failure to give any notice to a particular holder, nor any defect in a notice given to a particular holder, will affect the sufficiency of any notice given to another holder.

Book-entry and other indirect holders should consult their banks or brokers for information on how they will receive notices.

#### Our Relationship with the Trustee

U.S. Bank Trust National Association has provided commercial banking and other services for us and our affiliates in the past and may do so in the future. Among other things, U.S. Bank Trust National Association holds debt securities issued by us and serves as trustee or agent with regard to other obligations of UBS or its subsidiaries.

U.S. Bank Trust National Association is serving as the trustee for the debt securities and the warrants issued under our warrant indenture. Consequently, if an actual or potential event of default occurs with respect to any of these securities, the trustee may be considered to have a conflicting interest for purposes of the Trust Indenture Act of 1939. In that case, the trustee may be required to resign under one or more of the indentures, and we would be required to appoint a successor trustee. For this purpose, a "potential" event of default means an event that would be an event of default if the requirements for giving us default notice or for the default having to exist for a specific period of time were disregarded.

#### **Legal Ownership and Book-Entry Issuance**

In this section, we describe special considerations that will apply to registered securities issued in global—i.e., book-entry—form. First we describe the difference between legal ownership and indirect ownership of registered securities. Then we describe special provisions that apply to global securities.

#### Who is The Legal Owner of a Registered Security?

Each debt security or warrant in registered form will be represented either by a certificate issued in definitive form to a particular investor or by one or more global securities representing the entire issuance of securities. We refer to those who have securities registered in their own names, on the books that we or the trustee, warrant agent or other agent maintain for this purpose, as the "holders" of those securities. These persons are the legal holders of the securities. We refer to those who, indirectly through others, own beneficial interests in securities that are not registered in their own names as indirect owners of those securities. As we discuss below, indirect owners are not legal holders, and investors in securities issued in book-entry form or in street name will be indirect owners.

#### **Book-Entry Owners**

We will issue each security in book-entry form only. This means securities will be represented by one or more global securities registered in the name of a financial institution that holds them as depositary on behalf of other financial institutions that participate in the depositary's book-entry system. These participating institutions, in turn, hold beneficial interests in the securities on behalf of themselves or their customers.

Under each indenture or warrant agreement, only the person in whose name a security is registered is recognized as the holder of that security. Consequently, for securities issued in global form, we will recognize only the depositary as the holder of the securities and we will make all payments on the securities, including deliveries of any property other than cash, to the depositary. The depositary passes along the payments it receives to its participants, which in turn pass the payments along to their customers who are the beneficial owners. The depositary and its participants do so under agreements they have made with one another or with their customers; they are not obligated to do so under the terms of the securities.

As a result, investors will not own securities directly. Instead, they will own beneficial interests in a global security, through a bank, broker or other financial institution that participates in the depositary's book-entry system or holds an interest through a participant. As long as the securities are issued in global form, investors will be indirect owners, and not holders, of the securities.

#### **Street Name Owners**

In the future we may terminate a global security or issue securities initially in non-global form. In these cases, investors may choose to hold their securities in their own names or in street name. Securities held by an investor in street name would be registered in the name of a bank, broker or other financial institution that the investor chooses, and the investor would hold only a beneficial interest in those securities through an account he or she maintains at that institution.

For securities held in street name, we will recognize only the intermediary banks, brokers and other financial institutions in whose names the securities are registered as the holders of those securities and we will make all payments on those securities, including deliveries of any property other than cash, to them. These institutions pass along the payments they receive to their customers who are the beneficial owners, but only because they agree to do so in their customer agreements or because they are legally required to do so. Investors who hold securities in street name will be indirect owners, not holders, of those securities.

#### **Legal Holders**

Our obligations, as well as the obligations of the trustee and the obligations, if any, of any warrant agents and any other third parties employed by us, the trustee or any of those agents, run only to the holders of the securities. We do not have obligations to investors who hold indirect interests in global securities, in street name or by any other indirect means. This will be the case whether an investor chooses to be an indirect owner of a security or has no choice because we are issuing the securities only in global form.

For example, once we make a payment or give a notice to the holder, we have no further responsibility for that payment or notice even if that holder is required, under agreements with depositary participants or customers or by law, to pass it along to the indirect owners but does not do so. Similarly, if we want to obtain the approval of the holders for any purpose—for example, to amend the indenture for a series of debt securities or warrants or the warrant agreement for a series of warrants or to relieve us of the consequences of a default or of our obligation to comply with a particular provision of the indenture—we would seek the approval only from the holders, and not the indirect owners, of the relevant securities. Whether and how the holders contact the indirect owners is up to the holders.

When we refer to "you" in this prospectus, we mean those who invest in the securities being offered by this prospectus, whether they are the holders or only indirect owners of those securities. When we refer to "your securities" in this prospectus, we mean the securities in which you will hold a direct or indirect interest.

#### **Special Considerations for Indirect Owners**

If you hold securities through a bank, broker or other financial institution, either in book-entry form or in street name, you should check with your own institution to find out:

- how it handles securities payments and notices;
- whether it imposes fees or charges;
- whether and how you can instruct it to exercise any rights to purchase or sell warrant property under a warrant or to exchange or convert a security for or into other property;
- how it would handle a request for the holders' consent, if ever required;
- whether and how you can instruct it to send you securities registered in your own name so you can be a holder, if that is permitted in the future;
- how it would exercise rights under the securities if there were a default or other event triggering the need for holders to act to protect their interests; and
- if the securities are in book-entry form, how the depositary's rules and procedures will affect these matters.

#### What Is a Global Security?

We will issue each security in book-entry form only. Each security issued in book-entry form will be represented by a global security that we deposit with and register in the name of one or more financial institutions or clearing systems, or their nominees, which we select. A financial institution or clearing system that we select for any security for this purpose is called the "depositary" for that security. A security will usually have only one depositary but it may have more. Each series of securities will have one or more of the following as the depositaries:

- > The Depository Trust Company, New York, New York, which is known as "DTC";
- ➤ a financial institution holding the securities on behalf of Morgan Guaranty Trust Company of New York, acting out of its Brussels, Belgium, office, as operator of the Euroclear system, which is known as "Euroclear";
- > a financial institution holding the securities on behalf of Clearstream Banking, société anonyme, which is known as "Clearstream"; and

> any other clearing system or financial institution named in the applicable prospectus supplement. The depositaries named above may also be participants in one another's systems. Thus, for example, if DTC is the depositary for a global security, investors may hold beneficial interests in that security through Euroclear or Clearstream, as DTC participants.

The depositary or depositaries for your securities will be named in your prospectus supplement; if none is named, the depositary will be DTC.

A global security may represent one or any other number of individual securities. Generally, all securities represented by the same global security will have the same terms. We may, however, issue a global security that represents multiple securities of the same kind, such as debt securities, that have different terms and are issued at different times. We call this kind of global security a master global security. Your prospectus supplement will not indicate whether your securities are represented by a master global security.

A global security may not be transferred to or registered in the name of anyone other than the depositary or its nominee, unless special termination situations arise. We describe those situations below under "—Holder's Option to Obtain a Non-Global Security; Special Situations When a Global Security Will Be Terminated." As a result of these arrangements, the depositary, or its nominee, will be the sole registered owner and holder of all securities represented by a global security, and investors will be permitted to own only indirect interests in a global security. Indirect interests must be held by means of an account with a broker, bank or other financial institution that in turn has an account with the depositary or with another institution that does. Thus, an investor whose security is represented by a global security will not be a holder of the security, but only an indirect owner of an interest in the global security.

If the prospectus supplement for a particular security indicates that the security will be issued in global form only, then the security will be represented by a global security at all times unless and until the global security is terminated. We describe the situations in which this can occur below under "—Holder's Option to Obtain a Non-Global Security; Special Situations When a Global Security Will Be Terminated." If termination occurs, we may issue the securities through another book-entry clearing system or decide that the securities may no longer be held through any book-entry clearing system.

#### **Special Considerations for Global Securities**

As an indirect owner, an investor's rights relating to a global security will be governed by the account rules of the depositary and those of the investor's financial institution or other intermediary through which it holds its interest (such as Euroclear or Clearstream, if DTC is the depositary), as well as general laws relating to securities transfers. We do not recognize this type of investor or any intermediary as a holder of securities and instead deal only with the depositary that holds the global security. If securities are issued only in the form of a global security, an investor should be aware of the following:

- An investor cannot require the securities to be registered in his or her own name, and cannot obtain non-global certificates for his or her interest in the securities, except in the special situations we describe below.
- An investor will be an indirect holder and must look to his or her own bank or broker for payments on the securities and protection of his or her legal rights relating to the securities, as we describe above under "—Who Is the Legal Owner of a Registered Security?"
- An investor may not be able to sell interests in the securities to some insurance companies and other institutions that are required by law to own their securities in non-book-entry form.
- An investor may not be able to pledge his or her interest in a global security in circumstances where certificates representing the securities must be delivered to the lender or other beneficiary of the pledge in order for the pledge to be effective.
- > The depositary's policies will govern payments, deliveries, transfers, exchanges, notices and other matters relating to an investor's interest in a global security, and those policies may change from time to time. We, the trustee and any warrant agents will have no responsibility for any aspect of the depositary's policies, actions or records of ownership interests in a global security. We, the trustee and any warrant agents also do not supervise the depositary in any way.
- The depositary will require that those who purchase and sell interests in a global security within its book-entry system use immediately available funds and your broker or bank may require you to do so as well.

Financial institutions that participate in the depositary's book-entry system and through which an investor holds its interest in the global securities, directly or indirectly, may also have their own policies affecting payments, deliveries, transfers, exchanges, notices and other matters relating to the securities, and those policies may change from time to time. For example, if you hold an interest in a global security through Euroclear or Clearstream, when DTC is the depositary, Euroclear or Clearstream, as applicable, will require those who purchase and sell interests in that security through them to use immediately available funds and comply with other policies and procedures, including deadlines for giving instructions as to transactions that are to be effected on a particular day. There may be more than one financial intermediary in the chain of ownership for an investor. We do not monitor and are not responsible for the policies or actions or records of ownership interests of any of those intermediaries.

#### Holder's Option to Obtain a Non-Global Security; Special Situations When a Global Security Will Be Terminated

If we issue any series of securities in book-entry form but we choose to give the beneficial owners of that series the right to obtain non-global securities, any beneficial owner entitled to obtain non-global securities may do so by following the applicable procedures of the depositary, any transfer agent or registrar for that series and that owner's bank, broker or other financial institution through which that owner holds its beneficial interest in the securities. If you are entitled to request a non-global certificate and wish to do so, you will need to allow sufficient lead time to enable us or our agent to prepare the requested certificate.

In addition, in a few special situations described below, a global security will be terminated and interests in it will be exchanged for certificates in non-global form representing the securities it represented. After that exchange, the choice of whether to hold the securities directly or in street name will be up to the investor. Investors must consult their own banks or brokers to find out how to have their interests in a global security transferred on termination to their own names, so that they will be holders. We have described the rights of holders and street name investors above under "—Who Is the Legal Owner of a Registered Security?"

The special situations for termination of a global security are as follows:

- if the depositary notifies us that it is unwilling, unable or no longer qualified to continue as depositary for that global security and we do not appoint another institution to act as depositary within 60 days; or
- > in the case of a global security representing debt securities or warrants issued under an indenture, if an event of default has occurred with regard to these debt securities or warrants and has not been cured or waived.

If a global security is terminated, only the depositary, and not we, the trustee for any debt securities or warrants or the warrant agent for any warrants, is responsible for deciding the names of the institutions in whose names the securities represented by the global security will be registered and, therefore, who will be the holders of those securities.

#### **Considerations Relating to Euroclear and Clearstream**

Euroclear and Clearstream are securities clearance systems in Europe. Both systems clear and settle securities transactions between their participants through electronic, book-entry delivery of securities against payment.

Euroclear and Clearstream may be depositaries for a global security. In addition, if DTC is the depositary for a global security, Euroclear and Clearstream may hold interests in the global security as participants in DTC.

As long as any global security is held by Euroclear or Clearstream as depositary, you may hold an interest in the global security only through an organization that participates, directly or indirectly, in Euroclear or Clearstream. If Euroclear or Clearstream is the depositary for a global security and there is no depositary in the United States, you will not be able to hold interests in that global security through any securities clearance system in the United States.

Payments, deliveries, transfers, exchanges, notices and other matters relating to the securities made through Euroclear or Clearstream must comply with the rules and procedures of those systems. Those systems could change their rules and procedures at any time. We have no control over those systems or their participants and we take no responsibility for their activities. Transactions between participants in Euroclear or Clearstream, on one hand, and participants in DTC, on the other hand, when DTC is the depositary, would also be subject to DTC's rules and procedures.

#### Special Timing Considerations for Transactions in Euroclear and Clearstream

Investors will be able to make and receive through Euroclear and Clearstream payments, deliveries, transfers, exchanges, notices and other transactions involving any securities held through those systems only on days when those systems are open for business. Those systems may not be open for business on days when banks, brokers and other institutions are open for business in the United States.

In addition, because of time-zone differences, U.S. investors who hold their interests in the securities through these systems and wish to transfer their interests, or to receive or make a payment or delivery or exercise any other right with respect to their interests, on a particular day may find that the transaction will not be effected until the next business day in Luxembourg or Brussels, as applicable. Thus, investors who wish to exercise rights that expire on a particular day may need to act before the expiration date. In addition, investors who hold their interests through both DTC and Euroclear or Clearstream may need to make special arrangements to finance any purchases or sales of their interests between the U.S. and European clearing systems, and those transactions may settle later than would be the case for transactions within one clearing system.

#### 1. UBS AG FI Enhanced Large Cap Growth ETN due June 19, 2024

**Principal Terms:** 

Initial Trade Date: June 10, 2014

Initial Settlement Date: June 13, 2014

Term: 10 years, subject to your right to receive payment for your Securities upon redemption, acceleration upon minimum

indicative value or exercise by UBS of its call right.

**Denomination/Principal Amount:** \$100.00 per Security

Maturity Date: June 19, 2024, subject to adjustment

**Underlying Index**: The return on the Securities is linked to the Russell 1000 Growth Total Return Index. The level of the Index reflects both the price performance of the Index Constituent Securities and the reinvestment of dividends on the Index Constituent

Securities.

Annual Tracking Rate: 0.85% per annum

Financing Spread: 0.44% per annum

**Loss Rebalancing Fee**: Upon each occurrence of a Loss Rebalancing Event, you will incur a 0.05% reduction in the LR Current Principal Amount of Your Securities and may also have a further reduction due to a breakage computation. See "General Terms of the Securities — Loss Rebalancing Event Upon Large Decreases in the Indicative Value" for the definition of the Loss Rebalancing Fee and all other defined pertaining to the Loss Rebalancing Event.

First Redemption Date: June 20, 2014 for Regular Redemptions, June 26, 2014 for Large Redemptions

Final Redemption Date: June 14, 2024

First Call Date: The first date that UBS may exercise its Call Right is June 15, 2015

**Quarterly Initial Closing Level for the Initial Calendar Quarter**: 826.0448, the Index Closing Level (as defined below) on the Initial Trade Date.

**Quarterly Reset Dates**: For each calendar quarter, the Quarterly Reset Date is the first Trading Day of that quarter beginning on October 1, 2014 and ending on April 1, 2024, subject to adjustment.

**Quarterly Valuation Dates**: For each Quarterly Reset Date, the Quarterly Valuation Date is the last Trading Day of the previous calendar quarter, beginning on September 30, 2014 and ending on March 28, 2024, subject to adjustment.

**Floor Level**: The "Floor Level" is equal to \$20.00 (subject to adjustment as described under "Valuation of the Index and the Securities — Split or Reverse Split of the Securities").

Index Sponsor: Russell Investments, a subsidiary of Russell Investment Group ("Russell").

**Listing**: The Securities have been approved for listing, subject to official notice of issuance, on NYSE Arca under the symbol "FBGX"

**Calculation Date**: June 10, 2024, unless that day is not a Trading Day, in which case the Calculation Date will be the next Trading Day, subject to adjustment.

Index Symbol: RU10GRTR (NYSE and Bloomberg)

Intraday Indicative Value Symbol: FBGXIV (Bloomberg)

CUSIP No.: 902677780 ISIN No.: US9026777808

#### **General Terms of the Securities**

In this section, references to "holders" or "you" mean those who own the Securities registered in their own names, on the books that we or the trustee maintain for this purpose, and not those who own beneficial interests in the Securities registered in street name or in the Securities issued in book-entry form through DTC or another depositary. Owners of beneficial interests in the Securities should read the section entitled "Legal Ownership and Book-Entry Issuance" under "Medium-Term Notes, Series A" above.

These Securities are part of a series of debt securities entitled "Medium-Term Notes, Series A" that we may issue, from time to time, under the indenture more particularly described under "Medium-Term Notes, Series A" above. This section summarizes general financial and other terms that apply to the Securities. Terms that apply generally to all Medium-Term Notes, Series A are described under "Medium-Term Notes, Series A" above. The terms described here supplement those described in "Medium-Term Notes, Series A" above and, if the terms described here are inconsistent with those described there, the terms described here are controlling.

#### **Interest or Coupons**

We will not pay you any interest or coupons during the term of the Securities.

#### **Payment at Maturity**

The "Maturity Date" for each series of Securities will be the third Trading Day after the last Trading Day in the applicable Measurement Period, which we refer to in this section "— Payment at Maturity" as the "Final Measurement Period". The scheduled Maturity Date is identified in "Principal Terms" above.

For each Security, unless earlier called, redeemed or accelerated, you will receive at maturity a cash payment equal to:

- (a) the product of (i) the Current Principal Amount and (ii) the Index Factor as of the last Trading Day in the Final Measurement Period, minus
- (b) the Accrued Fees as of such last Trading Day.

If the amount calculated above is less than zero, the payment at maturity will be zero.

You may lose some or all of your initial investment at maturity. Because the Accrued Fees reduce your final payment, the quarterly compounded leveraged return of the Index will need to offset the negative effect of the Accrued Fees and Loss Rebalancing Fees, if applicable, in order for you to receive an aggregate amount over the term of the Securities of any series equal to at least the initial investment of your Securities. If the quarterly compounded leveraged return of the Index is insufficient to offset the negative effect of the Accrued Fees and the Loss Rebalancing Fees, if applicable, or if the quarterly compounded leveraged return of the Index is negative, you will lose some or all of your investment.

The Accrued Fees will be calculated as of the last Trading Day in the Final Measurement Period as the sum of (i) the Accrued Tracking Fee as of such last Trading Day and (ii) the Accrued Financing Charge as of such last Trading Day.

The "Financing Level" is, as of any date of determination, an amount that equals the Current Principal Amount.

The "Accrued Financing Charge" as of the last Trading Day of the Final Measurement Period is an amount equal to the product of (a) the Financing Level as of the preceding Quarterly Reset Date, (b) a fraction, the numerator of which is the total number of calendar days from, but excluding, the immediately preceding Quarterly Valuation Date to, and including, such last Trading Day of such Final Measurement Period and the denominator of which is 360, and (c) the Financing Rate.

On the Initial Trade Date, the Accrued Financing Charge for each Security will be \$0.

The "Accrued Tracking Fee" as of the last Trading Day in the Final Measurement Period is an amount equal to (a) the aggregate sum of (i) the Current Indicative Value as of the immediately preceding Trading Day for each date starting from, but excluding, the immediately preceding Quarterly Valuation Date to, and including, such last Trading Day in such Final Measurement Period *times* (ii) the Annual Tracking Rate, *divided by* (b) 365.

The "Annual Tracking Rate" is a per annum rate described in "Principal Terms" above.

The "Current Indicative Value" is, as determined by the Calculation Agent as of any date of determination, an amount per Security of any series equal to the product of (i) the Current Principal Amount and (ii) the Index Factor as of such date, calculated using the Index Closing Level on such date as the Index Valuation Level.

The "Principal Amount" of each Security is \$100.00. Each series of the Securities may be issued and sold over time at thencurrent market prices, which may be significantly higher or lower than the Principal Amount.

For the Initial Calendar Quarter, the Current Principal Amount will equal \$100.00 per Security of the applicable series. For each subsequent calendar quarter, the Current Principal Amount for each Security of that series will be reset as follows on the Quarterly Reset Date:

New Current Principal Amount = previous Current Principal Amount × Index Factor on the applicable Quarterly Valuation Date — Accrued Fees on the applicable Quarterly Valuation Date

If any series of the Securities undergoes a split or reverse split, the Current Principal Amount of that series will be adjusted accordingly.

For each calendar quarter, the "Quarterly Reset Date" is the first Trading Day of the quarter specified in "Principal Terms" above, subject to adjustment as described under "— Market Disruption Event"; provided, however, that no Quarterly Reset Date will occur on or after the Call Valuation Date or the Acceleration Date.

For each Quarterly Reset Date, the "Quarterly Valuation Date" is the last Trading Day of the previous calendar quarter subject to adjustment as described under "— Market Disruption Event". The Quarterly Valuation Date is specified in "Principal Terms" above .

The Index Factor will be calculated as follows:

 $1 + (2 \times Index Performance Ratio)$ 

The Index Performance Ratio on any Quarterly Valuation Date, any Redemption Valuation Date, or as of the last Trading Day in the applicable Measurement Period, as applicable, will be:

<u>Index Valuation Level</u> — <u>Quarterly Initial Closing Level</u>

<u>Quarterly Initial Closing Level</u>

The "Index Valuation Level" will equal the arithmetic mean of the Index Closing Levels measured on each Trading Day during the applicable Measurement Period, or the Index Closing Level on any Quarterly Valuation Date or any Redemption Valuation Date, as determined by the Calculation Agent, provided that:

- (1) for Regular Redemptions, if the Redemption Valuation Date falls in a Final Measurement Period, Call Measurement Period, or Acceleration Measurement Period, for the purposes of calculating the Index Performance Ratio as of the Redemption Valuation Date, the Index Valuation Level on the Redemption Valuation Date during such Measurement Period shall equal (a) (i) for each elapsed Trading Day in the Measurement Period from and including the Call Valuation Date, Acceleration Date or Calculation Date, as applicable, to but excluding the Redemption Valuation Date (the "Applicable Date"), the sum of the Index Closing Levels on such Trading Day(s) *plus* (ii) the Index Closing Level on the Applicable Date *times* the number of remaining Trading Days in the Measurement Period from and including the Applicable Date *divided* by (b) the number of Trading Days in the Measurement Period; and
- (2) For a Large Redemption, if the Redemption Valuation Date occurs during an Acceleration Measurement Period, Call Measurement Period, or Final Measurement Period, the Redemption Amount shall equal the Acceleration Amount, Call Settlement or payment at maturity, as applicable.

Unless specified otherwise in "Principal Terms" above, the applicable "Measurement Period" means the five Trading Days from and including the Call Valuation Date, Acceleration Date, Redemption Valuation Date (for a Large Redemption) or the Calculation Date, as applicable, subject to adjustment as described under "General Terms of the Securities — Market Disruption Event".

The "Quarterly Initial Closing Level" for the Initial Calendar Quarter is specified in "Principal Terms" above and will be the Index Closing Level on the applicable Initial Trade Date. For each subsequent calendar quarter, the Quarterly Initial Closing Level on the Quarterly Reset Date will equal the Index Closing Level on the Quarterly Valuation Date for the previous calendar quarter.

The "Index Closing Level" is, for any series of the Securities, the closing level of the relevant Index as published by the Index Sponsor.

The "Index Sponsor" will be the entity that calculates the level of the relevant Index is specified in "Principal Terms" above.

The "Calculation Date" is specified in "Principal Terms" above.

The "Current Indicative Value", as determined by the Calculation Agent as of any date of determination, is an amount per Security equal to the product of (i) the Current Principal Amount and (ii) the Index Factor of such date, using the Index Closing Level of such date as the Index Valuation Level.

Unless specified otherwise in "Principal Terms" above, "Trading Day" means any day on which (i) trading is generally conducted on NYSE Arca and (ii) trading is generally conducted on the markets on which the Index Constituent Securities in the relevant Index are traded, in each case as determined by the Calculation Agent.

#### Early Redemption at the Option of the Holders

You may elect to require UBS to redeem your Securities, subject to a minimum redemption amount of at least 12,500 Securities of the same series. If you elect to have your Securities redeemed and have done so under the redemption procedures described below under "—Redemption Procedures", you will receive payment for your Securities on the Redemption Date. The first and final Redemption Dates are specified in "Principal Terms" above. For any early redemptions, the applicable "Redemption Valuation Date" means the first Trading Day following the date on which you deliver a redemption notice to UBS in compliance with the redemption procedures. For any Large Redemption (as defined below), the Redemption Valuation Date will be the first Trading Day in the applicable Large Redemption Measurement Period. If a Redemption Valuation Date for a Large Redemption occurs during an Acceleration Measurement Period, Call Measurement Period or Final Measurement Period, the Redemption Amount shall equal the Acceleration Amount, Call Settlement or payment at maturity, as applicable.

To satisfy the minimum redemption amount of 12,500 Securities, your broker or other financial intermediary may bundle your Securities for redemption with those of other investors to reach this minimum amount of 12,500 Securities of the same series; however, there can be no assurance that they can or will do so. We may from time to time in our sole discretion reduce, in part or in whole, the minimum redemption amount of 12,500 Securities of any series. Any such reduction will be applied on a consistent basis for all holders of the Securities of the affected series at the time the reduction becomes effective.

The Securities will be redeemed and the holders will receive payment for their Securities on the third Business Day following the corresponding Redemption Valuation Date (or the last Trading Day in the applicable Large Redemption Measurement Period for a Large Redemption), or if such third day is not a Business Day, the next following Business Day (the "Redemption Date"). In addition, if a call notice has been issued, if acceleration has been triggered, or the Final Measurement Period has commenced, in each case with respect to any series of the Securities, for Regular Redemptions the last permitted Redemption Valuation Date for that series of Securities will be the second Trading Day in the applicable Call Measurement Period, Acceleration Measurement Period, or the Final Measurement Period, as applicable. For a Large Redemption, If the Redemption Valuation Date occurs during an Acceleration Measurement Period, Call Measurement Period, or Final Measurement Period, the Redemption Amount shall equal the Acceleration Amount, Call Settlement or payment at maturity, as applicable and the Redemption Date will be the third Business Day following the last Trading Day in the applicable Measurement Period. Any applicable Redemption Valuation Date is subject to adjustment as described under "— Market Disruption Event".

A "Regular Redemption" means an early redemption of Securities of a given series in an amount greater than or equal to the minimum redemption amount of 12,500 Securities but less than the large redemption amount of 2,000,000 Securities.

A "Large Redemption" means an early redemption of Securities of a given series in an amount equal to or greater than 2,000,000 Securities. For purposes of determining whether an early redemption is a Regular Redemption or a Large Redemption, UBS will aggregate all redemption requests received prior to 12:00 noon (New York City time) on a given Trading Day.

## Regular Redemptions

If you exercise your right to have us redeem your Securities and such redemption qualifies as a Regular Redemption, subject to your compliance with the procedures described under "— Redemption Procedures", for each applicable Security you will receive a cash payment on the relevant Redemption Date equal to

- (a) the product of
  - (i) the Current Principal Amount and (ii) the Index Factor as of the applicable Redemption Valuation Date, minus
- (b) the Accrued Fees as of such Redemption Valuation Date, minus
- (c) the Redemption Fee.

## Large Redemptions

If you exercise your right to have us redeem your Securities and such redemption qualifies as a Large Redemption, subject to your compliance with the procedures described under "— Redemption Procedures", for each applicable Security you will receive a cash payment on the relevant Redemption Date equal to

- (a) the product of
  - (i) the Current Principal Amount and (ii) the Index Factor as of the last Trading Day in the applicable Measurement Period, which we refer to in this section "— Early Redemption at the Option of the Holders" as the "Large Redemption Measurement Period", minus
- (b) the Accrued Fees as of such last Trading Day, minus
- (c) the Redemption Fee.

We refer to the cash payments described above as the "Redemption Amount".

If the amount calculated above is less than zero, the payment upon early redemption will be zero. We will inform you of such Redemption Amount two Business Days preceding the applicable Redemption Date.

You may lose some or all of your initial investment upon early redemption. Because the Accrued Fees and the Redemption Fee reduce your final payment, the quarterly compounded leveraged return of the Index will need to be sufficient to offset the negative effect of the Accrued Fees and the Redemption Fee, if applicable, in order for you to receive an aggregate amount over the term of the Securities equal to your initial investment in the Securities. If the quarterly compounded leveraged return of the Index is insufficient to offset such a negative effect or if the quarterly compounded leveraged return of the Index is negative, you will lose some or all of your investment upon early redemption.

The Accrued Fees will be calculated as of any Redemption Valuation Date (or for a Large Redemption, the last Trading Day in the Large Measurement Period) as the sum of (i) the Accrued Tracking Fee as of such date and (ii) the Accrued Financing Charge as of such date.

The "Accrued Tracking Fee" as of any Redemption Valuation Date is an amount equal to (a) the aggregate sum of (i) the Current Indicative Value as of the immediately preceding Trading Day for each date starting from, but excluding, the immediately preceding Quarterly Valuation Date (or, if the Redemption Valuation Date falls in the Initial Calendar Quarter, the Initial Trade Date) to, and including such Redemption Valuation Date (or for a Large Redemption, the last Trading Day in the Large Measurement Period) *times* (ii) the Annual Tracking Rate, *divided by* (b) 365.

The "Accrued Financing Charge" as of any Redemption Valuation Date (or for a Large Redemption, the last Trading Day in the Large Measurement Period) is an amount equal to the product of (a) the Financing Level as of the preceding Quarterly Reset Date, (b) a fraction, the numerator of which is the total number of calendar days from, but excluding, the immediately preceding Quarterly Valuation Date (or if the Redemption Valuation Date or last Trading Day of the applicable Large Measurement Period occurs prior to the initial Quarterly Valuation Date, the period from, and excluding, the Initial Trade Date) to, and including, such Redemption Valuation Date (or for a Large Redemption, the last Trading Day in the Large Measurement Period), and the denominator of which is 360, and (c) the Financing Rate.

The "Redemption Fee" means, as of any date of determination for a series of Securities, an amount per Security equal to the product of (a) 0.125%, (b) the Current Principal Amount and (c) the Index Factor as of the applicable Redemption Valuation Date (or for a Large Redemption, the last Trading Day in the Large Measurement Period).

We discuss these matters in the accompanying prospectus under "Description of Debt Securities We May Offer — Redemption and Repayment".

The Redemption Amount is meant to induce arbitrageurs to counteract any trading of the Securities at a premium or discount to their indicative value, though there can be no assurance that arbitrageurs will employ the redemption feature in this manner. Any series of Securities may trade at, above, or below its indicative value.

## **Redemption Procedures**

To redeem your Securities, you must instruct your broker or other person through whom you hold your Securities to take the following steps through normal clearing system channels:

- deliver a notice of redemption to UBS via email no later than 12:00 noon (New York City time) on the Trading Day immediately preceding the applicable Redemption Valuation Date. If we receive your notice by the time specified in the preceding sentence, we will respond by sending you a confirmation of redemption;
- deliver the signed confirmation of redemption to us via facsimile in the specified form by 5:00 p.m. (New York City time) on the same day. We or our affiliate must acknowledge receipt in order for your confirmation to be effective;
- instruct your DTC custodian to book a delivery vs. payment trade with respect to your Securities on the applicable Redemption Valuation Date (or the applicable last Trading Day in the Large Redemption Measurement Period for Large Redemptions) at a price equal to the Redemption Amount; and
- > cause your DTC custodian to deliver the trade as booked for settlement via DTC at or prior to 10:00 a.m. (New York City time) on the applicable Redemption Date.

Different brokerage firms may have different deadlines for accepting instructions from their customers. Accordingly, as a beneficial owner of the Securities, you should consult the brokerage firm through which you own your interest for the relevant deadline. If your broker delivers your notice of redemption after 12:00 noon (New York City time), or your confirmation of redemption after 5:00 p.m. (New York City time), on the Trading Day prior to the applicable Redemption Valuation Date, your notice will not be effective, you will not be able to redeem your Securities until the following Redemption Date and your broker will need to complete all the required steps if you should wish to redeem your Securities on any subsequent Redemption Date. In addition, UBS may request a medallion signature guarantee or such assurances of delivery as it may deem necessary in its sole discretion. All instructions given to participants from beneficial owners of Securities relating to the right to redeem their Securities will be irrevocable.

## **UBS's Call Right**

We have the right to redeem all, but not less than all, of the Securities of any series upon not less than eighteen calendar days' prior notice to the holders of the Securities of that series, such redemption to occur on any Trading Day specified in "Principal Terms" above through and including the Calculation Date specified in "Principal Terms" above. Upon early redemption in the event we exercise this right, you will receive a cash payment equal to

- (a) the product of (i) the Current Principal Amount and (ii) the Index Factor as of the last Trading Day in the applicable Measurement Period, which we refer to in this section "— UBS's Call Right" as the "Call Measurement Period", minus
- (b) the Accrued Fees as of such last Trading Day.

We refer to this cash payment as the "Call Settlement Amount".

If the amount calculated above is less than zero, the payment upon UBS's exercise of its call right will be zero.

If UBS issues a call notice on any Trading Day, the "Call Valuation Date" will be the fifth Trading Day following the Trading Day on which the call notice is issued.

We will inform you of such Call Settlement Amount on the first Business Day following the last Trading Day in the Call Measurement Period.

The holders will receive payment for their Securities on a date that is at least three, but not greater than six, Trading Days following the last Trading Day in the Call Measurement Period (the "Call Settlement Date"). We will inform you of such Call Settlement Date in the call notice. If a Market Disruption Event is continuing or occurs on the scheduled Call Valuation Date with respect to any of the Index Constituent Securities, such Call Valuation Date may be postponed as described under "—Market Disruption Event".

You may lose some or all of your initial investment at call. Because the Accrued Fees and Loss Rebalancing Fees, if applicable, reduce your final payment, the quarterly compounded leveraged return of the Index will need to offset the negative effect of the Accrued Fees and Loss Rebalancing Fees, if applicable, in order for you to receive an aggregate amount over the term of the Securities equal to at least initial investment of your Securities. If the quarterly compounded leveraged return of the Index is insufficient to offset the negative effect of the Accrued Fees and Loss Rebalancing Fees, if applicable, or if the quarterly compounded leveraged return of the Index is negative, you will lose some or all of your investment at call.

The Accrued Fees will be calculated as of the last Trading Day in the Call Measurement Period as the sum of (i) the Accrued Tracking Fee as of such last Trading Day and (ii) the Accrued Financing Charge as of such last Trading Day.

The "Accrued Tracking Fee" as of the last Trading Day in the Call Measurement Period is an amount equal to (a) the aggregate sum of (i) the Current Indicative Value as of the immediately preceding Trading Day for each date starting from, but excluding, the immediately preceding Quarterly Valuation Date to, and including such Call Valuation Date *times* (ii) the Annual Tracking Rate, *divided by* (b) 365.

The "Accrued Financing Charge" as of the last Trading Day of the Call Measurement Period is an amount equal to the product of (a) the Financing Level as of the preceding Quarterly Reset Date, (b) a fraction, the numerator of which is the total number of calendar days from, but excluding, the immediately preceding Quarterly Valuation Date to, and including, such last Trading Day of such Call Measurement Period and the denominator of which is 360, and (c) the Financing Rate.

## **Acceleration Upon Minimum Indicative Value**

If, at any time, the indicative value for any series of the Securities on any Trading Day equals the Floor Level or less (such day, an "Acceleration Date"), all issued and outstanding Securities of that series will be automatically accelerated and mandatorily redeemed by UBS (even if the indicative value of that series would later exceed the Floor Level on such Acceleration Date or any subsequent Trading Day during the applicable Measurement Period, which we refer to in this section "— Acceleration Upon Minimum Indicative Value" as the "Acceleration Measurement Period") for a cash payment equal to

- (a) the product of (i) the Current Principal Amount and (ii) the Index Factor as of the last Trading Day of the Acceleration Measurement Period, minus
- (b) the Accrued Fees as of such last Trading Day.

We refer to this cash payment as the "Acceleration Amount". The "Floor Level" of any series of the Securities will be specified in "Principal Terms" above. If any series of the Securities undergoes a split or reverse split, the Floor Level of that series will be adjusted accordingly. If the minimum indicative value threshold of any series of Securities has been breached, you will receive on the Acceleration Settlement Date only the Acceleration Amount in respect of your investment in that series of Securities.

You may lose some or all of your initial investment upon an acceleration upon minimum indicative value. Because the Accrued Fees and Loss Rebalancing Fees, if applicable, reduce your final payment, the quarterly compounded leveraged return of the Index will need to offset the negative effect of the Accrued Fees and Loss Rebalancing Fees, if applicable, in order for you to receive an aggregate amount over the term of the Securities equal to at least the initial investment of your Securities. If the quarterly compounded leveraged return of the Index is insufficient to offset the negative effect of the Accrued Fees and the Loss Rebalancing Fees, if applicable, or if the quarterly compounded leveraged return of the Index is negative, you will lose some or all of your investment upon an acceleration upon minimum indicative value.

The Accrued Fees will be calculated as of any date of determination for any series of Securities as the sum of (i) the Accrued Tracking Fee as of the last Trading Day of the Acceleration Measurement Period and (ii) the Accrued Financing Charge as of the last Trading Day of the Acceleration Measurement Period.

The "Accrued Tracking Fee" as of the last Trading Day of the Acceleration Measurement Period will be an amount equal to (a) the aggregate sum of (i) the Current Indicative Value as of the immediately preceding Trading Day for each date starting from, but excluding, the immediately preceding Quarterly Valuation Date (or, if the Acceleration Date falls in the Initial Calendar Quarter, the Initial Trade Date) to, and including, such last Trading Day in such Measurement Period, as applicable, *times* (ii) the Annual Tracking Rate, *divided by* (b) 365.

The "Accrued Financing Charge" as of the last Trading Day of the Acceleration Measurement Period is an amount equal to the product of (a) the Financing Level as of the preceding Quarterly Reset Date, (b) a fraction, the numerator of which is the total number of calendar days from, but excluding, the immediately preceding Quarterly Valuation Date (or if the Acceleration Date occurs prior to the initial Quarterly Valuation Date, the period from, and excluding, the Initial Trade Date) to, and including, such last Trading Day of such Measurement Period as applicable, and the denominator of which is 360, and (c) the Financing Rate.

The "Acceleration Settlement Date" will be the third Trading Day following the last Trading Day of the Acceleration Measurement Period.

Subject to the prior verification by the Calculation Agent that the indicative value of equal or less than the Floor Level was accurately calculated by the relevant calculation agent specified in "Principal Terms" above and in each case with respect to a series of Securities, UBS must provide notice to the holders of that series of the Securities that the minimum indicative value threshold has been breached not less than five calendar days prior to the Acceleration Settlement Date. For a detailed description of how the intraday indicative value of the Securities is calculated see "Valuation of the Index and the Securities".

## Loss Rebalancing Event Upon Large Decreases in the Indicative Value

A Loss Rebalancing Event will have the effect of deleveraging your Securities with the aim of resetting the then-current leverage to approximately 2.0 based on the Index Performance Ratio as of the LR Valuation Date. This means that after a Loss Rebalancing Event, a constant percentage increase in the Index Closing Level will have less of a positive effect on the value of your Securities relative to before the occurrence of the Loss Rebalancing Event. In addition, each time a Loss Rebalancing Event occurs, you will incur a Loss Rebalancing Fee, as defined below.

A "Loss Rebalancing Event" means if, at any time, the closing indicative value for any series of the Securities on any Trading Day decreases 40% in value from the closing indicative value of that series of the Securities on the previous Quarterly Valuation Date. A Loss Rebalancing Event may occur irrespective of whether a Market Disruption Event also occurs on that Trading Day.

With respect to a Loss Rebalancing Event, the "LR Valuation Date" is the first Trading Day following a Loss Rebalancing Event, subject to adjustment as described under "— Market Disruption Event".

With respect to a LR Valuation Date, the "LR Reset Date" is the first Trading Day following a LR Valuation Date, subject to adjustment as described under "— Market Disruption Event".

On the LR Reset Date, the Current Principal Amount for each Security of that series will be reset as follows:

New Current Principal Amount = 99.995% x LR Current Principal Amount.

LR Current Principal Amount = *previous* Current Principal Amount × Index Factor on the applicable LR Valuation Date — Accrued Fees on the applicable LR Valuation Date.

If the amount calculated above is less than zero, the payment at maturity will be zero.

On the LR Reset Date, the LR Current Principal Amount will be reset exactly like the "New Current Principal Amount" on a Quarterly Reset Date, except that:

- (1) the LR Reset Date will be the Quarterly Reset Date;
- (2) the Index Factor and Index Performance Ratio will be calculated on the LR Valuation Date;
- (3) the Index Valuation Level for purposes of calculating the Index Performance Ratio will be computed using the Index Closing Level on the LR Valuation Date;
- (4) for the next reset date, the Quarterly Initial Closing Level on the applicable reset date will equal the Index Closing Level on the LR Valuation Date;
- (5) Accrued Fees (the Accrued Tracking Fees and Accrued Financing Charge) will be computed as of the LR Valuation Date as if the LR Valuation Date was a Quarterly Valuation Date; and
- (6) the Financing Level will be reduced the new Current Principal Amount.

The Financing Rate will equal the sum of (a) 0.44% and (b) the three-month CME Term SOFR rate plus a 0.2616% adjustment, on the day that is two U.S. Government Securities Business Days prior to the immediately preceding Quarterly Valuation Date.

"CME Term SOFR" means the CME Term SOFR Reference Rates published for one-, three-, six-, and 12-month tenors as administered by CME Group Benchmark Administration, Ltd. (or any successor administrator thereof).

"U.S. Government Securities Business Day" means any day except for a Saturday, a Sunday or a day on which the Securities Industry and Financial Markets Association recommends that the fixed income departments of its members be closed for the entire day for purposes of trading in U.S. government securities.

Note that each time a Loss Rebalancing Event occurs, you will incur a 0.05% reduction in the LR Current Principal Amount of your Securities and you also may have a further reduction due to the breakage computation in the preceding proviso. We will refer to these reductions as a "Loss Rebalancing Fee".

Loss Rebalancing Events can occur multiple times. This means both that (i) the Current Principal Amount may be reset more frequently than quarterly and (ii) the cumulative effect of compounding and fees will have increased as a result of the Loss Rebalancing Event(s). Each Loss Rebalancing Event will have the effect of deleveraging your Securities with the aim of resetting the then-current leverage to approximately 2.0 based on the Index Performance Ratio as of the LR Valuation Date. This means that your Securities will entitle you to less of a positive gain in value relative to before the occurrence of the Loss Rebalancing Event. In addition, each time a Loss Rebalancing Event occurs, you will incur a Loss Rebalancing Fee. This fee will reduce the amount of your return (or increase your loss) on the Maturity Date, early redemption, acceleration or exercise by UBS of its call right.

## **Calculation Agent**

UBS Securities LLC will act as the Calculation Agent. The Calculation Agent will determine, among other things, the Index Valuation Level, the Index Performance Ratio, the Index Factor, the Current Principal Amount, the Current Indicative Value, the Accrued Fees, the Accrued Financing Charge, the Financing Level, the Financing Rate, the Accrued Tracking Fee, the Redemption Fee, if any, the Loss Rebalancing Fee, if any, the payment at maturity, if any, that we will pay you at maturity, the Redemption Amount, if any, that we will pay you upon redemption, the Call Settlement Amount, if any, that we will pay you on the Call Settlement Date, if applicable, or the Acceleration Amount, if any, that we will pay you on the Acceleration Settlement Date, if applicable, based on the relevant Index levels calculated by the Calculation Agent, as adjusted, and whether any day is a Business Day or Trading Day. The Calculation Agent will also be responsible for determining whether a Market Disruption Event has occurred, whether the relevant Index has been discontinued or is otherwise unavailable and whether there has been a material change in the relevant Index. All determinations made by the Calculation Agent will be at the sole discretion of the Calculation Agent for any series of the Securities and will, in the absence of manifest error, be conclusive for all purposes and binding on you and on us. We may appoint a different Calculation Agent for any series of the Securities from time to time without your consent and without notifying you.

The Calculation Agent will provide written notice to the trustee at its New York office, on which notice the trustee may conclusively rely, of the amount to be paid at maturity, early redemption, acceleration, or upon exercise by UBS of its call right on or prior to 12:00 p.m., New York City time, on the Business Day immediately preceding the Maturity Date, any Redemption Date, the Acceleration Settlement Date or the Call Settlement Date, as applicable.

All dollar amounts related to determination amounts payable per Security for any series of Securities will be rounded to the nearest ten-thousandth, with five one hundred-thousandths rounded upward (e.g., .76545 would be rounded up to .7655); and all dollar amounts paid on the aggregate principal amount of such Securities per holder will be rounded to the nearest cent, with one-half cent rounded upward.

# **Market Disruption Event**

To the extent a Market Disruption Event with respect to the relevant Index has occurred or is continuing on an Averaging Date (as defined below), the Index Closing Level for such Averaging Date will be determined by the Calculation Agent or one of its affiliates on the first succeeding Trading Day on which a Market Disruption Event does not occur or is not continuing (the "Deferred Averaging Date") with respect to the relevant Index irrespective of whether, pursuant to such determination, the Deferred Averaging Date would fall on a date originally scheduled to be an Averaging Date. If the postponement described in the preceding sentence results in the Index Closing Level being calculated on a day originally scheduled to be an Averaging Date, for purposes of determining the Index Closing Level on any Averaging Date, the Calculation Agent or one of its affiliates, as the case may be, will apply the Index Closing Level for such Deferred Averaging Date (i) on the date(s) of the original Market Disruption Event and (ii) such Averaging Date. For example, if the applicable Measurement Period for purposes of calculating the Call Settlement Amount is based on the arithmetic mean of the Index Closing Levels on October 3, October 4, October 5, October 6 and October 7, and there is a Market Disruption Event with respect to the relevant Index on October 3, but no other Market Disruption Event during such Measurement Period, then the Index Closing Level on October 4 will be used twice to calculate the Call Settlement Amount, and the Call Settlement Amount will be determined based on the arithmetic mean of the Index Closing Levels on October 4, October 4, October, 5, October 6 and October 7. The same approach would be applied if there is a Market Disruption Event during any Measurement Period.

If the Redemption Valuation Date, for purposes of calculating a Redemption Amount for a Regular Redemption, is based on the Index Closing Level on October 3 and there is a Market Disruption Event with respect to the Index on October 3, then the Index Closing Level on October 4 will be used to calculate the Redemption Amount. If a Market Disruption Event occurs on any Quarterly Valuation Date, or LR Valuation Date, the Index Closing Level for such date will be determined by the Calculation Agent or one of its affiliates on the first succeeding Trading Day on which a Market Disruption Event does not occur or is not continuing.

In no event, however, will any postponement pursuant to the two immediately preceding paragraphs result in the final Averaging Date, Quarterly Valuation Date, the Redemption Valuation Date, or LR Valuation Date, as applicable, occurring more than eight Trading Days following the day originally scheduled to be such final Averaging Date or other applicable date. If the eighth Trading Day following the date originally scheduled to be the final Averaging Date, Quarterly Valuation Date, Redemption Valuation Date, or LR Valuation Date, as applicable, a Market Disruption Event has occurred or is continuing with respect to the relevant Index on such eighth Trading Day, the Calculation Agent or one of its affiliates will determine the Index Closing Level based on its estimate of the Index Closing Level that would have prevailed on such eighth Trading Day but for such Market Disruption Event. If any Quarterly Valuation Date or LR Valuation Date is postponed as described above, the succeeding Quarterly Reset Date or LR Reset Date will occur on the next Trading Day following the postponed Quarterly Valuation Date or LR Valuation Date, as applicable.

An "Averaging Date" means each of the Trading Day(s) during any Measurement Period, subject to adjustment as described herein.

Notwithstanding the occurrence of one or more of the events below, which may, in the Calculation Agent's discretion, constitute a Market Disruption Event with respect to the relevant Index, the Calculation Agent in its discretion may waive its right to postpone the Index Closing Level if it determines that one or more of the below events has not and is not likely to materially impair its ability to determine the Index Closing Level on such date.

Any of the following will be a Market Disruption Event with respect to the relevant Index, in each case as determined by the Calculation Agent:

- (a) suspension, absence or material limitation of trading in a material number of the Index Constituent Securities for more than two hours or during the one-half hour before the close of trading in the applicable market or markets;
- (b) suspension, absence or material limitation of trading in option or futures contracts relating to the relevant Index or to a material number of Index Constituent equity interests in the primary market or markets for those contracts for more than two hours of trading or during the one-half hour before the close of trading in that market;
- (c) the relevant Index is not published; or
- (d) in any other event, if the Calculation Agent determines that the event materially interferes with our ability or the ability of any of our affiliates to unwind all or a material portion of a hedge with respect to the Securities that we or our affiliates have effected or may effect as described in the section entitled "Use of Proceeds and Hedging".

The following events will not be Market Disruption Events with respect to the relevant Index:

- (a) a limitation on the hours or numbers of days of trading, but only if the limitation results from an announced change in the regular business hours of the relevant market; or
- (b) a decision to permanently discontinue trading in the options or futures contracts relating to the relevant Index or any Index Constituent equity interests.

For this purpose, an "absence of trading" in the primary securities market on which option or futures contracts related to the relevant Index or any Index Constituent equity interests are traded will not include any time when that market is itself closed for trading under ordinary circumstances.

# Discontinuance of or Adjustments to the Relevant Index; Alteration of Method of Calculation

If the Index Sponsor or another entity that publishes the Index discontinues publication of the relevant Index, or if our right to use the Index is suspended or terminated, and the Index Sponsor or such other entity publishes a successor or substitute index that the Calculation Agent determines to be comparable to the discontinued relevant Index (such index being referred to herein as a "Successor Index"), then the Index Closing Level for such Successor Index will be determined by the Calculation Agent by reference to the Successor Index on the dates and at the times as of which the Index Closing Levels for such Successor Index are to be determined.

Upon any selection by the Calculation Agent of a Successor Index, the Calculation Agent will cause written notice thereof to be furnished to the trustee, to us and to the holders of the Securities.

If the Index Sponsor discontinues publication of the relevant Index, or if our right to use the Index is suspended or terminated, prior to, and such discontinuation or unavailability is continuing on, any Quarterly Valuation Date, any Averaging Date, any Redemption Valuation Date or any other relevant date on which the Index Closing Level is to be determined and the Calculation Agent determines that no Successor Index is available at such time, or the Calculation Agent has previously selected a Successor Index and publication of such Successor Index is discontinued prior to, and such discontinuation is continuing on any relevant date on which the Index Closing Level is to be determined, then the Calculation Agent will determine the Index Closing Level using the closing level and published share weighting of each Index Constituent Security included in the relevant Index or Successor Index, as applicable, immediately prior to such discontinuation or unavailability, as adjusted for certain corporate actions. In such event, the Calculation Agent will cause notice thereof to be furnished to the trustee, to us and to the holders of the Securities.

Notwithstanding these alternative arrangements, discontinuation of the publication of the relevant Index or Successor Index, as applicable, may adversely affect the value of the Securities.

If at any time the method of calculating the relevant Index or a Successor Index, or the value thereof, is changed in a material respect, or if the relevant Index or a Successor Index is in any other way modified so that the level of the relevant Index or such Successor Index does not, in the opinion of the Calculation Agent, fairly represent the level of the relevant Index or such Successor Index had such changes or modifications not been made, then the Calculation Agent will make such calculations and adjustments as, in the judgment of the Calculation Agent, may be necessary in order to arrive at a level of an index comparable to the relevant Index or such Successor Index, as the case may be, as if such changes or modifications had not been made, and the Calculation Agent will calculate the levels for the relevant Index or such Successor Index with reference to the relevant Index or such Successor Index, as adjusted. The Calculation Agent will accordingly calculate the relevant Index levels, Accrued Fees and the Redemption Fee and/or the Loss Rebalancing Fees, if applicable, based on the Index levels calculated by the Calculation Agent, as adjusted. Accordingly, if the method of calculating the relevant Index or a Successor Index is modified so that the level of the relevant Index or such Successor Index is a fraction of what it would have been if there had been no such modification (e.g., due to a split in the relevant Index), which, in turn, causes the level of the relevant Index or such Successor Index to be a fraction of what it would have been if there had been no such modification, then the Calculation Agent will make such calculations and adjustments in order to arrive at a level for the relevant Index or such Successor Index as if it had not been modified (e.g., as if such split had not occurred).

## **Redemption Price Upon Optional Tax Redemption**

We have the right to redeem any series of the Securities in the circumstances described under "Description of Debt Securities We May Offer — Optional Tax Redemption" in the accompanying prospectus. If we exercise this right, the redemption price of that series of the Securities will be determined by the Calculation Agent in a manner reasonably calculated to preserve your and our relative economic position.

## **Default Amount on Acceleration**

If an event of default occurs and the maturity of any series of the Securities is accelerated, we will pay the default amount in respect of the principal of the that series of Securities at maturity. We describe the default amount below under "— Default Amount".

For the purpose of determining whether the holders of our Medium-Term Notes, Series A are entitled to take any action under the indenture, we will treat the outstanding principal amount of each series of Securities as the outstanding principal amount of the Medium-Term Notes, Series A constituted by that series of Securities. Although the terms of the Securities may differ from those of the other Medium-Term Notes, Series A, holders of specified percentages in principal amount of all Medium-Term Notes, Series A, together in some cases with other series of our debt securities, will be able to take action affecting all the Medium-Term Notes, Series A, including the Securities. This action may involve changing some of the terms that apply to the Medium-Term Notes, Series A, accelerating the maturity of the Medium-Term Notes, Series A after a default or waiving some of our obligations under the indenture. We discuss these matters in "Medium Term Notes, Series A" under "Description of Debt Securities We May Offer — Default, Remedies and Waiver of Default" and "Description of Debt Securities We May Offer — Modification and Waiver of Covenants".

## **Default Amount**

The default amount for any series of the Securities on any day will be an amount, in U.S. dollars for the principal of the Securities, equal to the cost of having a qualified financial institution, of the kind and selected as described below, expressly assume all our payment and other obligations with respect to the Securities as of that day and as if no default or acceleration had occurred, or to undertake other obligations providing substantially equivalent economic value to you with respect to the Securities of the accelerated series. That cost will equal:

- > the lowest amount that a qualified financial institution would charge to effect this assumption or undertaking, plus
- the reasonable expenses, including reasonable attorneys' fees, incurred by the holders of the Securities in preparing any documentation necessary for this assumption or undertaking.

During the default quotation period for the Securities of the accelerated series, which we describe below, the holders of that series of the Securities and/or we may request a qualified financial institution to provide a quotation of the amount it would charge to effect this assumption or undertaking. If either party obtains a quotation, it must notify the other party in writing of the quotation. The amount referred to in the first bullet point above will equal the lowest — or, if there is only one, the only — quotation obtained, and as to which notice is so given, during the default quotation period. With respect to any quotation, however, the party not obtaining the quotation may object, on reasonable and significant grounds, to the assumption or undertaking by the qualified financial institution providing the quotation and notify the other party in writing of those grounds within two Business Days after the last day of the default quotation period, in which case that quotation will be disregarded in determining the default amount.

## **Default Quotation Period**

The default quotation period is the period beginning on the day the default amount first becomes due and ending on the third Business Day after that day, unless:

- > no quotation of the kind referred to above is obtained, or
- > every quotation of that kind obtained is objected to within five Business Days after the due date as described above.

If either of these two events occurs, the default quotation period will continue until the third Business Day after the first Business Day on which prompt notice of a quotation is given as described above. If that quotation is objected to as described above within five Business Days after that first Business Day, however, the default quotation period will continue as described in the prior sentence and this sentence.

#### **Qualified Financial Institutions**

For the purpose of determining the default amount at any time, a qualified financial institution must be a financial institution organized under the laws of any jurisdiction in the United States of America, Europe or Japan, which at that time has outstanding debt obligations with a stated maturity of one year or less from the date of issue and rated either:

- A-1 or higher by Standard & Poor's Financial Services LLC, a division of The McGraw-Hill Companies, Inc., or any successor, or any other comparable rating then used by that rating agency, or
- ➤ P-1 or higher by Moody's Investors Service or any successor, or any other comparable rating then used by that rating agency.

## **Manner of Payment and Delivery**

Any payment on or delivery of the Securities at maturity, early redemption, acceleration or upon exercise by UBS of its call right will be made to accounts designated by you and approved by us, or at the corporate trust office of the trustee in New York City, but only when the Securities are surrendered to the trustee at that office. We also may make any payment or delivery in accordance with the applicable procedures of the depositary.

## **Business Day**

When we refer to a Business Day with respect to the Securities, we mean a day that is a Business Day of the kind described in "Medium Term Notes, Series A" under "Description of Debt Securities We May Offer — Payment Mechanics for Debt Securities".

#### **Defeasance**

Neither full defeasance nor covenant defeasance, as described in "Medium Term Notes, Series A" under "Description of Debt Securities We May Offer — Defeasance and Covenant Defeasance", will apply to the Securities.

## Reissuances or Reopened Issues

We may, at our sole discretion, "reopen" or reissue any series of the Securities. We intend to issue the Securities initially in an amount having the aggregate offering price specified in "Principal Terms" above. However, we may issue additional Securities in amounts that exceed the amount specified in "Principal Terms" above at any time, without your consent and without notifying you. The Securities do not limit our ability to incur other indebtedness or to issue other Securities. Also, we are not subject to financial or similar restrictions by the terms of the Securities. For more information, please refer to "Medium Term Notes, Series A" under "Description of Debt Securities We May Offer — Amounts That We May Issue".

These further issuances, if any, will be consolidated to form a single class with the originally issued Securities of any series and will have the same CUSIP number and will trade interchangeably with that series of the Securities immediately upon settlement. Any additional issuances will increase the aggregate Principal Amount of the outstanding Securities of the class, plus the aggregate Principal Amount of any Securities bearing the same CUSIP number that are issued pursuant to any future issuances of Securities bearing the same CUSIP number. The price of any additional offering will be determined at the time of pricing of that offering.

## **Booking Branch**

The Securities will be booked through UBS AG, London Branch.

# **Clearance and Settlement**

The DTC participants that hold the Securities through DTC on behalf of investors will follow the settlement practices applicable to equity securities in DTC's settlement system with respect to the primary distribution of the Securities and secondary market trading between DTC participants.

## **Additional Terms of the Securities**

The general terms of the Securities described above are modified by the specific definitions and terms below.

"Intraday Indicative Value" means the approximate intrinsic economic value of the Securities calculated by NYSE Arca, Inc. and published on Bloomberg (based in part on information provided by the Index Sponsor) or a successor via the facilities on the Consolidated Tape Association under the symbol "FBGXIV".

"Trading Day" means any day on which (i) trading is generally conducted on NYSE Arca and (ii) trading is generally conducted on the Primary Exchanges on which the Index Constituent Securities are traded, in each case as determined by the Calculation Agent.

"Primary Exchange" means, with respect to each Index Constituent Security or each constituent underlying a successor index, the primary exchange or market of trading for such Index Constituent Security or such constituent underlying a successor index.

## Medium-Term Notes, Series B

## **Description of Debt Securities We May Offer**

Please note that in this section entitled "Description of Debt Securities We May Offer," references to UBS, we, our and us refer only to UBS AG and not to its consolidated subsidiaries. In particular, the debt securities are obligations solely of UBS AG, and not of any of its subsidiaries, including, without limitation, UBS Switzerland AG. Also, in this section, references to "holders" and "you" mean those who own debt securities registered in their own names on the books that we or the trustee maintain for this purpose, and not those who own beneficial interests in debt securities registered in street name or in debt securities issued in book-entry form through one or more depositaries. Owners of beneficial interests in the debt securities should read the section below entitled "Legal Ownership and Book-Entry Issuance."

References herein to "this prospectus" are deemed to refer to this section "Medium-Term Notes, Series B" and references to "your prospectus supplement" are deemed to refer to the individual description of notes issuances contained below in this exhibit.

#### The Debt Indenture

As required by U.S. federal law for publicly offered bonds and notes, the debt securities are governed by a document called an indenture. The debt indenture is a contract between us and U.S. Bank Trust National Association, which acts as trustee.

The trustee has two main roles:

- First, the trustee can enforce your rights against us if we default. There are limitations on the extent to which the trustee acts on your behalf, which we describe below under "—Default, Remedies and Waiver of Default."
- Second, the trustee performs administrative duties for us, such as sending you interest payments and notices.

See "—Our Relationship with the Trustee" below for more information about the trustee.

# We May Issue Many Series of Debt Securities Under the Debt Indenture

We may issue as many distinct series of debt securities under the debt indenture as we wish. This section summarizes terms of the debt securities that apply generally to all series. The provisions of the debt indenture allow us not only to issue debt securities with terms different from those of debt securities previously issued under the debt indenture, but also to "reopen" a previous issue of a series of debt securities and issue additional debt securities of that series. Most of the financial and other specific terms of your series, will be described in the prospectus supplement accompanying this prospectus. Those terms may vary from the terms described here.

We may issue debt securities separately or together with other debt securities.

As you read this section, please remember that the specific terms of your debt security as described in your prospectus supplement will supplement and, if applicable, may modify or replace the general terms described in this section. If there are any differences between your prospectus supplement and this prospectus, your prospectus supplement will control. Thus, the statements we make in this section may not apply to your debt security.

When we refer to a series of debt securities, we mean a series issued under the debt indenture. When we refer to your prospectus supplement, we mean the prospectus supplement describing the specific terms of the debt security you purchase. The terms used in your prospectus supplement will have the meanings described in this prospectus, unless otherwise specified.

Unless we indicate otherwise in your prospectus supplement, the debt securities we issue to you will be part of the series of debt securities referred to as our "medium-term notes, Series B." The Series B notes are a single distinct series under the debt indenture, and we may issue Series B notes in such amounts, at such times and on such terms as we wish. The Series B notes will differ from one another, and from any other series, in their terms, but all of the Series B notes together will constitute a single series for all purposes under the debt indenture pursuant to which they will be issued.

# **Amounts That We May Issue**

The debt indenture does not limit the aggregate amount of debt securities that we may issue or the number of series or the aggregate amount of any particular series. We have already issued Series B notes, many of which are currently outstanding. We intend to issue additional Series B notes, and may issue additional Series B notes at any time, without your consent and without notifying you. We may also issue debt securities and other securities at any time without your consent and without notifying you.

The debt indenture and the debt securities do not limit our ability to incur other indebtedness or to issue other securities. Also, we are not subject to financial or similar restrictions by the terms of the debt securities.

## **Principal Amount, Stated Maturity and Maturity**

The principal amount of a debt security means the principal amount payable at its stated maturity, unless that amount is not determinable, in which case the principal amount of a debt security is its face amount.

The term "stated maturity" with respect to any debt security means the day on which the principal amount of your debt security is scheduled to become due. The principal may become due sooner, by reason of redemption or acceleration after a default or otherwise in accordance with the terms of the debt security. The day on which the principal actually becomes due, whether at the stated maturity or earlier, is called the "maturity" of the principal.

We also use the terms "stated maturity" and "maturity" to refer to the days when other payments become due. For example, we may refer to a regular interest payment date when an installment of interest is scheduled to become due as the "stated maturity" of that installment.

When we refer to the "stated maturity" or the "maturity" of a debt security without specifying a particular payment, we mean the stated maturity or maturity, as the case may be, of the principal.

## This Section Is Only a Summary

The debt indenture and its associated documents, including your debt security, contain the full legal text governing the matters described in this section and your prospectus supplement. We have filed a copy of the debt indenture with the SEC as an exhibit to our registration statement. See "Where You Can Find More Information" above for information on how to obtain a copy.

This section and your prospectus supplement summarize all the material terms of the debt indenture and your debt security. They do not, however, describe every aspect of the debt indenture and your debt security. For example, in this section and your prospectus supplement, we use terms that have been given special meaning in the debt indenture, but we describe the meaning of only the more important of those terms.

## **Governing Law**

The debt indenture is, and the debt securities will be, governed by New York law.

#### **Currency of Debt Securities**

Amounts that become due and payable on your debt security in cash will be payable in a currency, composite currency, basket of currencies or currency unit or units specified in your prospectus supplement. We refer to this currency, composite currency, basket of currencies or currency unit or units as a "specified currency." The specified currency for your debt security will be U.S. dollars, unless your prospectus supplement states otherwise. Some debt securities may have different specified currencies for principal and interest. You will have to pay for your debt securities by delivering the requisite amount of the specified currency to UBS Securities LLC, UBS Financial Services Inc. or another firm that we name in your prospectus supplement, unless other arrangements have been made between you and us or you and that firm. We will make payments on your debt securities in the specified currency, except as described below in "—Payment Mechanics for Debt Securities." See "Considerations Relating to Securities Denominated or Payable in or Linked to a Non-U.S. Dollar Currency" below for more information about risks of investing in this kind of debt securities.

## **Types of Debt Securities**

We may issue any of the three types of debt securities described below. A debt security may have elements of each of the three types of debt securities described below. For example, a debt security may bear interest at a fixed rate for some periods and at a floating rate in others. Similarly, a debt security may provide for a payment of principal at maturity linked to an index and also bear interest at a fixed or floating rate.

#### Fixed Rate Debt Securities

A debt security of this type will bear interest at a fixed rate described in the applicable prospectus supplement. This type includes zero coupon debt securities, which bear no interest and are instead issued at a price lower than the principal amount. See "—Original Issue Discount Debt Securities" below for more information about zero coupon and other original issue discount debt securities.

Each fixed rate debt security, except any zero coupon debt security, will bear interest from its original issue date or from the most recent date to which interest on the debt security has been paid or made available for payment. Interest will accrue on the principal of a fixed rate debt security at the fixed yearly rate stated in the applicable prospectus supplement, until the principal is paid or made available for payment or the security has been converted or exchanged. Each payment of interest due on an interest payment date or the date of maturity will include interest accrued from and including the last date to which interest has been paid, or made available for payment, or from the issue date if none has been paid or made available for payment, to but excluding the interest payment date or the date of maturity. We will compute interest on fixed rate debt securities on the basis of a 360-day year of twelve 30-day months. We will pay interest on each interest payment date and at maturity as described below under "—Payment Mechanics for Debt Securities."

## Floating Rate Debt Securities

**Interest Rate Formulas.** A debt security of this type will bear interest at rates that are determined by reference to an interest rate formula. In some cases, the rates may also be adjusted by adding or subtracting a spread or multiplying by a spread multiplier and may be subject to a minimum rate or a maximum rate. If your debt security is a floating rate debt security, the formula and any adjustments that apply to the interest rate will be specified below.

Each floating rate debt security will bear interest from its original issue date or from the most recent date to which interest on the debt security has been paid or made available for payment. Interest will accrue on the principal of a floating rate debt security at the yearly rate determined according to the interest rate formula stated in the applicable prospectus supplement, until the principal is paid or made available for payment. We will pay interest on each interest payment date and at maturity as described below under "—Payment Mechanics for Debt Securities."

Calculation of Interest. Calculations relating to floating rate debt securities will be made by the calculation agent, an institution that we appoint as our agent for this purpose. That institution may include any affiliate of ours, such as UBS Securities LLC. The prospectus supplement for a particular floating rate debt security will name the institution that we have appointed to act as the calculation agent for that debt security as of its original issue date. We may appoint a different institution to serve as calculation agent from time to time after the original issue date of the debt security without your consent and without notifying you of the change. Absent manifest error, all determinations of the calculation will be final and binding on you and us, without any liability on the part of the calculation agent.

For each floating rate debt security, the calculation agent will determine, on the corresponding interest calculation or determination date, as described in the applicable prospectus supplement, the interest rate that takes effect on each interest reset date. In addition, the calculation agent will calculate the amount of interest that has accrued during each interest period—*i.e.*, the period from and including the original issue date, or the last date to which interest has been paid or made available for payment, to but excluding the payment date. For each interest period, the calculation agent will calculate the amount of accrued interest by multiplying the face or other specified amount of the floating rate debt security by an accrued interest factor for the interest period. This factor will equal the sum of the interest factors calculated for each day during the interest period. The interest factor for each day will be expressed as a decimal and will be calculated by dividing the interest rate, also expressed as a decimal, applicable to that day by 360 or by the actual number of days in the year, as specified in the applicable prospectus supplement.

Upon the request of the holder of any floating rate debt security, the calculation agent will provide the interest rate then in effect for that debt security—and, if determined, the interest rate that will become effective on the next interest reset date. The calculation agent's determination of any interest rate, and its calculation of the amount of interest for any interest period, will be final and binding in the absence of manifest error.

All percentages resulting from any calculation relating to a debt security will be rounded upward or downward, as appropriate, to the next higher or lower one hundred-thousandth of a percentage point, *e.g.*, 9.876541% (or .09876541) being rounded down to 9.87654% (or .0987654) and 9.876545% (or .09876545) being rounded up to 9.87655% (or .0987655). All amounts used in or resulting from any calculation relating to a floating rate debt security will be rounded upward or downward, as appropriate, to the nearest cent, in the case of U.S. dollars, or to the nearest corresponding hundredth of a unit, in the case of a currency other than U.S. dollars, with one-half cent or one-half of a corresponding hundredth of a unit or more being rounded upward.

In determining the base rate that applies to a floating rate debt security during a particular interest period, the calculation agent may obtain rate quotes from various banks or dealers active in the relevant market, as described in the applicable prospectus supplement. Those reference banks and dealers may include the calculation agent itself and its affiliates, as well as any underwriter, dealer or agent participating in the distribution of the relevant floating rate debt securities and its affiliates, and they may include UBS AG or its affiliates.

# Indexed Debt Securities

A debt security of this type provides that the principal amount payable at its maturity, and/or the amount of interest payable on an interest payment date, will be determined by reference to:

- > securities of one or more issuers;
- > one or more currencies;
- one or more commodities;
- > any other financial, economic or other measure or instrument, including the occurrence or non-occurrence of any event or circumstance; and/or
- > one or more indices or baskets of the items described above.

If you are a holder of an indexed debt security, you may receive an amount at maturity (including upon acceleration following an event of default) that is greater than or less than the face amount of your debt security depending upon the formula used to determine the amount payable and the value of the applicable index at maturity. The value of the applicable index will fluctuate over time.

An indexed debt security may provide either for cash settlement or for physical settlement by delivery of the underlying property or another property of the type listed above. An indexed debt security may also provide that the form of settlement may be determined at our option or at the holder's option. Some indexed debt securities may be convertible, exercisable or exchangeable, at our option or the holder's option, into or for securities of an issuer other than UBS AG.

If you purchase an indexed debt security, your prospectus supplement will include information about the relevant index, about how amounts that are to become payable will be determined by reference to the price or value of that index and about the terms on which the security may be settled physically or in cash. The prospectus supplement will also identify the calculation agent that will calculate the amounts payable with respect to the indexed debt security and may exercise significant discretion in doing so. The calculation agent may be UBS Securities LLC or another of our affiliates. See "Considerations Relating to Indexed Securities" for more information about risks of investing in debt securities of this type.

## **Original Issue Discount Debt Securities**

A fixed rate debt security, a floating rate debt security or an indexed debt security may be an original issue discount debt security. A debt security of this type is issued at a price lower than its principal amount and provides that, upon redemption or acceleration of its maturity, an amount less than its principal amount will be payable. An original issue discount debt security may be a zero coupon debt security. A debt security issued at a discount to its principal may, for U.S. federal income tax purposes, be considered an original issue discount debt security, regardless of the amount payable upon redemption or acceleration of maturity. See "U.S. Tax Considerations—Taxation of Debt Securities—Original Issue Discount" below for a brief description of the U.S. federal income tax consequences of owning an original issue discount debt security.

## **Information in Your Prospectus Supplement**

Your prospectus supplement will describe the specific terms of your debt security, which will include some or all of the following:

- > any limit on the total principal amount of the debt securities of the same series;
- > the stated maturity;
- the specified currency or currencies for principal and interest, if not U.S. dollars;
- the price at which we originally issue your debt security, expressed as a percentage of the principal amount, and the original issue date;
- whether your debt security is a fixed rate debt security, a floating rate debt security or an indexed debt security;
- > if your debt security is a fixed rate debt security, the yearly rate at which your debt security will bear interest, if any, and the interest payment dates;
- > if your debt security is a floating rate debt security, the interest rate basis; any applicable index currency or maturity, spread or spread multiplier or initial base rate, maximum rate or minimum rate; the interest reset, determination, calculation and payment dates; the day count used to calculate interest payments for any period; the business day convention; and the calculation agent;
- if your debt security is an indexed debt security, the principal amount, if any, we will pay you at maturity, the amount of interest, if any, we will pay you on an interest payment date or the formula we will use to calculate these amounts, if any, and the terms on which your debt security will be exchangeable for or payable in cash, securities or other property;
- if your debt security may be converted into or exercised or exchanged for debt or equity securities of one or more third parties, the terms on which conversion, exercise or exchange may occur, including whether conversion, exercise or exchange is mandatory, at the option of the holder or at our option, the period during which conversion, exercise or exchange may occur, the initial conversion, exercise or exchange price or rate and the circumstances or manner in which the amount of securities issuable upon conversion, exercise or exchange may be adjusted;
- > if your debt security is also an original issue discount debt security, the yield to maturity;
- if applicable, the circumstances under which your debt security may be redeemed at our option or repaid at the holder's option before the stated maturity, including any redemption commencement date, repayment date(s), redemption price(s) and redemption period(s);
- the authorized denominations, if other than \$1,000 and integral multiples of \$1,000;
- the depositary for your debt security, if other than DTC, and any circumstances under which the holder may request securities in non-global form, if we choose not to issue your debt security in book-entry form only;
- if your debt security will be issued in bearer form, any special provisions relating to bearer securities;
- if applicable, the circumstances under which we will pay additional amounts on any debt securities held by a person who is not a United States person for tax purposes and under which we can redeem the debt securities if we have to pay additional amounts;
- the names and duties of any co-trustees, depositaries, authenticating agents, paying agents, transfer agents or registrars for your debt security, as applicable; and
- > any other terms of your debt security, which could be different from those described in this prospectus.

If you purchase your debt security—or any of our other securities we describe in this prospectus—in a market-making transaction, you will receive information about the price you pay and your trade and settlement dates in a separate confirmation of sale. A market-making transaction is one in which we, UBS Securities LLC, UBS Financial Services Inc. or another of our affiliates resells a security that it has previously acquired from another holder. A market-making transaction in a particular security occurs after the original issuance and sale of the security.

## **Extension of Maturity**

If specified in the applicable prospectus supplement, we will have the option to extend the stated maturity of your debt security for one or more periods of whole years up to but not beyond the final maturity date specified in the prospectus supplement. We call a debt security whose maturity we may extend an extendible debt security. We call the period of time as to which we may extend the maturity the extension period. The following procedures will apply to extendible debt securities, unless otherwise indicated in the applicable prospectus supplement.

We may extend the maturity of an extendible debt security by notifying the paying agent between 45 and 60 days before the stated maturity then in effect. The stated maturity may be the original stated maturity, as described in the prospectus supplement, or a maturity that we previously extended by following these procedures. If we notify the paying agent that we will extend the maturity, the paying agent will send a notice to each holder by first class mail, postage prepaid, or by other means agreed upon between us and the paying agent, at least 30 days before the stated maturity then in effect. The notice sent by the paying agent will provide the following information:

- > our election to extend the maturity of the extendible debt security;
- > the extended maturity date or, if the maturity date had previously been extended, the new extended maturity date;
- the interest rate that will apply during the extension period or, in the case of a floating rate debt security, the spread and/or spread multiplier, if any, applicable during the extension period; and
- ➤ the provisions, if any, for redemption and repayment during the extension period.

Once the paying agent has mailed the notice to each holder, the extension of the maturity date will take place automatically. All of the terms of the debt security will be the same as the terms of the debt security as originally issued, except those terms that are described in the notice sent by the paying agent to each holder and except as described in the following paragraph.

Not later than 10:00 a.m., New York City time, on the twentieth calendar day before the maturity date then in effect for an extendible debt security or, if that day is not a business day, on the next succeeding business day, we may revoke the interest rate set forth in the extension notice sent by the paying agent to each holder and establish a higher interest rate for the extension period. If we elect to establish a higher interest rate, the paying agent will send a notice to each holder by first class mail, postage prepaid, or by other means agreed between us and the paying agent, of the higher interest rate in the case of a floating rate debt security, the higher spread and/or spread multiplier, if any. The notice of the higher rate cannot be revoked. All extendible debt securities as to which the maturity date has been extended will bear the higher rate for the extension period, whether or not tendered for repayment.

If we elect to extend the maturity date of an extendible debt security, each holder may elect repayment of all or part of its debt security on the maturity date then in effect at a price equal to the principal amount plus any accrued and unpaid interest to that date. To elect repayment, a holder must give notice to the paying agent between 25 and 35 days before the maturity date in effect. The notice must consist of either:

- > the debt security along with the completed form entitled "Option to Elect Repayment," which will be attached to your debt security.
- a telegram, facsimile transmission or letter from a member of a national securities exchange, the Financial Industry Regulatory Authority, Inc. or a commercial bank or trust company in the United States setting forth the name of the holder, the principal amount of the debt security, the principal amount of the debt security to be repaid, the certificate number or a description of the tenor and terms of the debt security, a statement that the option to elect repayment is being elected and a guarantee that the debt security, together with the completed form entitled "Option to Elect Repayment" will be received by the paying agent no later than the fifth business day after the date of the telegram, facsimile transmission or letter. The telegram, facsimile transmission or letter will become effective upon receipt, by that fifth business day, of the debt security and complete form.

The holder may revoke the election of repayment by sending to the paying agent written notice by 3:00 p.m., New York City time, on the twentieth day before the maturity date then in effect or, if that day is not a business day, on the next succeeding business day.

If an extendible debt security is represented by a global debt security, the depositary or its nominee, as the holder, will be the only person that can exercise the right to elect repayment or revoke such an election. Any indirect owners who own beneficial interests in the global debt security and wish to make such an election must give proper and timely instructions to the banks or brokers through which they hold their interests, requesting that they notify the depositary to make a repayment election or revoke such an election on their behalf. Different firms have different deadlines for accepting instructions from their customers, and you should take care to act promptly enough to ensure that your request is given effect by the depositary before the applicable deadline for exercise.

#### **Redemption and Repayment**

Unless otherwise indicated in your prospectus supplement, your debt security will not be entitled to the benefit of any sinking fund—that is, we will not deposit money on a regular basis into any separate custodial account to repay your debt securities. In addition, we will not be entitled to redeem your debt security before its stated maturity (except for certain tax reasons, as described below) unless your prospectus supplement specifies a redemption date or redemption commencement date. You will not be entitled to require us to buy your debt security from you, before its stated maturity, unless your prospectus supplement specifies one or more repayment dates.

If your prospectus supplement specifies one or more redemption dates, a redemption commencement date or a repayment date, it will also specify one or more redemption prices or repayment prices, which may be expressed as a percentage of the principal amount of your debt security. It may also specify one or more redemption periods during which the redemption prices relating to a redemption of debt securities during those periods will apply.

If your prospectus supplement specifies one or more redemption dates, your debt security will be redeemable at our option on any of those dates. If your prospectus supplement specifies a redemption commencement date, your debt security will be redeemable at our option at any time on or after that date. If we redeem your debt security, we will do so at the specified redemption price. If different prices are specified for different redemption periods, the price we pay will be the price that applies to the redemption period during which your debt security is redeemed.

If your prospectus supplement specifies a repayment date, your debt security will be repayable at your option on the specified repayment date at the specified repayment price, together with interest accrued to the repayment date.

If we exercise an option to redeem any debt security, we will give the trustee and the holders written notice of the principal amount of the debt security to be redeemed, not less than 3 business days nor more than 60 days before the applicable redemption date unless otherwise specified in your prospectus supplement. We will give the notice in the manner described below in "—Notices."

If a debt security represented by a global debt security is subject to repayment at the holder's option, the depositary or its nominee, as the holder, will be the only person that can exercise the right to repayment. Any indirect holders who own beneficial interests in the global debt security and wish to exercise a repayment right must give proper and timely instructions to the banks or brokers through which they hold their interests, requesting that they notify the depositary to exercise the repayment right on their behalf. Different firms have different deadlines for accepting instructions from their customers, and you should take care to act promptly enough to ensure that your request is given effect by the depositary before the applicable deadline for exercise.

Street name and other indirect holders should contact their banks or brokers for information about how to exercise a repayment right in a timely manner.

We or our affiliates may purchase debt securities from investors who are willing to sell from time to time, either in the open market at prevailing prices or in private transactions at negotiated prices. Debt securities that we or they purchase may, at our discretion, be held, resold or cancelled.

## **Optional Tax Redemption**

In addition to the situations described above under "—Redemption and Repayment," we also have the option to redeem the debt securities in two situations described below, unless otherwise indicated in your prospectus supplement. The redemption price for the debt securities, other than original issue discount debt securities, will be equal to the principal amount of the debt securities being redeemed plus accrued interest and any additional amounts due on the date fixed for redemption. The redemption price for original issue discount debt securities will be specified in the prospectus supplement for such debt securities. Furthermore, we must give you between 10 and 60 days' notice before redeeming the debt securities unless otherwise specified in your prospectus supplement.

- The first situation is where, as a result of a change in, execution of or amendment to any laws or treaties or the official application or interpretation of any laws or treaties, we would be required to pay additional amounts as described below under "—Payment of Additional Amounts."
  - This applies only in the case of changes, executions, amendments, applications or interpretations that occur on or after the date specified in the prospectus supplement for the applicable debt securities and in a relevant jurisdiction, as defined in "—Payment of Additional Amounts" below. If UBS is succeeded by another entity, the applicable jurisdiction will be the jurisdiction in which the successor entity is organized, and the applicable date will be the date the entity became a successor.
  - We would not have the option to redeem in this case if we could have avoided the payment of additional amounts or the deduction or withholding by using reasonable measures available to us.
- The second situation is where a person located outside of a relevant jurisdiction into which UBS is merged or to whom it has conveyed, transferred or leased its property is required to pay an additional amount. We would have the option to redeem the debt securities even if we are required to pay additional amounts immediately after the merger, conveyance, transfer or lease. We are not required to use reasonable measures to avoid the obligation to pay additional amounts in this situation.

# **Payment of Additional Amounts**

A relevant jurisdiction may require UBS to withhold amounts from payments on the principal or interest on a debt security for taxes or any other governmental charges. If the relevant jurisdiction requires a withholding of this type, UBS may be required to pay you an additional amount so that the net amount you receive will be the amount specified in the debt security to which you are entitled.

By relevant jurisdiction, we mean Switzerland or a jurisdiction in which the UBS branch through which debt securities are issued is located. UBS will not have to pay additional amounts in respect of taxes or other governmental charges that are required to be deducted or withheld by any paying agent from a payment on a debt security, if such payment can be made without such deduction or withholding by any other paying agent. Furthermore, UBS will not pay additional amounts for or on account of:

the existence of any present or former connection between you and the relevant jurisdiction, other than the mere holding of the debt security and the receipt of payments on it;

- > any estate, inheritance, gift, sales, transfer or personal property tax or any similar tax, duty, assessment or governmental charge;
- your failure, or the failure of any intermediary, custodian or broker, to comply with any reasonable certification, documentation, information or other reporting requirement concerning your nationality, residence, identity or connection with the relevant jurisdiction, if such compliance is required as a precondition to relief or exemption from such taxes or other governmental charges (including, without limitation, a certification that you are not resident in the relevant jurisdiction or are not an individual resident of a member state of the European Union);
- your status as a bank purchasing the debt security in the ordinary course of its lending business;
- > your actual or constructive ownership of 10% or more of the combined voting power of all classes of stock of UBS entitled to vote:
- any taxes imposed on contingent interest as described in section 871(h)(4) of the Internal Revenue Code (as defined below under "U.S. Tax Considerations");
- any taxes which would not have been imposed but for your presentation, or a presentation on your behalf, of a debt security payment on a date more than 15 days after the date on which such payment on the debt security becomes due and payable or on which the payment is duly provided for, whichever occurs later; or
- > any combination of the items listed above.

In addition, no additional amounts will be required to be paid on account of any deduction or withholding imposed or required pursuant to Sections 1471 through 1474 of the Internal Revenue Code (as defined below under "U.S. Tax Considerations"), any current or future regulations or official interpretations thereof, any agreement entered into pursuant to Section 1471(b) of the Internal Revenue Code, or any fiscal or regulatory legislation, rules or practices adopted pursuant to any intergovernmental agreement entered into in connection with the implementation of such Sections of the Internal Revenue Code.

These provisions will also apply to any taxes or governmental charges imposed by any jurisdiction in which a successor to UBS is organized. The prospectus supplement relating to the debt security may describe additional circumstances in which UBS would not be required to pay additional amounts.

#### **Mergers and Similar Transactions**

We are generally permitted to merge or consolidate with another firm. We are also permitted to sell our assets substantially as an entirety to another firm. With regard to any series of debt securities, we may not take any of these actions, however, unless all the following conditions are met:

- If the successor firm in the transaction is not UBS, the successor firm must be organized as a corporation, partnership or trust and must expressly assume our obligations under the debt securities of that series and the debt indenture. The successor firm must be organized under the laws of Switzerland.
- Immediately after the transaction, no default under the debt securities of that series has occurred and is continuing. For this purpose, "default under the debt securities of that series" means an event of default with respect to that series or any event that would be an event of default with respect to that series if the requirements for giving us default notice and for our default having to continue for a specific period of time were disregarded. We describe these matters below under "—Default, Remedies and Waiver of Default."

If the conditions described above are satisfied with respect to the debt securities of any series, we will not need to obtain the approval of the holders of those debt securities in order to merge or consolidate or to sell our assets. Also, these conditions will apply only if we wish to merge or consolidate with another firm or sell our assets substantially as an entirety to another firm. We will not need to satisfy these conditions if we enter into other types of transactions, including any transaction in which we acquire the stock or assets of another firm, any transaction that involves a change of control of UBS but in which we do not merge or consolidate and any transaction in which we sell less than substantially all our assets.

Also, if we merge, consolidate or sell our assets substantially as an entirety and the successor firm is a non-Swiss entity, neither we nor any successor would have any obligation to compensate you for any resulting adverse tax consequences to the debt securities.

## **Defeasance and Covenant Defeasance**

If indicated in the applicable prospectus supplement for a debt security, the provisions for full defeasance and covenant defeasance described below will apply to that debt security. In general, we expect these provisions to apply to each debt security that has a specified currency of U.S. dollars and is not a floating rate or indexed debt security.

## Full Defeasance

If there is a change in U.S. federal tax law, as described below, we can legally release ourselves from all payment and other obligations on your debt security. This is called full defeasance. To do so, each of the following must occur:

We must deposit in trust for the benefit of all holders of those debt securities, money, U.S. government or U.S. government agency notes or bonds or a combination of money and U.S. government or U.S. government agency notes or bonds that will, in each case, in the opinion of a nationally recognized firm of independent public accountants, generate enough cash to make interest, principal and any other payments on those debt securities on their various due dates.

- There must be a change in current U.S. federal tax law or an Internal Revenue Service ruling that lets us make the above deposit without causing the holders to be taxed on those debt securities any differently than if we did not make the deposit and just repaid the debt securities ourselves. Under current federal tax law, the deposit and our legal release from your debt securities would be treated as though we took back your debt security and gave you your share of the cash and notes or bonds deposited in trust. In that event, you could recognize gain or loss on your debt security.
- We must deliver to the trustee a legal opinion of our counsel confirming the tax law change described above.

If we ever fully defease your debt security, you would have to rely solely on the trust deposit for payments on your debt security. You would not be able to look to us for payment in the event of any shortfall.

## Covenant Defeasance

Under current U.S. federal tax law, we can make the same type of deposit described above and be released from any restrictive covenants relating to your debt security that may be described in your prospectus supplement. This is called covenant defeasance. In that event, you would lose the protection of those restrictive covenants. In order to achieve covenant defeasance for any debt securities, we must do both of the following:

- We must deposit in trust for the benefit of all holders of those debt securities, money, U.S. government or U.S. government agency notes or bonds or a combination of money and U.S. government or U.S. government agency notes or bonds that will, in each case, in the opinion of a nationally recognized firm of independent public accountants, generate enough cash to make interest, principal and any other payments on those debt securities on their various due dates.
- We must deliver to the trustee a legal opinion of our counsel confirming that under U.S. federal income tax law as then in effect we may make the above deposit without causing you to be taxed on those debt securities any differently than if we did not make the deposit and just repaid those debt securities ourselves.

If we accomplish covenant defeasance with regard to your debt security, the following provisions of the debt indenture and your debt security would no longer apply:

- > Any covenants that your prospectus supplement may state are applicable to your debt security; and
- The events of default resulting from a breach of covenants, described below in the fourth bullet point under "—Default, Remedies and Waiver of Default—Events of Default."

Any right we have to redeem will survive covenant defeasance with regard to those debt securities.

If we accomplish covenant defeasance on your debt security, you can still look to us for repayment of your debt security in the event of any shortfall in the trust deposit. You should note, however, that if one of the remaining events of default occurred, such as our bankruptcy, and your debt security became immediately due and payable, there may be a shortfall. Depending on the event causing the default you may not be able to obtain payment of the shortfall.

## **Default, Remedies and Waiver of Default**

You will have special rights if an event of default with respect to your series of debt securities occurs and is not cured, as described in this subsection.

# Events of Default

Unless your prospectus supplement says otherwise, when we refer to an event of default with respect to any series of debt securities, we mean any of the following:

- We do not pay the principal or any premium (including delivering any security or other property deliverable) on any debt security of that series at its maturity;
- We do not pay interest on any debt securities of that series within 30 days after it becomes due and payable;
- We do not deposit a sinking fund payment with regard to any debt securities of that series on its due date, but only if the payment is required in the applicable prospectus supplement;
- We remain in breach of any other covenant we make in the debt indenture for the benefit of the debt securities of that series, for 60 days after we receive a notice of default stating that we are in breach and requiring us to remedy the breach. The notice must be sent by the trustee or the holders of not less than 10% in principal amount of the relevant series of debt securities then outstanding;
- > We file for bankruptcy or certain other bankruptcy, insolvency or reorganization events relating to UBS occur; or
- > If the applicable prospectus supplement states that any additional event of default applies to your series, that event of default occurs.

## Remedies If an Event of Default Occurs

If an event of default has occurred with respect to any series of debt securities and has not been cured or waived, the trustee or the holders of not less than 25% in principal amount of all debt securities of that series then outstanding may declare the entire principal amount of the debt securities of that series to be due immediately. If an event of default occurs because of bankruptcy, insolvency or reorganization events relating to UBS, the entire principal amount of the debt securities of that series will be automatically accelerated, without any action by the trustee or any holder.

Each of the situations described above is called an acceleration of the maturity of the affected series of debt securities. If the maturity of any series is accelerated and a judgment for payment has not yet been obtained, the holders of a majority in principal amount of the debt securities of that series may cancel the acceleration for the entire series.

If an event of default occurs, the trustee will have special duties. The trustee will be obligated to use those of its rights and powers under the debt indenture, and to use the same degree of care and skill in doing so, that a prudent person would use in that situation in conducting his or her own affairs.

Except as described in the prior paragraph, the trustee is not required to take any action under the debt indenture at the request of any holders unless the holders offer the trustee reasonable protection from expenses and liability. This is called an indemnity. If the trustee is provided with an indemnity reasonably satisfactory to it, the holders of a majority in principal amount of all debt securities of the relevant series may direct the time, method and place of conducting any lawsuit or other formal legal action seeking any remedy available to the trustee with respect to that series. These majority holders may also direct the trustee in performing any other action under the debt indenture with respect to the debt securities of that series.

Before you bypass the trustee and bring your own lawsuit or other formal legal action or take other steps to enforce your rights or protect your interests relating to any debt security, all of the following must occur:

- > The holder of your debt security must give the trustee written notice that an event of default has occurred, and the event of default must not have been cured or waived.
- The holders of not less than 25% in principal amount of all debt securities of your series must make a written request that the trustee take action because of the default, and they or other holders must offer to the trustee indemnity reasonably satisfactory to the trustee against the cost and other liabilities of taking that action.
- The trustee must not have taken action for 60 days after the above steps have been taken.
- During those 60 days, the holders of a majority in principal amount of the debt securities of your series must not have given the trustee directions that are inconsistent with the written request of the holders of not less than 25% in principal amount of all debt securities of your series.

You are, however, entitled at any time to bring a lawsuit for the payment of money due on your debt security on or after its due date

## Waiver of Default

The holders of not less than a majority in principal amount of the debt securities of any series may waive a default for all debt securities of that series. If this happens, the default will be treated as if it has not occurred. No one can waive a payment default on your debt security, however, without the approval of the particular holder of that debt security.

We Will Give the Trustee Information About Defaults Annually

We will furnish to the trustee every year a written statement of two of our officers certifying that to their knowledge we are in compliance with the debt indenture and the debt securities, or else specifying any default under the debt indenture.

Book-entry and other indirect holders should consult their banks or brokers for information on how to give notice or direction to or make a request of the trustee and how to declare or cancel an acceleration of the maturity of the debt securities. Bookentry and other indirect owners are described below under "Legal Ownership and Book-Entry Issuance."

#### **Modification and Waiver of Covenants**

There are three types of changes we can make to the debt indenture and the debt securities of any series.

Changes Requiring Each Holder's Approval

First, there are changes that cannot be made without the approval of each holder of a debt security affected by the change. Here is a list of those types of changes:

- > change the stated maturity for any principal or interest payment on a debt security;
- reduce the principal amount, the amount payable on acceleration of the maturity after a default, the interest rate or the redemption price for a debt security;
- > permit redemption of a debt security if not previously permitted;
- impair any right a holder may have to require repayment of his or her debt security;
- impair any right that a holder of an indexed or any other debt security may have to exchange or convert the debt security for or into securities or other property;
- > change the currency of any payment on a debt security other than as permitted by the debt security;
- > change the place of payment on a debt security, if it is in non-global form;
- impair a holder's right to sue for payment of any amount due on his or her debt security;
- reduce the percentage in principal amount of the debt securities of any one or more affected series, taken separately or together, as applicable, the approval of whose holders is needed to change the debt indenture or those debt securities;
- reduce the percentage in principal amount of the debt securities of any one or more affected series, taken separately or together, as applicable, the consent of whose holders is needed to waive our compliance with the debt indenture or to waive defaults; and
- > change the provisions of the debt indenture dealing with modification and waiver in any other respect, except to increase any required percentage referred to above or to add to the provisions that cannot be changed or waived without approval of the holder of each affected debt security.

## Changes Not Requiring Approval of Holders

The second type of change does not require any approval by holders of the debt securities of an affected series. This type of change is limited to clarifications and changes that would not adversely affect the debt securities of that series in any material respect. We also do not need any approval to make changes that affect only debt securities to be issued under the debt indenture after the changes take effect.

We may also make changes or obtain waivers that do not adversely affect a particular debt security, even if they affect other debt securities. In those cases, we do not need to obtain the approval of the holder of the unaffected debt security; we need only obtain any required approvals from the holders of the affected debt securities.

Changes Requiring Majority Approval

Any other change to the debt indenture and the debt securities would require the following approval:

- ➤ If the change affects only the debt securities of a particular series, it must be approved by the holders of 66⅔% in principal amount of the debt securities of that series.
- If the change affects the debt securities of more than one series of debt securities issued under the debt indenture, it must be approved by the holders of 66% in principal amount of all series affected by the change, with the debt securities of all the affected series voting together as one class for this purpose (and of any affected series that by its terms is entitled to vote separately as a series, as described below).

In each case, the required approval must be given by written consent.

Majority approval would be required for us to obtain a waiver of any of our covenants in the debt indenture. Our covenants include the promises we make about merging, which we describe above under "—Mergers and Similar Transactions." If the holders approve a waiver of a covenant, we will not have to comply with that covenant. The holders, however, cannot approve a waiver of any provision in a particular debt security, or in the debt indenture as it affects that debt security, that we cannot change without the approval of the holder of that debt security as described above under "—Changes Requiring Each Holder's Approval," unless that holder approves the waiver.

Book-entry and other indirect holders should consult their banks or brokers for information on how approval may be granted or denied if we seek to change the debt indenture or the debt securities or request a waiver.

## **Special Rules for Action by Holders**

When holders take any action under the debt indenture, such as giving a notice of default, declaring an acceleration, approving any change or waiver or giving the trustee an instruction, we will apply the following rules.

Only Outstanding Debt Securities Are Eligible

Only holders of outstanding debt securities of the applicable series will be eligible to participate in any action by holders of debt securities of that series. Also, we will count only outstanding debt securities in determining whether the various percentage requirements for taking action have been met. For these purposes, a debt security will not be "outstanding":

- if it has been surrendered for cancellation:
- if we have deposited or set aside, in trust for its holder, money for its payment or redemption;
- if we have fully defeased it as described above under "—Defeasance and Covenant Defeasance—Full Defeasance"; or
- if we or one of our affiliates, such as UBS Securities LLC or UBS Financial Services Inc., is the beneficial owner.

## Special Series Voting Rights

We may issue series of debt securities that are entitled, by their terms, to vote separately on matters (for example, modification or waiver of provisions in the debt indenture) that would otherwise require a vote of all affected series, voting together as a single class. Any such series would be entitled to vote together with all other affected series, voting together as one class, and would also be entitled to vote separately, as a series only. These special voting rights will be described in the applicable prospectus supplement. For a series that does not have these special rights, voting will occur as described in the preceding section, but subject to any separate voting rights of any series having special rights. We may issue a series having these or other special voting rights without obtaining the consent of or giving notice to holders of outstanding series.

## Eligible Principal Amount of Some Debt Securities

In some situations, we may follow special rules in calculating the principal amount of a debt security that is to be treated as outstanding for the purposes described above. This may happen, for example, if the principal amount is payable in a non-U.S. dollar currency, increases over time or is not to be fixed until maturity. For any debt security of the kind described below, we will decide how much principal amount to attribute to the debt security as follows:

- For an original issue discount debt security, we will use the principal amount that would be due and payable on the action date if the maturity of the debt security were accelerated to that date because of a default.
- For a debt security whose principal amount is not known, we will use any amount that we indicate in the prospectus supplement for that debt security. The principal amount of a debt security may not be known, for example, because it is based on an index that changes from time to time and the principal amount is not to be determined until a later date.
- For debt securities with a principal amount denominated in one or more non-U.S. dollar currencies or currency units, we will use the U.S. dollar equivalent, which we will determine.

## Determining Record Dates for Action by Holders

We will generally be entitled to set any day as a record date for the purpose of determining the holders that are entitled to take action under the debt indenture. In certain limited circumstances, only the trustee will be entitled to set a record date for action by holders. If we or the trustee set a record date for an approval or other action to be taken by holders, that vote or action may be taken only by persons or entities who are holders on the record date and must be taken during the period that we specify for this purpose, or that the trustee specifies if it sets the record date. We or the trustee, as applicable, may shorten or lengthen this period from time to time. This period, however, may not extend beyond the 180th day after the record date for the action. In addition, record dates for any global debt security may be set in accordance with procedures established by the depositary from time to time. Accordingly, record dates for global debt securities may differ from those for other debt securities.

## Form, Exchange and Transfer of Debt Securities

We will issue each debt security in global—*i.e.*, book-entry—form only, unless we specify otherwise in the applicable prospectus supplement. Debt securities in book-entry form will be represented by a global security registered in the name of a depositary, which will be the holder of all the debt securities represented by the global security. Those who own beneficial interests in a global debt security will do so through participants in the depositary's securities clearance system, and the rights of these indirect owners will be governed solely by the applicable procedures of the depositary and its participants. We describe book-entry securities below under "Legal Ownership and Book-Entry Issuance." Unless we specify otherwise in the applicable prospectus supplement, The Depository Trust Company, New York, New York, known as DTC, will be the depositary for all debt securities in global form.

In addition, we will generally issue each debt security in registered form, without coupons, unless we specify otherwise in the applicable prospectus supplement. If we issue a debt security in bearer form, the applicable prospectus supplement will describe the provisions that would apply to that security.

If a debt security is issued as a global debt security, only the depositary—*e.g.*, DTC, Euroclear and Clearstream—will be entitled to transfer and exchange the debt security or exercise any other rights of a holder as described in this subsection, since the depositary will be the sole holder of the debt security.

If any debt securities cease to be issued in global form, then unless we indicate otherwise in your prospectus supplement, they will be issued:

- > only in fully registered form;
- > without interest coupons; and
- > unless we indicate otherwise in your prospectus supplement, in denominations of \$1,000 and integral multiples of \$1,000.

Holders may exchange their debt securities for debt securities of smaller denominations (subject to the limit above) or combined into fewer debt securities of larger denominations, as long as the total principal amount is not changed. You may not exchange your debt securities for securities of a different series or having different terms, unless your prospectus supplement says you may.

Holders may exchange or transfer their debt securities at the office of the trustee. They may also replace lost, stolen, destroyed or mutilated debt securities at that office. We have appointed the trustee to act as our agent for registering debt securities in the names of holders and transferring and replacing debt securities. We may appoint another entity to perform these functions or perform them ourselves.

Holders will not be required to pay a service charge to transfer or exchange their debt securities, but they may be required to pay for any tax or other governmental charge associated with the exchange or transfer. The transfer or exchange, and any replacement, will be made only if our transfer agent is satisfied with the holder's proof of legal ownership. The transfer agent may require an indemnity before replacing any debt securities.

If we have designated additional transfer agents for your debt security, they will be named in your prospectus supplement. We may appoint additional transfer agents or cancel the appointment of any particular transfer agent. We may also approve a change in the office through which any transfer agent acts.

If the debt securities of any series are redeemable and we redeem less than all those debt securities, we may block the transfer or exchange of those debt securities during the period beginning 15 days before the day we mail the notice of redemption and ending on the day of that mailing or during any other period specified in the applicable prospectus supplement, in order to freeze the list of holders who will receive the mailing. We may also refuse to register transfers of or exchange any debt security selected for redemption, except that we will continue to permit transfers and exchanges of the unredeemed portion of any debt security being partially redeemed.

The rules for exchange described above apply to exchanges of debt securities for other debt securities of the same series and kind. If a debt security is convertible, exercisable or exchangeable into or for a different kind of security, such as one that we have not issued, or for other property, the rules governing that type of conversion, exercise or exchange will be described in the applicable prospectus supplement.

## **Payment Mechanics for Debt Securities**

## Who Receives Payments?

If interest is due on a debt security on an interest payment date, we will pay the interest to the person in whose name the debt security is registered at the close of business on the regular record date described below relating to the interest payment date. If interest is due at maturity but on a day that is not an interest payment date, we will pay the interest to the person entitled to receive the principal of the debt security. If principal or another amount besides interest is due on a debt security at maturity, we will pay the amount to the holder of the debt security against surrender of the debt security at a proper place of payment (or, in the case of a global debt security, in accordance with the applicable policies of the depositary).

## **Payment Dates and Regular Record Dates for Interest**

Unless we specify otherwise in the applicable prospectus supplement, interest on any fixed rate debt security will be payable semiannually each May 15 and November 15 and at maturity, and the regular record date relating to an interest payment date for any fixed rate debt security will be the May 1 or November 1 next preceding that interest payment date. The regular record date relating to an interest payment date for any floating rate debt security will be the 15th calendar day before that interest payment date. These record dates will apply whether or not a particular record date is a business day. For the purpose of determining the holder at the close of business on a regular record date when business is not being conducted, the close of business will mean 5:00 P.M., New York City time, on that day.

The term "business day" means, for any debt security, a day that meets all the following applicable requirements:

- for all debt securities, is a Monday, Tuesday, Wednesday, Thursday or Friday that is not a day on which banking institutions in New York City generally are authorized or obligated by law, regulation or executive order to close and that satisfies any other criteria specified in your prospectus supplement;
- if the debt security is a floating rate debt security whose interest rate is based on the London Inter-Bank Offered Rate ("LIBOR"), is also a day on which dealings in the relevant index currency specified in the applicable prospectus supplement are transacted in the London interbank market;
- if the debt security is a floating rate debt security whose interest rate is based on the Secured Overnight Financing Rate ("SOFR"), is also any day except for a Saturday, a Sunday or a day on which the Securities Industry and Financial Markets Association recommends that the fixed income departments of its members be closed for the entire day for purposes of trading in U.S. government securities;
- if the debt security has a specified currency other than U.S. dollars or euros, is also a day on which banking institutions are not authorized or obligated by law, regulation or executive order to close in the principal financial center of the country issuing the specified currency;
- if the debt security either is a floating rate debt security whose interest rate is based on EURIBOR or has a specified currency of euros, is also a day on which the Trans-European Automated Real-time Gross settlement Express Transfer (TARGET) System, or any successor system, is open for business;
- if the debt security is held through Euroclear, is also not a day on which banking institutions in Brussels, Belgium are generally authorized or obligated by law, regulation or executive order to close; and
- if the debt security is held through Clearstream, is also not a day on which banking institutions in Luxembourg are generally authorized or obligated by law, regulation or executive order to close.

## How We Will Make Payments Due in U.S. Dollars

We will follow the practices described in this subsection when paying amounts due in U.S. dollars. Payments of amounts due in other currencies will be made as described in the next subsection.

Payments on Global Debt Securities. We will make payments on a global debt security in accordance with the applicable policies of the depositary as in effect from time to time. Under those policies, we will pay directly to the depositary, or its nominee, and not to any indirect owners who own beneficial interests in the global debt security. An indirect owner's right to receive those payments will be governed by the rules and practices of the depositary and its participants, as described under "Legal Ownership and Book-Entry Issuance—What Is a Global Security?"

Payments on Non-Global Debt Securities. We will make payments on a debt security in non-global, registered form as follows. We will pay interest that is due on an interest payment date by check mailed on the interest payment date to the holder at his or her address shown on the trustee's records as of the close of business on the regular record date. We will make all other payments by check at the paying agent described below, against surrender of the debt security. All payments by check will be made in next-day funds—that is, in funds that become available on the day after the check is cashed.

Alternatively, if a non-global debt security has a face amount of at least \$1,000,000 and the holder asks us to do so, we will pay any amount that becomes due on the debt security by wire transfer of immediately available funds to an account at a bank in New York City, on the due date. To request wire payment, the holder must give the paying agent appropriate wire transfer instructions at least five business days before the requested wire payment is due. In the case of any interest payment due on an interest payment date, the instructions must be given by the person who is the holder on the relevant regular record date. In the case of any other payment, payment will be made only after the debt security is surrendered to the paying agent. Any wire instructions, once properly given, will remain in effect unless and until new instructions are given in the manner described above.

Book-entry and other indirect owners should consult their banks or brokers for information on how they will receive payments on their debt securities.

## How We Will Make Payments Due in Other Currencies

We will follow the practices described in this subsection when paying amounts that are due in a specified currency other than U.S. dollars.

Payments on Global Debt Securities. We will make payments on a global debt security in accordance with the applicable policies of the depositary as in effect from time to time. We understand that these policies, as currently in effect at DTC, are as follows:

Unless otherwise indicated in your prospectus supplement, if you are an indirect owner of global debt securities denominated in a specified currency other than U.S. dollars and if you have the right to elect to receive payments in that other currency and you do make that election, you must notify the participant through which your interest in the global debt security is held of your election:

- > on or before the applicable regular record date, in the case of a payment of interest, or
- > on or before the 16th day prior to stated maturity, or any redemption or repayment date, in the case of payment of principal or any premium.

You may elect to receive all or only a portion of any interest, principal or premium payment in a specified currency other than U.S. dollars.

Your participant must, in turn, notify DTC of your election on or before the third DTC business day after that regular record date, in the case of a payment of interest, and on or before the 12th DTC business day prior to stated maturity, or on the redemption or repayment date if your debt security is redeemed or repaid earlier, in the case of a payment of principal or any premium.

DTC, in turn, will notify the paying agent of your election in accordance with DTC's procedures.

If complete instructions are received by the participant and forwarded by the participant to DTC, and by DTC to the paying agent, on or before the dates noted above, the paying agent, in accordance with DTC's instructions, will make the payments to you or your participant by wire transfer of immediately available funds to an account maintained by you or your participant with a bank located in the country issuing the specified currency or in another jurisdiction acceptable to us and the paying agent.

If the foregoing steps are not properly completed, we expect DTC to inform the paying agent that payment is to be made in U.S. dollars. In that case, we or our agent will convert the payment to U.S. dollars in the manner described below under "— Conversion to U.S. Dollars." We expect that we or our agent will then make the payment in U.S. dollars to DTC, and that DTC in turn will pass it along to its participants.

Book-entry and other indirect holders of a global debt security denominated in a currency other than U.S. dollars should consult their banks or brokers for information on how to request payment in the specified currency.

Payments on Non-Global Debt Securities. Except as described in the second to last paragraph under this heading, we will make payments on debt securities in non-global form in the applicable specified currency. We will make these payments by wire transfer of immediately available funds to any account that is maintained in the applicable specified currency at a bank designated by the holder and is acceptable to us and the trustee. To designate an account for wire payment, the holder must give the paying agent appropriate wire instructions at least five business days before the requested wire payment is due. In the case of any interest payment due on an interest payment date, the instructions must be given by the person who is the holder on the regular record date. In the case of any other payment, the payment will be made only after the debt security is surrendered to the paying agent. Any instructions, once properly given, will remain in effect unless and until new instructions are properly given in the manner described above.

If a holder fails to give instructions as described above, we will notify the holder at the address in the trustee's records and will make the payment within five business days after the holder provides appropriate instructions. Any late payment made in these circumstances will be treated under the debt indenture as if made on the due date, and no interest will accrue on the late payment from the due date to the date paid.

Although a payment on a debt security in non-global form may be due in a specified currency other than U.S. dollars, we will make the payment in U.S. dollars if the holder asks us to do so. To request U.S. dollar payment, the holder must provide appropriate written notice to the trustee at least five business days before the next due date for which payment in U.S. dollars is requested. In the case of any interest payment due on an interest payment date, the request must be made by the person who is the holder on the regular record date. Any request, once properly made, will remain in effect unless and until revoked by notice properly given in the manner described above.

Indirect owners of a non-global debt security with a specified currency other than U.S. dollars should contact their banks or brokers for information about how to receive payments in the specified currency or in U.S. dollars.

Conversion to U.S. Dollars. When we are asked by a holder to make payments in U.S. dollars of an amount due in another currency, either on a global debt security or a non-global debt security as described above, we will determine the U.S. dollar amount the holder receives as follows. The exchange rate agent described below will request currency bid quotations expressed in U.S. dollars from three or, if three are not available, then two, recognized foreign exchange dealers in New York City, any of which may be the exchange rate agent, which may be UBS Securities LLC, an affiliate of UBS, as of 11:00 A.M., New York City time, on the second business day before the payment date. Currency bid quotations will be requested on an aggregate basis, for all holders of debt securities requesting U.S. dollar payments of amounts due on the same date in the same specified currency. The U.S. dollar amount the holder receives will be based on the highest acceptable currency bid quotation received by the exchange rate agent. If the exchange rate agent determines that at least two acceptable currency bid quotations are not available on that second business day, the payment will be made in the specified currency.

To be acceptable, a quotation must be given as of 11:00 A.M., New York City time, on the second business day before the due date and the quoting dealer must commit to execute a contract at the quotation in the total amount due in that currency on all series of debt securities. If some but not all of the relevant debt securities are LIBOR debt securities, SOFR debt securities or EURIBOR debt securities, the second preceding business day will be determined for this purpose as if none of those debt securities were LIBOR debt securities, SOFR debt securities or EURIBOR debt securities.

A holder that requests payment in U.S. dollars will bear all associated currency exchange costs, which will be deducted from the payment.

When the Specified Currency Is Not Available. If we are obligated to make any payment in a specified currency other than U.S. dollars, and the specified currency or any successor currency is not available to us or cannot be paid to you due to circumstances beyond our control—such as the imposition of exchange controls or a disruption in the currency markets—we will be entitled to satisfy our obligation to make the payment in that specified currency by making the payment in U.S. dollars, on the basis specified in the applicable prospectus supplement.

For a specified currency other than U.S. dollars, the exchange rate will be the noon buying rate for cable transfers of the specified currency in New York City as quoted by the Federal Reserve Bank of New York on the then-most recent day on which that bank has quoted that rate.

The foregoing will apply to any debt security, whether in global or non-global form, and to any payment, including a payment at maturity. Any payment made under the circumstances and in a manner described above will not result in a default under any debt security or the debt indenture.

**Exchange Rate Agent.** If we issue a debt security in a specified currency other than U.S. dollars, we will appoint a financial institution to act as the exchange rate agent and will name the institution initially appointed when the debt security is originally issued in the applicable prospectus supplement. We may select UBS Securities LLC or another of our affiliates to perform this role. We may change the exchange rate agent from time to time after the original issue date of the debt security without your consent and without notifying you of the change.

All determinations made by the exchange rate agent will be at its sole discretion unless we state in your prospectus supplement that any determination is subject to our approval. In the absence of manifest error, those determinations will be conclusive for all purposes and binding on you and us, without any liability on the part of the exchange rate agent.

## **Payment When Offices Are Closed**

If any payment is due on a debt security on a day that is not a business day, we will make the payment on the next day that is a business day. Unless specified otherwise in the applicable prospectus supplement, payments postponed to the next business day in this situation will be treated under the debt indenture as if they were made on the original due date. Postponement of this kind will not result in a default under any debt security or the debt indenture, and no interest will accrue on the postponed amount from the original due date to the next day that is a business day. The term business day has a special meaning, which we describe above under "—Payment Dates and Regular Record Dates for Interest."

# **Paying Agent**

We may appoint one or more financial institutions to act as our paying agents, at whose designated offices debt securities in non-global entry form may be surrendered for payment at their maturity. We call each of those offices a paying agent. We may add, replace or terminate paying agents from time to time. We may also choose to act as our own paying agent. Initially, we have appointed the trustee, at its corporate trust office in New York City, as the paying agent. We must notify the trustee of changes in the paying agents.

## **Settlement Mechanics**

The settlement mechanics applicable to debt securities calling for physical settlement will be described in the applicable prospectus supplement.

## **Unclaimed Payments**

Regardless of who acts as paying agent, all money paid by us to a paying agent that remains unclaimed at the end of two years after the amount is due to a holder will be repaid to us. After that two-year period, the holder may look only to us for payment and not to the trustee, any other paying agent or anyone else.

#### **Notices**

Notices to be given to holders of a global debt security will be given only to the depositary, in accordance with its applicable policies as in effect from time to time. Notices to be given to holders of debt securities not in global form will be sent by mail to the respective addresses of the holders as they appear in the trustee's records, and will be deemed given when mailed. Neither the failure to give any notice to a particular holder, nor any defect in a notice given to a particular holder, will affect the sufficiency of any notice given to another holder.

Book-entry and other indirect holders should consult their banks or brokers for information on how they will receive notices.

## Our Relationship with the Trustee

U.S. Bank Trust National Association has provided commercial banking and other services for us and our affiliates in the past and may do so in the future. Among other things, U.S. Bank Trust National Association holds debt securities issued by us and serves as trustee or agent with regard to other obligations of UBS or its subsidiaries.

U.S. Bank Trust National Association is serving as the trustee for the debt securities and the warrants issued under our warrant indenture. Consequently, if an actual or potential event of default occurs with respect to any of these securities, the trustee may be considered to have a conflicting interest for purposes of the Trust Indenture Act of 1939. In that case, the trustee may be required to resign under one or more of the indentures, and we would be required to appoint a successor trustee. For this purpose, a "potential" event of default means an event that would be an event of default if the requirements for giving us default notice or for the default having to exist for a specific period of time were disregarded.

# **Legal Ownership and Book-Entry Issuance**

In this section, we describe special considerations that will apply to registered securities issued in global—i.e., book-entry—form. First we describe the difference between legal ownership and indirect ownership of registered securities. Then we describe special provisions that apply to global securities.

# Who is The Legal Owner of a Registered Security?

Each debt security or warrant in registered form will be represented either by a certificate issued in definitive form to a particular investor or by one or more global securities representing the entire issuance of securities. We refer to those who have securities registered in their own names, on the books that we or the trustee, warrant agent or other agent maintain for this purpose, as the "holders" of those securities. These persons are the legal holders of the securities. We refer to those who, indirectly through others, own beneficial interests in securities that are not registered in their own names as indirect owners of those securities. As we discuss below, indirect owners are not legal holders, and investors in securities issued in book-entry form or in street name will be indirect owners.

## **Book-Entry Owners**

We will issue each security in book-entry form only. This means securities will be represented by one or more global securities registered in the name of a financial institution that holds them as depositary on behalf of other financial institutions that participate in the depositary's book-entry system. These participating institutions, in turn, hold beneficial interests in the securities on behalf of themselves or their customers.

Under each indenture or warrant agreement, only the person in whose name a security is registered is recognized as the holder of that security. Consequently, for securities issued in global form, we will recognize only the depositary as the holder of the securities and we will make all payments on the securities, including deliveries of any property other than cash, to the depositary. The depositary passes along the payments it receives to its participants, which in turn pass the payments along to their customers who are the beneficial owners. The depositary and its participants do so under agreements they have made with one another or with their customers; they are not obligated to do so under the terms of the securities.

As a result, investors will not own securities directly. Instead, they will own beneficial interests in a global security, through a bank, broker or other financial institution that participates in the depositary's book-entry system or holds an interest through a participant. As long as the securities are issued in global form, investors will be indirect owners, and not holders, of the securities.

# **Street Name Owners**

In the future we may terminate a global security or issue securities initially in non-global form. In these cases, investors may choose to hold their securities in their own names or in street name. Securities held by an investor in street name would be registered in the name of a bank, broker or other financial institution that the investor chooses, and the investor would hold only a beneficial interest in those securities through an account he or she maintains at that institution.

For securities held in street name, we will recognize only the intermediary banks, brokers and other financial institutions in whose names the securities are registered as the holders of those securities and we will make all payments on those securities, including deliveries of any property other than cash, to them. These institutions pass along the payments they receive to their customers who are the beneficial owners, but only because they agree to do so in their customer agreements or because they are legally required to do so. Investors who hold securities in street name will be indirect owners, not holders, of those securities.

## **Legal Holders**

Our obligations, as well as the obligations of the trustee and the obligations, if any, of any warrant agents and any other third parties employed by us, the trustee or any of those agents, run only to the holders of the securities. We do not have obligations to investors who hold indirect interests in global securities, in street name or by any other indirect means. This will be the case whether an investor chooses to be an indirect owner of a security or has no choice because we are issuing the securities only in global form.

For example, once we make a payment or give a notice to the holder, we have no further responsibility for that payment or notice even if that holder is required, under agreements with depositary participants or customers or by law, to pass it along to the indirect owners but does not do so. Similarly, if we want to obtain the approval of the holders for any purpose—for example, to amend the indenture for a series of debt securities or warrants or the warrant agreement for a series of warrants or to relieve us of the consequences of a default or of our obligation to comply with a particular provision of the indenture—we would seek the approval only from the holders, and not the indirect owners, of the relevant securities. Whether and how the holders contact the indirect owners is up to the holders.

When we refer to "you" in this prospectus, we mean those who invest in the securities being offered by this prospectus, whether they are the holders or only indirect owners of those securities. When we refer to "your securities" in this prospectus, we mean the securities in which you will hold a direct or indirect interest.

#### **Special Considerations for Indirect Owners**

If you hold securities through a bank, broker or other financial institution, either in book-entry form or in street name, you should check with your own institution to find out:

- > how it handles securities payments and notices;
- whether it imposes fees or charges;
- whether and how you can instruct it to exercise any rights to purchase or sell warrant property under a warrant or to exchange or convert a security for or into other property;
- how it would handle a request for the holders' consent, if ever required;
- > whether and how you can instruct it to send you securities registered in your own name so you can be a holder, if that is permitted in the future;
- how it would exercise rights under the securities if there were a default or other event triggering the need for holders to act to protect their interests; and
- if the securities are in book-entry form, how the depositary's rules and procedures will affect these matters.

## What Is a Global Security?

We will issue each security in book-entry form only. Each security issued in book-entry form will be represented by a global security that we deposit with and register in the name of one or more financial institutions or clearing systems, or their nominees, which we select. A financial institution or clearing system that we select for any security for this purpose is called the "depositary" for that security. A security will usually have only one depositary but it may have more. Each series of securities will have one or more of the following as the depositaries:

- The Depository Trust Company, New York, New York, which is known as "DTC";
- ➤ a financial institution holding the securities on behalf of Morgan Guaranty Trust Company of New York, acting out of its Brussels, Belgium, office, as operator of the Euroclear system, which is known as "Euroclear";
- ➤ a financial institution holding the securities on behalf of Clearstream Banking, société anonyme, which is known as "Clearstream"; and

> any other clearing system or financial institution named in the applicable prospectus supplement. The depositaries named above may also be participants in one another's systems. Thus, for example, if DTC is the depositary for a global security, investors may hold beneficial interests in that security through Euroclear or Clearstream, as DTC participants.

The depositary or depositaries for your securities will be named in your prospectus supplement; if none is named, the depositary will be DTC.

A global security may represent one or any other number of individual securities. Generally, all securities represented by the same global security will have the same terms. We may, however, issue a global security that represents multiple securities of the same kind, such as debt securities, that have different terms and are issued at different times. We call this kind of global security a master global security. Your prospectus supplement will not indicate whether your securities are represented by a master global security.

A global security may not be transferred to or registered in the name of anyone other than the depositary or its nominee, unless special termination situations arise. We describe those situations below under "—Holder's Option to Obtain a Non-Global Security; Special Situations When a Global Security Will Be Terminated." As a result of these arrangements, the depositary, or its nominee, will be the sole registered owner and holder of all securities represented by a global security, and investors will be permitted to own only indirect interests in a global security. Indirect interests must be held by means of an account with a broker, bank or other financial institution that in turn has an account with the depositary or with another institution that does. Thus, an investor whose security is represented by a global security will not be a holder of the security, but only an indirect owner of an interest in the global security.

If the prospectus supplement for a particular security indicates that the security will be issued in global form only, then the security will be represented by a global security at all times unless and until the global security is terminated. We describe the situations in which this can occur below under "—Holder's Option to Obtain a Non-Global Security; Special Situations When a Global Security Will Be Terminated." If termination occurs, we may issue the securities through another book-entry clearing system or decide that the securities may no longer be held through any book-entry clearing system.

## **Special Considerations for Global Securities**

As an indirect owner, an investor's rights relating to a global security will be governed by the account rules of the depositary and those of the investor's financial institution or other intermediary through which it holds its interest (such as Euroclear or Clearstream, if DTC is the depositary), as well as general laws relating to securities transfers. We do not recognize this type of investor or any intermediary as a holder of securities and instead deal only with the depositary that holds the global security. If securities are issued only in the form of a global security, an investor should be aware of the following:

- An investor cannot require the securities to be registered in his or her own name, and cannot obtain non-global certificates for his or her interest in the securities, except in the special situations we describe below.
- An investor will be an indirect holder and must look to his or her own bank or broker for payments on the securities and protection of his or her legal rights relating to the securities, as we describe above under "—Who Is the Legal Owner of a Registered Security?"
- An investor may not be able to sell interests in the securities to some insurance companies and other institutions that are required by law to own their securities in non-book-entry form.
- An investor may not be able to pledge his or her interest in a global security in circumstances where certificates representing the securities must be delivered to the lender or other beneficiary of the pledge in order for the pledge to be effective.
- The depositary's policies will govern payments, deliveries, transfers, exchanges, notices and other matters relating to an investor's interest in a global security, and those policies may change from time to time. We, the trustee and any warrant agents will have no responsibility for any aspect of the depositary's policies, actions or records of ownership interests in a global security. We, the trustee and any warrant agents also do not supervise the depositary in any way.
- The depositary will require that those who purchase and sell interests in a global security within its book-entry system use immediately available funds and your broker or bank may require you to do so as well.

Financial institutions that participate in the depositary's book-entry system and through which an investor holds its interest in the global securities, directly or indirectly, may also have their own policies affecting payments, deliveries, transfers, exchanges, notices and other matters relating to the securities, and those policies may change from time to time. For example, if you hold an interest in a global security through Euroclear or Clearstream, when DTC is the depositary, Euroclear or Clearstream, as applicable, will require those who purchase and sell interests in that security through them to use immediately available funds and comply with other policies and procedures, including deadlines for giving instructions as to transactions that are to be effected on a particular day. There may be more than one financial intermediary in the chain of ownership for an investor. We do not monitor and are not responsible for the policies or actions or records of ownership interests of any of those intermediaries.

## Holder's Option to Obtain a Non-Global Security; Special Situations When a Global Security Will Be Terminated

If we issue any series of securities in book-entry form but we choose to give the beneficial owners of that series the right to obtain non-global securities, any beneficial owner entitled to obtain non-global securities may do so by following the applicable procedures of the depositary, any transfer agent or registrar for that series and that owner's bank, broker or other financial institution through which that owner holds its beneficial interest in the securities. If you are entitled to request a non-global certificate and wish to do so, you will need to allow sufficient lead time to enable us or our agent to prepare the requested certificate.

In addition, in a few special situations described below, a global security will be terminated and interests in it will be exchanged for certificates in non-global form representing the securities it represented. After that exchange, the choice of whether to hold the securities directly or in street name will be up to the investor. Investors must consult their own banks or brokers to find out how to have their interests in a global security transferred on termination to their own names, so that they will be holders. We have described the rights of holders and street name investors above under "—Who Is the Legal Owner of a Registered Security?"

The special situations for termination of a global security are as follows:

- if the depositary notifies us that it is unwilling, unable or no longer qualified to continue as depositary for that global security and we do not appoint another institution to act as depositary within 60 days; or
- in the case of a global security representing debt securities or warrants issued under an indenture, if an event of default has occurred with regard to these debt securities or warrants and has not been cured or waived.

If a global security is terminated, only the depositary, and not we, the trustee for any debt securities or warrants or the warrant agent for any warrants, is responsible for deciding the names of the institutions in whose names the securities represented by the global security will be registered and, therefore, who will be the holders of those securities.

## Considerations Relating to Euroclear and Clearstream

Euroclear and Clearstream are securities clearance systems in Europe. Both systems clear and settle securities transactions between their participants through electronic, book-entry delivery of securities against payment.

Euroclear and Clearstream may be depositaries for a global security. In addition, if DTC is the depositary for a global security, Euroclear and Clearstream may hold interests in the global security as participants in DTC.

As long as any global security is held by Euroclear or Clearstream as depositary, you may hold an interest in the global security only through an organization that participates, directly or indirectly, in Euroclear or Clearstream. If Euroclear or Clearstream is the depositary for a global security and there is no depositary in the United States, you will not be able to hold interests in that global security through any securities clearance system in the United States.

Payments, deliveries, transfers, exchanges, notices and other matters relating to the securities made through Euroclear or Clearstream must comply with the rules and procedures of those systems. Those systems could change their rules and procedures at any time. We have no control over those systems or their participants and we take no responsibility for their activities. Transactions between participants in Euroclear or Clearstream, on one hand, and participants in DTC, on the other hand, when DTC is the depositary, would also be subject to DTC's rules and procedures.

## **Special Timing Considerations for Transactions in Euroclear and Clearstream**

Investors will be able to make and receive through Euroclear and Clearstream payments, deliveries, transfers, exchanges, notices and other transactions involving any securities held through those systems only on days when those systems are open for business. Those systems may not be open for business on days when banks, brokers and other institutions are open for business in the United States.

In addition, because of time-zone differences, U.S. investors who hold their interests in the securities through these systems and wish to transfer their interests, or to receive or make a payment or delivery or exercise any other right with respect to their interests, on a particular day may find that the transaction will not be effected until the next business day in Luxembourg or Brussels, as applicable. Thus, investors who wish to exercise rights that expire on a particular day may need to act before the expiration date. In addition, investors who hold their interests through both DTC and Euroclear or Clearstream may need to make special arrangements to finance any purchases or sales of their interests between the U.S. and European clearing systems, and those transactions may settle later than would be the case for transactions within one clearing system.

# 1. ETRACS UBS Bloomberg Constant Maturity Commodity Index (CMCI) Total Return ETN Series B due April 5, 2038

## **Specific Terms of the Securities**

In this section, references to "holders" or "you" mean those who own the Securities registered in their own names, on the books that we or the trustee maintain for this purpose, and not those who own beneficial interests in the Securities registered in street name or in the Securities issued in book-entry form through The Depository Trust Company ("DTC") or another depositary. Owners of beneficial interests in the Securities should read the section entitled "Legal Ownership and Book-Entry Issuance" under "Medium-Term Notes, Series B" above.

These Securities are part of a series of debt securities entitled "Medium-Term Notes, Series B" that we may issue, from time to time, under the indenture more particularly described under "Medium-Term Notes, Series B" above. This section summarizes general financial and other terms that apply to the Securities. Terms that apply generally to all Medium-Term Notes, Series B are described in "Description of Debt Securities We May Offer" under "Medium-Term Notes, Series B" above. The terms described here supplement those described in "Medium-Term Notes, Series B" above and, if the terms described here are inconsistent with those described there, the terms described here are controlling.

These Securities are part of a single series of senior debt securities issued under our indenture dated as of June 12, 20015 between us and U.S. Bank Trust National Association, as trustee.

We describe the terms of the Securities in more detail below.

## Coupon

We will not pay you interest during the term of the Securities.

#### **Denomination**

The Stated Principal Amount of the Securities is \$25 per Security.

#### Payment at Maturity or Upon Early Redemption

At maturity or upon early redemption, you will receive a cash payment per \$25 Stated Principal Amount of your Securities equal to the Redemption Amount, which is calculated on the Final Valuation Date or the applicable Valuation Date, as the case may be, and based on the percentage change in the level of the Index from the Initial Trade Date relative to such Valuation Date.

The "Redemption Amount" will equal:

(\$25.00 × Index Performance Ratio) – Fee Amount

For purposes of calculating the Redemption Amount at maturity or upon early redemption, the Index Performance Ratio will be determined as of the corresponding Final Valuation Date or Valuation Date, as the case may be. If the amount so calculated is equal to or less than zero, the payment at maturity will be zero.

The "Index Performance Ratio" will be calculated as follows:

Index Ending Level
Index Starting Level

The "Index Starting Level" is 1,436.54, the closing level of the Index measured on April 1, 2008.

The "Index Ending Level" will equal the closing level of the Index on the applicable Trading Day.

The "Fee Amount" accrues on a daily basis. The initial Fee Amount will be \$0.9565 and beginning on and including the Initial Trade Date will increase each subsequent calendar date by an amount equal to: (0.55%/365) x \$25.00 x Index Performance Ratio on that day. For the purpose of calculating the Fee Amount, the Index Performance Ratio on any day that is not a Trading Day is the Index Performance Ratio as of the immediately preceding Trading Day.

Unlike ordinary debt securities, the Securities do not pay interest and do not guarantee any return of principal at maturity or upon an early redemption.

The Securities are fully exposed to any decline in the level of the Index. You may lose some or all of your investment if the Index level on the Final Valuation Date or the applicable Valuation Date, as the case may be, is less than the Index Starting Level or if the Index level does not increase by an amount sufficient to offset the negative effect of the Fee Amount. In addition, the Fee Amount will be calculated and accumulated based on a daily Index level and therefore will depend on the daily fluctuations of the Index level. If the amount calculated above is equal to or less than zero, the payment at maturity, call or upon early redemption will be zero.

To receive at least your Stated Principal Amount at maturity or upon early redemption, the Index must increase by a certain amount to offset the reduction to the Redemption Amount caused by the Fee Amount.

#### **Maturity Date**

The "Maturity Date" is April 5, 2038, unless that day is not a Business Day, in which case the Maturity Date will be the next following Business Day. If the third Trading Day before April 5, 2038 does not qualify as the Final Valuation Date as determined in accordance with "— Final Valuation Date" below, then the Maturity Date will be the third Trading Day following the Final Valuation Date or, if such day is not a Business Day, the next following Trading Day that is also a Business Day. The Calculation Agent may postpone the Final Valuation Date — and therefore the Maturity Date — if a market disruption event occurs or is continuing on a day that would otherwise be the Final Valuation Date. We describe market disruption events under "— Market Disruption Event" below.

#### **Final Valuation Date**

We currently expect the "Final Valuation Date" to be March 31, 2038, unless the Calculation Agent determines that a market disruption event occurs or is continuing on that day. In that event, the Final Valuation Date will be the first following Trading Day on which the Calculation Agent determines that a market disruption event does not occur and is not continuing. In no event, however, will the Final Valuation Date for the Securities be postponed by more than five (5) Trading Days.

## **Underlying Index**

The return on the Securities is linked to the performance of the UBS Bloomberg Constant Maturity Commodity Index (CMCI) Total Return (the "Index"). The Index is designed to be a diversified benchmark for commodities as an asset class. The Index, which is rebalanced monthly, is comprised of futures contracts on 27 components, representing 24 commodities, with up to five different maturities for each individual commodity. The Index is a "total return" index. The overall return on the Index is generated by two components: (i) uncollateralized returns on the futures contracts comprising the Index and (ii) a daily fixed-income return, which reflects the interest earned on a hypothetical 91-day Treasury Bill portfolio theoretically deposited as margin for hypothetical positions in the futures contracts comprising the Index.

## **Early Redemption**

You may elect to require UBS to redeem your Securities, in whole or in part, prior to the Maturity Date on any Trading Day through and including the final Redemption Date, subject to a minimum redemption amount of at least 50,000 Securities. If you elect to have UBS redeem your Securities, you will receive a cash payment equal to the Redemption Amount, which will be determined on the applicable Valuation Date and paid on the applicable Redemption Date. You must comply with the redemption procedures described below in order to redeem your Securities. To satisfy the minimum redemption amount, your broker or other financial intermediary may bundle your Securities for redemption with those of other investors to reach this minimum amount of 50,000 Securities. We may from time to time in our sole discretion reduce, in part or in whole, the minimum redemption amount of 50,000 Securities. Any such reduction will be applied on a consistent basis for all holders of the Securities at the time the reduction becomes effective.

## **Redemption Procedures**

To redeem your Securities, you must instruct your broker or other person through whom you hold your Securities to take the following steps through normal clearing system channels:

- deliver a notice of redemption to UBS via email no later than 12:00 p.m. (New York City time) on any Trading Day. If we receive your notice by the time specified in the preceding sentence, we will respond by sending you a form of confirmation of redemption;
- deliver the signed confirmation of redemption to us via facsimile in the specified form by 5:00 p.m. (New York City time) on the same day. We or our affiliate must acknowledge receipt in order for your confirmation to be effective;
- instruct your DTC custodian to book a delivery vs. payment trade with respect to your Securities on the applicable Valuation Date at a price equal to the Redemption Amount; and
- > cause your DTC custodian to deliver the trade as booked for settlement via DTC at or prior to 10:00 a.m. (New York City time) on the applicable Redemption Date.

Different brokerage firms may have different deadlines for accepting instructions from their customers. Accordingly, as a beneficial owner of the Securities, you should consult the brokerage firm through which you own your interest for the relevant deadline. If your broker delivers your notice of redemption after 12:00 p.m. (New York City time), or your confirmation of redemption after 5:00 p.m. (New York City time), on the Trading Day prior to the applicable Valuation Date, your notice will not be effective, you will not be able to redeem your Securities until the following Redemption Date and your broker will need to complete all the required steps if you should wish to redeem your Securities on any subsequent Redemption Date. In addition, UBS may request a medallion signature guarantee or such assurances of delivery as it may deem necessary in its sole discretion. All instructions given to participants from beneficial owners of Securities relating to the right to redeem their Securities will be irrevocable.

## **Redemption Dates**

The "Redemption Dates" will be the third Trading Day following a Valuation Date (other than the Final Valuation Date) or, if such day is not a Business Day, the next following Trading Day that is a Business Day. The final Redemption Date will be the third Trading Day following the Valuation Date that immediately precedes the Final Valuation Date or, if such day is not a Business Day, the next following Trading Day that is a Business Day. The Calculation Agent may postpone the applicable Valuation Date — and therefore the applicable Redemption Date — if a market disruption event occurs or is continuing on a day that would otherwise be the applicable Valuation Date. We describe market disruption events under "— Market Disruption Event" below.

#### **Valuation Dates**

For any early redemption, the applicable "Valuation Date" means the first Trading Day immediately following the Trading Day on which you deliver a redemption notice to UBS in compliance with the redemption procedures. In the event UBS exercises its Call Right (as defined below), the Valuation Date means the third Trading Day prior to the Call Settlement Date (as defined below). If the Calculation Agent determines that a market disruption event occurs or is continuing on a Valuation Date, the applicable Valuation Date will be the first following Trading Day on which the Calculation Agent determines that a market disruption event does not occur and is not continuing. In no event, however, will the applicable Valuation Date for the Securities be postponed by more than five (5) Trading Days. The Final Valuation Date is March 31, 2038.

# **UBS's Call Right**

On any Trading Day on or after October 17, 2016 through and including the Maturity Date (any such day, the "Call Settlement Date"), UBS may at its option redeem all, but not less than all, issued and outstanding Securities. To exercise its Call Right, UBS must provide notice to the holders of the Securities not less than five (5) Trading Days prior to the Call Settlement Date specified by UBS in such notice. If UBS elects to redeem the Securities on the Call Settlement Date, the Holder will receive a cash payment equal to the Redemption Amount, which will be calculated on the applicable Valuation Date and paid on the Call Settlement Date. The Calculation Agent may postpone the applicable Valuation Date — and therefore the Call Settlement Date — if a market disruption event occurs and is continuing on a day that would otherwise be the applicable Valuation Date.

In the event we exercise our Call Right, references to payment upon early redemption also refer to payment upon our exercise of our call right. See "— Payment at Maturity or Upon Early Redemption." We discuss redemption "Medium-Term Notes, Series B" above under "Description of the Debt Securities We May Offer–Redemption and Payment."

#### **Market Disruption Event**

The Calculation Agent will determine the Index Ending Level on the applicable Valuation Date or the Final Valuation Date, as the case may be. If the level of the Index has declined, you may lose some or all of your investment. If the level of the Index has increased, it must have increased by an amount sufficient to offset the Fee Amount in order to receive a positive return on your Securities. As described above, the applicable Valuation Date or the Final Valuation Date, as the case may be, may be postponed and thus the determination of the Index Ending Level may be postponed if the Calculation Agent determines that, on the applicable Valuation Date or the Final Valuation Date, as the case may be, a market disruption event has occurred or is continuing. Notwithstanding the occurrence of one or more of the events below, which may, in the Calculation Agent's discretion, constitute a market disruption event, the Calculation Agent in its discretion may waive its right to postpone the determination of the Index Ending Level if it determines that one or more of the below events has not and is not likely to materially impair its ability to determine the Index Ending Level on such date. If such a postponement occurs, the Calculation Agent will use the closing level of the Index on the first Trading Day on which no market disruption event occurs or is continuing. In no event, however, will the determination of the Index Ending Level be postponed by more than five (5) Trading Days.

If the determination of the Index Ending Level is postponed to the last possible day, but a market disruption event occurs or is continuing on that day, that day will nevertheless be the date on which the Index Ending Level will be determined by the Calculation Agent. In such an event, the Calculation Agent will make a good faith estimate in its sole discretion of the Index Ending Level that would have prevailed in the absence of the market disruption event.

Any of the following will be a market disruption event:

- > the absence or suspension of, or material limitation or disruption in the trading of any exchange-traded futures contract included in the Index:
- the settlement price of any such contract has increased or decreased by an amount equal to the maximum permitted price change from the previous day's settlement price;
- the Index is not published;
- > the settlement price is not published for any individual exchange-traded futures contract included in the Index;
- the occurrence of any event on any day or any number of consecutive days as determined by the Calculation Agent in its sole and reasonable discretion that affects our currency hedging (if any) with respect to U.S. dollars or the currency of any futures contract included in the Index; or
- in any other event, if the Calculation Agent determines in its sole discretion that the event materially interferes with our ability or the ability of any of our affiliates to unwind all or a material portion of a hedge with respect to the Securities that we or our affiliates have effected or may effect.

The following events will not be market disruption events:

- > a limitation on the hours or numbers of days of trading, but only if the limitation results from an announced change in the regular business hours of the relevant market; or
- ➤ a decision to permanently discontinue trading in the option or futures contracts relating to the Index or any Index Commodity.

For this purpose, an "absence of trading" in the primary securities market on which option or futures contracts related to a basket or any Index Commodities are traded will not include any time when that market is itself closed for trading under ordinary circumstances.

## **Redemption Price Upon Optional Tax Redemption**

We have the right to redeem the Securities in the circumstances described under "Description of Debt Securities We May Offer — Optional Tax Redemption" in "Medium-Term Notes, Series B" above. If we exercise this right, the redemption price of the Securities will be determined by the Calculation Agent in a manner reasonably calculated to preserve your and our relative economic position.

#### **Default Amount on Acceleration**

If an event of default occurs and the maturity of the Securities is accelerated, we will pay the default amount in respect of the principal of the Securities at maturity. We describe the default amount below under "— Default Amount."

For the purpose of determining whether the holders of our Medium-Term Notes, Series B, of which the Securities are a part, are entitled to take any action under the indenture, we will treat the outstanding principal amount of the Medium-Term Notes, Series B, as constituting the outstanding principal amount of the Securities. Although the terms of the Securities may differ from those of the other Series B medium-term notes, holders of specified percentages in principal amount of all Series B medium-term notes, together in some cases with other series of our debt securities, will be able to take action affecting all the Series B medium-term notes, including the Securities. This action may involve changing some of the terms that apply to the Series B medium-term notes, accelerating the maturity of the Series B medium-term notes after a default or waiving some of our obligations under the indenture. We discuss these matters in "Medium-Term Notes, Series B" above under "Description of Debt Securities We May Offer — Default, Remedies and Waiver of Default" and "Description of Debt Securities We May Offer — Modification and Waiver of Covenants."

#### **Default Amount**

The default amount for the Securities on any day will be an amount, in U.S. dollars for the principal of the Securities, equal to the cost of having a qualified financial institution, of the kind and selected as described below, expressly assume all our payment and other obligations with respect to the Securities as of that day and as if no default or acceleration had occurred, or to undertake other obligations providing substantially equivalent economic value to you with respect to the Securities. That cost will equal:

- the lowest amount that a qualified financial institution would charge to effect this assumption or undertaking, plus
- the reasonable expenses, including reasonable attorneys' fees, incurred by the holders of the Securities in preparing any documentation necessary for this assumption or undertaking.

During the default quotation period for the Securities, which we describe below, the holders of the Securities and/or we may request a qualified financial institution to provide a quotation of the amount it would charge to effect this assumption or undertaking. If either party obtains a quotation, it must notify the other party in writing of the quotation. The amount referred to in the first bullet point above will equal the lowest — or, if there is only one, the only — quotation obtained, and as to which notice is so given, during the default quotation period. With respect to any quotation, however, the party not obtaining the quotation may object, on reasonable and significant grounds, to the assumption or undertaking by the qualified financial institution providing the quotation and notify the other party in writing of those grounds within two (2) Business Days after the last day of the default quotation period, in which case that quotation will be disregarded in determining the default amount.

## **Default Quotation Period**

The default quotation period is the period beginning on the day the default amount first becomes due and ending on the third Business Day after that day, unless:

- > no quotation of the kind referred to above is obtained, or
- > every quotation of that kind obtained is objected to within five (5) Business Days after the due date as described above.

If either of these two events occurs, the default quotation period will continue until the third Business Day after the first Business Day on which prompt notice of a quotation is given as described above. If that quotation is objected to as described above within five (5) Business Days after that first Business Day, however, the default quotation period will continue as described in the prior sentence and this sentence.

In any event, if the default quotation period and the subsequent two (2) Business Day objection period have not ended before the applicable Valuation Date or the Final Valuation Date, as the case may be, then the default amount will equal the Stated Principal Amount of the Securities.

## **Qualified Financial Institutions**

For the purpose of determining the default amount at any time, a qualified financial institution must be a financial institution organized under the laws of any jurisdiction in the United States of America, Europe or Japan, which at that time has outstanding debt obligations with a stated maturity of one year or less from the date of issue and rated either:

- A-1 or higher by Standard & Poor's, a division of The McGraw-Hill Companies, Inc., or any successor, or any other comparable rating then used by that rating agency, or
- > P-1 or higher by Moody's Investors Service or any successor, or any other comparable rating then used by that rating agency.

## Discontinuance of or Adjustments to the Index; Alteration of Method of Calculation

If the Index Administrator discontinues publication of the Index and it or any other person or entity publishes a substitute index that the Calculation Agent determines is comparable to the Index and approves as a successor index, then the Calculation Agent will determine the Index Performance Ratio, Index Ending Level and the amount payable at maturity or upon early redemption by reference to such successor index.

If the Calculation Agent determines that the publication of the Index is discontinued and that there is no successor index on any date when the value of the Index is required to be determined, the Calculation Agent will instead make the necessary determination by reference to a group of commodities and options or another index and will apply a computation methodology that the Calculation Agent determines will as closely as reasonably possible replicate the Index.

If the Calculation Agent determines that the exchange-traded futures contracts included in the Index or the method of calculating the Index has been changed at any time in any respect — and whether the change is made by the Index Administrator under its existing policies or following a modification of those policies, is due to the publication of a successor index, is due to events affecting one or more of the Index Commodities or is due to any other reason — that causes the Index not to fairly represent the value of the Index had such changes not been made or that otherwise affects the calculation of the performance of the Index, the Index Ending Level or the amount payable at maturity or upon early redemption, then the Calculation Agent may make adjustments in the method of calculating the Index that it believes are appropriate to ensure that the Index Performance Ratio used to determine the amount payable on the Maturity Date or upon early redemption is equitable. All determinations and adjustments to be made by the Calculation Agent with respect to the performance of the Index, Index Ending Level, the amount payable at maturity or upon early redemption or otherwise relating to the level of the Index may be made by the Calculation Agent in its sole discretion.

## Manner of Payment and Delivery

Any payment on or delivery of the Securities at maturity or upon early redemption will be made to accounts designated by you and approved by us, or at the office of the trustee in New York City, but only when the Securities are surrendered to the trustee at that office. We also may make any payment or delivery in accordance with the applicable procedures of the depositary.

## **Trading Day**

Trading Day means a day on which (i) the value of the Index is published by Bloomberg or Reuters, (ii) trading is generally conducted on NYSE Arca and (iii) trading is generally conducted on the markets on which the futures contracts comprising the Index are traded, in each case as determined by the Calculation Agent in its sole discretion.

## **Business Day**

When we refer to a Business Day with respect to the Securities, we mean a day that is a Business Day of the kind described in "Description of Debt Securities We May Offer — Payment Mechanics for Debt Securities" in "Medium-Term Notes, Series B" above.

## **Modified Business Day**

As described in "Description of Debt Securities We May Offer — Payment Mechanics for Debt Securities" in "Medium-Term Notes, Series B", any payment on the Securities that would otherwise be due on a day that is not a Business Day may instead be paid on the next day that is a Business Day, with the same effect as if paid on the original due date, except as described under "— Maturity Date," "— Redemption Date" and "— Valuation Date" above.

## **Role of Calculation Agent**

Our affiliate, UBS Securities LLC, will serve as the Calculation Agent for the Securities. We may change the Calculation Agent after the original issue date of the Securities without notice. The Calculation Agent will make all determinations regarding the value of the Securities at maturity or upon early redemption, market disruption events, Trading Days, the default amount, the Index Starting Level, the Index Ending Level and the amount payable in respect of your Securities. Absent manifest error, all determinations of the Calculation Agent will be final and binding on you and us, without any liability on the part of the Calculation Agent. You will not be entitled to any compensation from us for any loss suffered as a result of any of the above determinations by the Calculation Agent.

## Reissuances or Reopened Issues

We may at our sole discretion, "reopen" or reissue the Securities. We issued the Securities initially in an amount having the aggregate stated principal amount specified on the cover of the prospectus supplement. We may issue additional Securities in amounts that exceed such amount at any time, without your consent and without notifying you. The Securities do not limit our ability to incur other indebtedness or to issue other securities. Also, we are not subject to financial or similar restrictions by the terms of the Securities. For more information, please refer to "Description of Debt Securities We May Offer — Amounts That We May Issue" in "Medium-Term Notes, Series B" above.

These further issuances, if any, will be consolidated to form a single class with the originally issued Securities and will have the same CUSIP number and will trade interchangeably with the Securities immediately upon settlement. Any additional issuances will increase the aggregate stated principal amount of the outstanding Securities of the class. The price of any additional offering will be determined at the time of pricing of that offering.

## **Booking Branch**

The Securities will be booked through UBS AG, London Branch.

#### **Clearance and Settlement**

The DTC participants that hold the Securities through DTC on behalf of investors will follow the settlement practices applicable to equity securities in DTC's settlement system with respect to the primary distribution of the Securities and secondary market trading between DTC participants.

# 2. ETRACS Bloomberg Commodity Index Total Return<sup>SM</sup> ETN Series B due October 31, 2039

## **Specific Terms of the Securities**

In this section, references to "holders" mean those who own the Securities registered in their own names, on the books that we or the trustee maintains for this purpose, and not those who own beneficial interests in the Securities registered in street name or in the Securities issued in book-entry form through The Depository Trust Company ("DTC") or another depositary. Owners of beneficial interests in the Securities should read the section entitled "Legal Ownership and Book-Entry Issuance" under "Medium-Term Notes, Series B" above.

The Securities are part of a series of debt securities entitled "Medium-Term Notes, Series B" that we may issue, from time to time, under the indenture more particularly described in the accompanying prospectus. This prospectus supplement summarizes specific financial and other terms that apply to the Securities. Terms that apply generally to all Medium-Term Notes, Series B are described in "Description of Debt Securities We May Offer" in the accompanying prospectus. The terms described here (*i.e.*, in this prospectus supplement) supplement those described in the accompanying prospectus and, if the terms described here are inconsistent with those described there, the terms described here are controlling.

#### Coupon

We will not pay you interest during the term of the Securities.

#### **Denomination**

The Stated Principal Amount per Security is \$25.00.

## Payment at Maturity, Call or Upon Early Redemption

At maturity, call or upon early redemption, you will receive a cash payment per \$25.00 principal amount of your Securities equal to the Redemption Amount, which is calculated on the Final Valuation Date or the applicable Valuation Date, as the case may be, and based on the percentage change in the level of the Index from the Initial Trade Date relative to such Valuation Date

The "Redemption Amount" will equal:

(\$25.00 × Index Performance Ratio) — Fee Amount

For purposes of calculating the Redemption Amount at maturity or upon early redemption, the Index Performance Ratio will be determined as of the corresponding Final Valuation Date or Valuation Date, as the case may be.

The "Fee Amount" is equal to 0.50% per annum, which accrues on a daily basis, with the Fee Amount equal to \$1.0823 on the Initial Trade Date, and then increasing, on each subsequent calendar day, by an amount equal to:  $(0.50\%/365) \times $25.00 \times 10^{-2}$  Index Performance Ratio on that day. If such day is not a Trading Day, the Index Performance Ratio will be calculated as of the immediately preceding Trading Day.

The "Index Performance Ratio" will be calculated as follows:

Index Ending Level
Index Starting Level

The "Index Starting Level" is 264.194, the closing level of the Index on October 28, 2009.

The "Index Ending Level" will equal the closing level of the Index on the applicable Valuation Date.

Unlike ordinary debt securities, the Securities do not pay interest and do not guarantee any return of principal at maturity, call or upon an early redemption.

The Securities are fully exposed to any decline in the level of the Index. You may lose some or all of your investment if the Index level declines from the Initial Trade Date relative to the Final Valuation Date or the applicable Valuation Date, as the case may be, or if the Index does not increase as of such date by an amount sufficient to offset the cumulative effect of the Fee Amount.

To receive at least your initial investment at maturity or upon early redemption, the Index must increase by a certain amount to offset the reduction to the Redemption Amount caused by the Fee Amount.

## **Maturity Date**

The Maturity Date is October 31, 2039, unless that day is not a Business Day, in which case the Maturity Date will be the next following Business Day. If the third Trading Day before October 31, 2039 does not qualify as the Final Valuation Date as determined in accordance with "— Final Valuation Date" below, then the Maturity Date will be the third Trading Day following the Final Valuation Date or, if such day is not a Business Day, the next following Trading Day that is also a Business Day. The calculation agent may postpone the Final Valuation Date — and therefore the Maturity Date — if a market disruption event occurs or is continuing on a day that would otherwise be the Final Valuation Date. We describe market disruption events under "— Market Disruption Event" below.

## **Final Valuation Date**

We currently expect the Final Valuation Date to be the Trading Day that falls on October 26, 2039, unless the calculation agent determines that a market disruption event occurs or is continuing on that day. In that event, the Final Valuation Date will be the first following Trading Day on which the calculation agent determines that a market disruption event does not occur and is not continuing. In no event, however, will the Final Valuation Date for the Securities be postponed by more than five Trading Days.

## **Underlying Index**

The return on the Securities is linked to the performance of the Bloomberg Commodity Index Total ReturnSM. The Index is composed of the prices of twenty-one exchange-traded futures contracts on physical commodities. An exchange-traded futures contract is a bilateral agreement providing for the purchase and sale of a specified type and quantity of a commodity or financial instrument during a stated delivery month for a fixed price. The twenty-three commodities included in the Index for 2020 are as follows: aluminum, brent crude oil, coffee, copper, corn, cotton, gold, HRW wheat, lean hogs, live cattle, low sulfur gas oil, natural gas, nickel, RBOB gasoline, silver, soybeans, soybean meal, soybean oil, sugar, wheat, WTI crude oil, ULS diesel and zinc. The Index is a "total return" index. The overall return on the Index is generated by two components: (i) unleveraged returns on futures contracts on the physical commodities comprising the Index and (ii) the returns that correspond to the weekly announced interest rate for specified 3-month U.S. Treasury Bills.

## **Early Redemption**

You may elect to require UBS to redeem your Securities, in whole or in part, prior to the Maturity Date on any Trading Day, provided that the Trading Day is also a Business Day, through and including the final Redemption Date, subject to a minimum redemption amount of at least 50,000 Securities. If you elect to have UBS redeem your Securities, you will receive a cash payment equal to the Redemption Amount, which will be determined on the applicable Valuation Date and paid on the applicable Redemption Date. You must comply with the redemption procedures described below in order to redeem your Securities. To satisfy the minimum redemption amount, your broker or other financial intermediary may bundle your Securities for redemption with those of other investors to reach this minimum amount of 50,000 Securities. UBS reserves the right from time to time to waive this minimum redemption amount in its sole discretion on a case-by-case basis. You should not assume you will be entitled to the benefit of any such waiver.

## **Redemption Procedures**

To redeem your Securities, you must instruct your broker or other person through whom you hold your Securities to take the following steps through normal clearing system channels:

- deliver a notice of redemption, to UBS via email no later than 12:00 noon (New York City time) on any Trading Day. If we receive your notice by the time specified in the preceding sentence, we will respond by sending you a form of confirmation of redemption;
- deliver the signed confirmation of redemption to us via facsimile in the specified form by 5:00 p.m. (New York City time) on the same day. We or our affiliate must acknowledge receipt in order for your confirmation to be effective;
- instruct your DTC custodian to book a delivery vs. payment trade with respect to your Securities on the applicable Valuation Date at a price equal to the Redemption Amount; and
- cause your DTC custodian to deliver the trade as booked for settlement via DTC at or prior to 12:00 noon (New York City time) on the applicable Redemption Date.

Different brokerage firms may have different deadlines for accepting instructions from their customers. Accordingly, as a beneficial owner of the Securities, you should consult the brokerage firm through which you own your interest for the relevant deadline. If your broker delivers your notice of redemption after 12:00 noon (New York City time), or your confirmation of redemption after 5:00 p.m. (New York City time), on the Trading Day prior to the applicable Valuation Date, your notice will not be effective, you will not be able to redeem your Securities until the following Redemption Date and your broker will need to complete all the required steps if you should wish to redeem your Securities on any subsequent Redemption Date. In addition, UBS may request a medallion signature guarantee or such assurances of delivery as it may deem necessary in its sole discretion. All instructions given to participants from beneficial owners of Securities relating to the right to redeem their Securities will be irrevocable.

#### **Redemption Dates**

The applicable Redemption Date will be the third Trading Day following a Valuation Date (other than the Final Valuation Date) or, if such day is not a Business Day, the next following Trading Day that is a Business Day. The final Redemption Date will be the third Trading Day following the Valuation Date that immediately precedes the Final Valuation Date or, if such day is not a Business Day, the next following Trading Day that is a Business Day. You should not assume that you will be entitled to any such acceleration. The calculation agent may postpone the applicable Valuation Date — and therefore the applicable Redemption Date — if a market disruption event occurs or is continuing on a day that would otherwise be the applicable Valuation Date. We describe market disruption events under "— Market Disruption Event" below.

#### **Valuation Dates**

For any early redemption, the applicable "Valuation Date" means the first Trading Day immediately following the Trading Day on which you deliver a redemption notice to UBS in compliance with the redemption procedures. You may, however, request that we accelerate the Redemption Date to the date on which the notice of redemption is received by UBS rather than the first Trading Day on which you deliver a redemption notice to us in compliance with the redemption procedures. You should not assume that you will be entitled to any such acceleration. We will be under no obligation to approve any such request, or to make any announcement regarding any decision by us to approve any such request. As a result, when considering making an investment in the Securities, you should assume that we will not choose to approve any request to accelerate the Redemption Valuation Date, or that if we do approve any such request, we will choose not to do so with respect to any redemption requests that you submit. In the event UBS exercises its call right, the Valuation Date means the third Trading Day prior to the Call Settlement Date (as defined below). If the calculation agent determines that a market disruption event occurs or is continuing on a Valuation Date, the applicable Valuation Date will be the first following Trading Day on which the calculation agent determines that a market disruption event does not occur and is not continuing. In no event, however, will the applicable Valuation Date for the Securities be postponed by more than five Trading Days. The Final Valuation Date is October 26, 2039.

#### **UBS's Call Right**

We have the right to redeem all, but not less than all, of the Securities upon not less than ten calendar days' prior notice to the holders of the Securities, such redemption to occur on any Trading Day (or if such day is not a Business Day, the next Trading Day that is also a Business Day) that we may specify through and including the Maturity Date (the "Call Settlement Date"). Upon early redemption in the event we exercise our call right, you will receive a cash payment equal to the Redemption Amount, which will be calculated on the applicable Valuation Date and paid on the Call Settlement Date. The calculation agent may postpone the applicable Valuation Date — and therefore the Call Settlement Date — if a market disruption event occurs and is continuing on a day that would otherwise be the applicable Valuation Date.

In the event we exercise our call right, references to payment upon early redemption also refer to payment upon our exercise of our call right. See "— Payment at Maturity, Call or Upon Early Redemption" above. We discuss these matters in "Medium-Term Notes, Series B" above under "Description of the Debt Securities We May Offer — Redemption and Repayment."

## **Market Disruption Event**

The calculation agent will determine the Index Ending Level on the applicable Valuation Date or the Final Valuation Date, as the case may be. If the level of the Index has declined, you will lose some or all of your investment. If the level of the Index has increased, it must have increased by an amount sufficient to offset the Fee Amount in order to receive a positive return on your Securities. As described above, the applicable Valuation Date or the Final Valuation Date, as the case may be, may be postponed and thus the determination of the Index Ending Level may be postponed if the calculation agent determines that, on the applicable Valuation Date or the Final Valuation Date, as the case may be, a market disruption event has occurred or is continuing. Notwithstanding the occurrence of one or more of the events below, which may, in the calculation agent's discretion, constitute a market disruption event, the calculation agent in its discretion may waive its right to postpone the determination of the Index Ending Level if it determines that one or more of the below events has not and is not likely to materially impair its ability to determine the Index Ending Level on such date. If such a postponement occurs, the calculation agent will use the closing level of the Index on the first Trading Day on which no market disruption event occurs or is continuing. In no event, however, will the determination of the Index Ending Level be postponed by more than five Trading Days.

If the determination of the Index Ending Level is postponed to the last possible day, but a market disruption event occurs or is continuing on that day, that day will nevertheless be the date on which the Index Ending Level will be determined by the calculation agent. In such an event, the calculation agent will make a good faith estimate in its sole discretion of the Index Ending Level that would have prevailed in the absence of the market disruption event.

Any of the following will be a market disruption event:

- > the absence or suspension of, or material limitation or disruption in the trading of any exchange-traded futures contract included in the Index;
- the settlement price of any such contract has increased or decreased by an amount equal to the maximum permitted price change from the previous day's settlement price;
- > the Index is not published;
- the settlement price is not published for any individual exchange-traded futures contract included in the Index;
- the occurrence of any event on any day or any number of consecutive days as determined by the calculation agent in its sole and reasonable discretion that affects our currency hedging (if any) with respect to U.S. dollars or the currency of any futures contract included in the Index; or
- in any other event, if the calculation agent determines in its sole discretion that the event materially interferes with our ability or the ability of any of our affiliates to unwind all or a material portion of a hedge with respect to the Securities that we or our affiliates have effected or may effect as described below under "Use of Proceeds and Hedging".

The following events will not be market disruption events:

- > a limitation on the hours or numbers of days of trading, but only if the limitation results from an announced change in the regular business hours of the relevant market; or
- a decision to permanently discontinue trading in the option or futures contracts relating to the Index or any Index Commodity.

For this purpose, an "absence of trading" in the primary securities market on which option or futures contracts related to a basket or any Index Commodities are traded will not include any time when that market is itself closed for trading under ordinary circumstances.

If a market disruption event affecting any Index Commodity occurs during the fifth through the ninth Business Days of each month (the "Hedge Roll Period") in any month other than January, then the daily roll of the relevant Designated Contract for such Index Commodity will be postponed until the next available Business Day on which a market disruption event does not occur, and the calculation of the Index will be adjusted to reflect this. The Hedge Roll Period will be extended only if a market disruption event affects an Index Commodity on the scheduled final Business Day comprising the Hedge Roll Period.

If a market disruption event affecting any Index Commodity occurs during the January Hedge Roll Period, then the rolling or rebalancing of the relevant Designated Contract will occur in all cases over five Business Days on which no market disruption event exists at a rate of 20% per day. The January Hedge Roll Period, and the resulting rebalancing that is scheduled to occur, will be extended in all cases until the affected Designated Contract finishes rolling over five Business Days not affected by a market disruption event.

If a market disruption event occurs on a CIM Determination Date in respect of any lead future for an Index Commodity used in the calculation of the CIMs, then the settlement prices used to calculate the CIMs for such year will be from the first prior Business Day on which a market disruption event had not occurred in any such futures.

#### **Redemption Price Upon Optional Tax Redemption**

We have the right to redeem the Securities in the circumstances described under "Description of Debt Securities We May Offer — Optional Tax Redemption" in "Medium-Term Notes, Series B" above. If we exercise this right, the redemption price of the Securities will be determined by the calculation agent in a manner reasonably calculated to preserve your and our relative economic position.

#### **Default Amount on Acceleration**

If an event of default occurs and the maturity of the Securities is accelerated, we will pay the default amount in respect of the principal of the Securities at maturity. We describe the default amount below under "— Default Amount."

For the purpose of determining whether the holders of our Medium-Term Notes, Series B, of which the Securities are a part, are entitled to take any action under the indenture, we will treat the outstanding principal amount of the Medium-Term Notes, Series B, as constituting the outstanding principal amount of the Securities. Although the terms of the Securities may differ from those of the other Medium-Term Notes, Series B, holders of specified percentages in principal amount of all Medium-Term Notes, Series B, together in some cases with other series of our debt securities, will be able to take action affecting all the Medium-Term Notes, Series B, including the Securities. This action may involve changing some of the terms that apply to the Medium-Term Notes, Series B, accelerating the maturity of the Medium-Term Notes, Series B after a default or waiving some of our obligations under the indenture. We discuss these matters in "Medium-Term Notes, Series B" above under "Description of Debt Securities We May Offer — Default, Remedies and Waiver of Default" and "Description of Debt Securities We May Offer — Modification and Waiver of Covenants."

#### **Default Amount**

The default amount for the Securities on any day will be an amount, in U.S. dollars for the principal of the Securities, equal to the cost of having a qualified financial institution, of the kind and selected as described below, expressly assume all our payment and other obligations with respect to the Securities as of that day and as if no default or acceleration had occurred, or to undertake other obligations providing substantially equivalent economic value to you with respect to the Securities. That cost will equal:

- > the lowest amount that a qualified financial institution would charge to effect this assumption or undertaking, plus
- the reasonable expenses, including reasonable attorneys' fees, incurred by the holders of the Securities in preparing any documentation necessary for this assumption or undertaking.

During the default quotation period for the Securities, which we describe below, the holders of the Securities and/or we may request a qualified financial institution to provide a quotation of the amount it would charge to effect this assumption or undertaking. If either party obtains a quotation, it must notify the other party in writing of the quotation. The amount referred to in the first bullet point above will equal the lowest — or, if there is only one, the only — quotation obtained, and as to which notice is so given, during the default quotation period. With respect to any quotation, however, the party not obtaining the quotation may object, on reasonable and significant grounds, to the assumption or undertaking by the qualified financial institution providing the quotation and notify the other party in writing of those grounds within two Business Days after the last day of the default quotation period, in which case that quotation will be disregarded in determining the default amount.

#### **Default Quotation Period**

The default quotation period is the period beginning on the day the default amount first becomes due and ending on the third Business Day after that day, unless:

- > no quotation of the kind referred to above is obtained, or
- > every quotation of that kind obtained is objected to within five Business Days after the due date as described above.

If either of these two events occurs, the default quotation period will continue until the third Business Day after the first Business Day on which prompt notice of a quotation is given as described above. If that quotation is objected to as described above within five Business Days after that first Business Day, however, the default quotation period will continue as described in the prior sentence and this sentence.

In any event, if the default quotation period and the subsequent two Business Day objection period have not ended before the applicable Valuation Date or the Final Valuation Date, as the case may be, then the default amount will equal the Stated Principal Amount of the Securities.

## **Qualified Financial Institutions**

For the purpose of determining the default amount at any time, a qualified financial institution must be a financial institution organized under the laws of any jurisdiction in the United States of America, Europe or Japan, which at that time has outstanding debt obligations with a stated maturity of one year or less from the date of issue and rated either:

- A-1 or higher by Standard & Poor's, a division of The McGraw-Hill Companies, Inc., or any successor, or any other comparable rating then used by that rating agency, or
- > P-1 or higher by Moody's Investors Service or any successor, or any other comparable rating then used by that rating agency.

## Discontinuance of or Adjustments to the Index; Alteration of Method of Calculation

If BISL (the Index administrator) discontinues publication of the Index and it or any other person or entity publish a substitute index that the calculation agent determines is comparable to the Index and approves as a successor index then the calculation agent will determine the Index Performance Ratio, Index Ending Level and the amount payable at maturity, call or upon early redemption by reference to such successor index.

If the calculation agent determines that the publication of the Index is discontinued and that there is no successor index on any date when the value of the Index is required to be determined, the calculation agent will instead make the necessary determination by reference to a group of commodities and options or another index and will apply a computation methodology that the calculation agent determines will as closely as reasonably possible replicate the Index.

If the calculation agent determines that the exchange-traded futures contracts included in the Index or the method of calculating the Index has been changed at any time in any respect — and whether the change is made by the Index administrator under its existing policies or following a modification of those policies, is due to the publication of a successor index, is due to events affecting one or more of the Index Commodities or is due to any other reason — that causes the Index not to fairly represent the value of the Index had such changes not been made or that otherwise affects the calculation of the performance of the Index, the Index Ending Level or the amount payable at maturity, call or upon early redemption, then the calculation agent may make adjustments in the method of calculating the Index that it believes are appropriate to ensure that the Index Performance Ratio used to determine the amount payable on maturity, call or upon early redemption is equitable. All determinations and adjustments to be made by the calculation agent with respect to the performance of the Index, Index Ending Level, the amount payable at maturity, call or upon early redemption or otherwise relating to the level of the Index may be made by the calculation agent in its sole discretion.

## Manner of Payment and Delivery

Any payment on or delivery of the Securities at maturity, call or upon early redemption will be made to accounts designated by you and approved by us, or at the corporate trust office of the trustee in New York City, but only when the Securities are surrendered to the trustee at that office. We also may make any payment or delivery in accordance with the applicable procedures of the depositary.

## **Trading Day**

"Trading Day" means a day on which (i) the value of the Index is published by Bloomberg L.P. or Reuters, (ii) trading is generally conducted on NYSE Area and (iii) trading is generally conducted on the markets on which the futures contracts comprising the Index are traded, in each case as determined by the calculation agent in its sole discretion.

#### **Business Day**

When we refer to a "Business Day" with respect to the Securities, we mean a day that is a "business day" of the kind described in "Description of Debt Securities We May Offer — Payment Mechanics for Debt Securities" in "Medium-Term Notes, Series B" above.

#### **Modified Business Day**

As described in "Description of Debt Securities We May Offer — Payment Mechanics for Debt Securities" in in "Medium-Term Notes, Series B" above, any payment on the Securities that would otherwise be due on a day that is not a Business Day may instead be paid on the next day that is a Business Day, with the same effect as if paid on the original due date, except as described under "— Maturity Date," "— Redemption Date" and "— Valuation Date" above.

## **Role of Calculation Agent**

Our affiliate, UBS Securities LLC, will serve as the calculation agent for the Securities. We may change the calculation agent after the original issue date of the Securities without notice. The calculation agent will make all determinations regarding the value of the Securities at maturity, call or upon early redemption, market disruption events, Trading Days, the default amount, the Index Starting Level, the Index Ending Level and the amount payable in respect of your Securities. Absent manifest error, all determinations of the calculation agent will be final and binding on you and us, without any liability on the part of the calculation agent. You will not be entitled to any compensation from us for any loss suffered as a result of any of the above determinations by the calculation agent.

#### **Reissuances or Reopened Issues**

We may, at our sole discretion, "reopen" or reissue the Securities. We may issue additional Securities in amounts that exceed the Stated Principal amount on the cover at any time, without your consent and without notifying you. The Securities do not limit our ability to incur other indebtedness or to issue other securities. Also, we are not subject to financial or similar restrictions by the terms of the Securities. For more information, please refer to "Description of Debt Securities We May Offer — Amounts That We May Issue" in "Medium-Term Notes, Series B" above.

These further issuances, if any, will be consolidated to form a single class with the Securities and will have the same CUSIP number and will trade interchangeably with the Securities immediately upon settlement. Any additional issuances will increase the aggregate Stated Principal Amount of the outstanding Securities of the class, plus the aggregate Stated Principal Amount of any Securities bearing the same CUSIP number that are issued pursuant to (i) any over-allotment option we may grant to an agent and (ii) any future issuances of Securities bearing the same CUSIP number. The price of any additional offering will be determined at the time of pricing of that offering.

# **Booking Branch**

The Securities will be booked through UBS AG, London Branch.

## **Clearance and Settlement**

The DTC participants that hold the Securities through DTC on behalf of investors will follow the settlement practices applicable to equity securities in DTC's settlement system with respect to the primary distribution of the Securities and secondary market trading between DTC participants.

## 3. ETRACS Alerian MLP Infrastructure Index ETN Series B due April 2, 2040

## **Specific Terms of the Securities**

In this section, references to "holders" or "you" mean those who own the Securities registered in their own names, on the books that we or the trustee maintain for this purpose, and not those who own beneficial interests in the Securities registered in street name or in the Securities issued in book-entry form through The Depository Trust Company ("DTC") or another depositary. Owners of beneficial interests in the Securities should read the section entitled "Legal Ownership and Book-Entry Issuance" under "Medium-Term Notes, Series B" above.

These Securities are part of a series of debt securities entitled "Medium-Term Notes, Series B" that we may issue, from time to time, under the indenture more particularly described under "Medium-Term Notes, Series B" above. This section summarizes general financial and other terms that apply to the Securities. Terms that apply generally to all Medium-Term Notes, Series B are described in "Description of Debt Securities We May Offer" under "Medium-Term Notes, Series B" above. The terms described here supplement those described in "Medium-Term Notes, Series B" above and, if the terms described here are inconsistent with those described there, the terms described here are controlling.

The Securities are part of a single series of senior debt securities issued under our indenture, dated as of June 12, 2015 between us and U.S. Bank Trust National Association, as trustee.

We describe the terms of the Securities in more detail below.

The Stated Principal Amount of each Security is \$25.00.

The Securities do not guarantee any return of principal at, or prior to, maturity or call, or upon early redemption. Instead, at maturity, you will receive a cash payment the amount of which will vary depending on the performance of the VWAP Level calculated in accordance with the formula set forth below and will be reduced by the Accrued Tracking Fee as of the last Index Business Day in the Final Measurement Period. We refer to this cash payment as the "Cash Settlement Amount." If the amount so calculated is equal to or less than zero, the Cash Settlement Amount will be zero and you will not receive a cash payment.

If you exercise your right to have us redeem your Securities, subject to compliance with the redemption procedures, for each Security you will receive a cash payment on the Redemption Date equal to the Redemption Amount as described below under "— Early Redemption at the Option of the Holders."

If the amount so calculated is equal to or less than zero, the Redemption Amount will be zero and you will not receive a cash payment.

The Securities may pay a cash coupon during their term.

#### **Coupon Payment**

For each Security you hold on the applicable Coupon Record Date, on each Coupon Payment Date you will receive an amount in cash equal to the difference between the Reference Distribution Amount, calculated as of the corresponding Coupon Valuation Date, and the Accrued Tracking Fee, calculated as of the corresponding Coupon Valuation Date (the "Coupon Amount").

To the extent the Reference Distribution Amount on any Coupon Valuation Date is equal to or less than the Accrued Tracking Fee on the corresponding Coupon Valuation Date, there will be no Coupon Amount payment made on the corresponding Coupon Payment Date, and an amount equal to the difference between the Accrued Tracking Fee and the Reference Distribution Amount (the "Tracking Fee Shortfall") will be included in the Accrued Tracking Fee for the next Coupon Valuation Date. This process will be repeated to the extent necessary until the Reference Distribution Amount for a Coupon Valuation Date is greater than the Accrued Tracking Fee for the corresponding Coupon Valuation Date. The final Coupon Amount will be included in the Cash Settlement Amount.

The "Coupon Payment Date" means the 15th Index Business Day following each Coupon Valuation Date, provided that the final Coupon Payment Date will be the Maturity Date, subject to adjustment as described herein. The first Coupon Payment Date will be January 22, 2016.

The "Coupon Record Date" means the ninth Index Business Day following each Coupon Valuation Date.

The "Coupon Ex-Date," with respect to a Coupon Amount, means the first Exchange Business Day on which the Securities trade without the right to receive such Coupon Amount. Under current NYSE Arca practice, the Coupon Ex-Date will generally be the second Exchange Business Day prior to the applicable Coupon Record Date.

The "Coupon Valuation Date" means the 30th of March, June, September and December of each calendar year during the term of the Securities or if such date is not an Index Business Day, then the first Index Business Day following such date, provided that the final Coupon Valuation Date will be the Calculation Date, subject to adjustment as described herein. The first Coupon Valuation Date will be December 30, 2015.

The "Reference Distribution Amount" means (i) as of the first Coupon Valuation Date, an amount equal to the gross cash distributions that a Reference Holder would have been entitled to receive in respect of the Index constituents held by such Reference Holder on the "record date" with respect to any Index constituent, for those cash distributions whose "ex-dividend date" occurs during the period from and excluding September 30, 2015 to and including the first Coupon Valuation Date; and (ii) as of any other Coupon Valuation Date, an amount equal to the gross cash distributions that a Reference Holder would have been entitled to receive in respect of the Index constituents held by such Reference Holder on the "record date" with respect to any Index constituent for those cash distributions whose "ex-dividend date" occurs during the period from and excluding the immediately preceding Coupon Valuation Date to and including such Coupon Valuation Date.

Notwithstanding the foregoing, with respect to cash distributions for an Index constituent which is scheduled to be paid prior to the applicable Coupon Ex-Date, if, and only if, the issuer of such Index constituent fails to pay the distribution to holders of such Index constituent by the scheduled payment date for such distribution, such distribution will be assumed to be zero for the purposes of calculating the applicable Reference Distribution Amount.

The "Reference Holder" is, as of any date of determination, a hypothetical holder of a number of units of each Index constituent equal to (i) the published unit weighting of that Index constituent as of that date, *divided by* (ii) the product of (a) the Index Divisor as of that date, and (b) the Initial VWAP Level divided by 25.

"record date" means, with respect to a distribution on an Index constituent, the date on which a holder of the Index constituent must be registered as a unitholder of such Index constituent in order to be entitled to receive such distribution.

"ex-dividend date" means, with respect to a distribution on an Index constituent, the first Business Day on which transactions in such Index constituent trade on the Primary Exchange without the right to receive such distribution.

The "Quarterly Tracking Fee" means, as of any date of determination, an amount per Security equal to the product of (i) 0.2125% (equivalent to 0.85% per annum) and (ii) the Current Indicative Value as of the immediately preceding Index Business Day.

The "Current Indicative Value," as determined by the Security Calculation Agent, means, as of any date of determination, an amount per Security equal to the product of (i) the Stated Principal Amount multiplied by (ii) a fraction, the numerator of which is equal to the VWAP Level (as defined under "— Cash Settlement Amount at Maturity") as of such date and the denominator of which is equal to the Initial VWAP Level. As of October 7, 2015, the Current Indicative Value was 29.8737.

The "Accrued Tracking Fee" is:

- (1) with respect to the first Coupon Valuation Date, an amount equal to:
  - the Quarterly Tracking Fee calculated as of the first Coupon Valuation Date (for the avoidance of doubt, the calculation of the Accrued Tracking Fee with respect to the first Coupon Valuation Date will be for a full quarter beginning from and excluding September 30, 2015);
- (2) with respect to any Coupon Valuation Date, other than the first and last Coupon Valuation Dates, an amount equal to the Quarterly Tracking Fee as of such Coupon Valuation Date *plus* the Tracking Fee Shortfall as of the immediately preceding Coupon Valuation Date, if any; and
- (3) with respect to the last Coupon Valuation Date, an amount equal to:
  - (a) the product of
    - (i) the Quarterly Tracking Fee as of such Coupon Valuation Date and
    - (ii) a fraction, the numerator of which is the total number of calendar days from and excluding the immediately preceding Coupon Valuation Date to and including such Coupon Valuation Date, and the denominator of which is 90, *plus*
  - (b) the Tracking Fee Shortfall as of the immediately preceding Coupon Valuation Date. If there is a Tracking Fee Shortfall on the last Coupon Valuation Date, it will be taken into account in determining the Cash Settlement Amount, as described below.

The Accrued Tracking Fee also takes into account the performance of the Index, as measured by the VWAP Level.

# **Cash Settlement Amount at Maturity**

The "Maturity Date" is April 2, 2040, subject to adjustment as described below under "— Market Disruption Event." For each Security, unless earlier called or redeemed, you will receive at maturity a cash payment equal to:

- (a) the product of
  - (i) the Stated Principal Amount and
  - (ii) the Index Performance Ratio as of the last Index Business Day in the Final Measurement Period, plus

- (b) the final Coupon Amount, *minus*
- (c) the Accrued Tracking Fee as of the last Index Business Day in the Final Measurement Period, plus
- (d) the Stub Reference Distribution Amount as of the last Index Business Day in the Final Measurement Period, if any.

We refer to this cash payment as the "Cash Settlement Amount." If the amount so calculated is equal to or less than zero, the payment at maturity will be zero.

The "Stated Principal Amount" of each Security is \$25.00.

You may lose some or all of your investment at maturity. The negative effect of the Accrued Tracking Fee will reduce your final payment. If the increase in the level of the Index (as measured by the Final VWAP Level, as compared to the Initial VWAP Level) is insufficient to offset the negative effect of the Accrued Tracking Fee (less any Coupon Amounts, any Stub Reference Distribution Amount and/or Adjusted Coupon Amount, as applicable, you may be entitled to receive), or if the Final VWAP Level is less than the Initial VWAP Level, you may lose some or all of your investment at maturity.

The "Index Performance Ratio" on any Index Business Day is calculated as follows:

Final VWAP Level
Initial VWAP Level

The "VWAP" with respect to each Index constituent, as of any date of determination, is the volume-weighted average price of one unit of such Index constituent as determined by the VWAP Calculation Agent based on the Primary Exchange for each Index constituent. For information about how the VWAP will be calculated to the extent a Disrupted Day exists with respect to an Index constituent, please see "— Market Disruption Event."

The "Initial VWAP Level" is 487.420, the VWAP Level on March 31, 2010, as determined by the VWAP Calculation Agent. See "— VWAP Calculation Agent" below.

The "Final VWAP Level," as determined by the VWAP Calculation Agent, will be the arithmetic mean of the VWAP Levels measured on each Index Business Day during the Final Measurement Period or Call Measurement Period or on any applicable Redemption Measurement Date, as applicable.

The "VWAP Level," as determined by the VWAP Calculation Agent as of any Index Business Day, is equal to (1) the sum of the products of (i) the VWAP of each Index constituent as of such date and (ii) the published share weighting of that Index constituent as of such date divided by (2) the Index Divisor as of such date, or expressed as a formula, as follows:

where:

$$VWAP Level = \frac{\sum_{i=1}^{n} (VWAP_{i,t} * W_{i,t})}{IndexDivisor_{t}}$$

*n* is the number of Index constituents;

VWAPi,t is the VWAP of Index constituent i as of Index Business Day t;

Wi, t is the published share weighting of Index constituent i as of Index Business Day t; and

*Index Divisor*<sub>t</sub> is the Index Divisor as of Index Business Day t.

As of October 7, 2015, the VWAP Level was 582.442.

The "Index Divisor," as of any date of determination, is the divisor used by the Index Calculation Agent to calculate the level of the Index.

The "Accrued Tracking Fee" as of the last Index Business Day in the Final Measurement Period is an amount equal to:

- (a) the product of
  - (i) the Quarterly Tracking Fee calculated as of the last Index Business Day in the Final Measurement Period and
  - (ii) a fraction, the numerator of which is the total number of calendar days from and excluding the Calculation Date to and including the last Index Business Day in the Final Measurement Period, and the denominator of which is 90, *plus*
- (b) the Tracking Fee Shortfall as of the last Coupon Valuation Date, if any.

The Accrued Tracking Fee also takes into account the performance of the Index, as measured by the VWAP Level.

The "Final Measurement Period" means the five (5) Index Business Days from and including the Calculation Date, subject to adjustment as described under "— Market Disruption Event."

The "Stub Reference Distribution Amount" means, as of the last Index Business Day in the Final Measurement Period or Call Measurement Period, as applicable, an amount equal to the gross cash distributions that a Reference Holder would have been entitled to receive in respect of the Index constituents held by such Reference Holder on the "record date" with respect to any Index constituent, for those cash distributions whose "ex-dividend date" occurs during the period from and excluding the first Index Business Day in the Final Measurement Period or Call Measurement Period, as applicable, to and including the last Index Business Day in the Final Measurement Period or Call Measurement Period, as applicable, provided, that for the purpose of calculating the Stub Reference Distribution Amount, the Reference Holder will be deemed to hold 4/5 ths, 3/5 ths, 2/5 ths and 1/5 th of the shares of each Index constituent it would otherwise hold on the second, third, fourth and fifth Index Business Day, respectively, in such Final Measurement Period or Call Measurement Period.

The "Index Calculation Agent" means the entity that calculates and publishes the level of the Index, which is currently S&P.

The "Calculation Date" means March 23, 2040, unless such day is not an Index Business Day, in which case the Calculation Date will be the next Index Business Day, subject to adjustments.

"Index Business Day" means any day on which the Primary Exchange and each Related Exchange are scheduled to be open for trading.

"Exchange Business Day" means any day on which the Primary Exchange or market for trading of the Securities is scheduled to be open for trading.

"Business Day" means any day that is not a Saturday, a Sunday or a day on which banking institutions in The City of New York, generally, are authorized or obligated by law, regulation or executive order to close.

"Primary Exchange" means, with respect to each Index constituent or each constituent underlying a successor index, the primary exchange or market of trading such Index constituent or such constituent underlying a successor index.

"Related Exchange" means, with respect to each Index constituent or each constituent underlying a successor index, each exchange or quotation system where trading has a material effect (as determined by the Security Calculation Agent) on the overall market for futures or options contracts relating to such Index constituent or such constituent underlying a successor index.

#### **Underlying Index**

The Alerian MLP Infrastructure Index measures the performance of energy infrastructure master limited partnerships ("MLPs"), and is calculated by S&P Dow Jones Indices using a float-adjusted, capitalization-weighted methodology. We refer to the MLPs included in the Index as the "Index constituents." The Index constituents earn the majority of their cash flow from gathering and processing, liquefaction, midstream services, pipeline transportation, rail terminating and storage of energy commodities.

### Early Redemption at the Option of the Holders

Subject to your compliance with the procedures described below and the potential postponements and adjustments as described under "— Market Disruption Event," you may submit a request to have us redeem your Securities on any Business Day no later than 12:00 noon, New York City time, and a confirmation of redemption by no later than 5:00 p.m., New York City time, on the Business Day immediately preceding the applicable Redemption Valuation Date, provided that you request that we redeem a minimum of 50,000 Securities. For any applicable redemption request, the "Redemption Valuation Date" will be the first Index Business Day following the date that the applicable Redemption Notice and Redemption Confirmation are delivered. To satisfy the minimum redemption amount, your broker or other financial intermediary may bundle your Securities for redemption with those of other investors to reach this minimum amount of 50,000 Securities. We may from time to time in our sole discretion reduce, in part or in whole, the minimum redemption amount of 50,000 Securities. Any such reduction will be applied on a consistent basis for all holders of the Securities at the time the reduction becomes effective.

The Securities will be redeemed and the holders will receive payment for their Securities on the third Business Day following the applicable Redemption Measurement Date (the "Redemption Date"). The first Redemption Date will be October 15, 2015. If a Market Disruption Event is continuing or occurs on the applicable scheduled Redemption Valuation Date with respect to any of the Index constituents, such Redemption Valuation Date may be postponed as described under "— Market Disruption Event."

The applicable "Redemption Measurement Date" means the Index Business Day following the applicable Redemption Valuation Date, subject to adjustments as described under "— Market Disruption Event."

If you exercise your right to have us redeem your Securities, subject to your compliance with the procedures described under "— Redemption Procedures," for each applicable Security you will receive a cash payment on the relevant Redemption Date equal to:

- (a) the product of
  - (i) the Stated Principal Amount and
  - (ii) the Index Performance Ratio as of the Redemption Measurement Date, plus

- (b) the Coupon Amount with respect to the Coupon Valuation Date immediately preceding the Redemption Valuation Date if on the Redemption Measurement Date the Coupon Ex-Date with respect to such Coupon Amount has not yet occurred, *plus*
- (c) the Adjusted Coupon Amount, if any, minus
- (d) the Accrued Tracking Fee as of the Redemption Measurement Date, minus
- (e) the Redemption Fee Amount.

We refer to this cash payment as the "Redemption Amount." We have determined to offer all holders of the Securities the option, upon early redemption and solely for purposes of determining the Redemption Amount, but not for any other purpose, to elect that the Index Performance Ratio (which is used to calculate the Redemption Amount) be calculated using the Index Closing Level on the Redemption Measurement Date instead of the Final VWAP Level. If the redeeming holder so elects, the Index Performance Ratio will be calculated, for purposes of determining the Redemption Amount, as:

# Index Closing Level on the Redemption Measurement Date Initial VWAP Level

The "Index Closing Level" is the closing level of the Index as reported on the NYSE and Bloomberg; provided, however, that if the closing level of the Index as reported on the NYSE (or any successor) differs from the closing level of the Index as reported on Bloomberg (or any successor), then the Index Closing Level will be the closing level of the Index as calculated by the Index Calculation Agent.

If the amount calculated above is equal to or less than zero, the payment upon early redemption will be zero.

We will inform you of such Redemption Amount on the first Business Day following the applicable Redemption Measurement Date.

You may lose some or all of your investment upon early redemption. The combined negative effect of the Accrued Tracking Fee and the Redemption Fee Amount will reduce your final Redemption Amount. If the level of the Index (as measured by the Final VWAP Level as compared to the Initial VWAP Level) does not increase by an amount sufficient to offset the combined negative effect of the Accrued Tracking Fee and the Redemption Fee Amount (less any Coupon Amounts, any Stub Reference Distribution Amount, as applicable, and/or any Adjusted Coupon Amount, you may be entitled to receive), you may lose some or all of your investment upon early redemption.

The Accrued Tracking Fee as of the Redemption Measurement Date is an amount equal to:

- (a) the product of
  - (i) the Quarterly Tracking Fee calculated as of the Redemption Measurement Date, and
  - (ii) a fraction, the numerator of which is the total number of calendar days from and excluding the Redemption Valuation Date to and including the Redemption Measurement Date, and the denominator of which is 90,

plus

(b) the Adjusted Tracking Fee Shortfall, if any.

The "Adjusted Coupon Amount," with respect to any Redemption Valuation Date, is an amount in cash equal to the difference between the Adjusted Reference Distribution Amount, calculated as of such Redemption Valuation Date, and the Adjusted Tracking Fee, calculated as of such Redemption Valuation Date. To the extent the Adjusted Reference Distribution Amount is less than the Adjusted Tracking Fee, the Redemption Amount will not include an Adjusted Coupon Amount, and the Adjusted Tracking Fee Shortfall will be included in the calculation of the Accrued Tracking Fee as of the applicable Redemption Measurement Date.

The "Adjusted Reference Distribution Amount," as of any Redemption Valuation Date, is an amount equal to the gross cash distributions that a Reference Holder would have been entitled to receive in respect of the Index constituents held by such Reference Holder on the "record date" with respect to an Index constituent, for those cash distributions whose "ex-dividend date" occurs during the period from and excluding the immediately preceding Coupon Valuation Date (or if the Redemption Valuation Date occurs prior to the first Coupon Valuation Date, the period from and excluding September 30, 2015) to and including such Redemption Valuation Date.

The "Adjusted Tracking Fee" is:

- (1) as of any Redemption Valuation Date occurring prior to the first Coupon Valuation Date, an amount equal to:
  - the product of
  - (i) the Quarterly Tracking Fee as of such Redemption Valuation Date and

- (ii) a fraction, the numerator of which is the total number of calendar days from and excluding September 30, 2015 to and including such Redemption Valuation Date, and the denominator of which is 90; and
- (2) as of any Redemption Valuation Date occurring on or after the first Coupon Valuation Date, an amount equal to:
  - (a) the Tracking Fee Shortfall as of the immediately preceding Coupon Valuation Date *plus*
  - (b) the product of
    - (i) the Quarterly Tracking Fee as of such Redemption Valuation Date and
    - (iii) a fraction, the numerator of which is the total number of calendar days from and excluding the immediately preceding Coupon Valuation Date to and including such Redemption Valuation Date, and the denominator of which is 90.

The "Adjusted Tracking Fee Shortfall," as of any Redemption Valuation Date, is the difference between the Adjusted Tracking Fee and the Adjusted Reference Distribution Amount, to the extent that the Adjusted Reference Distribution Amount, calculated as of such Redemption Valuation Date, is less than the Adjusted Tracking Fee, calculated as of such Redemption Valuation Date.

The "Redemption Fee Amount" means an amount equal to 0.125% of the Stated Principal Amount of the Securities.

Some of the defined terms used in this section have different applications when used in determining the Call Settlement Amount. For the definitions of the terms relevant to a call, please refer to "— UBS's Call Right" below.

We discuss redemption in "Medium-Term Notes, Series B" above under "Description of Debt Securities We May Offer — Redemption and Payment."

The Redemption Amount is meant to induce arbitrageurs to counteract any trading of the Securities at a premium or discount to their indicative value, though there can be no assurance that arbitrageurs will employ the repurchase feature in this manner.

## **Redemption Procedures**

To redeem your Securities, you must instruct your broker or other person through whom you hold your Securities to take the following steps through normal clearing system channels:

- deliver a notice of redemption, which we refer to as a "Redemption Notice" to UBS via email no later than 12:00 noon (New York City time) on the Business Day immediately preceding the applicable Redemption Valuation Date. If we receive your notice by the time specified in the preceding sentence, we will respond by sending you a form of confirmation of redemption;
- deliver the signed confirmation of redemption, which we refer to as the "Redemption Confirmation," to us via facsimile in the specified form by 5:00 p.m. (New York City time) on the same day. We or our affiliate must acknowledge receipt in order for your confirmation to be effective;
- instruct your DTC custodian to book a delivery vs. payment trade with respect to your Securities on the applicable Redemption Valuation Date at a price equal to the Redemption Amount; and
- > cause your DTC custodian to deliver the trade as booked for settlement via DTC at or prior to 10:00 a.m. (New York City time) on the applicable Redemption Date.

Different brokerage firms may have different deadlines for accepting instructions from their customers. Accordingly, as a beneficial owner of the Securities, you should consult the brokerage firm through which you own your interest for the relevant deadline. If your broker delivers your notice of redemption after 12:00 noon (New York City time), or your confirmation of redemption after 5:00 p.m. (New York City time), on the Business Day prior to the applicable Redemption Valuation Date, your notice will not be effective, you will not be able to redeem your Securities until the following Redemption Date and your broker will need to complete all the required steps if you should wish to redeem your Securities on any subsequent Redemption Date. In addition, UBS may request a medallion signature guarantee or such assurances of delivery as it may deem necessary in its sole discretion. All instructions given to participants from beneficial owners of Securities relating to the right to redeem their Securities will be irrevocable.

# **UBS's Call Right**

We have the right to redeem all, but not less than all, of the Securities upon not less than eighteen (18) calendar days' prior notice to the holders of the Securities, such redemption to occur on any Business Day that we may specify on or after October 17, 2016 through and including the Maturity Date (the "Call Settlement Date"). Upon early redemption in the event we exercise this right, you will receive a cash payment equal to:

- (a) the product of
  - (i) the Stated Principal Amount and
  - (ii) the Index Performance Ratio as of the last Index Business Day in the Call Measurement Period, plus

- (b) the Coupon Amount with respect to the Coupon Valuation Date immediately preceding the Call Valuation Date if on the last Index Business Day in the Call Measurement Period the Coupon Ex-Date with respect to such Coupon Amount has not yet occurred, *plus*
- (c) the Adjusted Coupon Amount, if any, *minus*
- (d) the Accrued Tracking Fee as of the last Index Business Day in the Call Measurement Period, plus
- (e) the Stub Reference Distribution Amount as of the last Index Business Day in the Call Measurement Period, if any.

We refer to this cash payment as the "Call Settlement Amount."

If the amount calculated above is equal to or less than zero, the payment upon early redemption will be zero.

We will inform you of such Call Settlement Amount on the first Business Day following the last Index Business Day in the Call Measurement Period.

The holders will receive payment for their Securities on the third Business Day following the last Index Business Day in the Call Measurement Period (the "Call Settlement Date"). If a Market Disruption Event is continuing or occurs on the scheduled Call Valuation Date with respect to any of the Index constituents, such Call Valuation Date may be postponed as described under "— Market Disruption Event."

The "Call Measurement Period" means the five (5) Index Business Days from and including the Call Valuation Date, subject to adjustments as described under "— Market Disruption Event."

You may lose some or all of your investment upon a call. The negative effect of the Accrued Tracking Fee will reduce your final payment. If the increase in the Final VWAP Level, as compared to the Initial VWAP Level, is insufficient to offset the negative effect of the Accrued Tracking Fee (less any Coupon Amounts, any Stub Reference Distribution Amount and/or any Adjusted Coupon Amount, you may be entitled to receive), or if the Final VWAP Level is less than the Initial VWAP Level, you may lose some or all of your investment upon a call.

The Accrued Tracking Fee as of the last Index Business Day in the Call Measurement Period is an amount equal to:

- (a) the product of
  - (i) the Quarterly Tracking Fee calculated as of the last Index Business Day in such Call Measurement Period,
  - (ii) a fraction, the numerator of which is the total number of calendar days from and excluding the Call Valuation Date to and including the last Index Business Day in such Call Measurement Period, and the denominator of which is 90, *plus*
- (b) the Adjusted Tracking Fee Shortfall (as defined below), if any.

The Accrued Tracking Fee also takes into account the performance of the Index, as measured by the VWAP Level.

The "Adjusted Coupon Amount," with respect to the Call Valuation Date, is an amount in cash equal to the difference between the Adjusted Reference Distribution Amount (as defined below), calculated as of the Call Valuation Date, and the Adjusted Tracking Fee (as defined in the preceding paragraph), calculated as of such Call Valuation Date. To the extent the Adjusted Reference Distribution Amount is less than the Adjusted Tracking Fee, the Call Settlement Amount will not include an Adjusted Coupon Amount, and the Adjusted Tracking Fee Shortfall (as defined below) will be included in the calculation of the Accrued Tracking Fee as of the last Index Business Day in the Call Measurement Period.

The "Adjusted Reference Distribution Amount," as of the Call Valuation Date, is an amount equal to the gross cash distributions that a Reference Holder would have been entitled to receive in respect of the Index constituents held by such Reference Holder on the "record date" with respect to an Index constituent, for those cash distributions whose "ex-dividend date" occurs during the period from and excluding the immediately preceding Coupon Valuation Date to and including the Call Valuation Date.

The "Adjusted Tracking Fee" is, as of the Call Valuation Date, an amount equal to:

- (a) the Tracking Fee Shortfall as of the immediately preceding Coupon Valuation Date *plus*
- (b) the product of
  - (i) the Quarterly Tracking Fee as of such Call Valuation Date and
  - (ii) a fraction, the numerator of which is the total number of calendar days from and excluding the immediately preceding Coupon Valuation Date to and including such Call Valuation Date, and the denominator of which is 90.

The "Adjusted Tracking Fee Shortfall," as of the Call Valuation Date, is the difference between the Adjusted Tracking Fee and the Adjusted Reference Distribution Amount, to the extent that the Adjusted Reference Distribution Amount, calculated as of such Call Valuation Date, is less than the Adjusted Tracking Fee, calculated as of such Call Valuation Date.

Some of the defined terms used in this section have different applications when used in determining the Redemption Amount. For the definition of the terms relevant to early redemption, please refer to "— Early Redemption at the Option of the Holders" above.

## **Security Calculation Agent**

UBS Securities LLC will act as the "Security Calculation Agent." The Security Calculation Agent will determine, among other things, the Current Indicative Value, the Index Performance Ratio, the Coupon Amount, the Adjusted Coupon Amount, if any, the Reference Distribution Amount, the Stub Reference Distribution Amount, if any, the Adjusted Reference Distribution Amount, the Accrued Tracking Fee (including the Quarterly Tracking Fee, any Tracking Fee Shortfall and any Adjusted Tracking Fee Shortfall), the Adjusted Tracking Fee, the Redemption Fee Amount, the Cash Settlement Amount, if any, that we will pay you at maturity, the Final Measurement Period, the Coupon Payment Dates, the Coupon Valuation Dates, the Coupon Ex-Dates, the Coupon Record Dates, the Redemption Amount, if any, that we will pay you upon redemption, if applicable, the Call Settlement Date, the Call Valuation Date, the Call Measurement Period and the Call Settlement Amount, if any, that we will pay you in the event that UBS calls the Securities, and whether any day is a Business Day, Exchange Business Day or Index Business Day. The Security Calculation Agent will also be responsible for determining whether a Market Disruption Event has occurred, whether the Index has been discontinued and whether there has been a material change in the Index. All determinations made by the Security Calculation Agent will be at the sole discretion of the Security Calculation Agent and will, in the absence of manifest error, be conclusive for all purposes and binding on you and on us. We may appoint a different Security Calculation Agent from time to time without your consent and without notifying you.

The Security Calculation Agent will provide written notice to the trustee at its New York office, on which notice the trustee may conclusively rely, of the amount to be paid at maturity or call, or upon early redemption, or on a Coupon Payment Date on or prior to 12:00 p.m., New York City time, on the Business Day immediately preceding the Maturity Date, any Redemption Date, any Call Settlement Date or any Coupon Payment Date, as applicable.

All dollar amounts related to determination of the Coupon Amount, the Adjusted Coupon Amount, if any, the Reference Distribution Amount, the Stub Reference Distribution Amount, if any, the Adjusted Reference Distribution Amount, the Accrued Tracking Fee (including the Quarterly Tracking Fee, any Tracking Fee Shortfall and any Adjusted Tracking Fee Shortfall), the Adjusted Tracking Fee, the Redemption Amount and Redemption Fee Amount, if any, per security, the Call Settlement Amount, if any, per security, and the Cash Settlement Amount, if any, per security, will be rounded to the nearest ten-thousandth, with five one hundred-thousandths rounded upward (e.g., .76545 would be rounded up to .7655); and all dollar amounts paid on the aggregate principal amount of Securities per holder will be rounded to the nearest cent, with one-half cent rounded upward.

#### **VWAP Calculation Agent**

The NYSE will on each day that is not a Disrupted Day (as defined below) act as the "VWAP Calculation Agent." The VWAP Calculation Agent will determine the VWAP of any Index constituent, the VWAP Level and the Final VWAP Level on any Index Business Day on which such VWAP, VWAP Level and Final VWAP Level are to be determined during the term of the Securities. The VWAP Calculation Agent determined the Initial VWAP Level of 487.420 as of March 31, 2010. All determinations made by the VWAP Calculation Agent will be at the sole discretion of the VWAP Calculation Agent and will, in the absence of manifest error, be conclusive for all purposes and binding on you and on us. We may appoint a different VWAP Calculation Agent from time to time without your consent and without notifying you.

All calculations with respect to the VWAP of any Index constituent, any VWAP Level, and the Final VWAP Level will be rounded to the nearest thousandth, with five ten-thousandths rounded upward (e.g., .8765 would be rounded to .877).

#### **Market Disruption Event**

To the extent a Disrupted Day (as defined below) exists with respect to an Index constituent on an Averaging Date (as defined below) or on a Redemption Measurement Date, the VWAP and published share weighting with respect to such Index constituent (and only with respect to such Index constituent) for such Averaging Date or Redemption Measurement Date will be determined by the Security Calculation Agent or one of its affiliates on the first succeeding Index Business Day that is not a Disrupted Day (the "Deferred Averaging Date") with respect to such Index constituent irrespective of whether pursuant to such determination, the Deferred Averaging Date would fall on a date originally scheduled to be an Averaging Date. If the postponement described in the preceding sentence results in the VWAP of a particular Index constituent being calculated on a day originally scheduled to be an Averaging Date, for purposes of determining the VWAP Levels on the Index Business Days during the Final Measurement Period or Call Measurement Period, or on the Redemption Measurement Date, as applicable, the Security Calculation Agent or one of its affiliates, as the case may be, will apply the VWAP and the published share weighting with respect to such Index constituent for such Deferred Averaging Date to the calculation of the VWAP Level (i) on the date(s) of the original disruption with respect to such Index constituent and (ii) such Averaging Date. For example, if the Final Measurement Period or Call Measurement Period, as applicable, for purposes of calculating the Cash Settlement Amount or Call Settlement Amount, respectively, is based on the arithmetic mean of the VWAP Levels on June 6, 2016, June 7, 2016, June 8, 2016, June 9, 2016 and June 10, 2016 and there is a Market Disruption Event for an Index constituent on June 6, 2016, but no other Market Disruption Event during the Final Measurement Period or Call Measurement Period, as applicable, then the VWAP for such disrupted Index constituent on June 7, 2016 will be used more than once to calculate the Cash Settlement Amount or Call Settlement Amount, respectively, and such Cash Settlement Amount or Call Settlement Amount, as applicable, will be determined based on the arithmetic mean of the VWAP for such disrupted Index constituent on June 7, 2016, June 7, 2016, June 8, 2016, June 9, 2016 and June 10, 2016.

If the Redemption Measurement Date for purposes of calculating a Redemption Amount is based on the VWAP Level on June 6, 2016 and there is a Market Disruption Event for an Index constituent on June 6, 2016, then the VWAP for such disrupted Index constituent on June 7, 2016 will be used to calculate the Redemption Amount.

In no event, however, will any postponement pursuant to the two immediately preceding paragraphs result in the final Averaging Date or the Redemption Measurement Date, as applicable, with respect to any Index constituent occurring more than three (3) Index Business Days following the day originally scheduled to be such final Averaging Date or Redemption Measurement Date. If the third Index Business Day following the date originally scheduled to be the final Averaging Date, or the Redemption Measurement Date, as applicable, is not an Index Business Day or is a Disrupted Day with respect to such Index constituent, the Security Calculation Agent or one of its affiliates will determine the VWAP and share weighting with respect to any Index constituent required to be determined for the purpose of calculating the applicable VWAP Level based on its good faith estimate of the VWAP and share weighting of each such Index constituent that would have prevailed on the Primary Exchange on such third Index Business Day but for such suspension or limitation.

An "Averaging Date" means each of the Index Business Days during the Final Measurement Period or Call Measurement Period, as applicable, subject to adjustment as described herein.

A "Disrupted Day" with respect to any Index constituent is any Index Business Day on which the Primary Exchange or any Related Exchange fails to open for trading during its regular trading session or on which a Market Disruption Event has occurred and is continuing, and, in both cases, the occurrence of which is determined by the Security Calculation Agent to have a material effect on the VWAP Level.

With respect to an Index constituent, a "Market Disruption Event" means:

- (a) the occurrence or existence of a condition specified below:
  - (i) any suspension, absence or limitation of trading on the Primary Exchange for trading in the Index constituent, whether by reason of movements in price exceeding limits permitted by the Primary Exchange or otherwise,
  - (ii) any suspension, absence or limitation of trading on the Related Exchange for trading in futures or options contracts related to the Index constituent, whether by reason of movements in price exceeding limits permitted by such Related Exchange or otherwise, or
  - (iii) any event (other than an event described in (b) below) that disrupts or impairs (as determined by the Security Calculation Agent) the ability of market participants in general (A) to effect transactions in, or obtain market values for, the relevant Index constituent or (B) to effect transactions in, or obtain market values for, futures or options contracts relating to the relevant Index constituent; or
- (b) the closure on any Index Business Day of the Primary Exchange or any Related Exchange prior to its Scheduled Closing Time unless such earlier closing time is announced by the Primary Exchange or such Related Exchange at least one hour prior to the earlier of (i) the actual closing time for the regular trading session on the Primary Exchange or such Related Exchange on such Index Business Day and (ii) the submission deadline for orders to be entered into the Primary Exchange or such Related Exchange system for execution at the close of trading on such Index Business Day;

in each case determined by the Security Calculation Agent in its sole discretion; and

(c) a determination by the Security Calculation Agent in its sole discretion that the event described above materially interfered with our ability or the ability of any of our affiliates to adjust or unwind all or a material portion of any hedge with respect to the Securities.

For purposes of the above definition:

- (a) a limitation on the hours or number of days of trading will not constitute a Market Disruption Event if it results from an announced change in the regular business hours of the Primary Exchange or Related Exchange, and
- (b) for purposes of clause (a) above, limitations pursuant to the rules of any Primary Exchange or Related Exchange similar to NYSE Rule 80B or Nasdaq Rule 4120 (or any applicable rule or regulation enacted or promulgated by any other self-regulatory organization or any government agency of scope similar to NYSE Rule 80B or Nasdaq Rule 4120 as determined by the Security Calculation Agent) on trading during significant market fluctuations will constitute a suspension, absence or material limitation of trading.

"Scheduled Closing Time" means, with respect to the Primary Exchange or the Related Exchange, on any Index Business Day, the scheduled weekday closing time of the Primary Exchange or such Related Exchange on such Index Business Day, without regard to after hours or any other trading outside of the regular trading session hours.

### **Redemption Price Upon Optional Tax Redemption**

We have the right to redeem the Securities in the circumstances described under "Description of Debt Securities We May Offer — Optional Tax Redemption" in "Medium-Term Notes, Series B" above. If we exercise this right, the redemption price of the Securities will be determined by the Security Calculation Agent in a manner reasonably calculated to preserve your and our relative economic position.

#### **Default Amount on Acceleration**

If an event of default occurs and the maturity of the Securities is accelerated, we will pay the default amount in respect of the principal of the Securities at maturity. We describe the default amount below under "— Default Amount." In addition to the default amount described below, we will also pay the Coupon Amount per Security, if any, with respect to the final Coupon Payment Date, as described above under "— Coupon Payment," calculated as if the date of acceleration was the last Index Business Day in the Final Measurement Period and the four Index Business Days immediately preceding the date of acceleration were the corresponding Index Business Days in the accelerated Final Measurement Period, with the fourth Index Business Day immediately preceding the date of accelerated final Coupon Valuation Date, and the Index Business Day immediately preceding the date of acceleration being the relevant final Coupon Valuation Date.

For the purpose of determining whether the holders of our Medium-Term Notes, Series B, of which the Securities are a part, are entitled to take any action under the indenture, we will treat the outstanding principal amount of the Medium-Term Notes, Series B, as constituting the outstanding principal amount of the Securities. Although the terms of the Securities may differ from those of the other Medium-Term Notes, Series B, holders of specified percentages in principal amount of all Medium-Term Notes, Series B, together in some cases with other series of our debt securities, will be able to take action affecting all the Medium-Term Notes, Series B, including the Securities. This action may involve changing some of the terms that apply to the Medium-Term Notes, Series B, accelerating the maturity of the Medium-Term Notes, Series B after a default or waiving some of our obligations under the indenture. We discuss these matters in "Medium-Term Notes, Series B" above under "Description of Debt Securities We May Offer — Default, Remedies and Waiver of Default" and "Description of Debt Securities We May Offer — Modification and Waiver of Covenants."

### **Default Amount**

The default amount for the Securities on any day will be an amount, in U.S. dollars for the principal of the Securities, equal to the cost of having a qualified financial institution, of the kind and selected as described below, expressly assume all our payment and other obligations with respect to the Securities as of that day and as if no default or acceleration had occurred, or to undertake other obligations providing substantially equivalent economic value to you with respect to the Securities. That cost will equal:

- > the lowest amount that a qualified financial institution would charge to effect this assumption or undertaking, plus
- the reasonable expenses, including reasonable attorneys' fees, incurred by the holders of the

Securities in preparing any documentation necessary for this assumption or undertaking.

During the default quotation period for the Securities, which we describe below, the holders of the Securities and/or we may request a qualified financial institution to provide a quotation of the amount it would charge to effect this assumption or undertaking. If either party obtains a quotation, it must notify the other party in writing of the quotation. The amount referred to in the first bullet point above will equal the lowest — or, if there is only one, the only — quotation obtained, and as to which notice is so given, during the default quotation period. With respect to any quotation, however, the party not obtaining the quotation may object, on reasonable and significant grounds, to the assumption or undertaking by the qualified financial institution providing the quotation and notify the other party in writing of those grounds within two (2) Business Days after the last day of the default quotation period, in which case that quotation will be disregarded in determining the default amount.

## **Default Quotation Period**

The default quotation period is the period beginning on the day the default amount first becomes due and ending on the third Business Day after that day, unless:

- > no quotation of the kind referred to above is obtained, or
- > every quotation of that kind obtained is objected to within five (5) Business Days after the due date as described above.

If either of these two events occurs, the default quotation period will continue until the third Business Day after the first Business Day on which prompt notice of a quotation is given as described above. If that quotation is objected to as described above within five (5) Business Days after that first Business Day, however, the default quotation period will continue as described in the prior sentence and this sentence.

In any event, if the default quotation period and the subsequent two (2) Business Day objection period have not ended before the Calculation Date, then the default amount will equal the Stated Principal Amount of the Securities.

#### **Qualified Financial Institutions**

For the purpose of determining the default amount at any time, a qualified financial institution must be a financial institution organized under the laws of any jurisdiction in the United States of America, Europe or Japan, which at that time has outstanding debt obligations with a stated maturity of one year or less from the date of issue and rated either:

- A-1 or higher by S&P or any successor, or any other comparable rating then used by that rating agency, or
- ➤ P-1 or higher by Moody's Investors Service or any successor, or any other comparable rating then used by that rating agency.

#### Discontinuance of or Adjustments to the Index; Alteration of Method of Calculation

If S&P discontinues publication of or otherwise fails to publish the Index, or S&P does not make the Index constituents, their share weighting and/or the Index Divisor available to the VWAP Calculation Agent, and the Index Sponsor, S&P or another entity publishes a successor or substitute index that the Security Calculation Agent determines to be comparable to the discontinued Index and for which the Index constituents, their share weighting, and/or the Index Divisor are available to the VWAP Calculation Agent (such index being referred to herein as a "successor index"), then the VWAP Level for such successor index will be determined by the VWAP Calculation Agent by reference to the sum of the products of the VWAPs of the components underlying such successor index on the Primary Exchanges and each such component's respective weighting within the successor index (which sum will be adjusted by any index divisor used by such successor index) on the dates and at the times as of which the VWAP Levels for such successor index are to be determined.

Upon any selection by the Security Calculation Agent of a successor Index, the Security Calculation Agent will cause written notice thereof to be furnished to the trustee, to us and to the holders of the Securities.

If S&P discontinues publication of the Index or does not make the Index constituents, their share weightings and/or Index Divisor available to the VWAP Calculation Agent prior to, and such discontinuation or unavailability is continuing on the Calculation Date or any Index Business Day during the Final Measurement Period or Call Measurement Period, or on the Redemption Measurement Date, as applicable, or any other relevant date on which the VWAP Level is to be determined and the Security Calculation Agent determines that no successor index is available at such time, or the Security Calculation Agent has previously selected a successor index and publication of such successor index is discontinued prior to, and such discontinuation is continuing on the Calculation Date or any Index Business Day during the Final Measurement Period or Call Measurement Period, or on the Redemption Measurement Date, as applicable, or any other relevant date on which the VWAP Level is to be determined, then the Security Calculation Agent will determine the relevant VWAP Levels using the VWAP and published share weighting of each Index constituent included in the Index or successor index, as applicable, immediately prior to such discontinuation or unavailability, as adjusted for certain corporate actions. In such event, the Security Calculation Agent will cause notice thereof to be furnished to the trustee, to us and to the holders of the Securities.

Notwithstanding these alternative arrangements, discontinuation of the publication of the Index or successor index, as applicable, may adversely affect the value of the Securities.

If at any time the method of calculating the Index or a successor index, or the value thereof, is changed in a material respect, or if the Index or a successor index is in any other way modified so that the VWAP Level of the Index or such successor index does not, in the opinion of the Security Calculation Agent, fairly represent the VWAP Level of the Index or such successor index had such changes or modifications not been made, then the Security Calculation Agent will make such calculations and adjustments as, in the good faith judgment of the Security Calculation Agent, may be necessary in order to arrive at a VWAP level of an index comparable to the Index or such successor index, as the case may be, as if such changes or modifications had not been made, and the Security Calculation Agent will calculate the VWAP Levels for the Index or such successor index with reference to the Index or such successor index, as adjusted. The Security Calculation Agent will accordingly calculate the Final VWAP Level, the Current Indicative Value, the Index Performance Ratio, the Coupon Amount, the Adjusted Coupon Amount, if any, the Reference Distribution Amount, the Stub Reference Distribution Amount, if any, the Adjusted Reference Distribution Amount, the Accrued Tracking Fee (including the Quarterly Tracking Fee, any Tracking Fee Shortfall and any Adjusted Tracking Fee Shortfall), the Adjusted Tracking Fee, the Redemption Fee Amount, if any, the Cash Settlement Amount, if any, that we will pay you at maturity, the Redemption Amount, if any, upon early redemption, if applicable, and the Call Settlement Amount, if any, that we will pay you in the event UBS calls the Securities, based on the relevant VWAP Levels calculated by the VWAP Calculation Agent, as adjusted. Accordingly, if the method of calculating the Index or a successor index is modified so that the level of the Index or such successor index is a fraction of what it would have been if there had been no such modification (e.g., due to a split in the Index), which, in turn, causes the VWAP Level of the Index or such successor index to be a fraction of what it would have been if there had been no such modification, then the Security Calculation Agent will make such calculations and adjustments in order to arrive at a VWAP Level for the Index or such successor index as if it had not been modified (e.g., as if such split had not occurred).

#### **Manner of Payment and Delivery**

Any payment on or delivery of the Securities at maturity or call, or upon early redemption will be made to accounts designated by you and approved by us, or at the corporate trust office of the trustee in New York City, but only when the Securities are surrendered to the trustee at that office. We also may make any payment or delivery in accordance with the applicable procedures of the depositary.

#### **Business Day**

When we refer to a Business Day with respect to the Securities, we mean a day that is a Business Day of the kind described in "Description of Debt Securities We May Offer — Payment Mechanics for Debt Securities" in "Medium-Term Notes, Series B".

## **Modified Business Day**

As described in "Description of Debt Securities We May Offer — Payment Mechanics for Debt Securities" in "Medium-Term Notes, Series B" above, any payment on the Securities that would otherwise be due on a day that is not a Business Day may instead be paid on the next day that is a Business Day, with the same effect as if paid on the original due date, except as described under "— Cash Settlement Amount at Maturity," "— UBS's Call Right" and "— Early Redemption at the Option of the Holders" above.

## **Reissuances or Reopened Issues**

We may, at our sole discretion, "reopen" or reissue the Securities. We issued the Securities initially in an amount having the aggregate stated principal amount specified on the cover of this prospectus supplement. We may issue additional Securities in amounts that exceed such amount any time, without your consent and without notifying you. The Securities do not limit our ability to incur other indebtedness or to issue other securities. Also, we are not subject to financial or similar restrictions by the terms of the Securities. For more information, please refer to "Description of Debt Securities We May Offer — Amounts That We May Issue" in "Medium-Term Notes, Series B" above.

These further issuances, if any, will be consolidated to form a single class with the originally issued Securities and will have the same CUSIP number and will trade interchangeably with the Securities immediately upon settlement. Any additional issuances will increase the aggregate stated principal amount of the outstanding Securities of the class. The price of any additional offering will be determined at the time of pricing of that offering.

## **Booking Branch**

The Securities will be booked through UBS AG, London Branch.

## **Clearance and Settlement**

The DTC participants that hold the Securities through DTC on behalf of investors will follow the settlement practices applicable to equity securities in DTC's settlement system with respect to the primary distribution of the Securities and secondary market trading between DTC participants.

# 4. ETRACS MarketVector Business Development Companies Liquid Index ETN due April 26, 2041

#### **Specific Terms of the Securities**

In this section, references to "holders" or "you" mean those who own the Securities registered in their own names, on the books that we or the trustee maintains for this purpose, and not those who own beneficial interests in the Securities registered in street name or in the Securities issued in book-entry form through The Depository Trust Company ("DTC") or another depositary. Owners of beneficial interests in the Securities should read the section entitled "Legal Ownership and Book-Entry Issuance" under "Medium-Term Notes, Series B" above.

These Securities are part of a series of UBS AG debt securities entitled "Medium-Term Notes, Series B" that we may issue, from time to time, under the indenture more particularly described under "Medium-Term Notes, Series B" above. This section summarizes general financial and other terms that apply to the Securities. Terms that apply generally to all Medium-Term Notes, Series B are described under "Medium-Term Notes, Series B" above. The terms described here supplement those described in "Medium-Term Notes, Series B" above and, if the terms described here are inconsistent with those described there, the terms described here are controlling.

These Securities are part of a single series of senior debt securities issued under our indenture, dated as of June 12, 2015 between us and U.S. Bank Trust National Association, as trustee.

We describe the terms of the Securities in more detail below.

The Stated Principal Amount of each Security is \$25.00.

The Securities do not guarantee any return of principal at, or prior to, maturity or call, or upon early redemption. At maturity, you will receive a cash payment the amount of which will vary depending on the performance of the Index and will be reduced by the Accrued Tracking Fee as of the last Index Business Day in the Final Measurement Period, as described under "— Cash Settlement Amount at Maturity." We refer to this cash payment as the "Cash Settlement Amount." If the amount so calculated is equal to or less than zero, the Cash Settlement Amount will be zero and you will not receive a cash payment.

If you exercise your right to have us redeem your Securities, subject to compliance with the redemption procedures, for each Security you will receive a cash payment on the Redemption Date equal to the Redemption Amount as described under "— Early Redemption at the Option of the Holders."

If the amount as calculated is equal to or less than zero, the Redemption Amount will be zero and you will not receive a cash payment.

The Securities may pay a cash coupon during their term.

## **Coupon Payment**

For each Security you hold on the applicable Coupon Record Date, on each quarterly Coupon Payment Date you will receive an amount in cash equal to the difference between the Reference Distribution Amount, calculated as of the corresponding Coupon Valuation Date, and the Accrued Tracking Fee, calculated as of the corresponding Coupon Valuation Date (the "Coupon Amount").

To the extent the Reference Distribution Amount on any Coupon Valuation Date is equal to or less than the Accrued Tracking Fee on the corresponding Coupon Valuation Date, there will be no Coupon Amount payment made on that Coupon Payment Date, and an amount equal to the difference between the Accrued Tracking Fee and the Reference Distribution Amount (the "Tracking Fee Shortfall") will be included in the Accrued Tracking Fee and will reduce the Coupon Amount for the next Coupon Valuation Date. This process will be repeated to the extent necessary until the Reference Distribution Amount for a Coupon Valuation Date is greater than the Accrued Tracking Fee for the corresponding Coupon Valuation Date. The final Coupon Amount will be included in the Cash Settlement Amount.

The "Coupon Payment Date" means the 15th Index Business Day following each Coupon Valuation Date. The final Coupon Payment Date will be the Maturity Date, subject to adjustment as described herein.

The "Coupon Record Date" means the ninth Index Business Day following each Coupon Valuation Date.

The "Coupon Ex-Date," with respect to a Coupon Amount, means the first Exchange Business Day on which the Securities trade without the right to receive such Coupon Amount. Under current NYSE Area practice, the Coupon Ex-Date will generally be the second Exchange Business Day prior to the applicable Coupon Record Date.

The "Coupon Valuation Date" means the 30th of March, June, September and December of each calendar year during the term of the Securities or if such date is not an Index Business Day, then the first Index Business Day following such date, provided that the final Coupon Valuation Date will be the Calculation Date, subject to adjustment as described herein..

The "Reference Distribution Amount" means as of any Coupon Valuation Date, an amount equal to the gross cash distributions that a Reference Holder would have been entitled to receive in respect of the Index constituents held by such Reference Holder on the "record date" with respect to any Index constituent for those cash distributions whose "ex-dividend date" occurs during the period from and excluding the immediately preceding Coupon Valuation Date to and including such Coupon Valuation Date.

Notwithstanding the foregoing, with respect to cash distributions for an Index constituent which is scheduled to be paid prior to the applicable Coupon Ex-Date, if, and only if, the issuer of such Index constituent fails to pay the distribution to holders of such Index constituent by the scheduled payment date for such distribution, such distribution will be assumed to be zero for the purposes of calculating the applicable Reference Distribution Amount.

The "**Reference Holder**" is, as of any date of determination, a hypothetical holder of a number of units of each Index constituent equal to (i) the published unit weighting of that Index constituent as of that date, as described under "MarketVector US Business Development Companies Liquid Index — Float Adjustment," *divided by* (ii) the product of (a) the Divisor as of that date and (b) the Initial Index Level *divided by* 25.

"record date" means, with respect to a distribution on an Index constituent, the date on which a holder of the Index constituent must be registered as a unitholder of such Index constituent in order to be entitled to receive such distribution.

"ex-dividend date" means, with respect to a distribution on an Index constituent, the first Business Day on which transactions in such Index constituent trade on the Primary Exchange without the right to receive such distribution.

"Business Day" means any day that is not a Saturday, a Sunday or a day on which banking institutions in The City of New York, generally, are authorized or obligated by law, regulation or executive order to close.

The "Annual Tracking Fee" means, as of any date of determination, an amount per Security equal to the product of (i) 0.85% per annum and (ii) the Current Indicative Value as of the immediately preceding Index Business Day.

The "Current Indicative Value," as determined by the Security Calculation Agent, means, as of any date of determination, an amount per Security equal to the product of (i) the Stated Principal Amount *times* (ii) the Index Performance Ratio (as defined under "— Cash Settlement Amount at Maturity") as of such date, using the Index Closing Level on such date as the Final Index Level. As of July 30, 2021, the Current Indicative Value was \$19.3744.

## The "Accrued Tracking Fee" is:

- (1) with respect to the first Coupon Valuation Date, an amount equal to the product of
  - (a) the Annual Tracking Fee calculated as of the first Coupon Valuation Date, and
  - (b) a fraction, the numerator of which is the total number of calendar days from and excluding September 30, 2015 to and including such Coupon Valuation Date, and the denominator of which is 365;

and

- (2) with respect to any Coupon Valuation Date other than the first Coupon Valuation Date, an amount equal to
  - (a) the product of
    - (i) the Annual Tracking Fee as of such Coupon Valuation Date, and
    - (i) a fraction, the numerator of which is the total number of calendar days from and excluding the immediately preceding Coupon Valuation Date to and including such Coupon Valuation Date, and the denominator of which is 365, *plus*
  - (b) the Tracking Fee Shortfall as of the immediately preceding Coupon Valuation Date. If there is a Tracking Fee Shortfall on the last Coupon Valuation Date, it will be taken into account in determining the Cash Settlement Amount, as described below.

The Accrued Tracking Fee also takes into account the performance of the Index, as measured by the Index Closing Level.

## **Cash Settlement Amount at Maturity**

For each Security, unless earlier called or redeemed, you will receive at maturity a cash payment equal to

(a) the product of

- (i) the Stated Principal Amount and
- (ii) the Index Performance Ratio as of the last Index Business Day in the Final Measurement Period, plus
- (b) the final Coupon Amount, *minus*
- (c) the Accrued Tracking Fee as of the last Index Business Day in the Final Measurement Period, plus
- (d) the Stub Reference Distribution Amount as of the last Index Business Day in the Final Measurement Period, if any.

We refer to this cash payment as the "Cash Settlement Amount." If the amount so calculated is equal to or less than zero, the payment at maturity will be zero.

You may lose some or all of your investment at maturity. The negative effect of the Accrued Tracking Fee will reduce your final payment. If the increase in the level of the Index (as measured by the Final Index Level, as compared to the Initial Index Level) is insufficient to offset the negative effect of the Accrued Tracking Fee (*less* any Coupon Amounts, any Stub Reference Distribution Amount and/or Adjusted Coupon Amount, as applicable, you may be entitled to receive) or if the Final Index Level is less than the Initial Index Level, you may lose some or all of your investment at maturity.

The "Stated Principal Amount" of each Security is \$25.00. The Securities may be issued and sold over time at then-current market prices, which may be significantly higher or lower than the Stated Principal Amount.

The Index Performance Ratio on any Index Business Day is calculated as follows:

Final Index Level
Initial Index Level

The "**Initial Index Level**" is adjusted on the Effective Date to be equal to (a) the Index Closing Level of the Index on the Effective Date *multiplied by* (b) (i) 904.113 (the original Initial Index Level) *divided by* (ii) the Index Closing Level of the Original Index on the Effective Date. The adjusted Initial index Level is 692.808593.

As determined by the Security Calculation Agent, the "Final Index Level" is the arithmetic mean of the Index Closing Levels measured on each Index Business Day during the Final Measurement Period or the Call Measurement Period, or the Index Closing Level on any Redemption Valuation Date; provided that if the Redemption Valuation Date falls in the Call Measurement Period or the Final Measurement Period, for the purposes of calculating the Index Performance Ratio as of the Redemption Valuation Date, the Final Index Level on any date of determination during the Call Measurement Period or the Final Measurement Period shall equal (a) 1/10 times (b) (i) the sum of the Index Closing Levels on each Index Business Day from and including the Call Valuation Date or the Calculation Date, as applicable, to but excluding the date of determination plus (ii) the number of Index Business Days from and including the date of determination to and including the last Index Business Day in the Call Measurement Period or the Final Measurement Period, as applicable, times the Index Closing Level on the date of determination.

The "Index Closing Level" is the closing level of the Index as reported on Bloomberg.

The "Accrued Tracking Fee" as of the last Index Business Day in the Final Measurement Period is an amount equal to

- (a) the product of
  - (i) the Annual Tracking Fee calculated as of the last Index Business Day in the Final Measurement
  - (ii) Period and
  - (iii) a fraction, the numerator of which is the total number of calendar days from and excluding the Calculation Date to and including the last Index Business Day in the Final Measurement Period, and the denominator of which is 365, *plus*
- (b) the Tracking Fee Shortfall as of the last Coupon Valuation Date, if any.

The Accrued Tracking Fee also takes into account the performance of the Index, as measured by the Index Closing Level.

The "Final Measurement Period" means the ten Index Business Days from and including the Calculation Date, subject to adjustment as described under "— Market Disruption Event."

The "Stub Reference Distribution Amount" means, as of the last Index Business Day in the Final Measurement Period or Call Measurement Period, as applicable, an amount equal to the gross cash distributions that a Reference Holder would have been entitled to receive in respect of the Index constituents held by such Reference Holder on the "record date" with respect to any Index constituent, for those cash distributions whose "ex-dividend date" occurs during the period from and excluding the first Index Business Day in the Final Measurement Period or Call Measurement Period, as applicable, to and including the last Index Business Day in the Final Measurement Period or Call Measurement Period, as applicable, provided, that for the purpose of calculating the Stub Reference Distribution Amount, the Reference Holder will be deemed to hold nine-tenths, eight-tenths, seven-tenths, six-tenths, five-tenths, four-tenths, three-tenths, two-tenths and one-tenth of the shares of each Index constituent it would otherwise hold on the second, third, fourth, fifth, sixth, seventh, eighth, ninth and tenth Index Business Day, respectively, in such Final Measurement Period or Call Measurement Period.

The "Index Calculation Agent" means the entity that calculates and publishes the level of the Index, which is Solactive AG as of market close on July 30, 2021.

The "Calculation Date" means April 9, 2041, unless such day is not an Index Business Day, in which case the Calculation Date will be the next Index Business Day, subject to adjustments.

- "Index Business Day" means any day on which the Primary Exchange and each Related Exchange are scheduled to be open for trading.
- "Exchange Business Day" means any day on which the Primary Exchange or market for trading of the Securities is scheduled to be open for trading and is also a valid settlement date.
- "Business Day" means any day that is not a Saturday, a Sunday or a day on which banking institutions in The City of New York, generally, are authorized or obligated by law, regulation or executive order to close.
- "Primary Exchange" means, with respect to each Index constituent or each constituent underlying a successor index, the primary exchange or market of trading such Index constituent or such constituent underlying a successor index.
- "Related Exchange" means, with respect to each Index constituent or each constituent underlying a successor index, each exchange or quotation system where trading has a material effect (as determined by the Security Calculation Agent) on the overall market for futures or options contracts relating to such Index constituent or such constituent underlying a successor index.

#### **Underlying Index**

The return on the Securities is linked to the performance of the MarketVector US Business Development Companies Liquid Index, the successor index to the Wells Fargo® Business Development Company Index (the "Original Index") effective after market close on the July 30, 2021 (the "Effective Date"), which was renamed from MVIS US Business Development Companies Index effective after market close on June 16, 2023. On April 26, 2021, the Security Calculation Agent announced that, pursuant to the terms of the Securities, it has determined that the Index is comparable to the Original Index and approved the Index as the successor index for the Securities following the discontinuation of publication of the Original Index. The Index is intended to measure the performance of the largest and most liquid companies which are treated as business development companies and are incorporated in the United States. The "Index Sponsor" is MarketVector Indexes GmbH.

# Early Redemption at the Option of the Holders

Subject to your compliance with the procedures described below and the potential postponements and adjustments as described under "— Market Disruption Event," you may submit a request on any Business Day during the term of the Securities to have us redeem your Securities ("Redemption Notice") on any Business Day no later than 12:00 noon, New York City time, and a confirmation of redemption ("Redemption Confirmation") by no later than 5:00 p.m., New York City time, on any Business Day, provided that you request that we redeem a minimum of 50,000 Securities. To satisfy the minimum redemption amount, your broker or other financial intermediary may bundle your Securities for redemption with those of other investors to reach this minimum amount of 50,000 Securities; however, there can be no assurance that they can or will do so. We may from time to time in our sole discretion reduce, in part or in whole, the minimum redemption amount of 50,000 Securities. Any such reduction will be applied on a consistent basis for all holders of the Securities at the time the reduction becomes effective.

The Securities will be redeemed and the holders will receive payment for their Securities on the third Business Day following the applicable Redemption Valuation Date (the "Redemption Date"). The final Redemption Date will be April 18, 2041; provided that if a call notice has been issued, the last Redemption Valuation Date is the fifth Index Business Day prior to the Call Settlement Date in connection with the call notice. (See "Specific Terms of the Securities — UBS's Call Right"). If a Market Disruption Event is continuing or occurs on the applicable scheduled Redemption Valuation Date with respect to any of the Index constituents, such Redemption Valuation Date may be postponed as described under "— Market Disruption Event."

For any applicable redemption request, the "Redemption Valuation Date" will be the first Index Business Day following the date that the applicable Redemption Notice and Redemption Confirmation are delivered. You may request that UBS AG accelerate the Redemption Valuation Date to the date on which you deliver the applicable Redemption Notice and Redemption Confirmation instead of the Index Business Day following such date. If UBS AG approves such request, in its sole discretion on a case-by-case basis, the Redemption Valuation Date for such redemption shall be the date on which you deliver the applicable Redemption Notice and Redemption Confirmation instead of the Index Business Day following such date. You should not assume that you will be entitled to any such acceleration. UBS AG will be under no obligation to approve any such request, or to make any announcement regarding any decision by it to approve any such request.

If you exercise your right to have us redeem your Securities, subject to your compliance with the procedures described under "— Redemption Procedures," for each applicable Security you will receive a cash payment on the relevant Redemption Date equal to:

- (a) the product of
  - (i) the Stated Principal Amount and
  - (ii) the Index Performance Ratio as of the Redemption Valuation Date, plus
- (b) the Coupon Amount with respect to the Coupon Valuation Date immediately preceding the Redemption Valuation Date if on the Redemption Valuation Date the Coupon Ex-Date with respect to such Coupon Amount has not yet occurred, *plus*
- (c) the Adjusted Coupon Amount, if any, *minus*
- (d) the Adjusted Tracking Fee Shortfall, if any, as of the Redemption Valuation Date, minus
- (e) the Redemption Fee Amount.

We refer to this cash payment as the "Redemption Amount."

For purposes of calculating the Redemption Amount, either the Adjusted Coupon Amount will be included or the Adjusted Tracking Fee Shortfall will be subtracted, but not both.

If the amount calculated above is equal to or less than zero, the payment upon early redemption will be zero.

We will inform you of such Redemption Amount on the first Business Day following the applicable Redemption Valuation Date.

You may lose some or all of your investment upon early redemption. The combined negative effect of the Accrued Tracking Fee and the Redemption Fee Amount will reduce your final Redemption Amount. If the level of the Index (as measured by the Final Index Level, as compared to the Initial Index Level) does not increase by an amount sufficient to offset the combined negative effect of the Accrued Tracking Fee and the Redemption Fee Amount (*less* any Coupon Amounts, any Stub Reference Distribution Amount, as applicable, and/or any Adjusted Coupon Amount you may be entitled to receive) or if the Final Index Level is less than the Initial Index Level, you may lose some or all of your investment upon early redemption.

The "Adjusted Coupon Amount," with respect to any Redemption Valuation Date, is an amount in cash equal to the difference between the Adjusted Reference Distribution Amount, calculated as of the applicable Redemption Valuation Date, and the Adjusted Tracking Fee, calculated as of such Redemption Valuation Date, to the extent that the Adjusted Reference Distribution Amount, calculated as of such Redemption Valuation Date, is greater than or equal to the Adjusted Tracking Fee, calculated as of such Redemption Valuation Date.

The "Adjusted Reference Distribution Amount," as of any Redemption Valuation Date, is an amount equal to the gross cash distributions that a Reference Holder would have been entitled to receive in respect of the Index constituents held by such Reference Holder on the "record date" with respect to an Index constituent, for those cash distributions whose "ex-dividend date" occurs during the period from and excluding the immediately preceding Coupon Valuation Date to and including such Redemption Valuation Date.

The "Adjusted Tracking Fee" is, as of the Call Valuation Date or any Redemption Valuation Date, as applicable, an amount equal to:

- (a) the Tracking Fee Shortfall as of the immediately preceding Coupon Valuation Date, plus
- (b) the product of

- (i) the Annual Tracking Fee as of such Redemption Valuation Date or Call Valuation Date and
- (ii) a fraction, the numerator of which is the total number of calendar days from and excluding the immediately preceding Coupon Valuation Date to and including such Redemption Valuation Date or Call Valuation Date, and the denominator of which is 365.

The "Adjusted Tracking Fee Shortfall," as of any Redemption Valuation Date, is the difference between the Adjusted Tracking Fee and the Adjusted Reference Distribution Amount, to the extent that the Adjusted Reference Distribution Amount, calculated as of such Redemption Valuation Date, is less than the Adjusted Tracking Fee, calculated as of such Redemption Valuation Date.

The "Redemption Fee Amount" means, as of any date of determination, an amount per Security equal to the product of (i) 0.125% and (ii) the Current Indicative Value as of the immediately preceding Index Business Day.

Some of the defined terms used in this section have different applications when used in determining the Call Settlement Amount. For the definitions of the terms relevant to a call, please refer to "— UBS's Call Right".

We discuss redemption in "Medium-Term Notes, Series B" above under "Description of Debt Securities We May Offer — Redemption and Repayment."

The Redemption Amount is meant to induce arbitrageurs to counteract any trading of the Securities at a premium or discount to their indicative value, though there can be no assurance that arbitrageurs will employ the redemption feature in this manner.

## **Redemption Procedures**

To redeem your Securities, you must instruct your broker or other person through whom you hold your Securities to take the following steps through normal clearing system channels:

- deliver a notice of redemption to UBS via email no later than 12:00 noon, New York City time, on the Business Day immediately preceding the applicable Redemption Valuation Date. If we receive your notice by the time specified in the preceding sentence, we will respond by sending you a form of confirmation of redemption;
- deliver the signed confirmation of redemption to us via facsimile in the specified form by 5:00 p.m. (New York City time) on the same day. We or our affiliate must acknowledge receipt in order for your confirmation to be effective;
- instruct your DTC custodian to book a delivery vs. payment trade with respect to your Securities on the applicable Redemption Valuation Date at a price equal to the Redemption Amount; and
- > cause your DTC custodian to deliver the trade as booked for settlement via DTC at or prior to 10:00 a.m., New York City time, on the applicable Redemption Date.

Different brokerage firms may have different deadlines for accepting instructions from their customers. Accordingly, as a beneficial owner of the Securities, you should consult the brokerage firm through which you own your interest for the relevant deadline. If your broker delivers your notice of redemption after 12:00 noon, New York City time, or your confirmation of redemption after 5:00 p.m., New York City time, on the Business Day prior to the applicable Redemption Valuation Date, your notice will not be effective, you will not be able to redeem your Securities until the following Redemption Date and your broker will need to complete all the required steps if you should wish to redeem your Securities on any subsequent Redemption Date. In addition, UBS may request a medallion signature guarantee or such assurances of delivery as it may deem necessary in its sole discretion. All instructions given to participants from beneficial owners of Securities relating to the right to redeem their Securities will be irrevocable.

## **UBS's Call Right**

We have the right to redeem all, but not less than all, of the Securities upon not less than 18 calendar days' prior notice to the holders of the Securities, such redemption to occur on any Exchange Business Day (or if such day is not an Exchange Business Day, the next Exchange Business Day) that we may specify through and including the Maturity Date (the "Call Settlement Date"). Upon early redemption in the event we exercise this right, you will receive a cash payment equal to:

- (a) the product of
  - (i) the Stated Principal Amount and (ii) the Index Performance Ratio as of the last Index Business

Day in the Call Measurement Period, plus

- (b) the Coupon Amount with respect to the Coupon Valuation Date immediately preceding the Call Valuation Date if on the last Index Business Day in the Call Measurement Period the Coupon Ex-Date with respect to such Coupon Amount has not yet occurred, *plus*
- (c) the Adjusted Coupon Amount, if any, minus
- (d) the Accrued Tracking Fee as of the last Index Business Day in the Call Measurement Period, plus

(e) the Stub Reference Distribution Amount as of the last Index Business Day in the Call Measurement Period, if any.

We refer to this cash payment as the "Call Settlement Amount."

If the amount calculated above is equal to or less than zero, the payment upon early redemption will be zero.

If UBS issues a call notice on any calendar day, the "Call Valuation Date" will be the fifth Business Day following the calendar day on which the call notice is issued.

We will inform you of such Call Settlement Amount on the first Business Day following the last Index Business Day in the Call Measurement Period.

The holders will receive payment for their Securities on the third Business Day following the last Index Business Day in the Call Measurement Period (the "Call Settlement Date"). If a Market Disruption Event is continuing or occurs on the scheduled Call Valuation Date with respect to any of the Index constituents, such Call Valuation Date may be postponed as described under "— Market Disruption Event."

The "Call Measurement Period" means the ten Index Business Days from and including the Call Valuation Date, subject to adjustments as described under "— Market Disruption Event."

You may lose some or all of your investment upon a call. The negative effect of the Accrued Tracking Fee will reduce your final payment. If the level of the Index (as measured by the Final Index Level, as compared to the Initial Index Level) is insufficient to offset the negative effect of the Accrued Tracking Fee (*less* any Coupon Amounts, any Stub Reference Distribution Amount and/or any Adjusted Coupon Amount, you may be entitled to receive) or if the Final Index Level is less than the Initial Index Level, you may lose some or all of your investment upon a call.

The "Accrued Tracking Fee" as of the last Index Business Day in the Call Measurement Period is an amount equal to:

- (a) the product of
  - (i) the Annual Tracking Fee calculated as of the last Index Business Day in the Call Measurement Period, and
  - (ii) a fraction, the numerator of which is the total number of calendar days from and excluding the Call Valuation Date to and including the last Index Business Day in the Call Measurement Period, and the denominator of which is 365, *plus*
- (b) the Adjusted Tracking Fee Shortfall (as defined below), if any.

The Accrued Tracking Fee also takes into account the performance of the Index, as measured by the Index Closing Level.

The "Adjusted Coupon Amount," with respect to the Call Valuation Date, is an amount in cash equal to the difference between the Adjusted Reference Distribution Amount (as defined below), calculated as of the Call Valuation Date, and the Adjusted Tracking Fee (as defined below), calculated as of the Call Valuation Date, to the extent that the Adjusted Reference Distribution Amount, calculated as of the Call Valuation Date, is greater than or equal to the Adjusted Tracking Fee, calculated as of the Call Valuation Date.

The "Adjusted Reference Distribution Amount," as of the Call Valuation Date, is an amount equal to the gross cash distributions that a Reference Holder would have been entitled to receive in respect of the Index constituents held by such Reference Holder on the "record date" with respect to an Index constituent, for those cash distributions whose "ex-dividend date" occurs during the period from and excluding the immediately preceding Coupon Valuation Date to and including the Call Valuation Date.

The "Adjusted Tracking Fee", as of the Call Valuation Date, is an amount equal to

- (a) the Tracking Fee Shortfall as of the immediately preceding Coupon Valuation Date *plus*
- (b) the product of
  - (i) the Annual Tracking Fee as of such Call Valuation Date and
  - (ii) a fraction, the numerator of which is the total number of calendar days from and excluding the immediately preceding Coupon Valuation Date to and including such Call Valuation Date, and the denominator of which is 365.

The "Adjusted Tracking Fee Shortfall," as of the Call Valuation Date, is the difference between the Adjusted Tracking Fee and the Adjusted Reference Distribution Amount, to the extent that the Adjusted Reference Distribution Amount, calculated as of the Call Valuation Date, is less than the Adjusted Tracking Fee, calculated as of the Call Valuation Date.

Some of the defined terms used in this section have different applications when used in determining the Redemption Amount. For the definition of the terms relevant to early redemption, please refer to "— Early Redemption at the Option of the Holders".

#### **Security Calculation Agent**

UBS Securities LLC will act as the Security Calculation Agent. The Security Calculation Agent will determine, among other things, the Current Indicative Value, the Final Index Level, the Index Performance Ratio, the Coupon Amount, the Adjusted Coupon Amount, if any, the Reference Distribution Amount, the Stub Reference Distribution Amount, if any, the Adjusted Reference Distribution Amount, the Accrued Tracking Fee (including the Annual Tracking Fee, any Tracking Fee Shortfall and any Adjusted Tracking Fee Shortfall), the Adjusted Tracking Fee, the Redemption Fee Amount, the Cash Settlement Amount, if any, that we will pay you at maturity, the Final Measurement Period, the Coupon Payment Dates, the Coupon Valuation Dates, the Coupon Record Dates, the Redemption Amount, if any, that we will pay you upon redemption, if applicable, the Call Settlement Date, the Call Valuation Date, the Call Measurement Period and the Call Settlement Amount, if any, that we will pay you in the event that UBS calls the Securities, and whether any day is a Business Day, Index Business Day or Exchange Business Day. The Security Calculation Agent will also be responsible for determining whether a Market Disruption Event has occurred, whether the Index has been discontinued and whether there has been a material change in the Index. All determinations made by the Security Calculation Agent will be at the sole discretion of the Security Calculation Agent and will, in the absence of manifest error, be conclusive for all purposes and binding on you and on us. We may appoint a different Security Calculation Agent from time to time without your consent and without notifying you.

The Security Calculation Agent will provide written notice to the trustee at its New York office, on which notice the trustee may conclusively rely, of the amount to be paid at maturity or call, or upon early redemption, or on a Coupon Payment Date on or prior to 12:00 noon, New York City time, on the Business Day immediately preceding the Maturity Date, any Redemption Date, any Call Settlement Date or any Coupon Payment Date, as applicable.

All dollar amounts related to determination of the Coupon Amount, the Adjusted Coupon Amount, if any, the Reference Distribution Amount, the Stub Reference Distribution Amount, if any, the Adjusted Reference Distribution Amount, the Accrued Tracking Fee (including the Annual Tracking Fee, any Tracking Fee Shortfall and any Adjusted Tracking Fee Shortfall), the Adjusted Tracking Fee, the Redemption Amount and Redemption Fee Amount, if any, per Security, the Call Settlement Amount, if any, per Security, and the Cash Settlement Amount, if any, per Security, will be rounded to the nearest ten-thousandth, with five one hundred-thousandths rounded upward (e.g., .76545 would be rounded up to .7655); and all dollar amounts paid on the aggregate stated principal amount of Securities per holder will be rounded to the nearest cent, with one-half cent rounded upward.

# **Market Disruption Event**

To the extent a Market Disruption Event with respect to the Index has occurred or is continuing on an Averaging Date (as defined below) or on a Redemption Valuation Date, the Index Closing Level for such Averaging Date or Redemption Valuation Date will be determined by the Security Calculation Agent or one of its affiliates on the first succeeding Index Business Day on which a Market Disruption Event does not occur or is not continuing (the "Deferred Averaging Date") with respect to the Index irrespective of whether pursuant to such determination, the Deferred Averaging Date would fall on a date originally scheduled to be an Averaging Date. If the postponement described in the preceding sentence results in the Index Closing Level being calculated on a day originally scheduled to be an Averaging Date, for purposes of determining the Index Closing Level on the Index Business Days during the Final Measurement Period or the Call Measurement Period, or on the Redemption Valuation Date, as applicable, the Security Calculation Agent or one of its affiliates, as the case may be, will apply the Index Closing Level for such Deferred Averaging Date (i) on the date(s) of the original Market Disruption Event and (ii) such Averaging Date. For example, if the Final Measurement Period or Call Measurement Period, as applicable, for purposes of calculating the Cash Settlement Amount or Call Settlement Amount, respectively, is based on the arithmetic mean of the Index Closing Levels on October 3, October 4, October 5, October 6, October 7, October 10, October 11, October 12, October 13 and October 14, and there is a Market Disruption Event with respect to the Index on October 3, but no other Market Disruption Event during the Final Measurement Period or the Call Measurement Period, as applicable, then the Index Closing Level on October 4 will be used twice to calculate the Cash Settlement Amount or Call Settlement Amount, respectively, and such Cash Settlement Amount or Call Settlement Amount, as applicable, will be determined based on the arithmetic mean of the Index Closing Levels on October 4, October 4, October 5, October 6, October 7, October 10, October 11, October 12, October 13 and October 14.

If the Redemption Valuation Date for purposes of calculating a Redemption Amount is based on the Index Closing Level on October 3, 2016 and there is a Market Disruption Event with respect to the Index on October 3, 2016, then the Index Closing Level on October 4, 2016 will be used to calculate the Redemption Amount.

In no event, however, will any postponement pursuant to the two immediately preceding paragraphs result in the final Averaging Date or the Redemption Valuation Date, as applicable, occurring more than three Index Business Days following the day originally scheduled to be such final Averaging Date or Redemption Valuation Date. If the third Index Business Day following the date originally scheduled to be the final Averaging Date, or the Redemption Valuation Date, as applicable, is not an Index Business Day or a Market Disruption Event has occurred or is continuing with respect to the Index on such third Index Business Day, the Security Calculation Agent or one of its affiliates will determine the Index Closing Level based on its good faith estimate of the Index Closing Level that would have prevailed on such third Index Business Day but for such Market Disruption Event.

An "Averaging Date" means each of the Index Business Days during the Final Measurement Period or the Call Measurement Period, as applicable, subject to adjustment as described herein.

Notwithstanding the occurrence of one or more of the events below, which may, in the Security Calculation Agent's discretion, constitute a Market Disruption Event with respect to the Index, the Security Calculation Agent in its discretion may waive its right to postpone the Index Closing Level if it determines that one or more of the below events has not and is not likely to materially impair its ability to determine the Index Closing Level on such date.

Any of the following will be a Market Disruption Event with respect to the Index, in each case as determined by the Security Calculation Agent in its sole discretion:

- (a) suspension, absence or material limitation of trading in a material number of Index constituents for more than two hours or during the one-half hour before the close of trading in the applicable market or markets;
- (b) suspension, absence or material limitation of trading in option or futures contracts relating to the Index or to a material number of Index constituent equity interests in the primary market or markets for those contracts for more than two hours of trading or during the one-half hour before the close of trading in that market;
- (c) the Index is not published; or
- (d) in any other event, if the Security Calculation Agent determines in its sole discretion that the event materially interferes with our ability or the ability of any of our affiliates to unwind all or a material portion of a hedge with respect to the Securities that we or our affiliates have effected or may effect as described in the section entitled "Use of Proceeds and Hedging."

The following events will not be Market Disruption Events with respect to the Index:

- (a) a limitation on the hours or numbers of days of trading, but only if the limitation results from an announced change in the regular business hours of the relevant market; or
- (b) a decision to permanently discontinue trading in the option or futures contracts relating to the Index or any Index constituent equity interests.

For this purpose, an "absence of trading" in the primary securities market on which option or futures contracts related to the Index or any Index constituent equity interests are traded will not include any time when that market is itself closed for trading under ordinary circumstances.

## **Redemption Price Upon Optional Tax Redemption**

We have the right to redeem the Securities in the circumstances described under "Description of Debt Securities We May Offer — Optional Tax Redemption" in "Medium-Term Notes, Series B" above. If we exercise this right, the redemption price of the Securities will be determined by the Security Calculation Agent in a manner reasonably calculated to preserve your and our relative economic positions.

## **Default Amount on Acceleration**

If an event of default occurs and the maturity of the Securities is accelerated, we will pay the default amount in respect of the principal of the Securities at maturity. We describe the default amount below under "— Default Amount."

In addition to the default amount described below, we will also pay the Coupon Amount per Security, if any, with respect to the final Coupon Payment Date, as described above under "— Coupon Payment," calculated as if the date of acceleration was the last Index Business Day in the Final Measurement Period and the four Index Business Days immediately preceding the date of acceleration were the corresponding Index Business Days in the accelerated Final Measurement Period, with the fourth Index Business Day immediately preceding the date of accelerated Calculation Date and the accelerated final Coupon Valuation Date, and the Index Business Day immediately preceding the date of acceleration being the relevant final Coupon Valuation Date.

For the purpose of determining whether the holders of our Medium-Term Notes, Series B, of which the Securities are a part, are entitled to take any action under the indenture, we will treat the outstanding principal amount of the Medium-Term Notes, Series B, as constituting the outstanding principal amount of the Securities. Although the terms of the Securities may differ from those of the other Medium-Term Notes, Series B, holders of specified percentages in principal amount of all Medium-Term Notes, Series B, together in some cases with other series of our debt securities, will be able to take action affecting all the Medium-Term Notes, Series B, including the Securities. This action may involve changing some of the terms that apply to the Medium-Term Notes, Series B, accelerating the maturity of the Medium-Term Notes, Series B after a default or waiving some of our obligations under the indenture. We discuss these matters in "Medium-Term Notes, Series B" above under "Description of Debt Securities We May Offer — Default, Remedies and Waiver of Default" and "Description of Debt Securities We May Offer — Modification and Waiver of Covenants."

### **Default Amount**

The default amount for the Securities on any day will be an amount, in U.S. dollars for the principal of the Securities, equal to the cost of having a qualified financial institution, of the kind and selected as described below, expressly assume all our payment and other obligations with respect to the Securities as of that day and as if no default or acceleration had occurred, or to undertake other obligations providing substantially equivalent economic value to you with respect to the Securities. That cost will equal:

- > the lowest amount that a qualified financial institution would charge to effect this assumption or undertaking, plus
- the reasonable expenses, including reasonable attorneys' fees, incurred by the holders of the Securities in preparing any documentation necessary for this assumption or undertaking.

During the default quotation period for the Securities, which we describe below, the holders of the Securities and/or we may request a qualified financial institution to provide a quotation of the amount it would charge to effect this assumption or undertaking. If either party obtains a quotation, it must notify the other party in writing of the quotation. The amount referred to in the first bullet point above will equal the lowest — or, if there is only one, the only — quotation obtained, and as to which notice is so given, during the default quotation period. With respect to any quotation, however, the party not obtaining the quotation may object, on reasonable and significant grounds, to the assumption or undertaking by the qualified financial institution providing the quotation and notify the other party in writing of those grounds within two Business Days after the last day of the default quotation period, in which case that quotation will be disregarded in determining the default amount.

#### **Default Quotation Period**

The default quotation period is the period beginning on the day the default amount first becomes due and ending on the third Business Day after that day, unless:

- > no quotation of the kind referred to above is obtained, or
- > every quotation of that kind obtained is objected to within five Business Days after the due date as described above.

If either of these two events occurs, the default quotation period will continue until the third Business Day after the first Business Day on which prompt notice of a quotation is given as described above. If that quotation is objected to as described above within five Business Days after that first Business Day, however, the default quotation period will continue as described in the prior sentence and this sentence.

In any event, if the default quotation period and the subsequent two Business Day objection period have not ended before the Calculation Date, then the default amount will equal the Stated Principal Amount of the Securities.

# **Qualified Financial Institutions**

For the purpose of determining the default amount at any time, a qualified financial institution must be a financial institution organized under the laws of any jurisdiction in the United States of America, Europe or Japan, which at that time has outstanding debt obligations with a stated maturity of one year or less from the date of issue and rated either:

- A-1 or higher by Standard & Poor's Financial Services LLC, a subsidiary of The McGraw-Hill Companies, Inc., or any successor, or any other comparable rating then used by that rating agency, or
- ➤ P-1 or higher by Moody's Investors Service or any successor, or any other comparable rating then used by that rating agency.

## Discontinuation of the Index; Alteration of Method of Calculation

If the Index Sponsor or the Index Calculation Agent discontinues publication of or otherwise fails to publish the Index, and the Index Sponsor, the Index Calculation Agent or another entity publishes a successor or substitute index that the Security Calculation Agent determines to be comparable to the discontinued Index (such index being referred to herein as a "successor index"), then the Index Closing Level for such successor index will be determined by the Security Calculation Agent by reference to the successor index on the dates and at the times as of which the Index Closing Levels for such successor index are to be determined.

Upon any selection by the Security Calculation Agent of a successor index, the Security Calculation Agent will cause written notice thereof to be furnished to the trustee, to us and to the holders of the Securities.

If the Index Sponsor or the Index Calculation Agent discontinues publication of the Index prior to, and such discontinuation is continuing on the Calculation Date or any Index Business Day during the Final Measurement Period or Call Measurement Period, or on the Redemption Valuation Date, as applicable, or any other relevant date on which the Index Closing Level is to be determined and the Security Calculation Agent determines that no successor index is available at such time, or the Security Calculation Agent has previously selected a successor index and publication of such successor index is discontinued prior to, and such discontinuation is continuing on, the Calculation Date or any Index Business Day during the Final Measurement Period or Call Measurement Period, or on the Redemption Valuation Date, as applicable, or any other relevant date on which the Index Closing Level is to be determined, then the Security Calculation Agent will determine the Index Closing Level using the closing level and published share weighting of each Index constituent included in the Index or successor index, as applicable, immediately prior to such discontinuation or unavailability, as adjusted for certain corporate actions as described under "MarketVector US Business Development Liquid Companies Index — Corporate Events."

In such event, the Security Calculation Agent will cause notice thereof to be furnished to the trustee, to us and to the holders of the Securities.

Notwithstanding these alternative arrangements, discontinuation of the publication of the Index or successor index, as applicable, may adversely affect the value of the Securities.

If at any time the method of calculating the Index or a successor index, or the value thereof, is changed in a material respect, or if the Index or a successor index is in any other way modified so that the level of the Index or such successor index does not, in the opinion of the Security Calculation Agent, fairly represent the level of the Index or such successor index had such changes or modifications not been made, then the Security Calculation Agent will make such calculations and adjustments as, in the good faith judgment of the Security Calculation Agent, may be necessary in order to arrive at a level of an index comparable to the Index or such successor index, as the case may be, as if such changes or modifications had not been made, and the Security Calculation Agent will calculate the levels for the Index or such successor index with reference to the Index or such successor index, as adjusted. The Security Calculation Agent will accordingly calculate the Current Indicative Value, the Final Index Level, the Index Performance Ratio, the Coupon Amount, the Adjusted Coupon Amount, if any, the Reference Distribution Amount, the Stub Reference Distribution Amount, if any, the Adjusted Reference Distribution Amount, the Accrued Tracking Fee (including the Annual Tracking Fee, any Tracking Fee Shortfall and any Adjusted Tracking Fee Shortfall), the Adjusted Tracking Fee, the Redemption Fee Amount, if any, the Cash Settlement Amount, if any, that we will pay you at maturity, the Redemption Amount, if any, upon redemption, if applicable, or the Call Settlement Amount that we will pay you on the Call Settlement Date, if applicable, based on the relevant index levels calculated by the Security Calculation Agent, as adjusted. Accordingly, if the method of calculating the Index or a successor index is modified so that the level of the Index or such successor index is a fraction of what it would have been if there had been no such modification (e.g., due to a split in the Index), which, in turn, causes the level of the Index or such successor index to be a fraction of what it would have been if there had been no such modification, then the Security Calculation Agent will make such calculations and adjustments in order to arrive at a level for the Index or such successor index as if it had not been modified (e.g., as if such split had not occurred).

## **Manner of Payment and Delivery**

Any payment on or delivery of the Securities at maturity or call, or upon early redemption will be made to accounts designated by you and approved by us, or at the corporate trust office of the trustee in New York City, but only when the Securities are surrendered to the trustee at that office. We also may make any payment or delivery in accordance with the applicable procedures of the depositary.

## **Business Day**

When we refer to a Business Day with respect to the Securities, we mean a day that is a Business Day of the kind described in "Description of Debt Securities We May Offer — Payment Mechanics for Debt Securities" in "Medium-Term Notes, Series R"

#### **Modified Business Day**

As described in "Description of Debt Securities We May Offer — Payment Mechanics for Debt Securities" in "Medium-Term Notes, Series B", any payment on the Securities that would otherwise be due on a day that is not a Business Day may instead be paid on the next day that is a Business Day, with the same effect as if paid on the original due date, except as described under "— Cash Settlement Amount at Maturity," "— UBS's Call Right" and "— Early Redemption at the Option of the Holders" above.

# Defeasance

Neither full defeasance nor covenant defeasance, as described in "Medium-Term Notes, Series B" under "Description of Debt Securities We May Offer — Defeasance and Covenant Defeasance," will apply to the Securities.

## Reissuances or Reopened Issues

We may, at our sole discretion, "reopen" or reissue the Securities. We issued the Securities initially in an amount having the aggregate stated principal amount specified on the cover of this prospectus supplement. We may issue additional Securities in amounts that exceed such amount at any time, without your consent and without notifying you. The Securities do not limit our ability to incur other indebtedness or to issue other securities. Also, we are not subject to financial or similar restrictions by the terms of the Securities. For more information, please refer to "Description of Debt Securities We May Offer — Amounts That We May Issue" in "Medium-Term Notes, Series B".

These further issuances, if any, will be consolidated to form a single class with the originally issued Securities and will have the same CUSIP number and will trade interchangeably with the Securities immediately upon settlement. Any additional issuances will increase the aggregate stated principal amount of the outstanding Securities of the class. The price of any additional offering will be determined at the time of pricing of that offering.

# **Booking Branch**

The Securities will be booked through UBS AG, London Branch.

#### **Clearance and Settlement**

The DTC participants that hold the Securities through DTC on behalf of investors will follow the settlement practices applicable to equity securities in DTC's settlement system with respect to the primary distribution of the Securities and secondary market trading between DTC participants.

#### 5. ETRACS Alerian MLP Index ETN Series B due July 18, 2042

#### **Specific Terms of the Securities**

In this section, references to "holders" mean those who own the Securities registered in their own names, on the books that we or the trustee maintain for this purpose, and not those who own beneficial interests in the Securities registered in street name or in the Securities issued in book-entry form through The Depository Trust Company ("DTC") or another depositary. Owners of beneficial interests in the Securities should read the section entitled "Legal Ownership and Book-Entry Issuance" under "Medium-Term Notes, Series B" above.

These Securities are part of a series of debt securities entitled "Medium-Term Notes, Series B" that we may issue, from time to time, under the indenture more particularly described under "Medium-Term Notes, Series B" above. This section summarizes general financial and other terms that apply to the Securities. Terms that apply generally to all Medium-Term Notes, Series B are described in "Description of Debt Securities We May Offer" under "Medium-Term Notes, Series B" above. The terms described here supplement those described in "Medium-Term Notes, Series B" above and, if the terms described here are inconsistent with those described there, the terms described here are controlling.

The Securities are part of a single series of senior debt securities issued under our indenture, dated as of June 12, 2015, between us and U.S. Bank Trust National Association, as trustee.

We describe the terms of the Securities in more detail below.

The Stated Principal Amount of each Security is \$25.00.

The Securities do not guarantee any return of principal at, or prior to, maturity or call, or upon early redemption. Instead, at maturity, you will receive a cash payment the amount of which will vary depending on the performance of the VWAP Level calculated in accordance with the formula set forth below and will be reduced by the Accrued Tracking Fee as of the last Index Business Day in the Final Measurement Period. We refer to this cash payment as the "Cash Settlement Amount." If the amount so calculated is equal to or less than zero, the Cash Settlement Amount will be zero and you will not receive a cash payment.

If you exercise your right to have us redeem your Securities, subject to compliance with the redemption procedures, for each Security you will receive a cash payment on the Redemption Date equal to the Redemption Amount as described below under "— Early Redemption at the Option of the Holders."

The Securities may pay a cash coupon during their term.

## **Coupon Payment**

For each Security you hold on the applicable Coupon Record Date, on each Coupon Payment Date you will receive an amount in cash equal to the excess, if any, of the Reference Distribution Amount, calculated as of the corresponding Coupon Valuation Date, over the Accrued Tracking Fee, calculated as of the corresponding Coupon Valuation Date (the "Coupon Amount").

To the extent the Reference Distribution Amount on any Coupon Valuation Date is equal to or less than the Accrued Tracking Fee on the corresponding Coupon Valuation Date, there will be no Coupon Amount payment made on the corresponding Coupon Payment Date, and an amount equal to the difference between the Accrued Tracking Fee and the Reference Distribution Amount (the "Tracking Fee Shortfall") will be included in the Accrued Tracking Fee for the next Coupon Valuation Date. This process will be repeated to the extent necessary until the Reference Distribution Amount for a Coupon Valuation Date is greater than the Accrued Tracking Fee for the corresponding Coupon Valuation Date. The final Coupon Amount will be included in the Cash Settlement Amount.

The "Coupon Payment Date" means the fifteenth (15th) Index Business Day following each Coupon Valuation Date, provided that the final Coupon Payment Date will be the Maturity Date, subject to adjustment as described herein. The first Coupon Payment Date will be December 8, 2015.

The "Coupon Record Date" means the ninth (9th) Index Business Day following each Coupon Valuation Date.

The "Coupon Ex-Date," with respect to a Coupon Amount, means the first (1st) Exchange Business Day on which the Securities trade without the right to receive such Coupon Amount. Under current NYSE Arca practice, the Coupon Ex-Date will generally be the second (2nd) Exchange Business Day prior to the applicable Coupon Record Date.

The "Coupon Valuation Date" means the fifteenth (15th) of February, May, August and November of each calendar year during the term of the Securities or if such date is not an Index Business Day, then the first Index Business Day following such date, provided that the final Coupon Valuation Date will be the Calculation Date, subject to adjustment as described herein. The first Coupon Valuation Date will be November 16, 2015.

The "Reference Distribution Amount" means (i) as of the first Coupon Valuation Date, an amount equal to the gross cash distributions that a Reference Holder would have been entitled to receive in respect of the Index constituents held by such Reference Holder on the "record date" with respect to any Index constituent, for those cash distributions whose "ex-dividend date" occurs during the period from and excluding August 17, 2015 to and including the first Coupon Valuation Date; and (ii) as of any other Coupon Valuation Date, an amount equal to the gross cash distributions that a Reference Holder would have been entitled to receive in respect of the Index constituents held by such Reference Holder on the "record date" with respect to any Index constituent for those cash distributions whose "ex-dividend date" occurs during the period from and excluding the immediately preceding Coupon Valuation Date to and including such Coupon Valuation Date.

Notwithstanding the foregoing, with respect to cash distributions for an Index constituent which are scheduled to be paid prior to the applicable Coupon Ex-Date, if, and only if, the issuer of such Index constituent fails to pay the distribution to holders of such Index constituent by the scheduled payment date for such distribution, such distribution will be assumed to be zero for the purposes of calculating the applicable Reference Distribution Amount.

The "Reference Holder" is, as of any date of determination, a hypothetical holder of a number of units of each Index constituent equal to (i) the published unit weighting of that Index constituent as of that date, *divided by* (ii) the product of (a) the Index Divisor as of that date, and (b) the Initial VWAP Level *divided by* 25.

"record date" means, with respect to a distribution on an Index constituent, the date on which a holder of the Index constituent must be registered as a unitholder of such Index constituent in order to be entitled to receive such distribution.

"ex-dividend date" means, with respect to a distribution on an Index constituent, the first Business Day on which transactions in such Index constituent trade on the Primary Exchange without the right to receive such distribution.

The "Quarterly Tracking Fee" means, as of any date of determination, an amount per Security equal to the product of (i) 0.20% (equivalent to 0.80% per annum) and (ii) the Current Indicative Value as of the immediately preceding Index Business Day.

The "Current Indicative Value," as determined by the Security Calculation Agent, means, as of any date of determination, an amount per Security equal to the product of (i) the Stated Principal Amount *multiplied by* (ii) a fraction, the numerator of which is equal to the VWAP Level (as defined under "— Cash Settlement Amount at Maturity") as of such date and the denominator of which is equal to the Initial VWAP Level. As of October 7, 2015, the Current Indicative Value was 21.4587.

The "Accrued Tracking Fee" is:

- (1) with respect to the first Coupon Valuation Date, an amount equal to
  - the Quarterly Tracking Fee calculated as of the first Coupon Valuation Date (for the avoidance of doubt, the calculation of the Accrued Tracking Fee with respect to the first Coupon Valuation Date will be for a full quarter beginning from and excluding August 17, 2015);
- (2) with respect to any Coupon Valuation Date, other than the first and last Coupon Valuation Dates, an amount equal to the Quarterly Tracking Fee as of such Coupon Valuation Date, *plus* the Tracking Fee Shortfall as of the immediately preceding Coupon Valuation Date, if any; and
- (3) with respect to the last Coupon Valuation Date, an amount equal to
  - (a) the product of
    - (i) the Quarterly Tracking Fee as of such Coupon Valuation Date and
    - (ii) a fraction, the numerator of which is the total number of calendar days from and excluding the immediately preceding Coupon Valuation Date to and including such Coupon Valuation Date, and the denominator of which is 90, *plus*
  - (b) the Tracking Fee Shortfall as of the immediately preceding Coupon Valuation Date. If there is a Tracking Fee Shortfall on the last Coupon Valuation Date, it will be taken into account in determining the Cash Settlement Amount, as described below.

The calculation of the Accrued Tracking Fee also takes into account the performance of the Index, as measured by the VWAP Level.

#### **Cash Settlement Amount at Maturity**

The "Maturity Date" is July 18, 2042, which will be the third Business Day following the last Index Business Day in the Final Measurement Period, subject to adjustment as described below under "— Market Disruption Event."

For each Security, unless earlier called or redeemed, you will receive at maturity a cash payment equal to

- (a) the product of
  - (i) the Stated Principal Amount and
  - (ii) the Index Performance Ratio as of the last Index Business Day in the Final Measurement Period, plus
- (b) the final Coupon Amount, *minus*
- (c) the Accrued Tracking Fee as of the last Index Business Day in the Final Measurement Period, plus
- (d) the Stub Reference Distribution Amount as of the last Index Business Day in the Final Measurement Period, if any.

We refer to this cash payment as the "Cash Settlement Amount." If the amount calculated above is equal to or less than zero, the payment at maturity will be zero.

You may lose some or all of your investment at maturity. The negative effect of the Accrued Tracking Fee will reduce your final payment. If the level of the Index increases (as measured by the Final VWAP Level, as compared to the Initial VWAP Level), such increase may be insufficient to offset the negative effect of the Accrued Tracking Fee (less any Coupon Amounts, Stub Reference Distribution Amount and/ or Adjusted Coupon Amount, as applicable, you may be entitled to receive), or if the Final VWAP Level is less than the Initial VWAP Level, you may lose some or all of your investment at maturity.

The "Stated Principal Amount" of each Security is \$25.00.

The "Index Performance Ratio" on any Index Business Day is calculated as follows:

Final VWAP Level Initial VWAP Level

The "VWAP" with respect to each Index constituent, as of any date of determination, is the volume-weighted average price of one unit of such Index constituent as determined by the VWAP Calculation Agent based on the Primary Exchange for each Index constituent. For information about how the VWAP will be calculated to the extent a Disrupted Day exists with respect to an Index constituent, please see "— Market Disruption Event."

The "Initial VWAP Level" is 396.997, the VWAP Level on July 17, 2012, as determined by the VWAP Calculation Agent. See "— VWAP Calculation Agent" below.

The "Final VWAP Level," as determined by the VWAP Calculation Agent, will be the arithmetic mean of the VWAP Levels measured on each Index Business Day during the Final Measurement Period or the Call Measurement Period or on any applicable Redemption Measurement Date, as applicable.

The "VWAP Level," as determined by the VWAP Calculation Agent as of any Index Business Day, is equal to (1) the sum of the products of (i) the VWAP of each Index constituent as of such date and (ii) the published unit weighting of that Index constituent as of such date *divided by* (2) the Index Divisor as of such date, or expressed as a formula, as follows:

VWAP Level = 
$$\sum_{i=1}^{n} (VWAP_{i,t} *_{Wi,t})$$
Index Divisor,

where:

*n* is the number of Index constituents;

VWAPi,t is the VWAP of Index constituent i as of Index Business Day t;

Wi, t is the published unit weighting of Index constituent i as of Index Business Day t; and

*Index Divisor t* is the Index Divisor as of Index Business Day t.

As of October 7, 2015, the VWAP Level was 340.761.

The "Index Divisor," as of any date of determination, is the divisor used by the Index Calculation Agent to calculate the level of the Index, as further described under "Alerian MLP Index — Index Equations".

The "Accrued Tracking Fee" as of the last Index Business Day in the Final Measurement Period is an amount equal to

- (a) the product of
  - (i) the Quarterly Tracking Fee calculated as of the last Index Business Day in the Final Measurement Period and
  - (ii) a fraction, the numerator of which is the total number of calendar days from and excluding the Calculation Date to and including the last Index Business Day in the Final Measurement Period, and the denominator of which is 90, *plus*
- (b) the Tracking Fee Shortfall as of the last Coupon Valuation Date, if any.

The Accrued Tracking Fee also takes into account the performance of the Index, as measured by the VWAP Level.

The "Final Measurement Period" means the five (5) Index Business Days from and including the Calculation Date, subject to adjustment as described under "— Market Disruption Event."

The "Stub Reference Distribution Amount" means, as of the last Index Business Day in the Final Measurement Period or the Call Measurement Period, as applicable, an amount equal to the gross cash distributions that a Reference Holder would have been entitled to receive in respect of the Index constituents held by such Reference Holder on the "record date" with respect to any Index constituent, for those cash distributions whose "ex-dividend date" occurs during the period from and excluding the first Index Business Day in the Final Measurement Period or the Call Measurement Period, as applicable, to and including the last Index Business Day in the Final Measurement Period or the Call Measurement Period, as applicable, provided, that for the purpose of calculating the Stub Reference Distribution Amount, the Reference Holder will be deemed to hold 4/5 ths, 3/5 ths, 2/5 ths and 1/5 th of the shares of each Index constituent it would otherwise hold on the second, third, fourth and fifth Index Business Day, respectively, in such Final Measurement Period or the Call Measurement Period.

The "Index Calculation Agent" means the entity that calculates and publishes the level of the Index, which is currently S&P.

The "Calculation Date" means July 9, 2042, unless such day is not an Index Business Day, in which case the Calculation Date will be the next Index Business Day, subject to adjustments.

"Index Business Day" means any day on which the Primary Exchange and each Related Exchange are scheduled to be open for trading.

"Exchange Business Day" means any day on which the Primary Exchange or market for trading of the Securities is scheduled to be open for trading.

"Primary Exchange" means, with respect to each Index constituent or each constituent underlying a successor index, the primary exchange or market of trading such Index constituent or such constituent underlying a successor index.

"Related Exchange" means, with respect to each Index constituent or each constituent underlying a successor index, each exchange or quotation system where trading has a material effect (as determined by the Security Calculation Agent) on the overall market for futures or options contracts relating to such Index constituent or such constituent underlying a successor index.

## **Underlying Index**

The Alerian MLP Index measures the composite performance of energy master limited partnerships ("MLPs"), and is calculated by S&P Dow Jones Indices using a float-adjusted, capitalization-weighted methodology. We refer to the MLPs included in the Index as the "Index constituents." The Index constituents earn the majority of their cash flow from qualifying activities involving energy commodities, which include pipeline transportation, gathering and processing, storage, production and mining, marketing, marine transportation, services, catalytic conversion, mineral interest, refining, regasification and other related activities.

#### Early Redemption at the Option of the Holders

Subject to your compliance with the procedures described below and the potential postponements and adjustments as described under "— Market Disruption Event," you may submit a request to have us redeem your Securities on any Business Day no later than 12:00 noon, New York City time, and a confirmation of redemption by no later than 5:00 p.m., New York City time, on the applicable Redemption Notice Date, provided that you request that we redeem a minimum of 50,000 Securities. For any applicable redemption request, the "Redemption Notice Date" will be the date that the applicable Redemption Notice and Redemption Confirmation are delivered. If such Redemption Notice or Redemption Confirmation is delivered on a day that is not an Index Business Day, then the Redemption Notice Date shall be the next Index Business Day. To satisfy the minimum redemption amount, your broker or other financial intermediary may bundle your Securities for redemption with those of other investors to reach this minimum amount of 50,000 Securities. We may from time to time in our sole discretion reduce, in part or in whole, the minimum redemption amount of 50,000 Securities. Any such reduction will be applied on a consistent basis for all holders of the Securities at the time the reduction becomes effective.

The Securities will be redeemed and the holders will receive payment for their Securities on the third Business Day following the applicable Redemption Measurement Date (the "Redemption Date"). The first Redemption Date will be October 15, 2015. If a Market Disruption Event is continuing or occurs on the applicable scheduled Redemption Measurement Date with respect to any of the Index constituents, such Redemption Measurement Date may be postponed as described under "— Market Disruption Event."

The applicable "Redemption Measurement Date" means the Index Business Day following the applicable Redemption Notice Date, subject to adjustments as described under "— Market Disruption Event."

If you exercise your right to have us redeem your Securities, subject to your compliance with the procedures described under "— Redemption Procedures," for each applicable Security you will receive a cash payment on the relevant Redemption Date equal to

- (a) the product of
  - (i) the Stated Principal Amount and
  - (ii) the Index Performance Ratio as of the Redemption Measurement Date, plus
- (b) the Coupon Amount with respect to the Coupon Valuation Date immediately preceding the Redemption Measurement Date if on the Redemption Measurement Date the Coupon Ex-Date with respect to such Coupon Amount has not yet occurred, *plus*
- (c) the Adjusted Coupon Amount, if any, minus
- (d) the Adjusted Tracking Fee Shortfall, if any, minus
- (e) the Redemption Fee Amount.

We refer to this cash payment as the "Redemption Amount." We have determined to offer all holders of the Securities the option, upon early redemption and solely for purposes of determining the Redemption Amount, but not for any other purpose, to elect that the Index Performance Ratio (which is used to calculate the Redemption Amount) be calculated using the Index Closing Level on the Redemption Measurement Date instead of the Final VWAP Level. If the redeeming holder so elects, the Index Performance Ratio will be calculated, for purposes of determining the Redemption Amount, as:

# Index Closing Level on the Redemption Measurement Date Initial VWAP Level

The "Index Closing Level" is the closing level of the Index as reported on the NYSE and Bloomberg; provided, however, that if the closing level of the Index as reported on the NYSE (or any successor) differs from the closing level of the Index as reported on Bloomberg (or any successor), then the Index Closing Level will be the closing level of the Index as calculated by the Index Calculation Agent.

If the amount calculated above is equal to or less than zero, the payment upon early redemption will be zero.

We will inform you of such Redemption Amount on the first Business Day following the applicable Redemption Measurement Date.

You may lose some or all of your investment upon early redemption. The combined negative effect of the Accrued Tracking Fee and the Redemption Fee Amount will reduce your final Redemption Amount. If the level of the Index (as measured by the Final VWAP Level) does not increase as compared to the Initial VWAP Level by an amount sufficient to offset the combined negative effect of the Accrued Tracking Fee and the Redemption Fee Amount (less any Coupon Amounts, any Stub Reference Distribution Amount, as applicable, and/or any Adjusted Coupon Amount you may be entitled to receive), you may lose some or all of your investment upon early redemption.

The "Adjusted Coupon Amount," with respect to any Redemption Measurement Date, is an amount in cash equal to the difference between the Adjusted Reference Distribution Amount, calculated as of such Redemption Measurement Date, and the Adjusted Tracking Fee, calculated as of such Redemption Measurement Date. To the extent the Adjusted Reference Distribution Amount is less than the Adjusted Tracking Fee, the Redemption Amount will not include an Adjusted Coupon Amount, and the Adjusted Tracking Fee Shortfall will be included in the calculation of Redemption Amount.

The "Adjusted Reference Distribution Amount," as of any Redemption Measurement Date, is an amount equal to the gross cash distributions that a Reference Holder would have been entitled to receive in respect of the Index constituents held by such Reference Holder on the "record date" with respect to an Index constituent, for those cash distributions whose "ex-dividend date" occurs during the period from and excluding the immediately preceding Coupon Valuation Date (or if the Redemption Measurement Date occurs prior to the first Coupon Valuation Date, the period from and excluding August 17, 2015) to and including such Redemption Measurement Date.

The "Adjusted Tracking Fee" is:

- (1) as of any Redemption Measurement Date occurring prior to the first Coupon Valuation Date, an amount equal to the product of
  - (i) the Quarterly Tracking Fee as of such Redemption Measurement Date and
  - (ii) a fraction, the numerator of which is the total number of calendar days from and excluding August 17, 2015 to and including such Redemption Measurement Date, and the denominator of which is 90; and
- (2) as of any Redemption Measurement Date occurring on or after the first Coupon Valuation Date, an amount equal to
  - (a) the Tracking Fee Shortfall as of the immediately preceding Coupon Valuation Date *plus*
  - (b) the product of
    - (i) the Quarterly Tracking Fee as of such Redemption Measurement Date and
    - (ii) a fraction, the numerator of which is the total number of calendar days from and excluding the immediately preceding Coupon Valuation Date to and including such Redemption Measurement Date, and the denominator of which is 90.

The "Adjusted Tracking Fee Shortfall," as of any Redemption Measurement Date, is the difference between the Adjusted Tracking Fee and the Adjusted Reference Distribution Amount, to the extent that the Adjusted Reference Distribution Amount, calculated as of such Redemption Measurement Date, is less than the Adjusted Tracking Fee, calculated as of such Redemption Measurement Date.

The "Redemption Fee Amount" means an amount equal to 0.125% of the Current Indicative Value.

Some of the defined terms used in this section have different applications when used in determining the Call Settlement Amount. For the definitions of the terms relevant to a call, please refer to "— UBS Call Right."

We discuss redemption in "Medium-Term Notes, Series B" under "Description of Debt Securities We May Offer — Redemption and Repayment".

The Redemption Amount is meant to induce arbitrageurs to counteract any trading of the Securities at a premium or discount to their indicative value, though there can be no assurance that arbitrageurs will employ the repurchase feature in this manner.

#### **Redemption Procedures**

To redeem your Securities, you must instruct your broker or other person through whom you hold your Securities to take the following steps through normal clearing system channels:

- deliver a notice of redemption to UBS via e-mail no later than 12:00 noon, New York City time, on the applicable Redemption Notice Date. If we receive your Redemption Notice by the time specified in the preceding sentence, we will respond by sending you a form of confirmation of redemption;
- deliver the signed confirmation of redemption, which we refer to as the "Redemption Confirmation," to us via facsimile in the specified form by 5:00 p.m., New York City time on the same day. We or our affiliate must acknowledge receipt in order for your Redemption Confirmation to be effective;
- instruct your DTC custodian to book a delivery vs. payment trade with respect to your Securities on the applicable Redemption Measurement Date at a price equal to the Redemption Amount; and
- cause your DTC custodian to deliver the trade as booked for settlement via DTC at or prior to 10:00 a.m., New York City time, on the applicable Redemption Date.

Different brokerage firms may have different deadlines for accepting instructions from their customers. Accordingly, as a beneficial owner of the Securities, you should consult the brokerage firm through which you own your interest for the relevant deadline. If your broker delivers your notice of redemption after 12:00 noon, New York City time, or your confirmation of redemption after 5:00 p.m., New York City time, on the applicable Redemption Notice Date, your notice will not be effective, you will not be able to redeem your Securities until the following Redemption Date and your broker will need to complete all the required steps if you should wish to redeem your Securities on any subsequent Redemption Date. In addition, UBS may request a medallion signature guarantee or such assurances of delivery as it may deem necessary in its sole discretion. All instructions given to participants from beneficial owners of Securities relating to the right to redeem their Securities will be irrevocable.

## **UBS Call Right**

We have the right to redeem all, but not less than all, of the Securities upon not less than eighteen calendar days' prior notice to the holders of the Securities, such redemption to occur on any Business Day that we may specify on or after October 17, 2016 through and including the Maturity Date (the "Call Settlement Date"). Upon early redemption in the event we exercise this right, you will receive a cash payment equal to

- (a) the product of
  - (i) the Stated Principal Amount and
  - (ii) the Index Performance Ratio as of the last Index Business Day in the Call Measurement Period, plus
- (b) the Coupon Amount with respect to the Coupon Valuation Date immediately preceding the Call Valuation Date if on the last Index Business Day in the Call Measurement Period the Coupon Ex-Date with respect to such Coupon Amount has not yet occurred, *plus*
- (c) the Adjusted Coupon Amount, if any, *minus*
- (d) the Accrued Tracking Fee as of the last Index Business Day in the Call Measurement Period, plus
- (e) the Stub Reference Distribution Amount as of the last Index Business Day in the Call Measurement Period, if any.

We refer to this cash payment as the "Call Settlement Amount."

If the amount calculated above is equal to or less than zero, the payment upon early redemption will be zero.

If UBS issues a call notice on any calendar day, the "Call Valuation Date" will be the last Business Day of the week in which the call notice is issued, generally Friday, subject to a minimum five (5) calendar day period commencing on the date of the issuance of the call notice and ending on the related Call Valuation Date. If UBS issues a call notice on a Friday, the related Call Valuation Date will fall on the following Friday. The Call Settlement Date will be the third Business Day following the last Index Business Day in the Call Measurement Period.

We will inform you of such Call Settlement Amount on the first Business Day following the last Index Business Day in the Call Measurement Period.

The holders will receive payment for their Securities on the third Business Day following the last Index Business Day in the Call Measurement Period (the "Call Settlement Date"). If a Market Disruption Event is continuing or occurs on the scheduled Call Valuation Date with respect to any of the Index constituents, such Call Valuation Date may be postponed as described under "— Market Disruption Event."

The "Call Measurement Period" means the five (5) Index Business Days from and including the Call Valuation Date, subject to adjustments as described under "— Market Disruption Event."

You may lose some or all of your investment upon a call. The negative effect of the Accrued Tracking Fee will reduce your final payment. If the increase in the Final VWAP Level, as compared to the Initial VWAP Level, is insufficient to offset the negative effect of the Accrued Tracking Fee (less any Coupon Amounts, any Stub Reference Distribution Amount and/or any Adjusted Coupon Amount), or if the Final VWAP Level is less than the Initial VWAP Level, you may lose some or all of your investment upon a call.

The Accrued Tracking Fee as of the last Index Business Day in the Call Measurement Period is an amount equal to

- (a) the product of
  - (i) the Quarterly Tracking Fee calculated as of the last Index Business Day in such Call Measurement Period, and
  - (ii) a fraction, the numerator of which is the total number of calendar days from and excluding the Call Valuation Date to and including the last Index Business Day in such Call Measurement Period, and the denominator of which is 90, *plus*
- (b) the Adjusted Tracking Fee Shortfall (as defined below), if any.

The Accrued Tracking Fee also takes into account the performance of the Index, as measured by the VWAP Level.

The "Adjusted Coupon Amount," with respect to the Call Valuation Date, is an amount in cash equal to the difference between the Adjusted Reference Distribution Amount (as defined below), calculated as of the Call Valuation Date, and the Adjusted Tracking Fee (as defined in the preceding paragraph), calculated as of such Call Valuation Date. To the extent the Adjusted Reference Distribution Amount is less than the Adjusted Tracking Fee, the Call Settlement Amount will not include an Adjusted Coupon Amount, and the Adjusted Tracking Fee Shortfall (as defined below) will be included in the calculation of the Accrued Tracking Fee as of the last Index Business Day in the Call Measurement Period.

The "Adjusted Reference Distribution Amount," as of the Call Valuation Date, is an amount equal to the gross cash distributions that a Reference Holder would have been entitled to receive in respect of the Index constituents held by such Reference Holder on the "record date" with respect to an Index constituent, for those cash distributions whose "ex-dividend date" occurs during the period from and excluding the immediately preceding Coupon Valuation Date to and including the Call Valuation Date.

The "Adjusted Tracking Fee" is:

as of the Call Valuation Date, an amount equal to

- (a) the Tracking Fee Shortfall as of the immediately preceding Coupon Valuation Date, plus
- (b) the product of
  - (i) the Quarterly Tracking Fee as of such Call Valuation Date and
  - (ii) a fraction, the numerator of which is the total number of calendar days from and excluding the immediately preceding Coupon Valuation Date to and including such Call Valuation Date, and the denominator of which is 90.

The "Adjusted Tracking Fee Shortfall," as of the Call Valuation Date, is the difference between the Adjusted Tracking Fee and the Adjusted Reference Distribution Amount, to the extent that the Adjusted Reference Distribution Amount, calculated as of such Call Valuation Date, is less than the Adjusted Tracking Fee, calculated as of such Call Valuation Date.

Some of the defined terms used in this section have different applications when used in determining the Redemption Amount. For the definition of the terms relevant to early redemption, please refer to "— Early Redemption at the Option of the Holders".

# **Security Calculation Agent**

UBS Securities LLC will act as the Security Calculation Agent. The Security Calculation Agent will determine, among other things, the Current Indicative Value, Index Performance Ratio, the Coupon Amount, the Adjusted Coupon Amount, if any, the Reference Distribution Amount, the Stub Reference Distribution Amount, if any, the Adjusted Reference Distribution Amount, the Accrued Tracking Fee (including the Quarterly Tracking Fee, any Tracking Fee Shortfall and any Adjusted Tracking Fee Shortfall), the Adjusted Tracking Fee, the Redemption Fee Amount, the Cash Settlement Amount, if any, that we will pay you at maturity, the Final Measurement Period, the Coupon Payment Dates, the Coupon Valuation Dates, the Coupon Ex-Dates, the Coupon Record Dates, the Redemption Amount, if any, that we will pay you upon redemption, if applicable, the Call Settlement Date, the Call Valuation Date, the Call Measurement Period and the Call Settlement Amount, if any, that we will pay you in the event that UBS calls the Securities, and whether any day is a Business Day, Exchange Business Day or Index Business Day. The Security Calculation Agent will also be responsible for determining whether a Market Disruption Event has occurred, whether the Index has been discontinued and whether there has been a material change in the Index. All determinations made by the Security Calculation Agent will be at the sole discretion of the Security Calculation Agent and will, in the absence of manifest error, be conclusive for all purposes and binding on you and on us. The holder of the Securities shall not be entitled to any compensation from us for any loss suffered as a result of any determinations or calculations made by the Security Calculation Agent. We may appoint a different Security Calculation Agent from time to time without your consent and without notifying you.

The Security Calculation Agent will provide written notice to the trustee at its New York office, on which notice the trustee may conclusively rely, of the amount to be paid at maturity or call, or upon early redemption, or on a Coupon Payment Date on or prior to 12:00 p.m., New York City time, on the Business Day immediately preceding the Maturity Date, any Redemption Date, any Call Settlement Date or any Coupon Payment Date, as applicable.

All dollar amounts related to determination of the Coupon Amount, the Adjusted Coupon Amount, if any, the Reference Distribution Amount, the Stub Reference Distribution Amount, if any, the Adjusted Reference Distribution Amount, the Accrued Tracking Fee (including the Quarterly Tracking Fee, any Tracking Fee Shortfall and any Adjusted Tracking Fee Shortfall), the Adjusted Tracking Fee, the Redemption Amount and Redemption Fee Amount, if any, per security, the Call Settlement Amount, if any, per security, and the Cash Settlement Amount, if any, per security, will be rounded to the nearest ten-thousandth, with five one hundred-thousandths rounded upward (*e.g.*, .76545 would be rounded up to .7655); and all dollar amounts paid on the aggregate principal amount of Securities per holder will be rounded to the nearest cent, with one-half cent rounded upward.

# **VWAP Calculation Agent**

The NYSE will on each day that is not a Disrupted Day (as defined below) act as the VWAP Calculation Agent. The VWAP Calculation Agent will determine the VWAP of any Index constituent, the VWAP Level and the Final VWAP Level on any Index Business Day on which such VWAP, VWAP Level and Final VWAP Level are to be determined during the term of the Securities. The VWAP Calculation Agent determined the Initial VWAP Level of 396.997 as of July 17, 2012. All determinations made by the VWAP Calculation Agent will be at the sole discretion of the VWAP Calculation Agent and will, in the absence of manifest error, be conclusive for all purposes and binding on you and on us. We may appoint a different VWAP Calculation Agent from time to time without your consent and without notifying you.

All calculations with respect to the VWAP of any Index constituent, any VWAP Level and the Final VWAP Level will be rounded to the nearest thousandth, with five ten-thousandths rounded upward (e.g., .8765 would be rounded to .877).

# **Market Disruption Event**

To the extent a Disrupted Day (as defined below) exists with respect to an Index constituent on an Averaging Date (as defined below) or on a Redemption Measurement Date, the VWAP and published unit weighting with respect to such Index constituent (and only with respect to such Index constituent) for such Averaging Date or Redemption Measurement Date will be determined by the Security Calculation Agent or one of its affiliates on the first succeeding Index Business Day that is not a Disrupted Day (the "Deferred Averaging Date") with respect to such Index constituent irrespective of whether pursuant to such determination, the Deferred Averaging Date would fall on a date originally scheduled to be an Averaging Date. If the postponement described in the preceding sentence results in the VWAP of a particular Index constituent being calculated on a day originally scheduled to be an Averaging Date, for purposes of determining the VWAP Levels on the Index Business Days during the Final Measurement Period or the Call Measurement Period, or on the Redemption Measurement Date, as applicable, the Security Calculation Agent or one of its affiliates, as the case may be, will apply the VWAP and the published unit weighting with respect to such Index constituent for such Deferred Averaging Date to the calculation of the VWAP Level (i) on the date(s) of the original disruption with respect to such Index constituent and (ii) such Averaging Date. For example, if the Final Measurement Period or the Call Measurement Period, as applicable, for purposes of calculating the Cash Settlement Amount or Call Settlement Amount, respectively, is based on the arithmetic mean of the VWAP Levels on June 6, 2016, June 7, 2016, June 8, 2016, June 9, 2016 and June 10, 2016 and there is a Market Disruption Event for an Index constituent on June 6, 2016, but no other Market Disruption Event during the Final Measurement Period or the Call Measurement Period, as applicable, then the VWAP for such disrupted Index constituent on June 7, 2016 will be used more than once to calculate the Cash Settlement Amount or Call Settlement Amount, respectively, and such Cash Settlement Amount or Call Settlement Amount, as applicable, will be determined based on the arithmetic mean of the VWAP for such disrupted Index constituent on June 7, 2016, June 7, 2016, June 8, 2016, June 9, 2016 and June 10, 2016.

If the Redemption Measurement Date for purposes of calculating a Redemption Amount is based on the VWAP Level on June 6, 2016 and there is a Market Disruption Event for an Index constituent on June 6, 2016, then the VWAP for such disrupted Index constituent on June 7, 2016 will be used to calculate the Redemption Amount.

In no event, however, will any postponement pursuant to the two immediately preceding paragraphs result in the final Averaging Date or the Redemption Measurement Date, as applicable, with respect to any Index constituent occurring more than three (3) Index Business Days following the day originally scheduled to be such final Averaging Date or Redemption Measurement Date. If the third Index Business Day following the date originally scheduled to be the final Averaging Date, or the Redemption Measurement Date, as applicable, is not an Index Business Day or is a Disrupted Day with respect to such Index constituent, the Security Calculation Agent or one of its affiliates will determine the VWAP and unit weighting with respect to any Index constituent required to be determined for the purpose of calculating the applicable VWAP Level based on its good faith estimate of the VWAP and unit weighting of each such Index constituent that would have prevailed on the Primary Exchange on such third Index Business Day but for such suspension or limitation.

An "Averaging Date" means each of the Index Business Days during the Final Measurement Period or the Call Measurement Period, as applicable, subject to adjustment as described herein.

A "Disrupted Day" with respect to any Index constituent is any Index Business Day on which the Primary Exchange or any Related Exchange fails to open for trading during its regular trading session or on which a Market Disruption Event has occurred and is continuing, and, in both cases, the occurrence of which is determined by the Security Calculation Agent to have a material effect on the VWAP Level.

With respect to an Index constituent, a "Market Disruption Event" means:

- (a) the occurrence or existence of a condition specified below:
  - (i) any suspension, absence or limitation of trading on the Primary Exchange for trading in the Index constituent, whether by reason of movements in price exceeding limits permitted by the Primary Exchange or otherwise;
  - (ii) any suspension, absence or limitation of trading on the Related Exchange for trading in futures or options contracts related to the Index constituent, whether by reason of movements in price exceeding limits permitted by such Related Exchange or otherwise, or
  - (iii) any event (other than an event described in (b) below) that disrupts or impairs (as determined by the Security Calculation Agent) the ability of market participants in general (A) to effect transactions in, or obtain market values for, the relevant Index constituent or (B) to effect transactions in, or obtain market values for, futures or options contracts relating to the relevant Index constituent; or

- (b) the closure on any Index Business Day of the Primary Exchange or any Related Exchange prior to its Scheduled Closing Time unless such earlier closing time is announced by the Primary Exchange or such Related Exchange at least one hour prior to the earlier of (i) the actual closing time for the regular trading session on the Primary Exchange or such Related Exchange on such Index Business Day and (ii) the submission deadline for orders to be entered into the Primary Exchange or such Related Exchange system for execution at the close of trading on such Index Business Day;
  - in each case determined by the Security Calculation Agent in its sole discretion; and
- (c) a determination by the Security Calculation Agent in its sole discretion that the event described above materially interfered with our ability or the ability of any of our affiliates to adjust or unwind all or a material portion of any hedge with respect to the Securities.

For purposes of the above definition:

- (a) a limitation on the hours or number of days of trading will not constitute a Market Disruption Event if it results from an announced change in the regular business hours of the Primary Exchange or Related Exchange, and
- (b) for purposes of clause (a) above, limitations pursuant to the rules of any Primary Exchange or Related Exchange similar to NYSE Rule 80B or Nasdaq Rule 4120 (or any applicable rule or regulation enacted or promulgated by any other self-regulatory organization or any government agency of scope similar to NYSE Rule 80B or Nasdaq Rule 4120 as determined by the Security Calculation Agent) on trading during significant market fluctuations will constitute a suspension, absence or material limitation of trading.

"Scheduled Closing Time" means, with respect to the Primary Exchange or the Related Exchange, on any Index Business Day, the scheduled weekday closing time of the Primary Exchange or such Related Exchange on such Index Business Day, without regard to after hours or any other trading outside of the regular trading session hours.

# **Redemption Price Upon Optional Tax Redemption**

We have the right to redeem the Securities in the circumstances described in "Medium-Term Notes, Series B" under "Description of Debt Securities We May Offer — Optional Tax Redemption". If we exercise this right, the redemption price of the Securities will be determined by the Security Calculation Agent in a manner reasonably calculated to preserve your and our relative economic position.

# **Default Amount on Acceleration**

If an event of default occurs and the maturity of the Securities is accelerated, we will pay the default amount in respect of the principal of the Securities at maturity. We describe the default amount below under "— Default Amount." In addition to the default amount described below, we will also pay the Coupon Amount per Security, if any, with respect to the final Coupon Payment Date, as described above under "— Coupon Payment," calculated as if the date of acceleration was the last Index Business Day in the Final Measurement Period and the four (4) Index Business Days immediately preceding the date of acceleration were the corresponding Index Business Days in the accelerated Final Measurement Period, with the fourth Index Business Day immediately preceding the date of accelerated Calculation Date and the accelerated final Coupon Valuation Date, and the Index Business Day immediately preceding the date of acceleration being the relevant final Coupon Valuation Date.

For the purpose of determining whether the holders of our Medium-Term Notes, Series B, of which the Securities are a part, are entitled to take any action under the indenture, we will treat the outstanding principal amount of the Medium-Term Notes, Series B, as constituting the outstanding principal amount of the Securities. Although the terms of the Securities may differ from those of the other Medium-Term Notes, Series B, holders of specified percentages in Stated Principal Amount of all Medium-Term Notes, Series B, together in some cases with other series of our debt securities, will be able to take action affecting all the Medium-Term Notes, Series B, including the Securities. This action may involve changing some of the terms that apply to the Medium-Term Notes, Series B, accelerating the maturity of the "Medium-Term Notes, Series B" after a default or waiving some of our obligations under the indenture. We discuss these matters in "Medium-Term Notes, Series B" above under "Description of Debt Securities We May Offer — Default, Remedies and Waiver of Default" and "Description of Debt Securities We May Offer — Modification and Waiver of Covenants."

# **Default Amount**

The default amount for the Securities on any day will be an amount in U.S. dollars for the principal of the Securities, as determined by the Security Calculation Agent in its sole discretion, equal to the cost of having a qualified financial institution, of the kind and selected as described below, expressly assume all our payment and other obligations with respect to the Securities as of that day and as if no default or acceleration had occurred, or to undertake other obligations providing substantially equivalent economic value to you with respect to the Securities. That cost will equal:

- > the lowest amount that a qualified financial institution would charge to effect this assumption or undertaking, plus
- the reasonable expenses, including reasonable attorneys' fees, incurred by the holders of the Securities in preparing any documentation necessary for this assumption or undertaking.

During the default quotation period for the Securities, which we describe below, the holders of the Securities and/or we may request a qualified financial institution to provide a quotation of the amount it would charge to effect this assumption or undertaking. If either party obtains a quotation, it must notify the other party in writing of the quotation. The amount referred to in the first bullet point above will equal the lowest — or, if there is only one, the only — quotation obtained, and as to which notice is so given, during the default quotation period. With respect to any quotation, however, the party not obtaining the quotation may object, on reasonable and significant grounds, to the assumption or undertaking by the qualified financial institution providing the quotation and notify the other party in writing of those grounds within two (2) Business Days after the last day of the default quotation period, in which case that quotation will be disregarded in determining the default amount.

#### **Default Quotation Period**

The default quotation period is the period beginning on the day the default amount first becomes due and ending on the third (3rd) Business Day after that day, unless:

- > no quotation of the kind referred to above is obtained, or
- > every quotation of that kind obtained is objected to within five (5) Business Days after the due date as described above.

If either of these two events occurs, the default quotation period will continue until the third (3rd) Business Day after the first Business Day on which prompt notice of a quotation is given as described above. If that quotation is objected to as described above within five (5) Business Days after that first Business Day, however, the default quotation period will continue as described in the prior sentence and this sentence.

In any event, if the default quotation period and the subsequent two (2) Business Day objection period have not ended before the Calculation Date, then the default amount will equal the Stated Principal Amount of the Securities.

## **Qualified Financial Institutions**

For the purpose of determining the default amount at any time, a qualified financial institution must be a financial institution organized under the laws of any jurisdiction in the United States of America, Europe or Japan, which at that time has outstanding debt obligations with a stated maturity of one year or less from the date of issue and is rated either:

- A-1 or higher by S&P or any successor, or any other comparable rating then used by that rating agency, or
- ➤ P-1 or higher by Moody's Investors Service or any successor, or any other comparable rating then used by that rating agency.

## Discontinuance of or Adjustments to the Index; Alteration of Method of Calculation

If S&P discontinues publication of or otherwise fails to publish the Index, or S&P does not make the Index constituents, their unit weighting and/or the Index Divisor available to the VWAP Calculation Agent, and the Index Sponsor, S&P or another entity publishes a successor or substitute index that the Security Calculation Agent determines to be comparable to the discontinued Index and for which the Index constituents, their unit weighting, and/or the Index Divisor are available to the VWAP Calculation Agent (such index being referred to herein as a "successor index"), then the VWAP Level for such successor index will be determined by the VWAP Calculation Agent by reference to the sum of the products of the VWAPs of the components underlying such successor index on the Primary Exchanges and each such component's respective weighting within the successor index (which sum will be adjusted by any index divisor used by such successor index) on the dates and at the times as of which the VWAP Levels for such successor index are to be determined.

Upon any selection by the Security Calculation Agent of a successor Index, the Security Calculation Agent will cause written notice thereof to be furnished to the trustee, to us and to the holders of the Securities.

If S&P discontinues publication of the Index or does not make the Index constituents, their unit weightings and/or Index Divisor available to the VWAP Calculation Agent prior to, and such discontinuation or unavailability is continuing on the Calculation Date or any Index Business Day during the Final Measurement Period or the Call Measurement Period, or on the Redemption Measurement Date, as applicable, or any other relevant date on which the VWAP Level is to be determined and the Security Calculation Agent determines that no successor index is available at such time, or the Security Calculation Agent has previously selected a successor index and publication of such successor index is discontinued prior to, and such discontinuation is continuing on the Calculation Date or any Index Business Day during the Final Measurement Period or the Call Measurement Period, or on the Redemption Measurement Date, as applicable, or any other relevant date on which the VWAP Level is to be determined, then the Security Calculation Agent will determine the relevant VWAP Levels using the VWAP and published unit weighting of each Index constituent included in the Index or successor index, as applicable, immediately prior to such discontinuation or unavailability, as adjusted for certain corporate actions as described under "Alerian MLP Index — Index Rebalancings." In such event, the Security Calculation Agent will cause notice thereof to be furnished to the trustee, to us and to the holders of the Securities.

Notwithstanding these alternative arrangements, discontinuation of the publication of the Index or successor index, as applicable, may adversely affect the value of the Securities.

If at any time the method of calculating the Index or a successor index, or the value thereof, is changed in a material respect, or if the Index or a successor index is in any other way modified so that the VWAP Level of the Index or such successor index does not, in the opinion of the Security Calculation Agent, fairly represent the VWAP Level of the Index or such successor index had such changes or modifications not been made, then the Security Calculation Agent will make such calculations and adjustments as, in the good faith judgment of the Security Calculation Agent, may be necessary in order to arrive at a VWAP level of an index comparable to the Index or such successor index, as the case may be, as if such changes or modifications had not been made, and the Security Calculation Agent will calculate the VWAP Levels for the Index or such successor index with reference to the Index or such successor index, as adjusted. The Security Calculation Agent will accordingly calculate the Final VWAP Level, the Current Indicative Value, the Index Performance Ratio, the Coupon Amount, the Adjusted Coupon Amount, if any, the Reference Distribution Amount, the Stub Reference Distribution Amount, if any, the Adjusted Reference Distribution Amount, the Accrued Tracking Fee (including the Quarterly Tracking Fee, any Tracking Fee Shortfall and any Adjusted Tracking Fee Shortfall), the Adjusted Tracking Fee, the Redemption Fee Amount, if any, the Cash Settlement Amount, if any, that we will pay you at maturity, the Redemption Amount, if any, upon early redemption, if applicable, and the Call Settlement Amount, if any, that we will pay you in the event UBS calls the Securities, based on the relevant VWAP Levels calculated by the VWAP Calculation Agent, as adjusted. Accordingly, if the method of calculating the Index or a successor index is modified so that the level of the Index or such successor index is a fraction of what it would have been if there had been no such modification (e.g., due to a split in the Index), which, in turn, causes the VWAP Level of the Index or such successor index to be a fraction of what it would have been if there had been no such modification, then the Security Calculation Agent will make such calculations and adjustments in order to arrive at a VWAP Level for the Index or such successor index as if it had not been modified (e.g., as if such split had not occurred).

## **Manner of Payment and Delivery**

Any payment on or delivery of the Securities at maturity or call, or upon early redemption will be made to accounts designated by you and approved by us, or at the corporate trust office of the trustee in New York City, but only when the Securities are surrendered to the trustee at that office. We also may make any payment or delivery in accordance with the applicable procedures of the depositary.

# **Business Day**

When we refer to a Business Day with respect to the Securities, we mean a day that is a Business Day of the kind described in "Medium-Term Notes, Series B" under "Description of Debt Securities We May Offer — Payment Mechanics for Debt Securities".

# **Modified Business Day**

As described in "Medium-Term Notes, Series B" under "Description of Debt Securities We May Offer — Payment Mechanics for Debt Securities", any payment on the Securities that would otherwise be due on a day that is not a Business Day may instead be paid on the next day that is a Business Day, with the same effect as if paid on the original due date, except as described under "— Cash Settlement Amount at Maturity," "— UBS Call Right" and "— Early Redemption at the Option of the Holders" above.

# Reissuances or Reopened Issues

We may, at our sole discretion, "reopen" or reissue the Securities. We issued the Securities initially in an amount having the aggregate principal amount specified on the cover of the prospectus supplement. We may issue additional Securities in amounts that exceed such amount at any time, without your consent and without notifying you. The Securities do not limit our ability to incur other indebtedness or to issue other securities. Also, we are not subject to financial or similar restrictions by the terms of the Securities. For more information, please refer to "Medium-Term Notes, Series B" under "Description of Debt Securities We May Offer — Amounts That We May Issue".

These further issuances, if any, will be consolidated to form a single class with the originally issued Securities and will have the same CUSIP number and will trade interchangeably with the Securities immediately upon settlement. Any additional issuances will increase the aggregate stated principal amount of the outstanding Securities of the class. The price of any additional offering will be determined at the time of pricing of that offering.

#### **Booking Branch**

The Securities will be booked through UBS AG, London Branch.

# **Clearance and Settlement**

The DTC participants that hold the Securities through DTC on behalf of investors will follow the settlement practices applicable to equity securities in DTC's settlement system with respect to the primary distribution of the Securities and secondary market trading between DTC participants.

## 6. ETRACS Monthly Pay 2xLeveraged US Small Cap High Dividend ETN Series B, due November 10, 2048

## **Specific Terms of the Securities**

In this section, references to "holders" mean those who own the Securities registered in their own names, on the books that we or the trustee maintains for this purpose, and not those who own beneficial interests in the Securities registered in street name or in the Securities issued in book-entry form through The Depository Trust Company ("DTC") or another depositary. Owners of beneficial interests in the Securities should read the section entitled "Legal Ownership and Book-Entry Issuance" under "Medium-Term Notes, Series B" above.

These Securities are part of a series of debt securities entitled "Medium-Term Notes, Series B" that we may issue, from time to time, under the indenture more particularly described under "Medium-Term Notes, Series B" above. This section summarizes general financial and other terms that apply to the Securities. Terms that apply generally to all Medium-Term Notes, Series B are described in "Description of Debt Securities We May Offer" under "Medium-Term Notes, Series B" above. The terms described here supplement those described in "Medium-Term Notes, Series B" above and, if the terms described here are inconsistent with those described there, the terms described here are controlling.

The Securities are part of a single series of senior debt securities issued under our indenture, dated as of June 12, 2015 between us and U.S. Bank Trust National Association, as trustee.

We describe the terms of the Securities in more detail below. The Stated Principal Amount of each Security is \$25.00.

The Securities do not guarantee any return of principal at, or prior to, maturity, call or acceleration, or upon early redemption. Instead, at maturity, you will receive a cash payment per Security the amount of which will vary depending on the performance and path of the Index and will be reduced by the Accrued Fees as of the last Index Business Day in the Final Measurement Period as described under "— Cash Settlement Amount at Maturity." If the amount as calculated is equal to or less than zero, the Cash Settlement Amount will be zero and you will not receive a cash payment.

If you exercise your right to have us redeem your Securities, subject to compliance with the redemption procedures, for each Security you will receive a cash payment per Security on the relevant Redemption Date equal to the Redemption Amount as described under "— Early Redemption at the Option of the Holders." If the amount as calculated is equal to or less than zero, the Redemption Amount will be zero and you will not receive a cash payment.

## **Coupon Payment**

For each Security you hold on the applicable Coupon Record Date, on each Coupon Payment Date you will receive an amount in cash equal to the Reference Distribution Amount, calculated as of the corresponding Coupon Valuation Date (the "Coupon Amount").

If the Reference Distribution Amount on such Coupon Valuation Date is zero, you will not receive any Coupon Amount on the related Coupon Payment Date. The final Coupon Amount will be included in the

Cash Settlement Amount if on the last Index Business Day in the Final Measurement Period the Coupon Ex-Date with respect to the final Coupon Amount has not yet occurred.

The "Coupon Payment Date" means the fifteenth (15th) Index Business Day following each Coupon Valuation Date. The final Coupon Payment Date will be the Maturity Date, subject to adjustment as described herein. The first Coupon Payment Date will be December 21, 2018, subject to adjustment as provided herein.

The "Coupon Record Date" means the ninth Index Business Day following each Coupon Valuation Date.

The "Coupon Ex-Date," with respect to a Coupon Amount, means the first Exchange Business Day on which the Securities trade without the right to receive such Coupon Amount. Under current NYSE Arca practice, the Coupon Ex-Date will generally be the Exchange Business Day prior to the applicable Coupon Record Date.

The "Coupon Valuation Date" means the 30th day of each month, and the 28th day of February of each calendar year during the term of the Securities or if such date is not an Index Business Day, then the first Index Business Day following such date, provided that the final Coupon Valuation Date will be the Calculation Date, subject to adjustment described herein. The first Coupon Valuation Date will be November 30, 2018.

The "Reference Distribution Amount" means (i) as of the first Coupon Valuation Date, an amount equal to the gross cash distributions that a Reference Holder would have been entitled to receive in respect of the Index Constituent Securities held by such Reference Holder on the record date with respect to any Index Constituent Security, for those cash distributions whose ex-dividend date occurs during the period from, but excluding, the Initial Trade Date to, and including, the first Coupon Valuation Date; (ii) as of any other Coupon Valuation Date (other than the Calculation Date), an amount equal to the gross cash distributions that a Reference Holder would have been entitled to receive in respect of the Index Constituent Securities held by such Reference Holder on the record date with respect to any Index Constituent Security for those cash distributions whose ex-dividend date occurs during the period from, but excluding, the immediately preceding Coupon Valuation Date to, and including, such Coupon Valuation Date; and (iii) as of the Calculation Date, an amount equal to the gross cash distributions that a Reference Holder would have been entitled to receive in respect of the Index Constituent Securities held by such Reference Holder on the record date with respect to any Index Constituent Security for those cash distributions whose exdividend date occurs during the period from, but excluding, the immediately preceding Coupon Valuation Date to, but excluding, the Calculation Date.

Notwithstanding the foregoing, with respect to cash distributions for an Index Constituent Security which is scheduled to be paid prior to the applicable Coupon Ex-Date, if, and only if, the issuer of such Index Constituent Security fails to pay the distribution to holders of such Index Constituent Security by the scheduled payment date for such distribution, such distribution will be assumed to be zero for the purposes of calculating the applicable Reference Distribution Amount.

The "**Reference Holder**" is, as of any date of determination, a hypothetical holder of a number of units of each Index Constituent Security equal to two *times* (a) the product of (i) the published unit weighting of that Index Constituent Security as of that date and (ii) the Current Principal Amount, *divided* by (b) the Monthly Initial Closing Level or Loss Rebalancing Closing Level, whichever is more recent.

"record date" means, (i) with respect to a distribution on an Index Constituent Security, the date on which a holder of the Index Constituent Security must be registered as a stockholder/unitholder of such Index Constituent Security in order to be entitled to receive such distribution and (ii) with respect to any split or reverse split, the tenth Business Day after the announcement date.

"ex-dividend date" means, with respect to a distribution on an Index Constituent Security, the first Business Day on which transactions in such Index Constituent Security trade on the Primary Exchange without the right to receive such distribution.

# **Cash Settlement Amount at Maturity**

The "Maturity Date" is November 10, 2048, which will be the second Business Day following the last Index Business Day in the Final Measurement Period, subject to adjustment as described below under "— Market Disruption Event."

For each Security, unless earlier called, redeemed or accelerated, you will receive at maturity a cash payment equal to:

- (a) the product of
  - (i) the Current Principal Amount and (ii) the Index Factor as of the last Index Business Day in the Final Measurement Period, *plus*
- (b) the final Coupon Amount, if on the last Index Business Day in the Final Measurement Period the Coupon Ex-Date with respect to the final Coupon Amount has not yet occurred, *minus*
- (c) the Accrued Fees as of the last Index Business Day in the Final Measurement Period, plus
- (d) the Stub Reference Distribution Amount as of the last Index Business Day in the Final Measurement Period, if any.

We refer to this cash payment as the "Cash Settlement Amount."

If the amount so calculated is equal to or less than zero, the payment at maturity will be zero.

The following graphic illustrates the formula to determine the Cash Settlement Amount, which has been simplified for ease of presentation.



You may lose all or a substantial portion of your investment at maturity. The combined negative effect of the Accrued Fees will reduce your final payment. If the compounded leveraged monthly return of the Index is insufficient to offset the negative effect of the Accrued Fees (less any Coupon Amounts and/or any Stub Reference Distribution Amount, as applicable, you may be entitled to receive), or if the compounded leveraged monthly return of the Index is negative, you may lose all or a substantial portion of your investment at maturity.

The Securities may be called by UBS prior to the Maturity Date pursuant to UBS's Call Right and, upon the occurrence of an acceleration event, the Securities may be accelerated and redeemed by UBS, at its option. See "Specific Terms of the Securities — UBS's Call Right" and "Specific Terms of the Securities — Optional Acceleration Upon Minimum Indicative Value".

The Stated Principal Amount of each Security is \$25.00. The Securities may be issued and sold over time at then-current market prices which may be significantly higher or lower than the Stated Principal Amount.

The Current Principal Amount for the period from the Initial Settlement Date to November 30, 2018 (such period, the "initial calendar month") will equal \$25.00 per Security (unless a Loss Rebalancing Event occurs during the initial calendar month). For each subsequent calendar month, the Current Principal Amount for each Security will be reset as follows on the Monthly Reset Date:

New Current Principal Amount = previous Current Principal Amount  $\times$  Index Factor on the applicable Monthly Valuation Date – Accrued Fees on the applicable Monthly Valuation Date

In the event of a Loss Rebalancing Event, the Current Principal Amount will be reset on the applicable Loss Rebalancing Reset Date as described below under "— Loss Rebalancing Events".

If a day that would otherwise be a Monthly Reset Date falls within a Measurement Period, then the Current Principal Amount will not be reset on such date and no further Monthly Reset Dates will occur during the term of the Securities.

If the Securities undergo a split or reverse split, the Current Principal Amount will be adjusted accordingly.

For each calendar month, the "Monthly Reset Date" is the first Exchange Business Day of that month beginning on December 1, 2018 and ending on November 1, 2048, subject to adjustment as described under "— Market Disruption Event." If a day that would otherwise be a Monthly Reset Date falls within a Measurement Period, as applicable, then the Current Principal Amount will not be reset on such date and no further Monthly Reset Dates will occur during the term of the Securities.

For each Monthly Reset Date, the "Monthly Valuation Date" is the last Exchange Business Day of the previous calendar month beginning on November 30, 2018 and ending on October 31, 2048, subject to adjustment as described under "— Market Disruption Event." If a day that would otherwise be a Monthly Reset Date falls within a Measurement Period, then the Current Principal Amount will not be reset on such date and no further Monthly Reset Dates or Monthly Valuation Dates will occur during the term of the Securities.

The "Index Factor" is:  $1 + (2 \times Index Performance Ratio)$ .

The "Index Performance Ratio" may be calculated on multiple dates of determination during any applicable calendar month. The formula used to calculate the Index Performance Ratio on any date of determination depends on the number of Loss Rebalancing Events that have occurred in the applicable calendar month.

If no Loss Rebalancing Events have occurred in the applicable calendar month, then on any Index Business Day during a Measurement Period, or on the Monthly Valuation Date, any Redemption Valuation Date, the first Loss Rebalancing Valuation Date of the applicable calendar month or any other date of determination, as applicable, the Index Performance Ratio will be equal to:

# <u>Index Valuation Level – Monthly Initial Closing Level</u> Monthly Initial Closing Level

where the "Monthly Initial Closing Level" for the initial calendar month is 122.3841, the Index Closing Level on November 8, 2018. For each subsequent calendar month, the Monthly Initial Closing Level will equal the Index Closing Level on the Monthly Valuation Date for the previous calendar month. For example, the Monthly Initial Closing Level for December 2018 will equal the Index Closing Level on November 30, 2018, subject to adjustment. If a day that would otherwise be a Monthly Reset Date falls within a Measurement Period, then the Current Principal Amount will not be reset on such date and the Monthly Initial Closing Level for the then-current calendar month will remain the same as it was for the immediately preceding calendar month.

If one or more Loss Rebalancing Events have occurred during the applicable calendar month, then on any Index Business Day during a Measurement Period, or on the Monthly Valuation Date, any Redemption Valuation Date, on each Loss Rebalancing Valuation Date after the first Loss Rebalancing Valuation Date in the applicable calendar month or on any other date of determination, as applicable, the Index Performance Ratio will be equal to:

# <u>Index Valuation Level – the most recent Loss Rebalancing Closing Level</u> the most recent Loss Rebalancing Closing Level

The "Index Closing Level" will equal the closing level of the Index on any date of determination, as reported on the NYSE and Bloomberg L.P.

The "Index Valuation Level", as determined by the Security Calculation Agent will equal the arithmetic mean of the Index Closing Levels measured on each Index Business Day during the applicable Measurement Period, or the Index Closing Level on any Monthly Valuation Date, Loss Rebalancing Valuation Date or Redemption Valuation Date, provided that if the Redemption Valuation Date falls in any Measurement Period, for the purposes of calculating the Index Performance Ratio as of the Redemption Valuation Date, the Index Valuation Level on any date of determination during such Measurement Period shall equal (a) 1/5 times (b) (i) the sum of the Index Closing Levels on each Index Business Day from, and including, the first Index Business Day of the applicable Measurement Period, to, and including, the date of determination, plus (ii) the number of Index Business Days from, but excluding, the date of determination to, and including, the last Index Business Day in such Measurement Period, times the Index Closing Level on such date of determination.

"Measurement Period" means the Final Measurement Period, Call Measurement Period or Acceleration Valuation Period, as applicable.

The "intraday indicative value", or "Indicative Value" is an amount per Security, as determined by the Security Calculation Agent as of any date of determination equal to (Current Principal Amount on the previous calendar day × Index Factor, calculated using the intraday indicative value of the Index) — Accrued Fees + Coupon Amount with respect to the Coupon Valuation Date immediately preceding the date of determination if on the date of determination the Coupon Ex-Date with respect to such Coupon Amount has not yet occurred + Reference Distribution Amount, calculated as if such time and date of determination is a Coupon Valuation Date.

The "Current Indicative Principal Amount", is an amount per Security, as determined by the Security Calculation Agent as of any date of determination, equal to the product of (i) the Current Principal Amount and (ii) the Index Factor as of such date, using the Index Closing Level as of such date as the Index Valuation Level.

The "Accrued Fees" as of any date of determination means the sum of (1) the Accrued Tracking Fee as of such date and (2) the Accrued Financing Charges as of such date.

The Securities are subject to an "Accrued Tracking Fee" per Security, calculated as follows:

- (a) On the Initial Trade Date, the Accrued Tracking Fee is equal to 0.
- (b) On the initial Monthly Valuation Date (or if applicable, on a Loss Rebalancing Date that occurs prior to the initial Monthly Valuation Date), the Accrued Tracking Fee is an amount equal to the product of: (a) the Annual Tracking Fee as of the initial Monthly Valuation Date and (b) a fraction, the numerator of which is the total number of calendar days from, but excluding, the Initial Trade Date to, and including, the initial Monthly Valuation Date (or Loss Rebalancing Date, as applicable), and the denominator of which is 365.
- (c) On any subsequent Monthly Valuation Date other than the Initial Monthly Valuation Date or on any Loss Rebalancing Date, the Accrued Tracking Fee is an amount equal to the product of (a) the Annual Tracking Fee as of such Monthly Valuation Date or Loss Rebalancing Date, as the case may be, and (b) a fraction, the numerator of which is the total number of calendar days from, but excluding, the immediately preceding Monthly Valuation Date (or Loss Rebalancing Date, whichever is more recent), to, and including, such Monthly Valuation Date or Loss Rebalancing Date, as the case may be, and the denominator of which is 365.
- (d) On the last Exchange Business Day of an applicable Measurement Period, or as of the Redemption Valuation Date, as applicable, the Accrued Tracking Fee is an amount equal to the product of (a) the Annual Tracking Fee calculated as of the last Exchange Business Day of the applicable Measurement Period, or as of the Redemption Valuation Date, as applicable, and (b) a fraction, the numerator of which is the total number of calendar days from, but excluding, the immediately preceding Monthly Valuation Date (or Loss Rebalancing Date, whichever is more recent), to, and including, (i) such last Exchange Business Day of such Measurement Period, or (ii) such Redemption Valuation Date (or, if the Optional Acceleration Date or Redemption Valuation Date occurs prior to the initial Monthly Valuation Date, the period from, and excluding, the Initial Trade Date), as applicable, and the denominator of which is 365.

The "Annual Tracking Fee" is, as of any date of determination, an amount per Security equal to the product of (i) the Annual Tracking Rate and (ii) the Current Indicative Principal Amount as of the immediately preceding Index Business Day.

The "Annual Tracking Rate" is 0.85%.

The Securities are subject to "Accrued Financing Charges" per Security calculated as follows:

- (a) On the Initial Trade Date, the Accrued Financing Charge for each Security is equal to \$0.
- (b) On the initial Monthly Valuation Date (or if applicable, on a Loss Rebalancing Date that occurs prior to the initial Monthly Valuation Date), the Accrued Financing Charge for each Security will equal (a) the aggregate sum of (i) the Financing Level as of each date starting from, but excluding, the Initial Trade Date, to and including the initial Monthly Valuation Date (or Loss Rebalancing Date, whichever is more recent) *times* (ii) the Financing Rate as of such date, *divided by* (b) 360.
- (c) On any subsequent Monthly Valuation Date, the Accrued Financing Charge for each Security will equal (a) the aggregate sum of (i) the Financing Level as of each date starting from, but excluding, the immediately preceding Monthly Valuation Date (or Loss Rebalancing Valuation Date, whichever is more recent), to and including, the then current Monthly Valuation Date *times* (ii) the Financing Rate as of such date, *divided by* (b) 360.
- (d) On the last Index Business Day of an applicable Measurement Period, or as of the Redemption Valuation Date, as applicable, the Accrued Financing Charge for each Security will equal (a) the aggregate sum of (i) the Financing Level as of each date starting from, but excluding, the immediately preceding Monthly Valuation Date (or Loss Rebalancing Valuation Date, or, if the Redemption Valuation Date falls in the Initial Calendar Month, the Initial Trade Date, whichever is more recent), to, and including such last Index Business Day in such Measurement Period, or such Redemption Valuation Date, as applicable, *times* (ii) the Financing Rate as of such date, *divided by* (b) 360.

"CME Term SOFR" means the CME Term SOFR Reference Rates published for one-, three-, six-, and 12-month tenors as administered by CME Group Benchmark Administration, Ltd. (or any successor administrator thereof).

The "Financing Level" is, as of any date of determination, an amount that equals the Current Principal Amount.

The "Financing Rate" will equal the sum of (a) the "Financing Spread" of 0.80% and (b) the three-month CME Term SOFR rate plus a 0.2616% adjustment, on the day that is two U.S. Government Securities Business Days prior to the immediately preceding Monthly Valuation Date.

The Accrued Financing Charges seek to compensate UBS for providing investors with the potential to receive a leveraged participation in movements in the Index Closing Level and are intended to approximate the monthly financing costs that investors may have otherwise incurred had they sought to borrow funds at a similar rate from a third party to invest in the Securities.

The "Final Measurement Period" means the five Index Business Days from, and including, the Calculation Date, subject to adjustment as described under "— Market Disruption Event."

The "Stub Reference Distribution Amount" means, as of the last Index Business Day in a Measurement Period, an amount equal to the gross cash distributions that a Reference Holder would have been entitled to receive in respect of the Index Constituent Securities held by such Reference Holder on the "record date" with respect to any Index Constituent Security, for those cash distributions whose "ex-dividend date" occurs during the period from, but excluding, the immediately preceding Coupon Valuation Date (or if such Redemption Valuation Date or the Optional Acceleration Date occurs prior to the first Coupon Valuation Date, the period from but excluding the Initial Trade Date) to, and including, such last Index Business Day of such Measurement Period, or such Redemption Valuation Date, as applicable; provided, that for the purpose of calculating the Stub Reference Distribution Amount, the Reference Holder will be deemed to hold four-fifths, three-fifths, two-fifths and one-fifth of the shares of each Index Constituent Security it would otherwise hold on the second, third, fourth and fifth Index Business Day, respectively, in such Measurement Period.

The "Index Calculation Agent" means the entity that calculates and publishes the level of the Index, which is currently Solactive.

The "Calculation Date" means November 2, 2048, unless such day is not an Index Business Day, in which case the Calculation Date will be the next Index Business Day, subject to adjustments.

"Index Business Day" means any day on which the Primary Exchange and each Related Exchange are scheduled to be open for trading.

"Exchange Business Day" means any day on which the Primary Exchange or market for trading of the Securities is scheduled to be open for trading.

"Primary Exchange" means, with respect to each Index Constituent Security or each constituent underlying a successor index, the primary exchange or market of trading such Index Constituent Security or such constituent underlying a successor index.

"Related Exchange" means, with respect to each Index Constituent Security or each constituent underlying a successor index, each exchange or quotation system where trading has a material effect (as determined by the Security Calculation Agent) on the overall market for futures or options contracts relating to such Index Constituent Security or such constituent underlying a successor index.

"U.S. Government Securities Business Day" means any day except for a Saturday, a Sunday or a day on which the Securities Industry and Financial Markets Association recommends that the fixed income departments of its members be closed for the entire day for purposes of trading in U.S. government securities.

## **Underlying Index**

The return on the Securities is linked to the performance of the price return version of the Solactive US Small Cap High Dividend Index ("SOLSMHD"). The Index is designed to measure the performance of 100 relatively small capitalization, dividend yielding Index Constituent Securities selected from a universe of qualifying U.S. listed equity securities. The Index Sponsor and Index Calculation Agent is Solactive AG ("Solactive" or the "Index Sponsor").

## Early Redemption at the Option of the Holders

Subject to your compliance with the procedures described below and the potential postponements and adjustments as described under "— Market Disruption Event," you may submit a request to have us redeem your Securities on any Index Business Day no later than 4:00 p.m., New York City time, and a confirmation of redemption by no later than 5:00 p.m., New York City time, on any applicable Index Business Day, provided that you request that we redeem a minimum of 50,000 Securities. We reserve the right from time to time to waive this minimum redemption amount in our sole discretion on a case-by-case basis. You should not assume you will be entitled to the benefit of any such waiver. For any applicable redemption request, the "Redemption Valuation Date" will be the first Index Business Day following the date that the applicable redemption notice and redemption confirmation are delivered, except that we reserve the right from time to time to accelerate, in our sole discretion on a case-by-case basis, the Redemption Valuation Date to the date on which the notice of redemption is received by UBS rather than the following Index Business Day. You should not assume you will be entitled to the benefit of any such acceleration. To satisfy the minimum redemption amount, your broker or other financial intermediary may bundle your Securities for redemption with those of other investors to reach this minimum amount of 50,000 Securities.

The Securities will be redeemed and the holders will receive payment for their Securities on the second Index Business Day following the applicable Redemption Valuation Date (the "Redemption Date"). The first Redemption Date will be November 15, 2018, and the final Redemption Date will be November 3, 2048. In addition, if a call notice has been issued or if acceleration has been triggered, the last Redemption Valuation Date will be the fifth Index Business day prior to the Call Settlement Date or Acceleration Settlement Date, as applicable. If a Market Disruption Event is continuing or occurs on the applicable scheduled Redemption Valuation Date with respect to any of the Index Constituent Securities, such Redemption Valuation Date may be postponed as described under "— Market Disruption Event."

As of any Redemption Valuation Date, the "Redemption Fee Amount" means an amount per Security equal to:

(0.125% × Closing Indicative Value of the Security as of the Redemption Valuation Date).

If you exercise your right to have us redeem your Securities, subject to your compliance with the procedures described under "— Redemption Procedures," for each applicable Security you will receive a cash payment on the relevant Redemption Date equal to:

Closing Indicative Value as of the Redemption Valuation Date - Redemption Fee Amount.

We refer to this cash payment as the "**Redemption Amount**." If the amount calculated above is equal to or less than zero, the payment upon early redemption will be zero. We reserve the right from time to time to waive the Redemption Fee Amount in our sole discretion and on a case-by-case basis. There can be no assurance that we will elect to waive this fee and you should not assume you will be entitled to such fee waiver.

We will inform you of such Redemption Amount on the first Business Day following the applicable Redemption Valuation Date.

The redemption feature is intended to induce arbitrageurs to counteract any trading of the Securities at a discount to their indicative value, though there can be no assurance that arbitrageurs will employ the redemption feature in this manner or that they will be successful in counteracting any divergence in the market price of the Securities and their indicative value.

The following graphic illustrates the formula to determine the Redemption Amount, which has been simplified for ease of presentation.

Closing Indicative — Redemption Fee
Value — Amount

You may lose all or a substantial portion of your investment upon early redemption. The combined negative effect of the Accrued Fees and the Redemption Fee Amount will reduce your final payment. If the compounded leveraged monthly return of the Index is insufficient to offset the negative effect of the Accrued Fees and the Redemption Fee Amount, if applicable (less any Coupon Amounts and/or any Stub Reference Distribution Amount you may be entitled to receive as of the Redemption Valuation Date), or if the compounded leveraged monthly return of the Index is negative, you may lose all or a substantial portion of your investment upon early redemption.

The Securities may be called by UBS prior to the Maturity Date pursuant to UBS's Call Right and, upon the occurrence of an acceleration event, the Securities may be accelerated and redeemed by UBS, at its option. See "Specific Terms of the Securities — UBS's Call Right" and "Specific Terms of the Securities — Optional Acceleration Upon Minimum Indicative Value".

We discuss these matters in the accompanying prospectus under "Description of Debt Securities We May Offer — Redemption and Repayment."

The Redemption Amount is meant to induce arbitrageurs to counteract any trading of the Securities at a premium or discount to their indicative value, though there can be no assurance that arbitrageurs will employ the redemption feature in this manner.

## **Redemption Procedures**

To redeem your Securities, you must instruct your broker or other person through whom you hold your Securities to take the following steps through normal clearing system channels:

- deliver a notice of redemption, which we refer to as a "**Redemption Notice**" to UBS via email no later than 4:00 p.m. (New York City time) on the Index Business Day on which you elect to exercise your redemption right. If we receive your Redemption Notice by the time specified in the preceding sentence, we will respond by sending you a form of confirmation of redemption;
- deliver the signed confirmation of redemption, which we refer to as the "**Redemption Confirmation**", to us via email in the specified form by 5:00 p.m. (New York City time) on the same day. We or our affiliate must acknowledge receipt in order for your Redemption Confirmation to be effective;
- instruct your DTC custodian to book a delivery vs. payment trade with respect to your Securities on the applicable Redemption Valuation Date at a price equal to the Redemption Amount; and
- cause your DTC custodian to deliver the trade as booked for settlement via DTC at or prior to 12:00 noon (New York City time) on the applicable Redemption Date.

Different brokerage firms may have different deadlines for accepting instructions from their customers. Accordingly, as a beneficial owner of the Securities, you should consult the brokerage firm through which you own your interest for the relevant deadline. If your broker delivers your Redemption Notice after 4:00 p.m. (New York City time), or your Redemption Confirmation after 5:00 p.m. (New York City time), on the Business Day prior to the applicable Redemption Valuation Date, your Redemption Notice will not be effective, you will not be able to redeem your Securities until the following Redemption Date and your broker will need to complete all the required steps if you should wish to redeem your Securities on any subsequent Redemption Date. In addition, UBS may request a medallion signature guarantee or such assurances of delivery as it may deem necessary in its sole discretion. All instructions given to participants from beneficial owners of Securities relating to the right to redeem their Securities will be irrevocable.

We reserve the right from time to time to waive the minimum redemption amount or the Redemption Fee Amount in our sole discretion on a case-by-case basis. In addition, we reserve the right from time to time to accelerate, in our sole discretion on a case-by-case basis, the Redemption Valuation Date to the date on which the Redemption Notice is received by UBS rather than the following Index Business Day. You should not assume you will be entitled to the benefit of any such waiver or election to accelerate the Redemption Valuation Date.

## **UBS's Call Right**

We have the right to redeem all, but not less than all, of the Securities upon not less than eighteen (18) calendar days' prior notice to the holders of the Securities (which may be provided via press release), such redemption to occur on any Business Day that we may specify on or after November 15, 2019 through and including the Maturity Date. Upon early redemption in the event we exercise this right, you will receive a cash payment equal to

- (a) the product of
  - (i) the Current Principal Amount and (ii) the Index Factor as of the last Index Business Day in the Call Measurement Period, *plus*
- (b) the Coupon Amount with respect to the Coupon Valuation Date immediately preceding the Call Valuation Date if on the last Index Business Day in the Call Measurement Period the Coupon Ex-Date with respect to such Coupon Amount has not yet occurred, *minus*
- (c) the Accrued Fees as of the last Index Business Day in the Call Measurement Period, plus
- (d) the Stub Reference Distribution Amount as of the last Index Business Day in the Call Measurement Period, if any.

We refer to this cash payment as the "Call Settlement Amount."

If the amount calculated above is equal to or less than zero, the payment upon UBS's exercise of its Call Right will be zero.

We will inform you of such Call Settlement Amount on the first Business Day following the last Index Business Day in the Call Measurement Period.

The holders will receive payment for their Securities on the second Business Day following the last Index Business Day in the Call Measurement Period (the "Call Settlement Date"). If a Market Disruption Event is continuing or occurs on the scheduled Call Valuation Date with respect to any of the Index Constituent Securities, such Call Valuation Date may be postponed as described under "— Market Disruption Event."

# The "Call Measurement Period" means:

- if the Market Value of Securities outstanding as at the close of business on the Exchange Business Day immediately preceding the date of delivery by UBS of its notice to holders (which may be provided via press release) of its exercise of the UBS Call Right is less than \$75,000,000, the Call Valuation Date, subject to adjustments as described under "— Market Disruption Event";
- (b) if the Market Value of Securities outstanding as at the close of business on the Exchange Business Day immediately preceding the date of delivery by UBS of its notice to holders (which may be provided via press release) of its exercise of the UBS Call Right is equal to or greater than \$75,000,000, the five (5) Index Business Days from and including the Call Valuation Date, subject to adjustments as described under "— Market Disruption Event."

The "Market Value" of the Securities outstanding as of the close of business on the Exchange Business Day immediately preceding the date of delivery by UBS of its notice to holders (which may be provided via press release) of its exercise of the UBS Call Right will equal:

Intraday indicative value as of such Exchange Business Day  $\times$  number of Securities outstanding as reported by SMHBIV <Index> on Bloomberg.

The "Call Valuation Date" means the date disclosed as such by UBS in its notice to holders (which may be provided via press release) of its exercise of the UBS Call Right.

In any notice to holders exercising the UBS Call Right, we will specify how many days are included in the Call Measurement Period.

The following graphic illustrates the formula to determine the Call Settlement Amount, which has been simplified for ease of presentation.

You may lose all or a substantial portion of your investment upon a call. The combined negative effect of the Accrued Fees will reduce your final payment. If the compounded leveraged monthly return of the Index is insufficient to offset the negative effect of the Accrued Fees (less any Coupon Amounts and/or any Stub Reference Distribution Amount, as applicable, you may be entitled to receive), or if the compounded leveraged monthly return of the Index is negative, you may lose all or a substantial portion of your investment upon a call.

In addition, upon the occurrence of an acceleration event, the Securities may be accelerated and redeemed by UBS, at its option. See "Specific Terms of the Securities — Optional Acceleration Upon Minimum Indicative Value".

## **Optional Acceleration Upon Minimum Indicative Value**

If, at any time, the intraday indicative value of the Securities on any Index Business Day equals \$2.00 or less (the "Indicative Value Optional Acceleration Trigger") (each such day, an "Optional Acceleration Date"), all issued and outstanding Securities may be accelerated and redeemed by UBS, at its option (even if the intraday indicative value would later exceed \$2.00 on such Optional Acceleration Date or any subsequent Index Business Day) for a cash payment equal to the Acceleration Amount (the "Acceleration Option").

In the event that the Indicative Value Optional Acceleration Trigger threshold has been breached, UBS will issue a press release before 9:00 a.m. on the Index Business Day following the Optional Acceleration Date announcing whether or not it has elected to exercise its Acceleration Option. UBS is under no obligation to exercise its Acceleration Option and the Securities may remain outstanding following an Indicative Value Optional Acceleration Trigger Event occurring, if UBS does not elect to exercise such Acceleration Option.

## The "Acceleration Amount" will equal

- (a) the product of
  - (i) the Current Principal Amount and (ii) the Index Factor as of the last Index Business Day in the Acceleration Valuation Period, *plus*
- (b) the Coupon Amount with respect to the Coupon Valuation Date immediately preceding the Optional Acceleration
  Date if on the last Index Business Day in the Acceleration Valuation Period the Coupon Ex-Date with respect to such
  Coupon Amount has not yet occurred, *minus*
- (c) the Accrued Fees as of the last Index Business Day in the Acceleration Valuation Period, plus
- (d) the Stub Reference Distribution Amount as of the last Index Business Day in the Acceleration Valuation Period, if any.

If the Acceleration Amount is equal to or less than zero, the payment upon acceleration will be zero.

If the Indicative Value Optional Acceleration Trigger threshold has been breached and UBS elects to exercise its Acceleration Option, you will receive on the Acceleration Settlement Date only the Acceleration Amount in respect of your investment in the Securities. The "Acceleration Settlement Date" will be the second Business Day following the last Index Business Day of the Acceleration Valuation Period. The "Acceleration Valuation Period" will be the five Index Business Days from, but excluding, the Optional Acceleration Date, subject to adjustment as described under "— Market Disruption Event." Subject to the prior verification by the Security Calculation Agent that the intraday indicative value of the Securities of \$2.00 or less was accurately calculated by the NYSE, UBS must provide notice (which may be provided via press release) to the holders of the Securities that the minimum indicative value threshold has been breached not less than five calendar days prior to the Acceleration Settlement Date.

For a detailed description of how the minimum indicative value of the Securities is calculated see "Valuation of the Index and the Securities".

If the Securities undergo a split or reverse split, the Indicative Value Optional Acceleration Trigger will be adjusted accordingly.

The following graphic illustrates the formula to determine the Acceleration Amount, which has been simplified for ease of presentation.



You may lose all or a substantial portion of your investment upon acceleration. The combined negative effect of the Accrued Fees will reduce your final payment. If the compounded leveraged monthly return of the Index is insufficient to offset the negative effect of the Accrued Fees (less any Coupon Amounts and/or any Stub Reference Distribution Amount, as applicable, you may be entitled to receive), or if the compounded leveraged monthly return of the Index is negative, you may lose all or a substantial portion of your investment upon acceleration.

In addition, the Securities may be called by UBS prior to the Maturity Date pursuant to UBS's Call Right. See "Specific Terms of the Securities — UBS's Call Right".

## **Loss Rebalancing Events**

A Loss Rebalancing Event will have the effect of deleveraging your Securities with the aim of resetting the then-current leverage to approximately 2.0. This means that after a Loss Rebalancing Event, a constant percentage increase in the Index Closing Level will have less of a positive effect on the value of your Securities relative to before the occurrence of the Loss Rebalancing Event.

A "Loss Rebalancing Event" occurs if, at any time, the Intraday Index Value on any Index Business Day (other than an Excluded Day, as defined herein) decreases 20% in value from the previous Monthly Initial Closing Level or Loss Rebalancing Closing Level, whichever is more recent. If a Loss Rebalancing Event occurs, the Current Principal Amount of the Securities will be reset as described below, which will have the effect of deleveraging your Securities with the aim of resetting the thencurrent leverage to approximately 2.0. A Loss Rebalancing Event may occur irrespective of whether a Market Disruption Event also occurs on such Index Business Day.

Upon the occurrence of a Loss Rebalancing Event, the Current Principal Amount will be reset on the applicable Loss Rebalancing Reset Date as follows:

New Current Principal Amount = previous Current Principal Amount × Index Factor on the applicable Loss Rebalancing Valuation Date — Accrued Fees on the applicable Loss Rebalancing Valuation Date

In the event of a Loss Rebalancing Event, the Financing Rate will not be adjusted.

On the next Monthly Valuation Date following one or more Loss Rebalancing Events, the Monthly Initial Closing Level will be replaced with the most recent Loss Rebalancing Closing Level in the calculation of the Index Performance Ratio.

Loss Rebalancing Events may occur multiple times over the term of the Securities and may occur multiple times during a single calendar month. This means both that (i) the Current Principal Amount may be reset more frequently than monthly and (ii) the cumulative effect of compounding and fees will have increased as a result of the Loss Rebalancing Event(s). Because each Loss Rebalancing Event will have the effect of deleveraging your Securities, following a Loss Rebalancing Event your Securities will have less exposure to a potential positive gain in value relative to the exposure before the occurrence of such Loss Rebalancing Event.

On any Loss Rebalancing Valuation Date, the Accrued Financing Charges for each Security will equal the product of (i) the Financing Level on the immediately preceding Monthly Valuation Date or Loss Rebalancing Valuation Date, whichever is more recent, *times* (ii) the Financing Rate times (iii) the number of calendar days from, but excluding, the immediately preceding Monthly Valuation Date or Loss Rebalancing Valuation Date, whichever is more recent, to, and including, the then current Loss Rebalancing Valuation Date *divided by* (iv) 360.

An "Excluded Day" means (i) the Index Business Day immediately preceding any Monthly Valuation Date, (ii) any Monthly Valuation Date, (iii) any Loss Rebalancing Valuation Date (iv) the Index Business Day immediately preceding the first day of the Final Measurement Period or any day after such Index Business Day, (v) the Index Business Day immediately preceding the first day of the Call Measurement Period or any day after such Index Business Day, or (vi) the Optional Acceleration Date or any day after the Optional Acceleration Date.

"Loss Rebalancing Closing Level" means the Index Closing Level on the Loss Rebalancing Valuation Date.

"Loss Rebalancing Reset Date" means the first Index Business Day immediately following a Loss Rebalancing Valuation Date, subject to adjustment as described under "— Market Disruption Event."

#### "Loss Rebalancing Valuation Date" means:

- (a) if a Loss Rebalancing Event occurs at or prior to 3:15 p.m. on an Index Business Day, the day that such Loss Rebalancing Event occurs, subject to adjustment as described under "— Market Disruption Event";
- (b) if a Loss Rebalancing Event occurs after 3:15 p.m. on an Index Business Day, the first Index Business Day following the occurrence of such Loss Rebalancing Event, subject to adjustment as described under "— Market Disruption Event."

# **Security Calculation Agent**

UBS Securities LLC will act as the Security Calculation Agent. The Security Calculation Agent will be solely responsible for all determinations and calculations regarding the value of the Securities, including, among other things, at maturity or upon early redemption or call, or at other times, the Current Principal Amount, Current Indicative Principal Amount, intraday indicative value, Market Disruption Events, Business Days, Index Business Days, Exchange Business Days, the Index Factor, the Index Performance Ratio, the Index Valuation Level, the Financing Level, the Accrued Fees (including determining any successor to the LIBOR base rate), the Coupon Amount, the Reference Distribution Amount, the Stub Reference Distribution Amount, if any, the Accrued Fees, the Redemption Fee Amount, the Cash Settlement Amount, if any, that we will pay you at maturity, the Coupon Ex-Dates, the Coupon Record Dates, the Redemption Amount, if any, that we will pay you upon redemption, if applicable, the Acceleration Amount that we will pay you upon acceleration, the Call Settlement Amount, if any, that we will pay you in the event that UBS calls the Securities, whether a Loss Rebalancing Event has occurred and whether any day is a Business Day, Index Business Day or an Exchange Business Day and all such other matters as may be specified elsewhere herein as matters to be determined by the Security Calculation Agent. The Security Calculation Agent will also be responsible for determining whether the Index has been discontinued and whether there has been a material change in the Index. The Security Calculation Agent will make all such determinations and calculations in its sole discretion, and absent manifest error, all determinations of the Security Calculation Agent will be conclusive for all purposes and binding on us, you, and all other persons having an interest in the Security, without liability on the part of the Security Calculation Agent. You will not be entitled to any compensation from us for any loss suffered as a result of any determinations or calculations made by the Security Calculation Agent. We may appoint a different Security Calculation Agent from time to time after the date of the prospectus supplement without your consent and without notifying you.

The Security Calculation Agent will provide written notice to the trustee at its New York office, on which notice the trustee may conclusively rely, of the amount to be paid at maturity, call or acceleration, or upon early redemption, or on a Coupon Payment Date on or prior to 12:00 noon, New York City time, on the Business Day immediately preceding the Maturity Date, any Redemption Date, any Call Settlement Date, Acceleration Settlement Date or any Coupon Payment Date, as applicable.

All dollar amounts related to determination of the Coupon Amount, the Reference Distribution Amount, the Stub Reference Distribution Amount, if any, the Accrued Fees, the Redemption Amount and Redemption Fee Amount, if any, per Security, the Call Settlement Amount, if any, per Security, the Current Principal Amount, the Acceleration Amount, the Financing Level, and the Cash Settlement Amount, if any, per Security, will be rounded to the nearest ten-thousandth, with five one hundred-thousandths rounded upward (*e.g.*, .76545 would be rounded up to .7655); and all dollar amounts paid on the Stated Principal Amount of the Securities per holder will be rounded to the nearest cent, with one-half cent rounded upward.

# **Market Disruption Event**

To the extent a Market Disruption Event with respect to the Index has occurred or is continuing on an Averaging Date (as defined below), the Index Closing Level for such Averaging Date will be determined by the Security Calculation Agent or one of its affiliates on the first succeeding Index Business Day on which a Market Disruption Event does not occur or is not continuing (the "Deferred Averaging Date") with respect to the Index irrespective of whether, pursuant to such determination, the Deferred Averaging Date would fall on a date originally scheduled to be an Averaging Date. If the postponement described in the preceding sentence results in the Index Closing Level being calculated on a day originally scheduled to be an Averaging Date, for purposes of determining the Index Closing Level on any Averaging Date, the Security Calculation Agent or one of its affiliates, as the case may be, will apply the Index Closing Level for such Deferred Averaging Date (i) on the date(s) of the original Market Disruption Event and (ii) such Averaging Date. For example, if the applicable Measurement Period for purposes of calculating the Call Settlement Amount is based on the arithmetic mean of the Index Closing Levels on October 3, October 4, October 5, October 6 and October 7, and there is a Market Disruption Event with respect to the Index on October 4 will be used twice to calculate the Call Settlement Amount, and the Call Settlement Amount will be determined based on the arithmetic mean of the Index Closing Levels on October 4, October 5, October 6 and October 7. The same approach would be applied if there is a Market Disruption Event during any Measurement Period.

To the extent a Market Disruption Event with respect to the Index has occurred or is continuing on the Redemption Valuation Date or any Monthly Valuation Date or Loss Rebalancing Valuation Date, the Index Closing Level for such Redemption Valuation Date, Monthly Valuation Date or Loss Rebalancing Valuation Date, as applicable, will be determined by the Security Calculation Agent or one of its affiliates on the first succeeding Index Business Day on which a Market Disruption Event does not occur or is not continuing with respect to the Index. For example, if the Redemption Valuation Date, for purposes of calculating a Redemption Amount, is based on the Index Closing Level on October 3 and there is a Market Disruption Event with respect to the Index on October 3, then the Index Closing Level on October 4 will be used to calculate the Redemption Amount, assuming that no such Market Disruption Event has occurred or is continuing on October 4.

In no event, however, will any postponement pursuant to the two immediately preceding paragraphs result in the final Averaging Date or any Monthly Valuation Date, Redemption Valuation Date or Loss Rebalancing Valuation Date, as applicable, occurring more than three Index Business Days following the day originally scheduled to be such final Averaging Date or such Monthly Valuation Date, Redemption Valuation Date or Loss Rebalancing Valuation Date. If a Market Disruption Event has occurred or is continuing with respect to the Index on the third Index Business Day following the date originally scheduled to be the final Averaging Date or any Monthly Valuation Date, Redemption Valuation Date or Loss Rebalancing Valuation Date, as applicable, the Security Calculation Agent or one of its affiliates will determine the Index Closing Level based on its good faith estimate of the Index Closing Level that would have prevailed on such third Index Business Day but for such Market Disruption Event. If any Monthly Valuation Date or Loss Rebalancing Valuation Date is postponed as described above, the succeeding Monthly Reset Date or Loss Rebalancing Valuation Date, as applicable.

An "Averaging Date" means each of the Index Business Days during a Measurement Period, subject to adjustment as described herein.

Any of the following will be a Market Disruption Event with respect to the Index, in each case as determined by the Security Calculation Agent in its sole discretion:

- (a) suspension, absence or material limitation of trading in a material number of Index Constituent Securities for trading in the Index Constituent Security, whether by reason of movements in price exceeding limits permitted by the Primary Exchange or otherwise;
- (b) suspension, absence or material limitation of trading in option or futures contracts relating to the Index or to a material number of Index Constituent Securities in the primary market or markets for those contracts;
- (c) the Index is not published; or
- (d) in any other event, if the Security Calculation Agent determines in its sole discretion that the event materially interferes with our ability or the ability of any of our affiliates to unwind all or a material portion of a hedge with respect to the Securities that we or our affiliates have effected or may effect as described in the section entitled "Use of Proceeds and Hedging".

The following events will not be Market Disruption Events with respect to the Index:

- (a) a limitation on the hours or numbers of days of trading, but only if the limitation results from an announced change in the regular business hours of the relevant market; or
- (b) a decision to permanently discontinue trading in the option or futures contracts relating to the Index or any Index Constituent Securities.

For this purpose, an "absence of trading" in the primary securities market on which option or futures contracts related to the Index or any Index Constituent Securities are traded will not include any time when that market is itself closed for trading under ordinary circumstances.

# **Redemption Price Upon Optional Tax Redemption**

We have the right to redeem the Securities in the circumstances described under "Description of Debt Securities We May Offer — Optional Tax Redemption" in the accompanying prospectus. If we exercise this right, the redemption price of the Securities will be determined by the Security Calculation Agent in a manner reasonably calculated to preserve your and our relative economic positions.

#### **Default Amount on Acceleration**

If an event of default occurs and the maturity of the Securities is accelerated, we will pay the default amount in respect of the principal of the Securities at maturity. We describe the default amount below under "— Default Amount."

In addition to the default amount described below, we will also pay the Coupon Amount per Security, if any, with respect to the final Coupon Payment Date, as described above under "— Coupon Payment," calculated as if the date of acceleration was the last Index Business Day in the Final Measurement Period and the four Index Business Days immediately preceding the date of acceleration were the corresponding Index Business Days in the accelerated Final Measurement Period, with the fourth Index Business Day immediately preceding the date of accelerated Calculation Date and the accelerated final Coupon Valuation Date, and the Index Business Day immediately preceding the date of acceleration being the relevant final Coupon Valuation Date.

For the purpose of determining whether the holders of our Medium-Term Notes, Series B, of which the Securities are a part, are entitled to take any action under the indenture, we will treat the outstanding principal amount of the Medium-Term Notes, Series B, as constituting the outstanding principal amount of the Securities. Although the terms of the Securities may differ from those of the other Medium-Term Notes, Series B, holders of specified percentages in principal amount of all Medium-Term Notes, Series B, together in some cases with other series of our debt securities, will be able to take action affecting all the Medium-Term Notes, Series B, including the Securities. This action may involve changing some of the terms that apply to the Medium-Term Notes, Series B, accelerating the maturity of the Medium-Term Notes, Series B after a default or waiving some of our obligations under the indenture. We discuss these matters in the attached prospectus under "Description of Debt Securities We May Offer — Default, Remedies and Waiver of Default" and "Description of Debt Securities We May Offer — Modification and Waiver of Covenants."

#### **Default Amount**

The default amount for the Securities on any day will be an amount, in U.S. dollars as determined by the Security Calculation Agent in its sole discretion, for the aggregate Stated Principal Amount of the Securities, equal to the cost of having a qualified financial institution, of the kind and selected as described below, expressly assume all our payment and other obligations with respect to the Securities as of that day and as if no default or acceleration had occurred, or to undertake other obligations providing substantially equivalent economic value to you with respect to the Securities. That cost will equal:

- > the lowest amount that a qualified financial institution would charge to effect this assumption or undertaking, plus
- the reasonable expenses, including reasonable attorneys' fees, incurred by the holders of the Securities in preparing any documentation necessary for this assumption or undertaking.

During the default quotation period for the Securities, which we describe below, the holders of the Securities and/or we may request a qualified financial institution to provide a quotation of the amount it would charge to effect this assumption or undertaking. If either party obtains a quotation, it must notify the other party in writing of the quotation. The amount referred to in the first bullet point above will equal the lowest — or, if there is only one, the only — quotation obtained, and as to which notice is so given, during the default quotation period. With respect to any quotation, however, the party not obtaining the quotation may object, on reasonable and significant grounds, to the assumption or undertaking by the qualified financial institution providing the quotation and notify the other party in writing of those grounds within two Business Days after the last day of the default quotation period, in which case that quotation will be disregarded in determining the default amount.

#### **Default Quotation Period**

The default quotation period is the period beginning on the day the default amount first becomes due and ending on the third Business Day after that day, unless:

- > no quotation of the kind referred to above is obtained, or
- every quotation of that kind obtained is objected to within five (5) Business Days after the due date as described above.

If either of these two events occurs, the default quotation period will continue until the third Business Day after the first Business Day on which prompt notice of a quotation is given as described above. If that quotation is objected to as described above within five (5) Business Days after that first Business Day, however, the default quotation period will continue as described in the prior sentence and this sentence.

In any event, if the default quotation period and the subsequent two Business Day objection period have not ended before the Calculation Date, then the default amount will equal the Stated Principal Amount of the Securities.

## **Qualified Financial Institutions**

For the purpose of determining the default amount at any time, a qualified financial institution must be a financial institution organized under the laws of any jurisdiction in the United States of America, Europe or Japan, which at that time has outstanding debt obligations with a stated maturity of one year or less from the date of issue and rated either:

- A-1 or higher by Standard & Poor's Financial Services LLC, a subsidiary of The McGraw-Hill Companies, Inc., or any successor, or any other comparable rating then used by that rating agency, or
- ▶ P-1 or higher by Moody's Investors Service or any successor, or any other comparable rating then used by that rating agency.

# Discontinuance of or Adjustments to the Index or Termination of Our License Agreement with the Index Sponsor; Alteration of Method of Calculation

If (i) the Index Sponsor discontinues publication of, or otherwise fails to publish, the Index, (ii) our license agreement with the Index Sponsor terminates or (iii) the Index Sponsor does not make the Index Constituent Securities and/or their unit weighting available to the Security Calculation Agent, and, in each case, any other person or entity publishes an index licensed to UBS that the Security Calculation Agent determines is comparable to the Index and for which the Index Constituent Securities and/or their unit weighting are available to the Security Calculation Agent (such index being referred to herein as a "successor index"), and the Security Calculation Agent approves such index as a successor index, then the Security Calculation Agent will determine the Index Closing Level on the applicable dates of determination, Coupon Amounts and the amount payable at maturity, call, acceleration or upon early redemption and all other related payments terms by reference to such successor index.

Upon any selection by the Security Calculation Agent of a successor index, the Security Calculation Agent will cause written notice thereof to be furnished to the trustee, to us and to the holders of the Securities.

If the Index Sponsor discontinues publication of the Index, our license agreement with the Index Sponsor terminates or the Index Sponsor does not make the Index Constituent Securities and/or their unit weighting available to the Security Calculation Agent, prior to, and such discontinuation, termination or unavailability is continuing on the Calculation Date or any Index Business Day during a Measurement Period, or on the Redemption Valuation Date or on any Monthly Valuation Date or Loss Rebalancing Valuation Date, as applicable, or on any other relevant date on which the Index Closing Level is to be determined and the Security Calculation Agent determines that no successor index is available at such time, or the Security Calculation Agent has previously selected a successor index and publication of such successor index is discontinued prior to, and such discontinuation is continuing on the Calculation Date or any Index Business Day during a Measurement Period, or on the Redemption Valuation Date or on any Monthly Valuation Date or Loss Rebalancing Valuation Date, as applicable, or any other relevant date on which the Index Closing Level is to be determined, then the Security Calculation Agent will determine the Index Closing Level using the Index Closing Level on the last Index Business Day immediately prior to such discontinuation or unavailability, as adjusted for certain corporate actions. In such event, the Security Calculation Agent will cause notice thereof to be furnished to the trustee, to us and to the holders of the Securities.

Notwithstanding these alternative arrangements, discontinuation of the publication of the Index or successor index, as applicable, may adversely affect the value of the Securities.

In addition, if an Index Replacement Event (as defined below) occurs at any time and the Index Sponsor or anyone else publishes an index that the Security Calculation Agent determines is comparable to the Index (the "Substitute Index"), then the Security Calculation Agent may elect, in its sole discretion, to permanently replace the original Index with the Substitute Index for all purposes under the Securities, and all provisions described in the prospectus supplement as applying to the Index will thereafter apply to the Substitute Index instead. In such event, the Security Calculation Agent will make such adjustments, if any, to any level of the Index or Substitute Index that is used for purposes of the Securities as it determines are appropriate in the circumstances. If the Security Calculation Agent elects to replace the original Index with a Substitute Index, then the Security Calculation Agent will determine all amounts

hereunder, including the Coupon Amounts, Current Principal Amount, Current Indicative Principal Amount, Index Factor, intraday indicative value, Accrued Fees, Index Closing Levels on the applicable dates of determination, all other related payment terms and the amount payable at maturity, call, or upon early redemption by reference to such Substitute Index. If the Security Calculation Agent so elects to replace the original Index with a Substitute Index, the Security Calculation Agent will cause written notice thereof to be furnished to the trustee, to us and to the holders of the Securities of the Securities.

#### An "Index Replacement Event" means:

- an amendment to or change (including any officially announced proposed change) in the laws, regulations or rules of the United States (or any political subdivision thereof), or any jurisdiction in which a Primary Exchange or Related Exchange (each as defined herein) is located that (i) makes it illegal for UBS AG or its affiliates to hold, acquire or dispose of units in the Index Constituent Securities included in the Index or options, futures, swaps or other derivatives on the Index or the units in the Index Constituent Securities included in the Index (including but not limited to exchange-imposed position limits), (ii) materially increases the cost to us, our affiliates, third parties with whom we transact or similarly situated third parties in performing our or their obligations in connection with the Securities, (iii) has a material adverse effect on any of these parties' ability to perform their obligations in connection with the Securities or (iv) materially affects our ability to issue or transact in exchange traded notes similar to the Securities, each as determined by the Security Calculation Agent;
- (b) any official administrative decision, judicial decision, administrative action, regulatory interpretation or other official pronouncement interpreting or applying those laws, regulations or rules that is announced on or after November 8, 2018 that (i) makes it illegal for UBS AG or its affiliates to hold, acquire or dispose of units in the Index Constituent Securities included in the Index or options, futures, swaps or other derivatives on the Index or the units in the Index constituents included in the Index (including but not limited to exchange-imposed position limits), (ii) materially increases the cost to us, our affiliates, third parties with whom we transact or similarly situated third parties in performing our or their obligations in connection with the Securities, (iii) has a material adverse effect on the ability of us, our affiliates, third parties with whom we transact or a similarly situated third party to perform our or their obligations in connection with the Securities or (iv) materially affects our ability to issue or transact in exchange traded notes similar to the Securities, each as determined by the Security Calculation Agent;
- (c) any event that occurs on or after November 8, 2018 that makes it a violation of any law, regulation or rule of the United States (or any political subdivision thereof), or any jurisdiction in which a Primary Exchange or Related Exchange (each as defined herein) is located, or of any official administrative decision, judicial decision, administrative action, regulatory interpretation or other official pronouncement interpreting or applying those laws, regulations or rules, (i) for UBS AG or its affiliates to hold, acquire or dispose of units in the Index Constituent Securities included in the Index or options, futures, swaps or other derivatives on the Index or the units in the Index constituents included in the Index (including but not limited to exchange-imposed position limits), (ii) for us, our affiliates, third parties with whom we transact or similarly situated third parties to perform our or their obligations in connection with the Securities or (iii) for us to issue or transact in exchange traded notes similar to the Securities, each as determined by the Security Calculation Agent;

- (d) any event, as determined by the Security Calculation Agent, as a result of which we or any of our affiliates or a similarly situated party would, after using commercially reasonable efforts, be unable to, or would incur a materially increased amount of tax, duty, expense or fee (other than brokerage commissions) to, acquire, establish, substitute, maintain, unwind or dispose of any transaction or asset it deems necessary to hedge the risk of the Securities, or realize, recover or remit the proceeds of any such transaction or asset; or
- (e) as determined by the Security Calculation Agent, the primary exchange or market for trading for the Securities, if any, announces that pursuant to the rules of such exchange or market, as applicable, the Securities cease (or will cease) to be listed, traded or publicly quoted on such exchange or market, as applicable, for any reason and are not immediately re-listed, re-traded or re-quoted on an exchange or quotation system located in the same country as such exchange or market, as applicable Notwithstanding these alternative arrangements, discontinuation of the publication of the Index or successor index, as applicable, may adversely affect the value of the Securities.

If at any time the method of calculating the Index or a successor index, or the value thereof, is changed in a material respect, or if the Index or a successor index is in any other way modified so that the Index Closing Level of the Index or such successor index does not, in the opinion of the Security Calculation Agent, fairly represent the Index Closing Level of the Index or such successor index had such changes or modifications not been made, then the Security Calculation Agent will make such calculations and adjustments as, in the good faith judgment of the Security Calculation Agent, may be necessary in order to arrive at an Index Closing Level of an index comparable to the Index or such successor index, as the case may be, as if such changes or modifications had not been made, and the Security Calculation Agent will calculate the Index Closing Level for the Index or such successor index with reference to the Index or such successor index, as adjusted. The Security Calculation Agent will accordingly calculate the Index Closing Level, the Index Valuation Level, the Index Performance Ratio, the Coupon Amount, the Reference Distribution Amount, the Stub Reference Distribution Amount, if any, the Accrued Fees, the Redemption Fee Amount, if any, the Cash Settlement Amount, if any, that we will pay you at maturity, the Redemption Amount, if any, upon early redemption, if applicable, the Call Settlement Amount, if any, that we will pay you in the event UBS calls the Securities, the Acceleration Amount that we will pay you in the event of an optional acceleration upon minimum indicative value, if applicable, the Loss Rebalancing Closing Level, if any, the Monthly Initial Closing Level and all related payment terms based on the Index Closing Level calculated by the Security Calculation Agent, as adjusted. Accordingly, if the method of calculating the Index or a successor index is modified so that the level of the Index or such successor index is a fraction of what it would have been if there had been no such modification (e.g., due to a split in the Index), which, in turn, causes the Index Closing Level of the Index or such successor index to be a fraction of what it would have been if there had been no such modification, then the Security Calculation Agent will make such calculations and adjustments in order to arrive at an Index Closing Level for the Index or such successor index as if it had not been modified (e.g., as if such split had not

In the event that the Security Calculation Agent elects to replace the Index with a successor index or a Substitute Index, UBS may, in its sole discretion, amend the title of the Securities in order to remove reference the former Index and to make such other changes to the title of the Securities as it considers necessary or desirable to reflect the name and/or characteristics of the relevant successor index or Substitute Index, as applicable.

All determinations and adjustments to be made by the Security Calculation Agent may be made in the Security Calculation Agent's sole discretion. See "Risk Factors — There are potential conflicts of interest between you and the Security Calculation Agent" in the prospectus supplement for a discussion of certain conflicts of interest which may arise with respect to the Security Calculation Agent.

# **Manner of Payment and Delivery**

Any payment on or delivery of the Securities at maturity, call or acceleration, or upon early redemption, will be made to accounts designated by you and approved by us, or at the corporate trust office of the trustee in New York City, but only when the Securities are surrendered to the trustee at that office. We also may make any payment or delivery in accordance with the applicable procedures of the depositary.

# **Business Day**

When we refer to a Business Day or a New York Business Day with respect to the Securities, we mean a day that is a Business Day of the kind described in "Description of Debt Securities We May Offer — Payment Mechanics for Debt Securities" in the accompanying prospectus.

### **Modified Business Day**

As described in "Description of Debt Securities We May Offer — Payment Mechanics for Debt Securities" in the attached prospectus, any payment on the Securities that would otherwise be due on a day that is not a Business Day may instead be paid on the next day that is a Business Day, with the same effect as if paid on the original due date, except as described under "— Cash Settlement Amount at Maturity," "— UBS's Call Right" and "— Early Redemption at the Option of the Holders" above.

## **Reissuances or Reopened Issues**

We may, at our sole discretion, "reopen" or reissue the Securities. We issued the Securities initially in an amount having the aggregate Stated Principal Amount specified on the cover of the prospectus supplement. We may issue additional Securities in amounts that exceed the amount on the cover at any time, without your consent and without notifying you. The Securities do not limit our ability to incur other indebtedness or to issue other securities. Also, we are not subject to financial or similar restrictions by the terms of the Securities. For more information, please refer to "Description of Debt Securities We May Offer — Amounts That We May Issue" in the accompanying prospectus.

These further issuances, if any, will be consolidated to form a single class with the originally issued Securities and will have the same CUSIP number and will trade interchangeably with the Securities immediately upon settlement. Any additional issuances will increase the aggregate Stated Principal Amount of the outstanding Securities of the class. The price of any additional offering will be determined at the time of pricing of that offering.

## **Booking Branch**

The Securities will be booked through UBS AG, London Branch.

#### **Clearance and Settlement**

The DTC participants that hold the Securities through DTC on behalf of investors will follow the settlement practices applicable to equity securities in DTC's settlement system with respect to the primary distribution of the Securities and secondary market trading between DTC participants.

# 7. ETRACS 2xMonthly Pay Leveraged Preferred Stock Index ETN due September 25, 2048

## **Specific Terms of the Securities**

In this section, references to "holders" or "you" mean those who own the Securities registered in their own names, on the books that we or the trustee maintain for this purpose, and not those who own beneficial interests in the Securities registered in street name or in the Securities issued in book-entry form through The Depository Trust Company ("DTC") or another depositary. Owners of beneficial interests in the Securities should read the section entitled "Legal Ownership and Book-Entry Issuance" under "Medium-Term Notes, Series B" above.

These Securities are part of a series of UBS AG debt securities entitled "Medium-Term Notes, Series B" that we may issue, from time to time, under the indenture more particularly described under "Medium-Term Notes, Series B" above. This section summarizes general financial and other terms that apply to the Securities. Terms that apply generally to all Medium-Term Notes, Series B are described under "Medium-Term Notes, Series B" above. The terms described here supplement those described under "Medium-Term Notes, Series B" above and, if the terms described here are inconsistent with those described there, the terms described here are controlling.

The Securities are part of a single series of senior debt securities issued under our indenture, dated as of June 12, 2015 between us and U.S. Bank Trust National Association, as trustee.

We describe the terms of the Securities in more detail below.

The Stated Principal Amount of each Security is \$25.00.

The Securities do not guarantee any return of principal at, or prior to, maturity, call or acceleration, or upon early redemption. Instead, at maturity, you will receive a cash payment per Security the amount of which will vary depending on the performance and path of the Index and will be reduced by the Accrued Fees as of the last Index Business Day in the Final Measurement Period as described under "— Cash Settlement Amount at Maturity." If the amount as calculated is equal to or less than zero, the Cash Settlement Amount will be zero and you will not receive a cash payment.

If you exercise your right to have us redeem your Securities, subject to compliance with the redemption procedures, for each Security you will receive a cash payment per Security on the relevant Redemption Date equal to the Redemption Amount as described under "— Early Redemption at the Option of the Holders." If the amount as calculated is equal to or less than zero, the Redemption Amount will be zero and you will not receive a cash payment.

# **Coupon Payment**

For each Security you hold on the applicable Coupon Record Date, on each Coupon Payment Date you will receive an amount in cash equal to the Reference Distribution Amount, calculated as of the corresponding Coupon Valuation Date (the "Coupon Amount").

If the Reference Distribution Amount on such Coupon Valuation Date is zero, you will not receive any Coupon Amount on the related Coupon Payment Date. The final Coupon Amount will be included in the Cash Settlement Amount if on the last Index Business Day in the Final Measurement Period the Coupon Ex-Date with respect to the final Coupon Amount has not yet occurred.

The "Coupon Payment Date" means the fifteenth (15th) Index Business Day following each Coupon Valuation Date. The final Coupon Payment Date will be the Maturity Date, subject to adjustment as described herein. The first Coupon Payment Date will be October 22, 2018, subject to adjustment as provided herein.

The "Coupon Record Date" means the ninth Index Business Day following each Coupon Valuation Date.

The "Coupon Ex-Date," with respect to a Coupon Amount, means the first Exchange Business Day on which the Securities trade without the right to receive such Coupon Amount. Under current NYSE Arca practice, the Coupon Ex-Date will generally be the Exchange Business Day prior to the applicable Coupon Record Date.

The "Coupon Valuation Date" means the 30th day of each month, and the 28th day of February, of each calendar year during the term of the Securities or if such date is not an Index Business Day, then the first Index Business Day following such date, provided that the final Coupon Valuation Date will be the Calculation Date, subject to adjustment described herein. The first Coupon Valuation Date was October 1, 2018.

The "Reference Distribution Amount" means (i) as of the first Coupon Valuation Date, an amount equal to the gross cash distributions that a Reference Holder would have been entitled to receive in respect of the Index Constituent Securities held by such Reference Holder on the record date with respect to any Index Constituent Security, for those cash distributions whose ex-dividend date occurs during the period from, but excluding, the Initial Trade Date to, and including, the first Coupon Valuation Date; (ii) as of any other Coupon Valuation Date (other than the Calculation Date), an amount equal to the gross cash distributions that a Reference Holder would have been entitled to receive in respect of the Index Constituent Securities held by such Reference Holder on the record date with respect to any Index Constituent Security for those cash distributions whose ex-dividend date occurs during the period from, but excluding, the immediately preceding Coupon Valuation Date to, and including, such Coupon Valuation Date; and (iii) as of the Calculation Date, an amount equal to the gross cash distributions that a Reference Holder would have been entitled to receive in respect of the Index Constituent Securities held by such Reference Holder on the record date with respect to any Index Constituent Security for those cash distributions whose exdividend date occurs during the period from, but excluding, the immediately preceding Coupon Valuation Date to, but excluding, the Calculation Date.

Notwithstanding the foregoing, with respect to cash distributions for an Index Constituent Security which is scheduled to be paid prior to the applicable Coupon Ex-Date, if, and only if, the issuer of such Index Constituent Security fails to pay the distribution to holders of such Index Constituent Security by the scheduled payment date for such distribution, such distribution will be assumed to be zero for the purposes of calculating the applicable Reference Distribution Amount.

The "**Reference Holder**" is, as of any date of determination, a hypothetical holder of a number of units of each Index Constituent Security equal to two *times* (a) the product of (i) the published unit weighting of that Index Constituent Security as of that date and (ii) the Current Principal Amount, *divided* by (b) the Monthly Initial Closing Level or Loss Rebalancing Closing Level, whichever is more recent.

"record date" means, (i) with respect to a distribution on an Index Constituent Security, the date on which a holder of the Index Constituent Security must be registered as a stockholder/unitholder of such Index Constituent Security in order to be entitled to receive such distribution and (ii) with respect to any split or reverse split, the tenth Business Day after the announcement date.

"ex-dividend date" means, with respect to a distribution on an Index Constituent Security, the first Business Day on which transactions in such Index Constituent Security trade on the Primary Exchange without the right to receive such distribution.

## **Cash Settlement Amount at Maturity**

The "Maturity Date" is September 25, 2048, which will be the second Business Day following the last Index Business Day in the Final Measurement Period, subject to adjustment as described below under "— Market Disruption Event."

For each Security, unless earlier called, redeemed or accelerated, you will receive at maturity a cash payment equal to:

- (a) the product of
  - (i) the Current Principal Amount and (ii) the Index Factor as of the last Index Business Day in the Final Measurement Period, *plus*
- (b) the final Coupon Amount, if on the last Index Business Day in the Final Measurement Period the Coupon Ex-Date with respect to the final Coupon Amount has not yet occurred, *minus*
- (c) the Accrued Fees as of the last Index Business Day in the Final Measurement Period, plus
- (d) the Stub Reference Distribution Amount as of the last Index Business Day in the Final Measurement Period, if any.

We refer to this cash payment as the "Cash Settlement Amount."

If the amount so calculated is equal to or less than zero, the payment at maturity will be zero.

The following graphic illustrates the formula to determine the Cash Settlement Amount, which has been simplified for ease of presentation.

You may lose all or a substantial portion of your investment at maturity. The combined negative effect of the Accrued Fees will reduce your final payment. If the compounded leveraged monthly return of the Index is insufficient to offset the negative effect of the Accrued Fees (less any Coupon Amounts and/or any Stub Reference Distribution Amount, as applicable, you may be entitled to receive), or if the compounded leveraged monthly return of the Index is negative, you may lose all or a substantial portion of your investment at maturity.

The Securities may be called by UBS prior to the Maturity Date pursuant to UBS's Call Right and, upon the occurrence of an acceleration event, the Securities may be accelerated and redeemed by UBS, at its option. See "Specific Terms of the Securities — UBS's Call Right" and "Specific Terms of the Securities — Optional Acceleration Upon Minimum Indicative Value" below.

The Stated Principal Amount of each Security is \$25.00. The Securities may be issued and sold over time at then-current market prices which may be significantly higher or lower than the Stated Principal Amount.

The Current Principal Amount for the period from the Initial Settlement Date to September 30, 2018 (such period, the "initial calendar month") is equal to \$25.00 per Security (unless a Loss Rebalancing Event occurs during the initial calendar month). For each subsequent calendar month, the Current Principal Amount for each Security will be reset as follows on the Monthly Reset Date:

New Current Principal Amount = previous Current Principal Amount  $\times$  Index Factor on the applicable Monthly Valuation Date — Accrued Fees on the applicable Monthly Valuation Date

In the event of a Loss Rebalancing Event, the Current Principal Amount will be reset on the applicable Loss Rebalancing Reset Date as described below under "— Loss Rebalancing Events".

If a day that would otherwise be a Monthly Reset Date falls within a Measurement Period, then the Current Principal Amount will not be reset on such date and no further Monthly Reset Dates will occur during the term of the Securities.

If the Securities undergo a split or reverse split, the Current Principal Amount will be adjusted accordingly.

For each calendar month, the "Monthly Reset Date" is the first Exchange Business Day of that month beginning on October 1, 2018 and ending on September 1, 2048, subject to adjustment as described under "— Market Disruption Event." If a day that would otherwise be a Monthly Reset Date falls within a Measurement Period, as applicable, then the Current Principal Amount will not be reset on such date and no further Monthly Reset Dates will occur during the term of the Securities.

For each Monthly Reset Date, the "Monthly Valuation Date" is the last Exchange Business Day of the previous calendar month beginning on September 30, 2018 and ending on August 31, 2048, subject to adjustment as described under "— Market Disruption Event." If a day that would otherwise be a Monthly Reset Date falls within a Measurement Period, then the Current Principal Amount will not be reset on such date and no further Monthly Reset Dates or Monthly Valuation Dates will occur during the term of the Securities.

The "Index Factor" is:  $1 + (2 \times Index Performance Ratio)$ .

The "Index Performance Ratio" may be calculated on multiple dates of determination during any applicable calendar month. The formula used to calculate the Index Performance Ratio on any date of determination depends on the number of Loss Rebalancing Events that have occurred in the applicable calendar month.

If no Loss Rebalancing Events have occurred in the applicable calendar month, then on any Index Business Day during a Measurement Period, or on the Monthly Valuation Date, any Redemption Valuation Date, the first Loss Rebalancing Valuation Date of the applicable calendar month or any other date of determination, as applicable, the Index Performance Ratio will be equal to:

# <u>Index Valuation Level – Monthly Initial Closing Level</u> Monthly Initial Closing Level

where the "Monthly Initial Closing Level" for the initial calendar month is 97.6983, the Index Closing Level on September 25, 2018. For each subsequent calendar month, the Monthly Initial Closing Level will equal the Index Closing Level on the Monthly Valuation Date for the previous calendar month. For example, the Monthly Initial Closing Level for October 2018 is equal to the Index Closing Level on September 30, 2018, subject to adjustment. If a day that would otherwise be a Monthly Reset Date falls within a Measurement Period, then the Current Principal Amount will not be reset on such date and the Monthly Initial Closing Level for the then-current calendar month will remain the same as it was for the immediately preceding calendar month.

If one or more Loss Rebalancing Events have occurred during the applicable calendar month, then on any Index Business Day during a Measurement Period, or on the Monthly Valuation Date, any Redemption Valuation Date, on each Loss Rebalancing Valuation Date after the first Loss Rebalancing Valuation Date in the applicable calendar month or on any other date of determination, as applicable, the Index Performance Ratio will be equal to:

<u>Index Valuation Level – the most recent Loss Rebalancing Closing Level</u> the most recent Loss Rebalancing Closing Level

The "Index Closing Level" will equal the closing level of the Index on any date of determination, as reported on the NYSE and Bloomberg L.P.

The "Index Valuation Level", as determined by the Security Calculation Agent will equal the arithmetic mean of the Index Closing Levels measured on each Index Business Day during the applicable Measurement Period, or the Index Closing Level on any Monthly Valuation Date, Loss Rebalancing Valuation Date or Redemption Valuation Date, provided that if the Redemption Valuation Date falls in any Measurement Period, for the purposes of calculating the Index Performance Ratio as of the Redemption Valuation Date, the Index Valuation Level on any date of determination during such Measurement Period shall equal (a) 1/5 times (b) (i) the sum of the Index Closing Levels on each Index Business Day from, and including, the first Index Business Day of the applicable Measurement Period, to, and including, the date of determination, plus (ii) the number of Index Business Days from, but excluding, the date of determination to, and including, the last Index Business Day in such Measurement Period, times the Index Closing Level on such date of determination.

"Measurement Period" means the Final Measurement Period, Call Measurement Period or Acceleration Valuation Period, as applicable.

The "intraday indicative value", or "Indicative Value" is an amount per Security, as determined by the Security Calculation Agent as of any date of determination equal to (Current Principal Amount on the previous calendar day × Index Factor, calculated using the intraday indicative value of the Index) — Accrued Fees + Coupon Amount with respect to the Coupon Valuation Date immediately preceding the date of determination if on the date of determination the Coupon Ex-Date with respect to such Coupon Amount has not yet occurred + Reference Distribution Amount, calculated as if such time and date of determination is a Coupon Valuation Date.

The "Current Indicative Principal Amount", is an amount per Security, as determined by the Security Calculation Agent as of any date of determination, equal to the product of (i) the Current Principal Amount and (ii) the Index Factor as of such date, using the Index Closing Level as of such date as the Index Valuation Level.

The "Accrued Fees" as of any date of determination means the sum of (1) the Accrued Tracking Fee as of such date and (2) the Accrued Financing Charges as of such date.

The Securities are subject to an "Accrued Tracking Fee" per Security, calculated as follows:

- (a) On the Initial Trade Date, the Accrued Tracking Fee is equal to 0.
- (b) On the initial Monthly Valuation Date (or if applicable, on a Loss Rebalancing Date that occurs prior to the initial Monthly Valuation Date), the Accrued Tracking Fee is an amount equal to the product of: (a) the Annual Tracking Fee as of the initial Monthly Valuation Date and (b) a fraction, the numerator of which is the total number of calendar days from, but excluding, the Initial Trade Date to, and including, the initial Monthly Valuation Date (or Loss Rebalancing Date, as applicable), and the denominator of which is 365.
- (c) On any subsequent Monthly Valuation Date other than the Initial Monthly Valuation Date or on any Loss Rebalancing Date, the Accrued Tracking Fee is an amount equal to the product of (a) the Annual Tracking Fee as of such Monthly Valuation Date or Loss Rebalancing Date, as the case may be, and (b) a fraction, the numerator of which is the total number of calendar days from, but excluding, the immediately preceding Monthly Valuation Date (or Loss Rebalancing Date, whichever is more recent), to, and including, such Monthly Valuation Date or Loss Rebalancing Date, as the case may be, and the denominator of which is 365.
- (d) On the last Exchange Business Day of an applicable Measurement Period, or as of the Redemption Valuation Date, as applicable, the Accrued Tracking Fee is an amount equal to the product of (a) the Annual Tracking Fee calculated as of the last Exchange Business Day of the applicable Measurement Period, or as of the Redemption Valuation Date, as applicable, and (b) a fraction, the numerator of which is the total number of calendar days from, but excluding, the immediately preceding Monthly Valuation Date (or Loss Rebalancing Date, whichever is more recent), to, and including, (i) such last Exchange Business Day of such Measurement Period, or (ii) such Redemption Valuation Date (or, if the Optional Acceleration Date or Redemption Valuation Date occurs prior to the initial Monthly Valuation Date, the period from, and excluding, the Initial Trade Date), as applicable, and the denominator of which is 365.

The "Annual Tracking Fee" is, as of any date of determination, an amount per Security equal to the product of (i) the Annual Tracking Rate and (ii) the Current Indicative Principal Amount as of the immediately preceding Index Business Day.

The "Annual Tracking Rate" is 0.85%. The Securities are subject to "Accrued Financing Charges" per Security calculated as follows:

- (a) On the Initial Trade Date, the Accrued Financing Charge for each Security is equal to \$0.
- (b) On the initial Monthly Valuation Date (or if applicable, on a Loss Rebalancing Date that occurs prior to the initial Monthly Valuation Date), the Accrued Financing Charge for each Security will equal (a) the aggregate sum of (i) the Financing Level as of each date starting from, but excluding, the Initial Trade Date, to and including the initial Monthly Valuation Date (or Loss Rebalancing Date, whichever is more recent) *times* (ii) the Financing Rate as of such date, *divided by* (b) 360.
- (c) On any subsequent Monthly Valuation Date, the Accrued Financing Charge for each Security will equal (a) the aggregate sum of (i) the Financing Level as of each date starting from, but excluding, the immediately preceding Monthly Valuation Date (or Loss Rebalancing Valuation Date, whichever is more recent), to and including, the then current Monthly Valuation Date *times* (ii) the Financing Rate as of such date, *divided by* (b) 360.
- (d) On the last Index Business Day of an applicable Measurement Period, or as of the Redemption Valuation Date, as applicable, the Accrued Financing Charge for each Security will equal (a) the aggregate sum of (i) the Financing Level as of each date starting from, but excluding, the immediately preceding Monthly Valuation Date (or Loss Rebalancing Valuation Date, or, if the Redemption Valuation Date falls in the Initial Calendar Month, the Initial Trade Date, whichever is more recent), to, and including such last Index Business Day in such Measurement Period, or such Redemption Valuation Date, as applicable, *times* (ii) the Financing Rate as of such date, *divided by* (b) 360.

"CME Term SOFR" means the CME Term SOFR Reference Rates published for one-, three-, six-, and 12-month tenors as administered by CME Group Benchmark Administration, Ltd. (or any successor administrator thereof).

The "Financing Level" is, as of any date of determination, an amount that equals the Current Principal Amount.

The "Financing Rate" will equal the sum of (a) the "Financing Spread" of 0.80% and (b) the three-month CME Term SOFR rate plus a 0.2616% adjustment, on the day that is two U.S. Government Securities Business Days prior to the immediately preceding Monthly Valuation Date.

The Accrued Financing Charges seek to compensate UBS for providing investors with the potential to receive a leveraged participation in movements in the Index Closing Level and are intended to approximate the monthly financing costs that investors may have otherwise incurred had they sought to borrow funds at a similar rate from a third party to invest in the Securities.

The "Final Measurement Period" means the five Index Business Days from, and including, the Calculation Date, subject to adjustment as described under "— Market Disruption Event."

The "Stub Reference Distribution Amount" means, as of the last Index Business Day in a Measurement Period, an amount equal to the gross cash distributions that a Reference Holder would have been entitled to receive in respect of the Index Constituent Securities held by such Reference Holder on the "record date" with respect to any Index Constituent Security, for those cash distributions whose "ex-dividend date" occurs during the period from, but excluding, the immediately preceding Coupon Valuation Date (or if such Redemption Valuation Date or the Optional Acceleration Date occurs prior to the first Coupon Valuation Date, the period from but excluding the Initial Trade Date) to, and including, such last Index Business Day of such Measurement Period, or such Redemption Valuation Date, as applicable; provided, that for the purpose of calculating the Stub Reference Distribution Amount, the Reference Holder will be deemed to hold four-fifths, three-fifths, two-fifths and one-fifth of the shares of each Index Constituent Security it would otherwise hold on the second, third, fourth and fifth Index Business Day, respectively, in such Measurement Period.

The "Index Calculation Agent" means the entity that calculates and publishes the level of the Index, which is currently Solactive.

The "Calculation Date" means September, 17, 2048, unless such day is not an Index Business Day, in which case the Calculation Date will be the next Index Business Day, subject to adjustments.

"Index Business Day" means any day on which the Primary Exchange and each Related Exchange are scheduled to be open for trading.

"Exchange Business Day" means any day on which the Primary Exchange or market for trading of the Securities is scheduled to be open for trading.

"Primary Exchange" means, with respect to each Index Constituent Security or each constituent underlying a successor index, the primary exchange or market of trading such Index Constituent Security or such constituent underlying a successor index.

"Related Exchange" means, with respect to each Index Constituent Security or each constituent underlying a successor index, each exchange or quotation system where trading has a material effect (as determined by the Security Calculation Agent) on the overall market for futures or options contracts relating to such Index Constituent Security or such constituent underlying a successor index.

"U.S. Government Securities Business Day" means any day except for a Saturday, a Sunday or a day on which the Securities Industry and Financial Markets Association recommends that the fixed income departments of its members be closed for the entire day for purposes of trading in U.S. government securities.

# **Underlying Index**

The return on the Securities is linked to the performance of the Solactive Preferred Stock ETF Index ("SOLPRF"). The Index is intended to track the price movements of an equally weighted portfolio of two ETFs that hold preferred securities of various issuers. We refer to the ETFs included in the Index as the "Index Constituent Securities." The Index Sponsor is Solactive AG ("Solactive" or the "Index Sponsor").

# Early Redemption at the Option of the Holders

Subject to your compliance with the procedures described below and the potential postponements and adjustments as described under "— Market Disruption Event," you may submit a request to have us redeem your Securities on any Index Business Day no later than 4:00 p.m., New York City time, and a confirmation of redemption by no later than 5:00 p.m., New York City time, on any applicable Index Business Day, provided that you request that we redeem a minimum of 50,000 Securities. We reserve the right from time to time to waive this minimum redemption amount in our sole discretion on a case-by-case basis. You should not assume you will be entitled to the benefit of any such waiver. For any applicable redemption request, the "Redemption Valuation Date" will be the first Index Business Day following the date that the applicable redemption notice and redemption confirmation are delivered, except that we reserve the right from time to time to accelerate, in our sole discretion on a case-by-case basis, the Redemption Valuation Date to the date on which the notice of redemption is received by UBS rather than the following Index Business Day. You should not assume you will be entitled to the benefit of any such acceleration. To satisfy the minimum redemption amount, your broker or other financial intermediary may bundle your Securities for redemption with those of other investors to reach this minimum amount of 50,000 Securities.

The Securities will be redeemed and the holders will receive payment for their Securities on the second Index Business Day following the applicable Redemption Valuation Date (the "**Redemption Date**"). The first Redemption Date was October 2, 2018, and the final Redemption Date will be September 18, 2048.

In addition, if a call notice has been issued or if acceleration has been triggered, the last Redemption Valuation Date will be the fifth Index Business day prior to the Call Settlement Date or Acceleration Settlement Date, as applicable. If a Market Disruption Event is continuing or occurs on the applicable scheduled Redemption Valuation Date with respect to any of the Index Constituent Securities, such Redemption Valuation Date may be postponed as described under "— Market Disruption Event."

As of any Redemption Valuation Date, the "Redemption Fee Amount" means an amount per Security equal to:

(0.125% × Closing Indicative Value of the Security as of the Redemption Valuation Date).

If you exercise your right to have us redeem your Securities, subject to your compliance with the procedures described under "— Redemption Procedures," for each applicable Security you will receive a cash payment on the relevant Redemption Date equal to:

Closing Indicative Value as of the Redemption Valuation Date — Redemption Fee Amount.

We refer to this cash payment as the "**Redemption Amount**." If the amount calculated above is equal to or less than zero, the payment upon early redemption will be zero. We reserve the right from time to time to waive the Redemption Fee Amount in our sole discretion and on a case-by-case basis. There can be no assurance that we will elect to waive this fee and you should not assume you will be entitled to such fee waiver.

We will inform you of such Redemption Amount on the first Business Day following the applicable Redemption Valuation Date.

The redemption feature is intended to induce arbitrageurs to counteract any trading of the Securities at a discount to their indicative value, though there can be no assurance that arbitrageurs will employ the redemption feature in this manner or that they will be successful in counteracting any divergence in the market price of the Securities and their indicative value.

The following graphic illustrates the formula to determine the Redemption Amount, which has been simplified for ease of presentation.

Closing	Redemption Fe	ee
Indicative Value	— Amount	

You may lose all or a substantial portion of your investment upon early redemption. The combined negative effect of the Accrued Fees and the Redemption Fee Amount will reduce your final payment. If the compounded leveraged monthly return of the Index is insufficient to offset the negative effect of the Accrued Fees and the Redemption Fee Amount, if applicable (less any Coupon Amounts and/or any Stub Reference Distribution Amount you may be entitled to receive as of the Redemption Valuation Date), or if the compounded leveraged monthly return of the Index is negative, you may lose all or a substantial portion of your investment upon early redemption.

The Securities may be called by UBS prior to the Maturity Date pursuant to UBS's Call Right and, upon the occurrence of an acceleration event, the Securities may be accelerated and redeemed by UBS, at its option. See "Specific Terms of the Securities — UBS's Call Right" and "Specific Terms of the Securities — Optional Acceleration Upon Minimum Indicative Value" below.

We discuss these matters in "Medium-Term Notes, Series B" under "Description of Debt Securities We May Offer — Redemption and Payment."

The Redemption Amount is meant to induce arbitrageurs to counteract any trading of the Securities at a premium or discount to their indicative value, though there can be no assurance that arbitrageurs will employ the redemption feature in this manner.

# **Redemption Procedures**

To redeem your Securities, you must instruct your broker or other person through whom you hold your Securities to take the following steps through normal clearing system channels:

- deliver a notice of redemption, which we refer to as a "**Redemption Notice**," to UBS via email no later than 4:00 p.m. (New York City time) on the Index Business Day on which you elect to exercise your redemption right. If we receive your Redemption Notice by the time specified in the preceding sentence, we will respond by sending you a form of confirmation of redemption;
- deliver the signed confirmation of redemption, which we refer to as the "**Redemption Confirmation**", to us via email in the specified form by 5:00 p.m. (New York City time) on the same day. We or our affiliate must acknowledge receipt in order for your Redemption Confirmation to be effective;
- instruct your DTC custodian to book a delivery vs. payment trade with respect to your Securities on the applicable Redemption Valuation Date at a price equal to the Redemption Amount; and
- cause your DTC custodian to deliver the trade as booked for settlement via DTC at or prior to 12:00 noon (New York City time) on the applicable Redemption Date.

Different brokerage firms may have different deadlines for accepting instructions from their customers. Accordingly, as a beneficial owner of the Securities, you should consult the brokerage firm through which you own your interest for the relevant deadline. If your broker delivers your Redemption Notice after 4:00 p.m. (New York City time), or your Redemption Confirmation after 5:00 p.m. (New York City time), on the Business Day prior to the applicable Redemption Valuation Date, your Redemption Notice will not be effective, you will not be able to redeem your Securities until the following Redemption Date and your broker will need to complete all the required steps if you should wish to redeem your Securities on any subsequent Redemption Date. In addition, UBS may request a medallion signature guarantee or such assurances of delivery as it may deem necessary in its sole discretion. All instructions given to participants from beneficial owners of Securities relating to the right to redeem their Securities will be irrevocable.

We reserve the right from time to time to waive the minimum redemption amount or the Redemption Fee Amount in our sole discretion on a case-by-case basis. In addition, we reserve the right from time to time to accelerate, in our sole discretion on a case-by-case basis, the Redemption Valuation Date to the date on which the Redemption Notice is received by UBS rather than the following Index Business Day. You should not assume you will be entitled to the benefit of any such waiver or election to accelerate the Redemption Valuation Date.

## **UBS's Call Right**

We have the right to redeem all, but not less than all, of the Securities upon not less than eighteen (18) calendar days' prior notice to the holders of the Securities (which may be provided via press release), such redemption to occur on any Business Day that we may specify on or after September 30, 2019 through and including the Maturity Date. Upon early redemption in the event we exercise this right, you will receive a cash payment equal to

- (a) the product of
  - (i) the Current Principal Amount and (ii) the Index Factor as of the last Index Business Day in the Call Measurement Period, *plus*
- (b) the Coupon Amount with respect to the Coupon Valuation Date immediately preceding the Call Valuation Date if on the last Index Business Day in the Call Measurement Period the Coupon Ex-Date with respect to such Coupon Amount has not yet occurred, *minus*
- (c) the Accrued Fees as of the last Index Business Day in the Call Measurement Period, plus
- (d) the Stub Reference Distribution Amount as of the last Index Business Day in the Call Measurement Period, if any.

We refer to this cash payment as the "Call Settlement Amount."

If the amount calculated above is equal to or less than zero, the payment upon UBS's exercise of its Call Right will be zero.

We will inform you of such Call Settlement Amount on the first Business Day following the last Index Business Day in the Call Measurement Period.

The holders will receive payment for their Securities on the second Business Day following the last Index Business Day in the Call Measurement Period (the "Call Settlement Date"). If a Market Disruption Event is continuing or occurs on the scheduled Call Valuation Date with respect to any of the Index Constituent Securities, such Call Valuation Date may be postponed as described under "— Market Disruption Event."

#### The "Call Measurement Period" means:

- (a) if the Market Value of Securities outstanding as at the close of business on the Exchange Business Day immediately preceding the date of delivery by UBS of its notice to holders (which may be provided via press release) of its exercise of the UBS Call Right is less than \$50,000,000, the Call Valuation Date, subject to adjustments as described under "— Market Disruption Event";
- (b) if the Market Value of Securities outstanding as at the close of business on the Exchange Business Day immediately preceding the date of delivery by UBS of its notice to holders (which may be provided via press release) of its exercise of the UBS Call Right is equal to or greater than \$50,000,000, the five (5) Index Business Days from and including the Call Valuation Date, subject to adjustments as described under "— Market Disruption Event."

The "Market Value" of the Securities outstanding as of the close of business on the Exchange Business Day immediately preceding the date of delivery by UBS of its notice to holders (which may be provided via press release) of its exercise of the UBS Call Right will equal:

Intraday indicative value as of such Exchange Business Day × number of Securities outstanding as reported by PFFLSO <Index> on Bloomberg.

The "Call Valuation Date" means the date disclosed as such by UBS in its notice to holders (which may be provided via press release) of its exercise of the UBS Call Right.

In any notice to holders exercising the UBS Call Right, we will specify how many days are included in the Call Measurement Period.

The following graphic illustrates the formula to determine the Call Settlement Amount, which has been simplified for ease of presentation.

You may lose all or a substantial portion of your investment upon a call. The combined negative effect of the Accrued Fees will reduce your final payment. If the compounded leveraged monthly return of the Index is insufficient to offset the negative effect of the Accrued Fees (less any Coupon Amounts and/or any Stub Reference Distribution Amount, as applicable, you may be entitled to receive), or if the compounded leveraged monthly return of the Index is negative, you may lose all or a substantial portion of your investment upon a call.

In addition, upon the occurrence of an acceleration event, the Securities may be accelerated and redeemed by UBS, at its option. See "Specific Terms of the Securities — Optional Acceleration Upon Minimum Indicative Value" below.

# **Optional Acceleration Upon Minimum Indicative Value**

If, at any time, the intraday indicative value of the Securities on any Index Business Day equals \$2.00 or less (the "Indicative Value Optional Acceleration Trigger") (each such day, an "Optional Acceleration Date"), all issued and outstanding Securities may be accelerated and redeemed by UBS, at its option (even if the intraday indicative value would later exceed \$2.00 on such Optional Acceleration Date or any subsequent Index Business Day) for a cash payment equal to the Acceleration Amount (the "Acceleration Option").

In the event that the Indicative Value Optional Acceleration Trigger threshold has been breached, UBS will issue a press release before 9:00 a.m. on the Index Business Day following the Optional Acceleration Date announcing whether or not it has elected to exercise its Acceleration Option. UBS is under no obligation to exercise its Acceleration Option and the Securities may remain outstanding following an Indicative Value Optional Acceleration Trigger Event occurring, if UBS does not elect to exercise such Acceleration Option.

## The "Acceleration Amount" will equal

- (a) the product of
  - (i) the Current Principal Amount and (ii) the Index Factor as of the last Index Business Day in the Acceleration Valuation Period, *plus*
- (b) the Coupon Amount with respect to the Coupon Valuation Date immediately preceding the Optional Acceleration Date if on the last Index Business Day in the Acceleration Valuation Period the Coupon Ex-Date with respect to such Coupon Amount has not yet occurred, *minus*
- (c) the Accrued Fees as of the last Index Business Day in the Acceleration Valuation Period, plus
- (d) the Stub Reference Distribution Amount as of the last Index Business Day in the Acceleration Valuation Period, if any.

If the Acceleration Amount is equal to or less than zero, the payment upon acceleration will be zero.

If the Indicative Value Optional Acceleration Trigger threshold has been breached and UBS elects to exercise its Acceleration Option, you will receive on the Acceleration Settlement Date only the Acceleration Amount in respect of your investment in the Securities. The "Acceleration Settlement Date" will be the second Business Day following the last Index Business Day of the Acceleration Valuation Period. The "Acceleration Valuation Period" will be the five Index Business Days from, but excluding, the Optional Acceleration Date, subject to adjustment as described under "— Market Disruption Event." Subject to the prior verification by the Security Calculation Agent that the intraday indicative value of the Securities of \$2.00 or less was accurately calculated by the NYSE, UBS must provide notice (which may be provided via press release) to the holders of the Securities that the minimum indicative value threshold has been breached not less than five calendar days prior to the Acceleration Settlement Date. For a detailed description of how the minimum indicative value of the Securities is calculated see "Valuation of the Index and the Securities" below.

If the Securities undergo a split or reverse split, the Indicative Value Optional Acceleration Trigger will be adjusted accordingly.

The following graphic illustrates the formula to determine the Acceleration Amount, which has been simplified for ease of presentation.

You may lose all or a substantial portion of your investment upon acceleration. The combined negative effect of the Accrued Fees will reduce your final payment. If the compounded leveraged monthly return of the Index is insufficient to offset the negative effect of the Accrued Fees (less any Coupon Amounts and/or any Stub Reference Distribution Amount, as applicable, you may be entitled to receive), or if the compounded leveraged monthly return of the Index is negative, you may lose all or a substantial portion of your investment upon acceleration.

In addition, the Securities may be called by UBS prior to the Maturity Date pursuant to UBS's Call Right. See "Specific Terms of the Securities — UBS's Call Right".

## **Loss Rebalancing Events**

A Loss Rebalancing Event will have the effect of deleveraging your Securities with the aim of resetting the then-current leverage to approximately 2.0. This means that after a Loss Rebalancing Event, a constant percentage increase in the Index Closing Level will have less of a positive effect on the value of your Securities relative to before the occurrence of the Loss Rebalancing Event.

A "Loss Rebalancing Event" occurs if, at any time, the Intraday Index Value on any Index Business Day (other than an Excluded Day, as defined herein) decreases 20% in value from the previous Monthly Initial Closing Level or Loss Rebalancing Closing Level, whichever is more recent. If a Loss Rebalancing Event occurs, the Current Principal Amount of the Securities will be reset as described below, which will have the effect of deleveraging your Securities with the aim of resetting the thencurrent leverage to approximately 2.0. A Loss Rebalancing Event may occur irrespective of whether a Market Disruption Event also occurs on such Index Business Day.

Upon the occurrence of a Loss Rebalancing Event, the Current Principal Amount will be reset on the applicable Loss Rebalancing Reset Date as follows:

New Current Principal Amount = previous Current Principal Amount × Index Factor on the applicable Loss Rebalancing Valuation Date — Accrued Fees on the applicable Loss Rebalancing Valuation Date

In the event of a Loss Rebalancing Event, the Financing Rate will not be adjusted.

On the next Monthly Valuation Date following one or more Loss Rebalancing Events, the Monthly Initial Closing Level will be replaced with the most recent Loss Rebalancing Closing Level in the calculation of the Index Performance Ratio.

Loss Rebalancing Events may occur multiple times over the term of the Securities and may occur multiple times during a single calendar month. This means both that (i) the Current Principal Amount may be reset more frequently than monthly and (ii) the cumulative effect of compounding and fees will have increased as a result of the Loss Rebalancing Event(s). Because each Loss Rebalancing Event will have the effect of deleveraging your Securities, following a Loss Rebalancing Event your Securities will have less exposure to a potential positive gain in value relative to the exposure before the occurrence of such Loss Rebalancing Event.

On any Loss Rebalancing Valuation Date, the Accrued Financing Charges for each Security will equal the product of (i) the Financing Level on the immediately preceding Monthly Valuation Date or Loss Rebalancing Valuation Date, whichever is more recent, *times* (ii) the Financing Rate times (iii) the number of calendar days from, but excluding, the immediately preceding Monthly Valuation Date or Loss Rebalancing Valuation Date, whichever is more recent, to, and including, the then current Loss Rebalancing Valuation Date *divided by* (iv) 360.

An "Excluded Day" means (i) the Index Business Day immediately preceding any Monthly Valuation Date, (ii) any Monthly Valuation Date, (iii) any Loss Rebalancing Valuation Date (iv) the Index Business Day immediately preceding the first day of the Final Measurement Period or any day after such Index Business Day, (v) the Index Business Day immediately preceding the first day of the Call Measurement Period or any day after such Index Business Day, or (vi) the Optional Acceleration Date or any day after the Optional Acceleration Date.

"Loss Rebalancing Closing Level" means the Index Closing Level on the Loss Rebalancing Valuation Date.

"Loss Rebalancing Reset Date" means the first Index Business Day immediately following a Loss Rebalancing Valuation Date, subject to adjustment as described under "— Market Disruption Event."

## "Loss Rebalancing Valuation Date" means:

- if a Loss Rebalancing Event occurs at or prior to 3:15 p.m. on an Index Business Day, the day that such Loss Rebalancing Event occurs, subject to adjustment as described under "— Market Disruption Event";
- (b) if a Loss Rebalancing Event occurs after 3:15 p.m. on an Index Business Day, the first Index Business Day following the occurrence of such Loss Rebalancing Event, subject to adjustment as described under "— Market Disruption Event."

# **Security Calculation Agent**

UBS Securities LLC will act as the Security Calculation Agent. The Security Calculation Agent will be solely responsible for all determinations and calculations regarding the value of the Securities, including, among other things, at maturity or upon early redemption or call, or at other times, the Current Principal Amount, Current Indicative Principal Amount, intraday indicative value, Market Disruption Events, Business Days, Index Business Days, Exchange Business Days, the Index Factor, the Index Performance Ratio, the Index Valuation Level, the Financing Level, the Accrued Fees (including determining any successor to the LIBOR base rate), the Coupon Amount, the Reference Distribution Amount, the Stub Reference Distribution Amount, if any, the Accrued Fees, the Redemption Fee Amount, the Cash Settlement Amount, if any, that we will pay you at maturity, the Coupon Ex-Dates, the Coupon Record Dates, the Redemption Amount, if any, that we will pay you upon redemption, if applicable, the Acceleration Amount that we will pay you upon acceleration, the Call Settlement Amount, if any, that we will pay you in the event that UBS calls the Securities, whether a Loss Rebalancing Event has occurred and whether any day is a Business Day, Index Business Day or an Exchange Business Day and all such other matters as may be specified elsewhere herein as matters to be determined by the Security Calculation Agent. The Security Calculation Agent will also be responsible for determining whether the Index has been discontinued and whether there has been a material change in the Index. The Security Calculation Agent will make all such determinations and calculations in its sole discretion, and absent manifest error, all determinations of the Security Calculation Agent will be conclusive for all purposes and binding on us, you, and all other persons having an interest in the Security, without liability on the part of the Security Calculation Agent. You will not be entitled to any compensation from us for any loss suffered as a result of any determinations or calculations made by the Security Calculation Agent. We may appoint a different Security Calculation Agent from time to time without your consent and without notifying you.

The Security Calculation Agent will provide written notice to the trustee at its New York office, on which notice the trustee may conclusively rely, of the amount to be paid at maturity, call or acceleration, or upon early redemption, or on a Coupon Payment Date on or prior to 12:00 noon, New York City time, on the Business Day immediately preceding the Maturity Date, any Redemption Date, any Call Settlement Date, Acceleration Settlement Date or any Coupon Payment Date, as applicable.

All dollar amounts related to determination of the Coupon Amount, the Reference Distribution Amount, the Stub Reference Distribution Amount, if any, the Accrued Fees, the Redemption Amount and Redemption Fee Amount, if any, per Security, the Call Settlement Amount, if any, per Security, the Current Principal Amount, the Acceleration Amount, the Financing Level, and the Cash Settlement Amount, if any, per Security, will be rounded to the nearest ten-thousandth, with five one hundred-thousandths rounded upward (*e.g.*, .76545 would be rounded up to .7655); and all dollar amounts paid on the Stated Principal Amount of the Securities per holder will be rounded to the nearest cent, with one-half cent rounded upward.

# **Market Disruption Event**

To the extent a Market Disruption Event with respect to the Index has occurred or is continuing on an Averaging Date (as defined below), the Index Closing Level for such Averaging Date will be determined by the Security Calculation Agent or one of its affiliates on the first succeeding Index Business Day on which a Market Disruption Event does not occur or is not continuing (the "Deferred Averaging Date") with respect to the Index irrespective of whether, pursuant to such determination, the Deferred Averaging Date would fall on a date originally scheduled to be an Averaging Date. If the postponement described in the preceding sentence results in the Index Closing Level being calculated on a day originally scheduled to be an Averaging Date, for purposes of determining the Index Closing Level on any Averaging Date, the Security Calculation Agent or one of its affiliates, as the case may be, will apply the Index Closing Level for such Deferred Averaging Date (i) on the date(s) of the original Market Disruption Event and (ii) such Averaging Date. For example, if the applicable Measurement Period for purposes of calculating the Call Settlement Amount is based on the arithmetic mean of the Index Closing Levels on October 3, October 4, October 5, October 6 and October 7, and there is a Market Disruption Event with respect to the Index on October 4 will be used twice to calculate the Call Settlement Amount, and the Call Settlement Amount will be determined based on the arithmetic mean of the Index Closing Levels on October 4, October 5, October 6 and October 7. The same approach would be applied if there is a Market Disruption Event during any Measurement Period.

To the extent a Market Disruption Event with respect to the Index has occurred or is continuing on the Redemption Valuation Date or any Monthly Valuation Date or Loss Rebalancing Valuation Date, the Index Closing Level for such Redemption Valuation Date, Monthly Valuation Date or Loss Rebalancing Valuation Date, as applicable, will be determined by the Security Calculation Agent or one of its affiliates on the first succeeding Index Business Day on which a Market Disruption Event does not occur or is not continuing with respect to the Index. For example, if the Redemption Valuation Date, for purposes of calculating a Redemption Amount, is based on the Index Closing Level on October 3 and there is a Market Disruption Event with respect to the Index on October 3, then the Index Closing Level on October 4 will be used to calculate the Redemption Amount, assuming that no such Market Disruption Event has occurred or is continuing on October 4.

In no event, however, will any postponement pursuant to the two immediately preceding paragraphs result in the final Averaging Date or any Monthly Valuation Date, Redemption Valuation Date or Loss Rebalancing Valuation Date, as applicable, occurring more than three Index Business Days following the day originally scheduled to be such final Averaging Date or such Monthly Valuation Date, Redemption Valuation Date or Loss Rebalancing Valuation Date. If a Market Disruption Event has occurred or is continuing with respect to the Index on the third Index Business Day following the date originally scheduled to be the final Averaging Date or any Monthly Valuation Date, Redemption Valuation Date or Loss Rebalancing Valuation Date, as applicable, the Security Calculation Agent or one of its affiliates will determine the Index Closing Level based on its good faith estimate of the Index Closing Level that would have prevailed on such third Index Business Day but for such Market Disruption Event. If any Monthly Valuation Date or Loss Rebalancing Valuation Date is postponed as described above, the succeeding Monthly Reset Date or Loss Rebalancing Valuation Date, as applicable.

An "Averaging Date" means each of the Index Business Days during a Measurement Period, subject to adjustment as described herein.

Any of the following will be a Market Disruption Event with respect to the Index, in each case as determined by the Security Calculation Agent in its sole discretion:

- (a) suspension, absence or material limitation of trading in a material number of Index Constituent Securities for trading in the Index Constituent Security, whether by reason of movements in price exceeding limits permitted by the Primary Exchange or otherwise;
- (b) suspension, absence or material limitation of trading in option or futures contracts relating to the Index or to a material number of Index Constituent Securities in the primary market or markets for those contracts;
- (c) the Index is not published; or
- (d) in any other event, if the Security Calculation Agent determines in its sole discretion that the event materially interferes with our ability or the ability of any of our affiliates to unwind all or a material portion of a hedge with respect to the Securities that we or our affiliates have effected or may effect as described in the section entitled "Use of Proceeds and Hedging" of the applicable prospectus supplement.

The following events will not be Market Disruption Events with respect to the Index:

- (a) a limitation on the hours or numbers of days of trading, but only if the limitation results from an announced change in the regular business hours of the relevant market; or
- (b) a decision to permanently discontinue trading in the option or futures contracts relating to the Index or any Index Constituent Securities.

For this purpose, an "absence of trading" in the primary securities market on which option or futures contracts related to the Index or any Index Constituent Securities are traded will not include any time when that market is itself closed for trading under ordinary circumstances.

# **Redemption Price Upon Optional Tax Redemption**

We have the right to redeem the Securities in the circumstances described under "Description of Debt Securities We May Offer — Optional Tax Redemption" in "Medium-Term Notes, Series B" above. If we exercise this right, the redemption price of the Securities will be determined by the Security Calculation Agent in a manner reasonably calculated to preserve your and our relative economic positions.

## **Default Amount on Acceleration**

If an event of default occurs and the maturity of the Securities is accelerated, we will pay the default amount in respect of the principal of the Securities at maturity. We describe the default amount below under "— Default Amount."

In addition to the default amount described below, we will also pay the Coupon Amount per Security, if any, with respect to the final Coupon Payment Date, as described above under "— Coupon Payment," calculated as if the date of acceleration was the last Index Business Day in the Final Measurement Period and the four Index Business Days immediately preceding the date of acceleration were the corresponding Index Business Days in the accelerated Final Measurement Period, with the fourth Index Business Day immediately preceding the date of accelerated Calculation Date and the accelerated final Coupon Valuation Date, and the Index Business Day immediately preceding the date of acceleration being the relevant final Coupon Valuation Date.

For the purpose of determining whether the holders of our Medium-Term Notes, Series B, of which the Securities are a part, are entitled to take any action under the indenture, we will treat the outstanding principal amount of the Medium-Term Notes, Series B, as constituting the outstanding principal amount of the Securities. Although the terms of the Securities may differ from those of the other Medium-Term Notes, Series B, holders of specified percentages in principal amount of all Medium-Term Notes, Series B, together in some cases with other series of our debt securities, will be able to take action affecting all the Medium-Term Notes, Series B, including the Securities. This action may involve changing some of the terms that apply to the Medium-Term Notes, Series B, accelerating the maturity of the Medium-Term Notes, Series B after a default or waiving some of our obligations under the indenture. We discuss these matters in "Medium-Term Notes, Series B" above, under "Description of Debt Securities We May Offer — Default, Remedies and Waiver of Default" and "Description of Debt Securities We May Offer — Modification and Waiver of Covenants."

#### **Default Amount**

The default amount for the Securities on any day will be an amount, in U.S. dollars as determined by the Security Calculation Agent in its sole discretion, for the aggregate Stated Principal Amount of the Securities, equal to the cost of having a qualified financial institution, of the kind and selected as described below, expressly assume all our payment and other obligations with respect to the Securities as of that day and as if no default or acceleration had occurred, or to undertake other obligations providing substantially equivalent economic value to you with respect to the Securities. That cost will equal:

- > the lowest amount that a qualified financial institution would charge to effect this assumption or undertaking, plus
- the reasonable expenses, including reasonable attorneys' fees, incurred by the holders of the Securities in preparing any documentation necessary for this assumption or undertaking.

During the default quotation period for the Securities, which we describe below, the holders of the Securities and/or we may request a qualified financial institution to provide a quotation of the amount it would charge to effect this assumption or undertaking. If either party obtains a quotation, it must notify the other party in writing of the quotation. The amount referred to in the first bullet point above will equal the lowest — or, if there is only one, the only — quotation obtained, and as to which notice is so given, during the default quotation period. With respect to any quotation, however, the party not obtaining the quotation may object, on reasonable and significant grounds, to the assumption or undertaking by the qualified financial institution providing the quotation and notify the other party in writing of those grounds within two Business Days after the last day of the default quotation period, in which case that quotation will be disregarded in determining the default amount.

#### **Default Quotation Period**

The default quotation period is the period beginning on the day the default amount first becomes due and ending on the third Business Day after that day, unless:

- > no quotation of the kind referred to above is obtained, or
- every quotation of that kind obtained is objected to within five (5) Business Days after the due date as described above.

If either of these two events occurs, the default quotation period will continue until the third Business Day after the first Business Day on which prompt notice of a quotation is given as described above. If that quotation is objected to as described above within five (5) Business Days after that first Business Day, however, the default quotation period will continue as described in the prior sentence and this sentence.

In any event, if the default quotation period and the subsequent two Business Day objection period have not ended before the Calculation Date, then the default amount will equal the Stated Principal Amount of the Securities.

## **Qualified Financial Institutions**

For the purpose of determining the default amount at any time, a qualified financial institution must be a financial institution organized under the laws of any jurisdiction in the United States of America, Europe or Japan, which at that time has outstanding debt obligations with a stated maturity of one year or less from the date of issue and rated either:

- A-1 or higher by Standard & Poor's Financial Services LLC, a subsidiary of The McGraw-Hill Companies, Inc., or any successor, or any other comparable rating then used by that rating agency, or
- ➤ P-1 or higher by Moody's Investors Service or any successor, or any other comparable rating then used by that rating agency.

# Discontinuance of or Adjustments to the Index or Termination of Our License Agreement with the Index Sponsor; Alteration of Method of Calculation

If (i) the Index Sponsor discontinues publication of, or otherwise fails to publish, the Index, (ii) our license agreement with the Index Sponsor terminates or (iii) the Index Sponsor does not make the Index Constituent Securities and/or their unit weighting available to the Security Calculation Agent, and, in each case, any other person or entity publishes an index licensed to UBS that the Security Calculation Agent determines is comparable to the Index and for which the Index Constituent Securities and/or their unit weighting are available to the Security Calculation Agent (such index being referred to herein as a "successor index"), and the Security Calculation Agent approves such index as a successor index, then the Security Calculation Agent will determine the Index Closing Level on the applicable dates of determination, Coupon Amounts and the amount payable at maturity, call, acceleration or upon early redemption and all other related payments terms by reference to such successor index.

Upon any selection by the Security Calculation Agent of a successor index, the Security Calculation Agent will cause written notice thereof to be furnished to the trustee, to us and to the holders of the Securities.

If the Index Sponsor discontinues publication of the Index, our license agreement with the Index Sponsor terminates or the Index Sponsor does not make the Index Constituent Securities and/or their unit weighting available to the Security Calculation Agent, prior to, and such discontinuation, termination or unavailability is continuing on the Calculation Date or any Index Business Day during a Measurement Period, or on the Redemption Valuation Date or on any Monthly Valuation Date or Loss Rebalancing Valuation Date, as applicable, or on any other relevant date on which the Index Closing Level is to be determined and the Security Calculation Agent determines that no successor index is available at such time, or the Security Calculation Agent has previously selected a successor index and publication of such successor index is discontinued prior to, and such discontinuation is continuing on the Calculation Date or any Index Business Day during a Measurement Period, or on the Redemption Valuation Date or on any Monthly Valuation Date or Loss Rebalancing Valuation Date, as applicable, or any other relevant date on which the Index Closing Level is to be determined, then the Security Calculation Agent will determine the Index Closing Level using the Index Closing Level on the last Index Business Day immediately prior to such discontinuation or unavailability, as adjusted for certain corporate actions. In such event, the Security Calculation Agent will cause notice thereof to be furnished to the trustee, to us and to the holders of the Securities.

Notwithstanding these alternative arrangements, discontinuation of the publication of the Index or successor index, as applicable, may adversely affect the value of the Securities.

In addition, if an Index Replacement Event (as defined below) occurs at any time and the Index Sponsor or anyone else publishes an index that the Security Calculation Agent determines is comparable to the Index (the "Substitute Index"), then the Security Calculation Agent may elect, in its sole discretion, to permanently replace the original Index with the Substitute Index for all purposes under the Securities, and all provisions described herein as applying to the Index will thereafter apply to the Substitute Index instead. In such event, the Security Calculation Agent will make such adjustments, if any, to any level of the Index or Substitute Index that is used for purposes of the Securities as it determines are appropriate in the circumstances. If the Security Calculation Agent elects to replace the original Index with a Substitute Index, then the Security Calculation Agent will determine all amounts hereunder, including the Coupon Amounts, Current Principal Amount, Current Indicative Principal Amount, Index Factor, intraday indicative value, Accrued Fees, Index Closing Levels on the applicable dates of determination, all other related payment terms and the amount payable at maturity, call, or upon early redemption by reference to such Substitute Index. If the Security Calculation Agent so elects to replace the original Index with a Substitute Index, the Security Calculation Agent will cause written notice thereof to be furnished to the trustee, to us and to the holders of the Securities.

## An "Index Replacement Event" means:

- an amendment to or change (including any officially announced proposed change) in the laws, regulations or rules of the United States (or any political subdivision thereof), or any jurisdiction in which a Primary Exchange or Related Exchange (each as defined herein) is located that (i) makes it illegal for UBS AG or its affiliates to hold, acquire or dispose of units in the Index Constituent Securities included in the Index or options, futures, swaps or other derivatives on the Index or the units in the Index Constituent Securities included in the Index (including but not limited to exchange-imposed position limits), (ii) materially increases the cost to us, our affiliates, third parties with whom we transact or similarly situated third parties in performing our or their obligations in connection with the Securities, (iii) has a material adverse effect on any of these parties' ability to perform their obligations in connection with the Securities or (iv) materially affects our ability to issue or transact in exchange traded notes similar to the Securities, each as determined by the Security Calculation Agent;
- (b) any official administrative decision, judicial decision, administrative action, regulatory interpretation or other official pronouncement interpreting or applying those laws, regulations or rules that is announced on or after September 25, 2018 that (i) makes it illegal for UBS AG or its affiliates to hold, acquire or dispose of units in the Index Constituent Securities included in the Index or options, futures, swaps or other derivatives on the Index or the units in the Index constituents included in the Index (including but not limited to exchange-imposed position limits), (ii) materially increases the cost to us, our affiliates, third parties with whom we transact or similarly situated third parties in performing our or their obligations in connection with the Securities, (iii) has a material adverse effect on the ability of us, our affiliates, third parties with whom we transact or a similarly situated third party to perform our or their obligations in connection with the Securities or (iv) materially affects our ability to issue or transact in exchange traded notes similar to the Securities, each as determined by the Security Calculation Agent;
- (c) any event that occurs on or after September 25, 2018 that makes it a violation of any law, regulation or rule of the United States (or any political subdivision thereof), or any jurisdiction in which a Primary Exchange or Related Exchange (each as defined herein) is located, or of any official administrative decision, judicial decision, administrative action, regulatory interpretation or other official pronouncement interpreting or applying those laws, regulations or rules, (i) for UBS AG or its affiliates to hold, acquire or dispose of units in the Index Constituent Securities included in the Index or options, futures, swaps or other derivatives on the Index or the units in the Index constituents included in the Index (including but not limited to exchange-imposed position limits), (ii) for us, our affiliates, third parties with whom we transact or similarly situated third parties to perform our or their obligations in connection with the Securities or (iii) for us to issue or transact in exchange traded notes similar to the Securities, each as determined by the Security Calculation Agent;

- (d) any event, as determined by the Security Calculation Agent, as a result of which we or any of our affiliates or a similarly situated party would, after using commercially reasonable efforts, be unable to, or would incur a materially increased amount of tax, duty, expense or fee (other than brokerage commissions) to, acquire, establish, re-establish, substitute, maintain, unwind or dispose of any transaction or asset it deems necessary to hedge the risk of the Securities, or realize, recover or remit the proceeds of any such transaction or asset; or
- (e) as determined by the Security Calculation Agent, the primary exchange or market for trading for the Securities, if any, announces that pursuant to the rules of such exchange or market, as applicable, the Securities cease (or will cease) to be listed, traded or publicly quoted on such exchange or market, as applicable, for any reason and are not immediately re-listed, re-traded or re-quoted on an exchange or quotation system located in the same country as such exchange or market, as applicable Notwithstanding these alternative arrangements, discontinuation of the publication of the Index or successor index, as applicable, may adversely affect the value of the Securities.

If at any time the method of calculating the Index or a successor index, or the value thereof, is changed in a material respect, or if the Index or a successor index is in any other way modified so that the Index Closing Level of the Index or such successor index does not, in the opinion of the Security Calculation Agent, fairly represent the Index Closing Level of the Index or such successor index had such changes or modifications not been made, then the Security Calculation Agent will make such calculations and adjustments as, in the good faith judgment of the Security Calculation Agent, may be necessary in order to arrive at an Index Closing Level of an index comparable to the Index or such successor index, as the case may be, as if such changes or modifications had not been made, and the Security Calculation Agent will calculate the Index Closing Level for the Index or such successor index with reference to the Index or such successor index, as adjusted. The Security Calculation Agent will accordingly calculate the Index Closing Level, the Index Valuation Level, the Index Performance Ratio, the Coupon Amount, the Reference Distribution Amount, the Stub Reference Distribution Amount, if any, the Accrued Fees, the Redemption Fee Amount, if any, the Cash Settlement Amount, if any, that we will pay you at maturity, the Redemption Amount, if any, upon early redemption, if applicable, the Call Settlement Amount, if any, that we will pay you in the event UBS calls the Securities, the Acceleration Amount that we will pay you in the event of an optional acceleration upon minimum indicative value, if applicable, the Loss Rebalancing Closing Level, if any, the Monthly Initial Closing Level and all related payment terms based on the Index Closing Level calculated by the Security Calculation Agent, as adjusted. Accordingly, if the method of calculating the Index or a successor index is modified so that the level of the Index or such successor index is a fraction of what it would have been if there had been no such modification (e.g., due to a split in the Index), which, in turn, causes the Index Closing Level of the Index or such successor index to be a fraction of what it would have been if there had been no such modification, then the Security Calculation Agent will make such calculations and adjustments in order to arrive at an Index Closing Level for the Index or such successor index as if it had not been modified (e.g., as if such split had not

In the event that the Security Calculation Agent elects to replace the Index with a successor index or a Substitute Index, UBS may, in its sole discretion, amend the title of the Securities in order to remove reference the former Index and to make such other changes to the title of the Securities as it considers necessary or desirable to reflect the name and/or characteristics of the relevant successor index or Substitute Index, as applicable.

All determinations and adjustments to be made by the Security Calculation Agent may be made in the Security Calculation Agent's sole discretion. See "Risk Factors — There are potential conflicts of interest between you and the Security Calculation Agent" in the prospectus supplement for a discussion of certain conflicts of interest which may arise with respect to the Security Calculation Agent.

# **Manner of Payment and Delivery**

Any payment on or delivery of the Securities at maturity, call or acceleration, or upon early redemption, will be made to accounts designated by you and approved by us, or at the corporate trust office of the trustee in New York City, but only when the Securities are surrendered to the trustee at that office. We also may make any payment or delivery in accordance with the applicable procedures of the depositary.

# **Business Day**

When we refer to a Business Day or a New York Business Day with respect to the Securities, we mean a day that is a Business Day of the kind described in "Description of Debt Securities We May Offer — Payment Mechanics for Debt Securities" in "Medium-Term Notes, Series B" above.

### **Modified Business Day**

As described in "Medium-Term Notes, Series B" under "Description of Debt Securities We May Offer — Payment Mechanics for Debt Securities", any payment on the Securities that would otherwise be due on a day that is not a Business Day may instead be paid on the next day that is a Business Day, with the same effect as if paid on the original due date, except as described under "— Cash Settlement Amount at Maturity," "— UBS's Call Right" and "— Early Redemption at the Option of the Holders" above.

#### **Reissuances or Reopened Issues**

We may, at our sole discretion, "reopen" or reissue the Securities. We issued the Securities initially in an amount having the aggregate Stated Principal Amount specified on the cover of the prospectus supplement. We may issue additional Securities in amounts that exceed the amount on the cover of the prospectus supplement at any time, without your consent and without notifying you. The Securities do not limit our ability to incur other indebtedness or to issue other securities. Also, we are not subject to financial or similar restrictions by the terms of the Securities. For more information, please refer to "Description of Debt Securities We May Offer — Amounts That We May Issue" in "Medium-Term Notes, Series B" above.

These further issuances, if any, will be consolidated to form a single class with the originally issued Securities and will have the same CUSIP number and will trade interchangeably with the Securities immediately upon settlement. Any additional issuances will increase the aggregate Stated Principal Amount of the outstanding Securities of the class. The price of any additional offering will be determined at the time of pricing of that offering.

#### **Booking Branch**

The Securities will be booked through UBS AG, London Branch.

#### **Clearance and Settlement**

The DTC participants that hold the Securities through DTC on behalf of investors will follow the settlement practices applicable to equity securities in DTC's settlement system with respect to the primary distribution of the Securities and secondary market trading between DTC participant.

## 8. ETRACS Monthly Pay 2xLeveraged US High Dividend Low Volatility ETN Series B due October 21, 2049

#### **Specific Terms of the Securities**

In this section, references to "holders" or "you" mean those who own the Securities registered in their own names, on the books that we or the trustee maintain for this purpose, and not those who own beneficial interests in the Securities registered in street name or in the Securities issued in book-entry form through The Depository Trust Company ("DTC") or another depositary. Owners of beneficial interests in the Securities should read the section entitled "Legal Ownership and Book-Entry Issuance" under "Medium-Term Notes, Series B" above.

These Securities are part of a series of UBS AG debt securities entitled "Medium-Term Notes, Series B" that we may issue, from time to time, under the indenture more particularly described under "Medium-Term Notes, Series B" above. This section summarizes general financial and other terms that apply to the Securities. Terms that apply generally to all Medium-Term Notes, Series B are described in "Description of Debt Securities We May Offer" under "Medium-Term Notes, Series B" above. The terms described here supplement those described in "Medium-Term Notes, Series B" above and, if the terms described here are inconsistent with those described there, the terms described here are controlling.

The Securities are part of a single series of senior debt securities issued under our indenture, dated as of June 12, 2015 between us and U.S. Bank Trust National Association, as trustee.

We describe the terms of the Securities in more detail below.

The Stated Principal Amount of each Security is \$25.00.

The Securities do not guarantee any return of principal at, or prior to, maturity, call or acceleration, or upon early redemption. Instead, at maturity, you will receive a cash payment per Security the amount of which will vary depending on the performance and path of the Index and will be reduced by the Accrued Fees as of the last Index Business Day in the Final Measurement Period as described under "— Cash Settlement Amount at Maturity." If the amount as calculated is equal to or less than zero, the Cash Settlement Amount will be zero and you will not receive a cash payment.

If you exercise your right to have us redeem your Securities, subject to compliance with the redemption procedures, for each Security you will receive a cash payment per Security on the relevant Redemption Date equal to the Redemption Amount as described under "— Early Redemption at the Option of the Holders." If the amount as calculated is equal to or less than zero, the Redemption Amount will be zero and you will not receive a cash payment.

## **Coupon Payment**

For each Security you hold on the applicable Coupon Record Date, on each Coupon Payment Date you will receive an amount in cash equal to the Reference Distribution Amount, calculated as of the corresponding Coupon Valuation Date (the "Coupon Amount").

If the Reference Distribution Amount on such Coupon Valuation Date is zero, you will not receive any Coupon Amount on the related Coupon Payment Date. The final Coupon Amount will be included in the Cash Settlement Amount if on the last Index Business Day in the Final Measurement Period the Coupon Ex-Date with respect to the final Coupon Amount has not yet occurred.

The "Coupon Payment Date" means the fifteenth (15th) Index Business Day following each Coupon Valuation Date. The final Coupon Payment Date will be the Maturity Date, subject to adjustment as described herein. The first Coupon Payment Date will be November 20, 2019, subject to adjustment as provided herein.

The "Coupon Record Date" means the ninth Index Business Day following each Coupon Valuation Date.

The "Coupon Ex-Date," with respect to a Coupon Amount, means the first Exchange Business Day on which the Securities trade without the right to receive such Coupon Amount. Under current NYSE Arca practice, the Coupon Ex-Date will generally be the Exchange Business Day prior to the applicable Coupon Record Date.

The "Coupon Valuation Date" means the 30th day of each month, and the 28th day of February of each calendar year during the term of the Securities or if such date is not an Index Business Day, then the first Index Business Day following such date, provided that the final Coupon Valuation Date will be the Calculation Date, subject to adjustment described herein. The first Coupon Valuation Date will be October 30, 2019.

The "Reference Distribution Amount" means (i) as of the first Coupon Valuation Date, an amount equal to the gross cash distributions that a Reference Holder would have been entitled to receive in respect of the Index Constituent Securities held by such Reference Holder on the record date with respect to any Index Constituent Security, for those cash distributions whose ex-dividend date occurs during the period from, but excluding, the Initial Trade Date to, and including, the first Coupon Valuation Date; (ii) as of any other Coupon Valuation Date (other than the Calculation Date), an amount equal to the gross cash distributions that a Reference Holder would have been entitled to receive in respect of the Index Constituent Securities held by such Reference Holder on the record date with respect to any Index Constituent Security for those cash distributions whose ex-dividend date occurs during the period from, but excluding, the immediately preceding Coupon Valuation Date to, and including, such Coupon Valuation Date; and (iii) as of the Calculation Date, an amount equal to the gross cash distributions that a Reference Holder would have been entitled to receive in respect of the Index Constituent Securities held by such Reference Holder on the record date with respect to any Index Constituent Security for those cash distributions whose exdividend date occurs during the period from, but excluding, the immediately preceding Coupon Valuation Date to, but excluding, the Calculation Date.

Notwithstanding the foregoing, with respect to cash distributions for an Index Constituent Security which is scheduled to be paid prior to the applicable Coupon Ex-Date, if, and only if, the issuer of such Index Constituent Security fails to pay the distribution to holders of such Index Constituent Security by the scheduled payment date for such distribution, such distribution will be assumed to be zero for the purposes of calculating the applicable Reference Distribution Amount.

The "**Reference Holder**" is, as of any date of determination, a hypothetical holder of a number of units of each Index Constituent Security equal to two *times* (a) the product of (i) the published unit weighting of that Index Constituent Security as of that date and (ii) the Current Principal Amount, *divided* by (b) the Monthly Initial Closing Level or Loss Rebalancing Closing Level, whichever is more recent.

"record date" means, (i) with respect to a distribution on an Index Constituent Security, the date on which a holder of the Index Constituent Security must be registered as a stockholder/unitholder of such Index Constituent Security in order to be entitled to receive such distribution and (ii) with respect to any split or reverse split, the tenth Business Day after the announcement date.

"ex-dividend date" means, with respect to a distribution on an Index Constituent Security, the first Business Day on which transactions in such Index Constituent Security trade on the Primary Exchange without the right to receive such distribution.

#### **Cash Settlement Amount at Maturity**

The "Maturity Date" is October 21, 2049, which will be the second Business Day following the last Index Business Day in the Final Measurement Period, subject to adjustment as described below under "— Market Disruption Event."

For each Security, unless earlier called, redeemed or accelerated, you will receive at maturity a cash payment equal to:

- (a) the product of
  - (i) the Current Principal Amount and (ii) the Index Factor as of the last Index Business Day in the Final Measurement Period, *plus*
- (b) the final Coupon Amount, if on the last Index Business Day in the Final Measurement Period the Coupon Ex-Date with respect to the final Coupon Amount has not yet occurred, *minus*
- (c) the Accrued Fees as of the last Index Business Day in the Final Measurement Period, plus
- (d) the Stub Reference Distribution Amount as of the last Index Business Day in the Final Measurement Period, if any.

We refer to this cash payment as the "Cash Settlement Amount."

If the amount so calculated is equal to or less than zero, the payment at maturity will be zero.

The following graphic illustrates the formula to determine the Cash Settlement Amount, which has been simplified for ease of presentation.

You may lose all or a substantial portion of your investment at maturity. The combined negative effect of the Accrued Fees will reduce your final payment. If the compounded leveraged monthly return of the Index is insufficient to offset the negative effect of the Accrued Fees (less any Coupon Amounts and/or any Stub Reference Distribution Amount, as applicable, you may be entitled to receive), or if the compounded leveraged monthly return of the Index is negative, you may lose all or a substantial portion of your investment at maturity.

The Securities may be called by UBS prior to the Maturity Date pursuant to UBS's Call Right and, upon the occurrence of an acceleration event, the Securities may be accelerated and redeemed by UBS, at its option. See "— UBS's Call Right" and "— Optional Acceleration Upon Minimum Indicative Value" below.

The Stated Principal Amount of each Security is \$25.00. The Securities may be issued and sold over time at then-current market prices which may be significantly higher or lower than the Stated Principal Amount.

The Current Principal Amount for the period from the Initial Settlement Date to October 31, 2019 (such period, the "initial calendar month") will equal \$25.00 per Security (unless a Loss Rebalancing Event occurs during the initial calendar month). For each subsequent calendar month, the Current Principal Amount for each Security will be reset as follows on the Monthly Reset Date:

*New* Current Principal Amount = *previous* Current Principal Amount × Index Factor on the applicable Monthly Valuation Date – Accrued Fees on the applicable Monthly Valuation Date

In the event of a Loss Rebalancing Event, the Current Principal Amount will be reset on the applicable Loss Rebalancing Reset Date as described below under "— Loss Rebalancing Events".

If a day that would otherwise be a Monthly Reset Date falls within a Measurement Period, then the Current Principal Amount will not be reset on such date and no further Monthly Reset Dates will occur during the term of the Securities.

If the Securities undergo a split or reverse split, the Current Principal Amount will be adjusted accordingly.

For each calendar month, the "Monthly Reset Date" is the first Exchange Business Day of that month beginning on November 1, 2019 and ending on October 1, 2049, subject to adjustment as described under "— Market Disruption Event." If a day that would otherwise be a Monthly Reset Date falls within a Measurement Period, as applicable, then the Current Principal Amount will not be reset on such date and no further Monthly Reset Dates will occur during the term of the Securities.

For each Monthly Reset Date, the "Monthly Valuation Date" is the last Exchange Business Day of the previous calendar month beginning on October 31, 2019 and ending on September 30, 2049, subject to adjustment as described under "— Market Disruption Event." If a day that would otherwise be a Monthly Reset Date falls within a Measurement Period, then the Current Principal Amount will not be reset on such date and no further Monthly Reset Dates or Monthly Valuation Dates will occur during the term of the Securities.

The "Index Factor" is:  $1 + (2 \times Index Performance Ratio)$ .

The "Index Performance Ratio" may be calculated on multiple dates of determination during any applicable calendar month. The formula used to calculate the Index Performance Ratio on any date of determination depends on the number of Loss Rebalancing Events that have occurred in the applicable calendar month.

If no Loss Rebalancing Events have occurred in the applicable calendar month, then on any Index Business Day during a Measurement Period, or on the Monthly Valuation Date, any Redemption Valuation Date, the first Loss Rebalancing Valuation Date of the applicable calendar month or any other date of determination, as applicable, the Index Performance Ratio will be equal to:

## <u>Index Valuation Level – Monthly Initial Closing Level</u> Monthly Initial Closing Level

where the "Monthly Initial Closing Level" for the initial calendar month is 230.9117, the Index Closing Level on October 24, 2019. For each subsequent calendar month, the Monthly Initial Closing Level will equal the Index Closing Level on the Monthly Valuation Date for the previous calendar month. For example, the Monthly Initial Closing Level for November 2019 will equal the Index Closing Level on October 31, 2019, subject to adjustment. If a day that would otherwise be a Monthly Reset Date falls within a Measurement Period, then the Current Principal Amount will not be reset on such date and the Monthly Initial Closing Level for the then-current calendar month will remain the same as it was for the immediately preceding calendar month.

If one or more Loss Rebalancing Events have occurred during the applicable calendar month, then on any Index Business Day during a Measurement Period, or on the Monthly Valuation Date, any Redemption Valuation Date, on each Loss Rebalancing Valuation Date after the first Loss Rebalancing Valuation Date in the applicable calendar month or on any other date of determination, as applicable, the Index Performance Ratio will be equal to:

<u>Index Valuation Level – the most recent Loss Rebalancing Closing Level</u> the most recent Loss Rebalancing Closing Level

The "Index Closing Level" will equal the closing level of the Index on any date of determination, as reported on the NYSE and Bloomberg L.P.

The "Index Valuation Level", as determined by the Security Calculation Agent will equal the arithmetic mean of the Index Closing Levels measured on each Index Business Day during the applicable Measurement Period, or the Index Closing Level on any Monthly Valuation Date, Loss Rebalancing Valuation Date or Redemption Valuation Date, provided that if the Redemption Valuation Date falls in any Measurement Period, for the purposes of calculating the Index Performance Ratio as of the Redemption Valuation Date, the Index Valuation Level on any date of determination during such Measurement Period shall equal (a) 1/5 times (b) (i) the sum of the Index Closing Levels on each Index Business Day from, and including, the first Index Business Day of the applicable Measurement Period, to, and including, the date of determination, plus (ii) the number of Index Business Days from, but excluding, the date of determination to, and including, the last Index Business Day in such Measurement Period, times the Index Closing Level on such date of determination.

"Measurement Period" means the Final Measurement Period, Call Measurement Period or Acceleration Valuation Period, as applicable.

The "intraday indicative value", or "Indicative Value" is an amount per Security, as determined by the Security Calculation Agent as of any date of determination equal to (Current Principal Amount on the previous calendar day × Index Factor, calculated using the intraday indicative value of the Index) — Accrued Fees + Coupon Amount with respect to the Coupon Valuation Date immediately preceding the date of determination if on the date of determination the Coupon Ex-Date with respect to such Coupon Amount has not yet occurred + Reference Distribution Amount, calculated as if such time and date of determination is a Coupon Valuation Date.

The "Current Indicative Principal Amount", is an amount per Security, as determined by the Security Calculation Agent as of any date of determination, equal to the product of (i) the Current Principal Amount and (ii) the Index Factor as of such date, using the Index Closing Level as of such date as the Index Valuation Level.

The "Accrued Fees" as of any date of determination means the sum of (1) the Accrued Tracking Fee as of such date and (2) the Accrued Financing Charges as of such date.

The Securities are subject to an "Accrued Tracking Fee" per Security, calculated as follows:

- (a) On the Initial Trade Date, the Accrued Tracking Fee is equal to 0.
- (b) On the initial Monthly Valuation Date (or if applicable, on a Loss Rebalancing Date that occurs prior to the initial Monthly Valuation Date), the Accrued Tracking Fee is an amount equal to the product of: (a) the Annual Tracking Fee as of the initial Monthly Valuation Date and (b) a fraction, the numerator of which is the total number of calendar days from, but excluding, the Initial Trade Date to, and including, the initial Monthly Valuation Date (or Loss Rebalancing Date, as applicable), and the denominator of which is 365.
- (c) On any subsequent Monthly Valuation Date other than the Initial Monthly Valuation Date or on any Loss Rebalancing Date, the Accrued Tracking Fee is an amount equal to the product of (a) the Annual Tracking Fee as of such Monthly Valuation Date or Loss Rebalancing Date, as the case may be, and (b) a fraction, the numerator of which is the total number of calendar days from, but excluding, the immediately preceding Monthly Valuation Date (or Loss Rebalancing Date, whichever is more recent), to, and including, such Monthly Valuation Date or Loss Rebalancing Date, as the case may be, and the denominator of which is 365.
- (d) On the last Exchange Business Day of an applicable Measurement Period, or as of the Redemption Valuation Date, as applicable, the Accrued Tracking Fee is an amount equal to the product of (a) the Annual Tracking Fee calculated as of the last Exchange Business Day of the applicable Measurement Period, or as of the Redemption Valuation Date, as applicable, and (b) a fraction, the numerator of which is the total number of calendar days from, but excluding, the immediately preceding Monthly Valuation Date (or Loss Rebalancing Date, whichever is more recent), to, and including, (i) such last Exchange Business Day of such Measurement Period, or (ii) such Redemption Valuation Date (or, if the Optional Acceleration Date or Redemption Valuation Date occurs prior to the initial Monthly Valuation Date, the period from, and excluding, the Initial Trade Date), as applicable, and the denominator of which is 365.

The "Annual Tracking Fee" is, as of any date of determination, an amount per Security equal to the product of (i) the Annual Tracking Rate and (ii) the Current Indicative Principal Amount as of the immediately preceding Index Business Day.

The "Annual Tracking Rate" is 0.85%. The Securities are subject to "Accrued Financing Charges" per Security calculated as follows:

- (a) On the Initial Trade Date, the Accrued Financing Charge for each Security is equal to \$0.
- (b) On the initial Monthly Valuation Date (or if applicable, on a Loss Rebalancing Date that occurs prior to the initial Monthly Valuation Date), the Accrued Financing Charge for each Security will equal (a) the aggregate sum of (i) the Financing Level as of each date starting from, but excluding, the Initial Trade Date, to and including the initial Monthly Valuation Date (or Loss Rebalancing Date, whichever is more recent) *times* (ii) the Financing Rate as of such date, *divided by* (b) 360.
- (c) On any subsequent Monthly Valuation Date, the Accrued Financing Charge for each Security will equal (a) the aggregate sum of (i) the Financing Level as of each date starting from, but excluding, the immediately preceding Monthly Valuation Date (or Loss Rebalancing Valuation Date, whichever is more recent), to and including, the then current Monthly Valuation Date *times* (ii) the Financing Rate as of such date, *divided by* (b) 360.
- (d) On the last Index Business Day of an applicable Measurement Period, or as of the Redemption Valuation Date, as applicable, the Accrued Financing Charge for each Security will equal (a) the aggregate sum of (i) the Financing Level as of each date starting from, but excluding, the immediately preceding Monthly Valuation Date (or Loss Rebalancing Valuation Date, or, if the Redemption Valuation Date falls in the Initial Calendar Month, the Initial Trade Date, whichever is more recent), to, and including such last Index Business Day in such Measurement Period, or such Redemption Valuation Date, as applicable, *times* (ii) the Financing Rate as of such date, *divided by* (b) 360.

"CME Term SOFR" means the CME Term SOFR Reference Rates published for one-, three-, six-, and 12-month tenors as administered by CME Group Benchmark Administration, Ltd. (or any successor administrator thereof).

The "Financing Level" is, as of any date of determination, an amount that equals the Current Principal Amount.

The "Financing Rate" will equal the sum of (a) the "Financing Spread" of 0.80% and (b) the three-month CME Term SOFR rate plus a 0.2616% adjustment, on the day that is two U.S. Government Securities Business Days prior to the immediately preceding Monthly Valuation Date.

The Accrued Financing Charges seek to compensate UBS for providing investors with the potential to receive a leveraged participation in movements in the Index Closing Level and are intended to approximate the monthly financing costs that investors may have otherwise incurred had they sought to borrow funds at a similar rate from a third party to invest in the Securities.

The "Final Measurement Period" means the five Index Business Days from, and including, the Calculation Date, subject to adjustment as described under "— Market Disruption Event."

The "Stub Reference Distribution Amount" means, as of the last Index Business Day in a Measurement Period, an amount equal to the gross cash distributions that a Reference Holder would have been entitled to receive in respect of the Index Constituent Securities held by such Reference Holder on the "record date" with respect to any Index Constituent Security, for those cash distributions whose "ex-dividend date" occurs during the period from, but excluding, the immediately preceding Coupon Valuation Date (or if such Redemption Valuation Date or the Optional Acceleration Date occurs prior to the first Coupon Valuation Date, the period from but excluding the Initial Trade Date) to, and including, such last Index Business Day of such Measurement Period, or such Redemption Valuation Date, as applicable; provided, that for the purpose of calculating the Stub Reference Distribution Amount, the Reference Holder will be deemed to hold four-fifths, three-fifths, two-fifths and one-fifth of the shares of each Index Constituent Security it would otherwise hold on the second, third, fourth and fifth Index Business Day, respectively, in such Measurement Period.

The "Index Calculation Agent" means the entity that calculates and publishes the level of the Index, which is currently Solactive.

The "Calculation Date" means October 13, 2049, unless such day is not an Index Business Day, in which case the Calculation Date will be the next Index Business Day, subject to adjustments.

"Index Business Day" means any day on which the Primary Exchange and each Related Exchange are scheduled to be open for trading.

"Exchange Business Day" means any day on which the Primary Exchange or market for trading of the Securities is scheduled to be open for trading.

"Primary Exchange" means, with respect to each Index Constituent Security or each constituent underlying a successor index, the primary exchange or market of trading such Index Constituent Security or such constituent underlying a successor index.

"Related Exchange" means, with respect to each Index Constituent Security or each constituent underlying a successor index, each exchange or quotation system where trading has a material effect (as determined by the Security Calculation Agent) on the overall market for futures or options contracts relating to such Index Constituent Security or such constituent underlying a successor index.

"U.S. Government Securities Business Day" means any day except for a Saturday, a Sunday or a day on which the Securities Industry and Financial Markets Association recommends that the fixed income departments of its members be closed for the entire day for purposes of trading in U.S. government securities.

## **Underlying Index**

The return on the Securities is linked to the performance of the price return version of the Solactive US High Dividend Low Volatility Index ("SOLHDLV"). The Index is designed to measure the performance of 40 dividend yielding, relatively lower volatility Index Constituent Securities from the universe of the largest 1,000 U.S. listed stocks by market capitalization.

## Early Redemption at the Option of the Holders

Subject to your compliance with the procedures described below and the potential postponements and adjustments as described under "— Market Disruption Event," you may submit a request to have us redeem your Securities on any Index Business Day no later than 12:00 noon, New York City time, and a confirmation of redemption by no later than 5:00 p.m., New York City time, on any applicable Index Business Day, provided that you request that we redeem a minimum of 50,000 Securities. We reserve the right from time to time to waive this minimum redemption amount in our sole discretion on a case-by-case basis. You should not assume you will be entitled to the benefit of any such waiver. For any applicable redemption request, the "Redemption Valuation Date" will be the first Index Business Day following the date that the applicable redemption notice and redemption confirmation are delivered, except that we reserve the right from time to time to accelerate, in our sole discretion on a case-by-case basis, the Redemption Valuation Date to the date on which the notice of redemption is received by UBS rather than the following Index Business Day. You should not assume you will be entitled to the benefit of any such acceleration. To satisfy the minimum redemption amount, your broker or other financial intermediary may bundle your Securities for redemption with those of other investors to reach this minimum amount of 50,000 Securities.

The Securities will be redeemed and the holders will receive payment for their Securities on the second Index Business Day following the applicable Redemption Valuation Date (the "Redemption Date"). The first Redemption Date will be October 30, 2019, and the final Redemption Date will be October 14, 2049. In addition, if a call notice has been issued or if acceleration has been triggered, the last Redemption Valuation Date will be the fifth Index Business day prior to the Call Settlement Date or Acceleration Settlement Date, as applicable. If a Market Disruption Event is continuing or occurs on the applicable scheduled Redemption Valuation Date with respect to any of the Index Constituent Securities, such Redemption Valuation Date may be postponed as described under "— Market Disruption Event."

As of any Redemption Valuation Date, the "Redemption Fee Amount" means an amount per Security equal to:

(0.125% × Closing Indicative Value of the Security as of the Redemption Valuation Date).

If you exercise your right to have us redeem your Securities, subject to your compliance with the procedures described under "— Redemption Procedures," for each applicable Security you will receive a cash payment on the relevant Redemption Date equal to:

Closing Indicative Value as of the Redemption Valuation Date - Redemption Fee Amount.

We refer to this cash payment as the "**Redemption Amount**." If the amount calculated above is equal to or less than zero, the payment upon early redemption will be zero. We reserve the right from time to time to waive the Redemption Fee Amount in our sole discretion and on a case-by-case basis. There can be no assurance that we will elect to waive this fee and you should not assume you will be entitled to such fee waiver.

We will inform you of such Redemption Amount on the first Business Day following the applicable Redemption Valuation Date.

The redemption feature is intended to induce arbitrageurs to counteract any trading of the Securities at a discount to their indicative value, though there can be no assurance that arbitrageurs will employ the redemption feature in this manner or that they will be successful in counteracting any divergence in the market price of the Securities and their indicative value.

The following graphic illustrates the formula to determine the Redemption Amount, which has been simplified for ease of presentation.

Closing Indicative — Redemption Fee
Value Amount

You may lose all or a substantial portion of your investment upon early redemption. The combined negative effect of the Accrued Fees and the Redemption Fee Amount will reduce your final payment. If the compounded leveraged monthly return of the Index is insufficient to offset the negative effect of the Accrued Fees and the Redemption Fee Amount, if applicable (less any Coupon Amounts and/or any Stub Reference Distribution Amount you may be entitled to receive as of the Redemption Valuation Date), or if the compounded leveraged monthly return of the Index is negative, you may lose all or a substantial portion of your investment upon early redemption.

The Securities may be called by UBS prior to the Maturity Date pursuant to UBS's Call Right and, upon the occurrence of an acceleration event, the Securities may be accelerated and redeemed by UBS, at its option. See "— UBS's Call Right" and "— Optional Acceleration Upon Minimum Indicative Value" below.

We discuss these matters in "Medium-Term Notes, Series B" above under "Description of Debt Securities We May Offer — Redemption and Repayment."

The Redemption Amount is meant to induce arbitrageurs to counteract any trading of the Securities at a premium or discount to their indicative value, though there can be no assurance that arbitrageurs will employ the redemption feature in this manner.

## **Redemption Procedures**

To redeem your Securities, you must instruct your broker or other person through whom you hold your Securities to take the following steps through normal clearing system channels:

- deliver a notice of redemption, which we refer to as a "**Redemption Notice**" to UBS via email no later than 12:00 noon (New York City time) on the Index Business Day on which you elect to exercise your redemption right. If we receive your Redemption Notice by the time specified in the preceding sentence, we will respond by sending you a form of confirmation of redemption;
- deliver the signed confirmation of redemption, which we refer to as the "**Redemption Confirmation**", to us via email in the specified form by 5:00 p.m. (New York City time) on the same day. We or our affiliate must acknowledge receipt in order for your Redemption Confirmation to be effective;
- instruct your DTC custodian to book a delivery vs. payment trade with respect to your Securities on the applicable Redemption Valuation Date at a price equal to the Redemption Amount; and
- cause your DTC custodian to deliver the trade as booked for settlement via DTC at or prior to 12:00 noon (New York City time) on the applicable Redemption Date.

Different brokerage firms may have different deadlines for accepting instructions from their customers. Accordingly, as a beneficial owner of the Securities, you should consult the brokerage firm through which you own your interest for the relevant deadline. If your broker delivers your Redemption Notice after 12:00 noon (New York City time), or your Redemption Confirmation after 5:00 p.m. (New York City time), on the Business Day prior to the applicable Redemption Valuation Date, your Redemption Notice will not be effective, you will not be able to redeem your Securities until the following Redemption Date and your broker will need to complete all the required steps if you should wish to redeem your Securities on any subsequent Redemption Date. In addition, UBS may request a medallion signature guarantee or such assurances of delivery as it may deem necessary in its sole discretion. All instructions given to participants from beneficial owners of Securities relating to the right to redeem their Securities will be irrevocable.

We reserve the right from time to time to waive the minimum redemption amount or the Redemption Fee Amount in our sole discretion on a case-by-case basis. In addition, we reserve the right from time to time to accelerate, in our sole discretion on a case-by-case basis, the Redemption Valuation Date to the date on which the Redemption Notice is received by UBS rather than the following Index Business Day. You should not assume you will be entitled to the benefit of any such waiver or election to accelerate the Redemption Valuation Date.

#### **UBS's Call Right**

We have the right to redeem all, but not less than all, of the Securities upon not less than eighteen (18) calendar days' prior notice to the holders of the Securities (which may be provided via press release), such redemption to occur on any Business Day that we may specify on or after November 12, 2019 through and including the Maturity Date. Upon early redemption in the event we exercise this right, you will receive a cash payment equal to

- (a) the product of
  - (i) the Current Principal Amount and (ii) the Index Factor as of the last Index Business Day in the Call Measurement Period, *plus*
- (b) the Coupon Amount with respect to the Coupon Valuation Date immediately preceding the Call Valuation Date if on the last Index Business Day in the Call Measurement Period the Coupon Ex-Date with respect to such Coupon Amount has not yet occurred, *minus*
- (c) the Accrued Fees as of the last Index Business Day in the Call Measurement Period, plus
- (d) the Stub Reference Distribution Amount as of the last Index Business Day in the Call Measurement Period, if any.

We refer to this cash payment as the "Call Settlement Amount."

If the amount calculated above is equal to or less than zero, the payment upon UBS's exercise of its Call Right will be zero.

We will inform you of such Call Settlement Amount on the first Business Day following the last Index Business Day in the Call Measurement Period.

The holders will receive payment for their Securities on the second Business Day following the last Index Business Day in the Call Measurement Period (the "Call Settlement Date"). If a Market Disruption Event is continuing or occurs on the scheduled Call Valuation Date with respect to any of the Index Constituent Securities, such Call Valuation Date may be postponed as described under "— Market Disruption Event."

#### The "Call Measurement Period" means:

- (a) if the Market Value of Securities outstanding as at the close of business on the Exchange Business Day immediately preceding the date of delivery by UBS of its notice to holders (which may be provided via press release) of its exercise of the UBS Call Right is less than \$250,000,000, the Call Valuation Date, subject to adjustments as described under "— Market Disruption Event";
- (b) if the Market Value of Securities outstanding as at the close of business on the Exchange Business Day immediately preceding the date of delivery by UBS of its notice to holders (which may be provided via press release) of its exercise of the UBS Call Right is equal to or greater than \$250,000,000, the five (5) Index Business Days from and including the Call Valuation Date, subject to adjustments as described under "— Market Disruption Event."

The "Market Value" of the Securities outstanding as of the close of business on the Exchange Business Day immediately preceding the date of delivery by UBS of its notice to holders (which may be provided via press release) of its exercise of the UBS Call Right will equal:

Intraday indicative value as of such Exchange Business Day  $\times$  number of Securities outstanding as reported by HDLBIV <Index> on Bloomberg.

The "Call Valuation Date" means the date disclosed as such by UBS in its notice to holders (which may be provided via press release) of its exercise of the UBS Call Right.

In any notice to holders exercising the UBS Call Right, we will specify how many days are included in the Call Measurement Period.

The following graphic illustrates the formula to determine the Call Settlement Amount, which has been simplified for ease of presentation.

You may lose all or a substantial portion of your investment upon a call. The combined negative effect of the Accrued Fees will reduce your final payment. If the compounded leveraged monthly return of the Index is insufficient to offset the negative effect of the Accrued Fees (less any Coupon Amounts and/or any Stub Reference Distribution Amount, as applicable, you may be entitled to receive), or if the compounded leveraged monthly return of the Index is negative, you may lose all or a substantial portion of your investment upon a call.

In addition, upon the occurrence of an acceleration event, the Securities may be accelerated and redeemed by UBS, at its option. See "Specific Terms of the Securities — Optional Acceleration Upon Minimum Indicative Value" below.

#### **Optional Acceleration Upon Minimum Indicative Value**

If, at any time, the intraday indicative value of the Securities on any Index Business Day equals \$2.00 or less (the "Indicative Value Optional Acceleration Trigger") (each such day, an "Optional Acceleration Date"), all issued and outstanding Securities may be accelerated and redeemed by UBS, at its option (even if the intraday indicative value would later exceed \$2.00 on such Optional Acceleration Date or any subsequent Index Business Day) for a cash payment equal to the Acceleration Amount (the "Acceleration Option").

In the event that the Indicative Value Optional Acceleration Trigger threshold has been breached, UBS will issue a press release before 9:00 a.m. on the Index Business Day following the Optional Acceleration Date announcing whether or not it has elected to exercise its Acceleration Option. UBS is under no obligation to exercise its Acceleration Option and the Securities may remain outstanding following an Indicative Value Optional Acceleration Trigger Event occurring, if UBS does not elect to exercise such Acceleration Option.

#### The "Acceleration Amount" will equal

- (a) the product of
  - (i) the Current Principal Amount and (ii) the Index Factor as of the last Index Business Day in the Acceleration Valuation Period, *plus*
- (b) the Coupon Amount with respect to the Coupon Valuation Date immediately preceding the Optional Acceleration
  Date if on the last Index Business Day in the Acceleration Valuation Period the Coupon Ex-Date with respect to such
  Coupon Amount has not yet occurred, *minus*
- (c) the Accrued Fees as of the last Index Business Day in the Acceleration Valuation Period, plus
- (d) the Stub Reference Distribution Amount as of the last Index Business Day in the Acceleration Valuation Period, if any.

If the Acceleration Amount is equal to or less than zero, the payment upon acceleration will be zero.

If the Indicative Value Optional Acceleration Trigger threshold has been breached and UBS elects to exercise its Acceleration Option, you will receive on the Acceleration Settlement Date only the Acceleration Amount in respect of your investment in the Securities. The "Acceleration Settlement Date" will be the second Business Day following the last Index Business Day of the Acceleration Valuation Period. The "Acceleration Valuation Period" will be the five Index Business Days from, but excluding, the Optional Acceleration Date, subject to adjustment as described under "— Market Disruption Event." Subject to the prior verification by the Security Calculation Agent that the intraday indicative value of the Securities of \$2.00 or less was accurately calculated by the NYSE, UBS must provide notice (which may be provided via press release) to the holders of the Securities that the minimum indicative value threshold has been breached not less than five calendar days prior to the Acceleration Settlement Date.

If the Securities undergo a split or reverse split, the Indicative Value Optional Acceleration Trigger will be adjusted accordingly.

The following graphic illustrates the formula to determine the Acceleration Amount, which has been simplified for ease of presentation.

You may lose all or a substantial portion of your investment upon acceleration. The combined negative effect of the Accrued Fees will reduce your final payment. If the compounded leveraged monthly return of the Index is insufficient to offset the negative effect of the Accrued Fees (less any Coupon Amounts and/or any Stub Reference Distribution Amount, as applicable, you may be entitled to receive), or if the compounded leveraged monthly return of the Index is negative, you may lose all or a substantial portion of your investment upon acceleration.

In addition, the Securities may be called by UBS prior to the Maturity Date pursuant to UBS's Call Right. See "— UBS's Call Right" above.

## **Loss Rebalancing Events**

A Loss Rebalancing Event will have the effect of deleveraging your Securities with the aim of resetting the then-current leverage to approximately 2.0. This means that after a Loss Rebalancing Event, a constant percentage increase in the Index Closing Level will have less of a positive effect on the value of your Securities relative to before the occurrence of the Loss Rebalancing Event.

A "Loss Rebalancing Event" occurs if, at any time, the Intraday Index Value on any Index Business Day (other than an Excluded Day, as defined herein) decreases 20% in value from the previous Monthly Initial Closing Level or Loss Rebalancing Closing Level, whichever is more recent. If a Loss Rebalancing Event occurs, the Current Principal Amount of the Securities will be reset as described below, which will have the effect of deleveraging your Securities with the aim of resetting the then-current leverage to approximately 2.0. A Loss Rebalancing Event may occur irrespective of whether a Market Disruption Event also occurs on such Index Business Day.

Upon the occurrence of a Loss Rebalancing Event, the Current Principal Amount will be reset on the applicable Loss Rebalancing Reset Date as follows:

New Current Principal Amount = previous Current Principal Amount × Index Factor on the applicable Loss Rebalancing Valuation Date — Accrued Fees on the applicable Loss Rebalancing Valuation Date

In the event of a Loss Rebalancing Event, the Financing Rate will not be adjusted.

On the next Monthly Valuation Date following one or more Loss Rebalancing Events, the Monthly Initial Closing Level will be replaced with the most recent Loss Rebalancing Closing Level in the calculation of the Index Performance Ratio.

Loss Rebalancing Events may occur multiple times over the term of the Securities and may occur multiple times during a single calendar month. This means both that (i) the Current Principal Amount may be reset more frequently than monthly and (ii) the cumulative effect of compounding and fees will have increased as a result of the Loss Rebalancing Event(s). Because each Loss Rebalancing Event will have the effect of deleveraging your Securities, following a Loss Rebalancing Event your Securities will have less exposure to a potential positive gain in value relative to the exposure before the occurrence of such Loss Rebalancing Event.

On any Loss Rebalancing Valuation Date, the Accrued Financing Charges for each Security will equal the product of (i) the Financing Level on the immediately preceding Monthly Valuation Date or Loss Rebalancing Valuation Date, whichever is more recent, *times* (ii) the Financing Rate times (iii) the number of calendar days from, but excluding, the immediately preceding Monthly Valuation Date or Loss Rebalancing Valuation Date, whichever is more recent, to, and including, the then current Loss Rebalancing Valuation Date *divided by* (iv) 360.

An "Excluded Day" means (i) the Index Business Day immediately preceding any Monthly Valuation Date, (ii) any Monthly Valuation Date, (iii) any Loss Rebalancing Valuation Date (iv) the Index Business Day immediately preceding the first day of the Final Measurement Period or any day after such Index Business Day, (v) the Index Business Day immediately preceding the first day of the Call Measurement Period or any day after such Index Business Day, or (vi) the Optional Acceleration Date or any day after the Optional Acceleration Date.

"Loss Rebalancing Closing Level" means the Index Closing Level on the Loss Rebalancing Valuation Date.

"Loss Rebalancing Reset Date" means the first Index Business Day immediately following a Loss Rebalancing Valuation Date, subject to adjustment as described under "— Market Disruption Event."

## "Loss Rebalancing Valuation Date" means:

- if a Loss Rebalancing Event occurs at or prior to 3:15 p.m. on an Index Business Day, the day that such Loss Rebalancing Event occurs, subject to adjustment as described under "— Market Disruption Event";
- (b) if a Loss Rebalancing Event occurs after 3:15 p.m. on an Index Business Day, the first Index Business Day following the occurrence of such Loss Rebalancing Event, subject to adjustment as described under "— Market Disruption Event."

## **Security Calculation Agent**

UBS Securities LLC will act as the Security Calculation Agent. The Security Calculation Agent will be solely responsible for all determinations and calculations regarding the value of the Securities, including, among other things, at maturity or upon early redemption or call, or at other times, the Current Principal Amount, Current Indicative Principal Amount, intraday indicative value, Market Disruption Events, Business Days, Index Business Days, Exchange Business Days, the Index Factor, the Index Performance Ratio, the Index Valuation Level, the Financing Level, the Accrued Fees (including determining any successor to the LIBOR base rate), the Coupon Amount, the Reference Distribution Amount, the Stub Reference Distribution Amount, if any, the Accrued Fees, the Redemption Fee Amount, the Cash Settlement Amount, if any, that we will pay you at maturity, the Coupon Ex-Dates, the Coupon Record Dates, the Redemption Amount, if any, that we will pay you upon redemption, if applicable, the Acceleration Amount that we will pay you upon acceleration, the Call Settlement Amount, if any, that we will pay you in the event that UBS calls the Securities, whether a Loss Rebalancing Event has occurred and whether any day is a Business Day, Index Business Day or an Exchange Business Day and all such other matters as may be specified elsewhere herein as matters to be determined by the Security Calculation Agent. The Security Calculation Agent will also be responsible for determining whether the Index has been discontinued and whether there has been a material change in the Index. The Security Calculation Agent will make all such determinations and calculations in its sole discretion, and absent manifest error, all determinations of the Security Calculation Agent will be conclusive for all purposes and binding on us, you, and all other persons having an interest in the Security, without liability on the part of the Security Calculation Agent. You will not be entitled to any compensation from us for any loss suffered as a result of any determinations or calculations made by the Security Calculation Agent. We may appoint a different Security Calculation Agent from time to time without your consent and without notifying you.

The Security Calculation Agent will provide written notice to the trustee at its New York office, on which notice the trustee may conclusively rely, of the amount to be paid at maturity, call or acceleration, or upon early redemption, or on a Coupon Payment Date on or prior to 12:00 noon, New York City time, on the Business Day immediately preceding the Maturity Date, any Redemption Date, any Call Settlement Date, Acceleration Settlement Date or any Coupon Payment Date, as applicable.

All dollar amounts related to determination of the Coupon Amount, the Reference Distribution Amount, the Stub Reference Distribution Amount, if any, the Accrued Fees, the Redemption Amount and Redemption Fee Amount, if any, per Security, the Call Settlement Amount, if any, per Security, the Current Principal Amount, the Acceleration Amount, the Financing Level, and the Cash Settlement Amount, if any, per Security, will be rounded to the nearest ten-thousandth, with five one hundred-thousandths rounded upward (*e.g.*, .76545 would be rounded up to .7655); and all dollar amounts paid on the Stated Principal Amount of the Securities per holder will be rounded to the nearest cent, with one-half cent rounded upward.

## **Market Disruption Event**

To the extent a Market Disruption Event with respect to the Index has occurred or is continuing on an Averaging Date (as defined below), the Index Closing Level for such Averaging Date will be determined by the Security Calculation Agent or one of its affiliates on the first succeeding Index Business Day on which a Market Disruption Event does not occur or is not continuing (the "Deferred Averaging Date") with respect to the Index irrespective of whether, pursuant to such determination, the Deferred Averaging Date would fall on a date originally scheduled to be an Averaging Date. If the postponement described in the preceding sentence results in the Index Closing Level being calculated on a day originally scheduled to be an Averaging Date, for purposes of determining the Index Closing Level on any Averaging Date, the Security Calculation Agent or one of its affiliates, as the case may be, will apply the Index Closing Level for such Deferred Averaging Date (i) on the date(s) of the original Market Disruption Event and (ii) such Averaging Date. For example, if the applicable Measurement Period for purposes of calculating the Call Settlement Amount is based on the arithmetic mean of the Index Closing Levels on November 3, November 4, November 5, November 6 and November 7, and there is a Market Disruption Event with respect to the Index on November 3, but no other Market Disruption Event during such Measurement Period, then the Index Closing Level on November 4 will be used twice to calculate the Call Settlement Amount, and the Call Settlement Amount will be determined based on the arithmetic mean of the Index Closing Levels on November 4, November 5, November 6 and November 7. The same approach would be applied if there is a Market Disruption Event during any Measurement Period.

To the extent a Market Disruption Event with respect to the Index has occurred or is continuing on the Redemption Valuation Date or any Monthly Valuation Date or Loss Rebalancing Valuation Date, the Index Closing Level for such Redemption Valuation Date, Monthly Valuation Date or Loss Rebalancing Valuation Date, as applicable, will be determined by the Security Calculation Agent or one of its affiliates on the first succeeding Index Business Day on which a Market Disruption Event does not occur or is not continuing with respect to the Index. For example, if the Redemption Valuation Date, for purposes of calculating a Redemption Amount, is based on the Index Closing Level on November 3 and there is a Market Disruption Event with respect to the Index on November 3, then the Index Closing Level on October 4 will be used to calculate the Redemption Amount, assuming that no such Market Disruption Event has occurred or is continuing on November 4.

In no event, however, will any postponement pursuant to the two immediately preceding paragraphs result in the final Averaging Date or any Monthly Valuation Date, Redemption Valuation Date or Loss Rebalancing Valuation Date, as applicable, occurring more than three Index Business Days following the day originally scheduled to be such final Averaging Date or such Monthly Valuation Date, Redemption Valuation Date or Loss Rebalancing Valuation Date. If a Market Disruption Event has occurred or is continuing with respect to the Index on the third Index Business Day following the date originally scheduled to be the final Averaging Date or any Monthly Valuation Date, Redemption Valuation Date or Loss Rebalancing Valuation Date, as applicable, the Security Calculation Agent or one of its affiliates will determine the Index Closing Level based on its good faith estimate of the Index Closing Level that would have prevailed on such third Index Business Day but for such Market Disruption Event. If any Monthly Valuation Date or Loss Rebalancing Valuation Date is postponed as described above, the succeeding Monthly Reset Date or Loss Rebalancing Valuation Date, as applicable.

An "Averaging Date" means each of the Index Business Days during a Measurement Period, subject to adjustment as described herein.

Any of the following will be a Market Disruption Event with respect to the Index, in each case as determined by the Security Calculation Agent in its sole discretion:

- (a) suspension, absence or material limitation of trading in a material number of Index Constituent Securities for trading in the Index Constituent Security, whether by reason of movements in price exceeding limits permitted by the Primary Exchange or otherwise;
- (b) suspension, absence or material limitation of trading in option or futures contracts relating to the Index or to a material number of Index Constituent Securities in the primary market or markets for those contracts;
- (c) the Index is not published; or
- (d) in any other event, if the Security Calculation Agent determines in its sole discretion that the event materially interferes with our ability or the ability of any of our affiliates to unwind all or a material portion of a hedge with respect to the Securities that we or our affiliates have effected or may effect as described in the section entitled "Use of Proceeds and Hedging".

The following events will not be Market Disruption Events with respect to the Index:

- (a) a limitation on the hours or numbers of days of trading, but only if the limitation results from an announced change in the regular business hours of the relevant market; or
- (b) a decision to permanently discontinue trading in the option or futures contracts relating to the Index or any Index Constituent Securities.

For this purpose, an "absence of trading" in the primary securities market on which option or futures contracts related to the Index or any Index Constituent Securities are traded will not include any time when that market is itself closed for trading under ordinary circumstances.

## **Redemption Price Upon Optional Tax Redemption**

We have the right to redeem the Securities in the circumstances described under "Description of Debt Securities We May Offer — Optional Tax Redemption" in "Medium-Term Notes, Series B" above. If we exercise this right, the redemption price of the Securities will be determined by the Security Calculation Agent in a manner reasonably calculated to preserve your and our relative economic positions.

#### **Default Amount on Acceleration**

If an event of default occurs and the maturity of the Securities is accelerated, we will pay the default amount in respect of the principal of the Securities at maturity. We describe the default amount below under "— Default Amount."

In addition to the default amount described below, we will also pay the Coupon Amount per Security, if any, with respect to the final Coupon Payment Date, as described above under "— Coupon Payment," calculated as if the date of acceleration was the last Index Business Day in the Final Measurement Period and the four Index Business Days immediately preceding the date of acceleration were the corresponding Index Business Days in the accelerated Final Measurement Period, with the fourth Index Business Day immediately preceding the date of accelerated Calculation Date and the accelerated final Coupon Valuation Date, and the Index Business Day immediately preceding the date of acceleration being the relevant final Coupon Valuation Date.

For the purpose of determining whether the holders of our Medium-Term Notes, Series B, of which the Securities are a part, are entitled to take any action under the indenture, we will treat the outstanding principal amount of the Medium-Term Notes, Series B, as constituting the outstanding principal amount of the Securities. Although the terms of the Securities may differ from those of the other Medium-Term Notes, Series B, holders of specified percentages in principal amount of all Medium-Term Notes, Series B, together in some cases with other series of our debt securities, will be able to take action affecting all the Medium-Term Notes, Series B, including the Securities. This action may involve changing some of the terms that apply to the Medium-Term Notes, Series B, accelerating the maturity of the Medium-Term Notes, Series B after a default or waiving some of our obligations under the indenture. We discuss these matters in "Medium-Term Notes, Series B" above under "Description of Debt Securities We May Offer — Default, Remedies and Waiver of Default" and "Description of Debt Securities We May Offer — Modification and Waiver of Covenants."

#### **Default Amount**

The default amount for the Securities on any day will be an amount, in U.S. dollars as determined by the Security Calculation Agent in its sole discretion, for the aggregate Stated Principal Amount of the Securities, equal to the cost of having a qualified financial institution, of the kind and selected as described below, expressly assume all our payment and other obligations with respect to the Securities as of that day and as if no default or acceleration had occurred, or to undertake other obligations providing substantially equivalent economic value to you with respect to the Securities. That cost will equal:

- > the lowest amount that a qualified financial institution would charge to effect this assumption or undertaking, plus
- the reasonable expenses, including reasonable attorneys' fees, incurred by the holders of the Securities in preparing any documentation necessary for this assumption or undertaking.

During the default quotation period for the Securities, which we describe below, the holders of the Securities and/or we may request a qualified financial institution to provide a quotation of the amount it would charge to effect this assumption or undertaking. If either party obtains a quotation, it must notify the other party in writing of the quotation. The amount referred to in the first bullet point above will equal the lowest — or, if there is only one, the only — quotation obtained, and as to which notice is so given, during the default quotation period. With respect to any quotation, however, the party not obtaining the quotation may object, on reasonable and significant grounds, to the assumption or undertaking by the qualified financial institution providing the quotation and notify the other party in writing of those grounds within two Business Days after the last day of the default quotation period, in which case that quotation will be disregarded in determining the default amount.

#### **Default Quotation Period**

The default quotation period is the period beginning on the day the default amount first becomes due and ending on the third Business Day after that day, unless:

- > no quotation of the kind referred to above is obtained, or
- every quotation of that kind obtained is objected to within five (5) Business Days after the due date as described above.

If either of these two events occurs, the default quotation period will continue until the third Business Day after the first Business Day on which prompt notice of a quotation is given as described above. If that quotation is objected to as described above within five (5) Business Days after that first Business Day, however, the default quotation period will continue as described in the prior sentence and this sentence.

In any event, if the default quotation period and the subsequent two Business Day objection period have not ended before the Calculation Date, then the default amount will equal the Stated Principal Amount of the Securities.

## **Qualified Financial Institutions**

For the purpose of determining the default amount at any time, a qualified financial institution must be a financial institution organized under the laws of any jurisdiction in the United States of America, Europe or Japan, which at that time has outstanding debt obligations with a stated maturity of one year or less from the date of issue and rated either:

- A-1 or higher by Standard & Poor's Financial Services LLC, a subsidiary of The McGraw-Hill Companies, Inc., or any successor, or any other comparable rating then used by that rating agency, or
- P-1 or higher by Moody's Investors Service or any successor, or any other comparable rating then used by that rating agency.

# Discontinuance of or Adjustments to the Index or Termination of Our License Agreement with the Index Sponsor; Alteration of Method of Calculation

If (i) the Index Sponsor discontinues publication of, or otherwise fails to publish, the Index, (ii) our license agreement with the Index Sponsor terminates or (iii) the Index Sponsor does not make the Index Constituent Securities and/or their unit weighting available to the Security Calculation Agent, and, in each case, any other person or entity publishes an index licensed to UBS that the Security Calculation Agent determines is comparable to the Index and for which the Index Constituent Securities and/or their unit weighting are available to the Security Calculation Agent (such index being referred to herein as a "successor index"), and the Security Calculation Agent approves such index as a successor index, then the Security Calculation Agent will determine the Index Closing Level on the applicable dates of determination, Coupon Amounts and the amount payable at maturity, call, acceleration or upon early redemption and all other related payments terms by reference to such successor index.

Upon any selection by the Security Calculation Agent of a successor index, the Security Calculation Agent will cause written notice thereof to be furnished to the trustee, to us and to the holders of the Securities.

If the Index Sponsor discontinues publication of the Index, our license agreement with the Index Sponsor terminates or the Index Sponsor does not make the Index Constituent Securities and/or their unit weighting available to the Security Calculation Agent, prior to, and such discontinuation, termination or unavailability is continuing on the Calculation Date or any Index Business Day during a Measurement Period, or on the Redemption Valuation Date or on any Monthly Valuation Date or Loss Rebalancing Valuation Date, as applicable, or on any other relevant date on which the Index Closing Level is to be determined and the Security Calculation Agent determines that no successor index is available at such time, or the Security Calculation Agent has previously selected a successor index and publication of such successor index is discontinued prior to, and such discontinuation is continuing on the Calculation Date or any Index Business Day during a Measurement Period, or on the Redemption Valuation Date or on any Monthly Valuation Date or Loss Rebalancing Valuation Date, as applicable, or any other relevant date on which the Index Closing Level is to be determined, then the Security Calculation Agent will determine the Index Closing Level using the Index Closing Level on the last Index Business Day immediately prior to such discontinuation or unavailability, as adjusted for certain corporate actions. In such event, the Security Calculation Agent will cause notice thereof to be furnished to the trustee, to us and to the holders of the Securities.

Notwithstanding these alternative arrangements, discontinuation of the publication of the Index or successor index, as applicable, may adversely affect the value of the Securities.

In addition, if an Index Replacement Event (as defined below) occurs at any time and the Index Sponsor or anyone else publishes an index that the Security Calculation Agent determines is comparable to the Index (the "Substitute Index"), then the Security Calculation Agent may elect, in its sole discretion, to permanently replace the original Index with the Substitute Index for all purposes under the Securities, and all provisions described herein as applying to the Index will thereafter apply to the Substitute Index instead. In such event, the Security Calculation Agent will make such adjustments, if any, to any level of the Index or Substitute Index that is used for purposes of the Securities as it determines are appropriate in the circumstances. If the Security Calculation Agent elects to replace the original Index with a Substitute Index, then the Security Calculation Agent will determine all amounts hereunder, including the Coupon Amounts, Current Principal Amount, Current Indicative Principal Amount, Index Factor, intraday indicative value, Accrued Fees, Index Closing Levels on the applicable dates of determination, all other related payment terms and the amount payable at maturity, call, or upon early redemption by reference to such Substitute Index. If the Security Calculation Agent so elects to replace the original Index with a Substitute Index, the Security Calculation Agent will cause written notice thereof to be furnished to the trustee, to us and to the holders of the Securities of the Securities.

## An "Index Replacement Event" means:

- an amendment to or change (including any officially announced proposed change) in the laws, regulations or rules of the United States (or any political subdivision thereof), or any jurisdiction in which a Primary Exchange or Related Exchange (each as defined herein) is located that (i) makes it illegal for UBS AG or its affiliates to hold, acquire or dispose of units in the Index Constituent Securities included in the Index or options, futures, swaps or other derivatives on the Index or the units in the Index Constituent Securities included in the Index (including but not limited to exchange-imposed position limits), (ii) materially increases the cost to us, our affiliates, third parties with whom we transact or similarly situated third parties in performing our or their obligations in connection with the Securities, (iii) has a material adverse effect on any of these parties' ability to perform their obligations in connection with the Securities or (iv) materially affects our ability to issue or transact in exchange traded notes similar to the Securities, each as determined by the Security Calculation Agent;
- (b) any official administrative decision, judicial decision, administrative action, regulatory interpretation or other official pronouncement interpreting or applying those laws, regulations or rules that is announced on or after October 24, 2019 that (i) makes it illegal for UBS AG or its affiliates to hold, acquire or dispose of units in the Index Constituent Securities included in the Index or options, futures, swaps or other derivatives on the Index or the units in the Index constituents included in the Index (including but not limited to exchange-imposed position limits), (ii) materially increases the cost to us, our affiliates, third parties with whom we transact or similarly situated third parties in performing our or their obligations in connection with the Securities, (iii) has a material adverse effect on the ability of us, our affiliates, third parties with whom we transact or a similarly situated third party to perform our or their obligations in connection with the Securities or (iv) materially affects our ability to issue or transact in exchange traded notes similar to the Securities, each as determined by the Security Calculation Agent;
- (c) any event that occurs on or after October 24, 2019 that makes it a violation of any law, regulation or rule of the United States (or any political subdivision thereof), or any jurisdiction in which a Primary Exchange or Related Exchange (each as defined herein) is located, or of any official administrative decision, judicial decision, administrative action, regulatory interpretation or other official pronouncement interpreting or applying those laws, regulations or rules, (i) for UBS AG or its affiliates to hold, acquire or dispose of units in the Index Constituent Securities included in the Index or options, futures, swaps or other derivatives on the Index or the units in the Index constituents included in the Index (including but not limited to exchange-imposed position limits), (ii) for us, our affiliates, third parties with whom we transact or similarly situated third parties to perform our or their obligations in connection with the Securities or (iii) for us to issue or transact in exchange traded notes similar to the Securities, each as determined by the Security Calculation Agent;

- (d) any event, as determined by the Security Calculation Agent, as a result of which we or any of our affiliates or a similarly situated party would, after using commercially reasonable efforts, be unable to, or would incur a materially increased amount of tax, duty, expense or fee (other than brokerage commissions) to, acquire, establish, substitute, maintain, unwind or dispose of any transaction or asset it deems necessary to hedge the risk of the Securities, or realize, recover or remit the proceeds of any such transaction or asset; or
- (e) as determined by the Security Calculation Agent, the primary exchange or market for trading for the Securities, if any, announces that pursuant to the rules of such exchange or market, as applicable, the Securities cease (or will cease) to be listed, traded or publicly quoted on such exchange or market, as applicable, for any reason and are not immediately re-listed, re-traded or re-quoted on an exchange or quotation system located in the same country as such exchange or market, as applicable.

Notwithstanding these alternative arrangements, discontinuation of the publication of the Index or successor index, as applicable, may adversely affect the value of the Securities.

If at any time the method of calculating the Index or a successor index, or the value thereof, is changed in a material respect, or if the Index or a successor index is in any other way modified so that the Index Closing Level of the Index or such successor index does not, in the opinion of the Security Calculation Agent, fairly represent the Index Closing Level of the Index or such successor index had such changes or modifications not been made, then the Security Calculation Agent will make such calculations and adjustments as, in the good faith judgment of the Security Calculation Agent, may be necessary in order to arrive at an Index Closing Level of an index comparable to the Index or such successor index, as the case may be, as if such changes or modifications had not been made, and the Security Calculation Agent will calculate the Index Closing Level for the Index or such successor index with reference to the Index or such successor index, as adjusted. The Security Calculation Agent will accordingly calculate the Index Closing Level, the Index Valuation Level, the Index Performance Ratio, the Coupon Amount, the Reference Distribution Amount, the Stub Reference Distribution Amount, if any, the Accrued Fees, the Redemption Fee Amount, if any, the Cash Settlement Amount, if any, that we will pay you at maturity, the Redemption Amount, if any, upon early redemption, if applicable, the Call Settlement Amount, if any, that we will pay you in the event UBS calls the Securities, the Acceleration Amount that we will pay you in the event of an optional acceleration upon minimum indicative value, if applicable, the Loss Rebalancing Closing Level, if any, the Monthly Initial Closing Level and all related payment terms based on the Index Closing Level calculated by the Security Calculation Agent, as adjusted. Accordingly, if the method of calculating the Index or a successor index is modified so that the level of the Index or such successor index is a fraction of what it would have been if there had been no such modification (e.g., due to a split in the Index), which, in turn, causes the Index Closing Level of the Index or such successor index to be a fraction of what it would have been if there had been no such modification, then the Security Calculation Agent will make such calculations and adjustments in order to arrive at an Index Closing Level for the Index or such successor index as if it had not been modified (e.g., as if such split had not

In the event that the Security Calculation Agent elects to replace the Index with a successor index or a Substitute Index, UBS may, in its sole discretion, amend the title of the Securities in order to remove reference the former Index and to make such other changes to the title of the Securities as it considers necessary or desirable to reflect the name and/or characteristics of the relevant successor index or Substitute Index, as applicable.

All determinations and adjustments to be made by the Security Calculation Agent may be made in the Security Calculation Agent's sole discretion. See "Risk Factors — There are potential conflicts of interest between you and the Security Calculation Agent" in the prospectus supplement for a discussion of certain conflicts of interest which may arise with respect to the Security Calculation Agent.

## Manner of Payment and Delivery

Any payment on or delivery of the Securities at maturity, call or acceleration, or upon early redemption, will be made to accounts designated by you and approved by us, or at the corporate trust office of the trustee in New York City, but only when the Securities are surrendered to the trustee at that office. We also may make any payment or delivery in accordance with the applicable procedures of the depositary.

#### **Business Day**

When we refer to a Business Day or a New York Business Day with respect to the Securities, we mean a day that is a Business Day of the kind described in "Description of Debt Securities We May Offer — Payment Mechanics for Debt Securities" in "Medium-Term Notes, Series B" above.

## **Modified Business Day**

As described in "Description of Debt Securities We May Offer — Payment Mechanics for Debt Securities" in "Medium-Term Notes, Series B" above, any payment on the Securities that would otherwise be due on a day that is not a Business Day may instead be paid on the next day that is a Business Day, with the same effect as if paid on the original due date, except as described under "— Cash Settlement Amount at Maturity," "— UBS's Call Right" and "— Early Redemption at the Option of the Holders" above.

#### **Reissuances or Reopened Issues**

We may, at our sole discretion, "reopen" or reissue the Securities. We issued the Securities initially in an amount having the aggregate Stated Principal Amount specified on the cover of the prospectus supplement. We may issue additional Securities in amounts that exceed the amount on the cover at any time, without your consent and without notifying you. The Securities do not limit our ability to incur other indebtedness or to issue other securities. Also, we are not subject to financial or similar restrictions by the terms of the Securities. For more information, please refer to "Description of Debt Securities We May Offer — Amounts That We May Issue" in "Medium-Term Notes, Series B" above.

These further issuances, if any, will be consolidated to form a single class with the originally issued Securities and will have the same CUSIP number and will trade interchangeably with the Securities immediately upon settlement. Any additional issuances will increase the aggregate Stated Principal Amount of the outstanding Securities of the class. The price of any additional offering will be determined at the time of pricing of that offering.

## **Booking Branch**

The Securities will be booked through UBS AG, London Branch.

#### **Clearance and Settlement**

The DTC participants that hold the Securities through DTC on behalf of investors will follow the settlement practices applicable to equity securities in DTC's settlement system with respect to the primary distribution of the Securities and secondary market trading between DTC participants.

## 9. ETRACS Quarterly Pay 1.5x Leveraged Alerian MLP Index ETN due June 10, 2050

## **Specific Terms of the Securities**

In this section, references to "holders" mean those who own the Securities registered in their own names, on the books that we or the trustee maintains for this purpose, and not those who own beneficial interests in the Securities registered in street name or in the Securities issued in book-entry form through The Depository Trust Company ("DTC") or another depositary. Owners of beneficial interests in the Securities should read the section entitled "Legal Ownership and Book-Entry Issuance" under "Medium-Term Notes, Series B" above.

The Securities are part of a series of UBS AG debt securities entitled "Medium-Term Notes, Series B" that we may issue, from time to time, under the indenture more particularly described in the accompanying prospectus. This prospectus supplement summarizes specific financial and other terms that apply to the Securities. Terms that apply generally to all Medium-Term Notes, Series B are described in "Description of Debt Securities We May Offer" in the accompanying prospectus. The terms described here (i.e., in this prospectus supplement) supplement those described in the accompanying prospectus and, if the terms described here are inconsistent with those described there, the terms described here are controlling.

The Securities are part of a single series of senior debt securities issued under our indenture, dated as of June 12, 2015 between us and U.S. Bank Trust National Association, as trustee.

We describe the terms of the Securities in more detail below.

The Stated Principal Amount of each Security is \$25.00.

The Securities do not guarantee any return of principal at, or prior to, maturity, call or acceleration upon the occurrence of a Zero Value Event, or upon early redemption. Instead, at maturity, you will receive a cash payment per Security the amount of which will vary depending on the performance and path of the Index and will be reduced by the Accrued Fees as of the last Index Business Day in the Final Measurement Period as described under "— Cash Settlement Amount at Maturity." If the amount as calculated is equal to or less than zero, the Cash Settlement Amount will be zero and you will not receive a cash payment.

If you exercise your right to have us redeem your Securities, subject to compliance with the redemption procedures, for each Security you will receive a cash payment per Security on the relevant Redemption Date equal to the Redemption Amount as described under "— Early Redemption at the Option of the Holders." If the amount as calculated is equal to or less than zero, the Redemption Amount will be zero and you will not receive a cash payment.

If a Zero Value Event occurs, for each Security you will receive a cash payment per Security on the Zero Value Settlement Date equal to the (i) the Measurement Period Cash Amount, on the immediately preceding calendar day, plus (ii) the Accrued Dividend, on the date on which the Zero Value Event occurred, minus (iii) the Accrued Fees, on the date on which the Zero Value Event occurred, as described under "— Automatic Acceleration Upon Zero Value Event."

## **Coupon Payment**

For each Security you hold on the applicable Coupon Record Date, on each Coupon Payment Date you will receive an amount in cash equal to the Coupon Amount. The Coupon Amount will equal the sum of the cash distributions that a hypothetical holder of Index constituents would have been entitled to receive in respect of the Index constituents during the relevant period. The Coupon Amount may be equal to zero.

The "Coupon Amount" means (i) on any calendar day that is not a Coupon Ex-Date, zero; and (ii) onany calendar day that is a Coupon Ex-Date, an amount per Security equal to the Accrued Dividend on the Coupon Valuation Date immediately preceding such Coupon Ex-Date. The minimum value of the Coupon Amount will be zero.

The following graphic illustrates the formula to determine the Coupon Amount on a Coupon Ex-Date, which has been simplified for ease of presentation:

Coupon Amount = Accrued Dividend, on the immediately preceding Coupon Valuation Date

If the Securities undergo a split or reverse split, the Coupon Amount will be adjusted accordingly.

The "Accrued Dividend" means (i) on the Initial Trade Date, zero; and (ii) on any subsequent calendar day, an amount per Security equal to (a) the Accrued Dividend as of the immediately preceding calendar day, *plus* (b) the Daily Dividend on such calendar day, *minus* the Coupon Amount on such calendar day.

If the Securities undergo a split or reverse split, the Accrued Dividend will be adjusted accordingly.

The "Daily Dividend" means, on any calendar day, an amount per Security equal to (a)(i) the Index Dividend Point, *times* (ii) the Leverage Factor, *times* (iii) the Current Principal Amount on the immediately preceding calendar day, *times* (iv) the Residual Factor on the immediately preceding calendar day, *divided by* (b) the Last Reset Index Closing Level.

The "Index Dividend Point" means, on any calendar day, an amount per Security equal to the *sum of the products* of (i) the cash value of distributions that a hypothetical holder of one share of each Index Constituent Security on such calendar day would have been entitled to receive in respect of that Index Constituent Security for those cash distributions whose "ex-dividend date" occurs on such calendar day and (ii) the number of units of that Index Constituent Security included in the Index as of such date.

The Index Dividend Point may not be publicly disseminated by the Index Calculation Agent. The dataused to calculate the Index Dividend Point is the property of the Index Sponsor and investors may be required to pay a fee and meet any other requirements of the Index Sponsor, in order to access such information. See "Risk Factors — The value of the Index Dividend Point may not be publicly disseminated or otherwise freely accessible to investors".

The Index Dividend Point, on any calendar day, represents the total cash value of distributions that a hypothetical holder of the Index Constituent Securities, in proportion to the weights of the Index Constituent Securities, would have been entitled to receive with respect to any Index Constituent Securities for those cash distributions whose "ex-dividend date" occurs on such calendar day.

The "Coupon Payment Date" means the fifteenth (15th) Index Business Day following each Coupon Valuation Date. The first Coupon Payment Date will be July 22, 2020, subject to adjustment as provided herein. If such day is not a Coupon Business Day, the Coupon Payment Date shall be the following Coupon Business Day.

If the Final Coupon Ex-Date occurs prior to the Maturity Date, but the Final Coupon Payment Date otherwise occurs after the Maturity Date, in such case, the Final Coupon Payment Date will be the Maturity Date, subject to adjustment as provided herein.

The "Coupon Record Date" means the ninth Index Business Day following each Coupon Valuation Date. If such day is not a Coupon Business Day, the Coupon Record Date shall be the immediately preceding Coupon Business Day.

The "Coupon Ex-Date," with respect to a Coupon Amount, means the first Coupon Business Day on which the Securities trade without the right to receive such Coupon Amount. Under current NYSE Area practice, the Coupon Ex-Date will generally be the Coupon Business Day immediately preceding the applicable Coupon Record Date.

If a Zero Value Event occurs on an Index Business Day that would otherwise be a Coupon Ex-Date, such day will not be a valid Coupon Ex-Date and all further Coupon Ex-Dates will be suspended. In this case, the Coupon Amount corresponding to such Coupon Ex-Date will be included in the Zero Value Settlement Amount payable on the Zero Value Settlement Date.

In addition, if a day that would otherwise by a Coupon Ex-Date occurs on or after the first day of an applicable Measurement Period, such day will not be a valid Coupon Ex-Date and all further Coupon Ex-Dates will be suspended. In this case, the Coupon Amount corresponding to such Coupon Ex-date will be included in the Cash Settlement Amount or Call Settlement Amount payable at maturity or call, respectively.

The "Coupon Valuation Date" means the 30th day of each March, June, September and December, of each calendar year during the term of the Securities or if such date is not an Index Business Day, then the first Index Business Day following such date, provided that the final Coupon Valuation Date will be the Calculation Date, subject to adjustment described herein. The first Coupon Valuation Date will be June 30, 2020.

Notwithstanding the foregoing, with respect to cash distributions or dividends on an Index Constituent Security which is scheduled to be paid prior to the applicable Coupon Ex-Date, if, and only if, the issuer of such Index Constituent Security fails to pay the dividend or distribution to holders of such Index Constituent Security by the scheduled payment date for such dividend or distribution, such dividend or distribution will be assumed to be zero for the purposes of calculating the applicable Coupon Amount. Any such delayed dividend or distribution payment from the issuer of an Index Constituent Security will be attributed back to the Accrued Dividend and included in the next Coupon Amount.

"Coupon Business Day" means any Index Business Day other than an Index Business Day on which banking institutions in New York are generally not authorized or obligated by law, regulation or executive order to open.

"record date" means, (i) with respect to a distribution on an Index Constituent Security, the date on which a holder of the Index Constituent Security must be registered as a stockholder/unitholder of such Index Constituent Security in order to be entitled to receive such distribution and (ii) with respect to any split or reverse split, the tenth Business Day after the announcement date.

"ex-dividend date" means, with respect to a distribution on an Index Constituent Security, the first Business Day on which transactions in such Index Constituent Security trade on the Primary Exchange without the right to receive such distribution.

#### **Cash Settlement Amount at Maturity**

The "Maturity Date" is June 10, 2050, which will be the third Business Day following the last IndexBusiness Day in the Final Measurement Period, subject to adjustment as described below under "— Market Disruption Event."

For each Security, unless earlier called, redeemed or accelerated, you will receive at maturity a cash payment equal to the Closing Indicative Value on the last Index Business Day in the applicable Measurement Period. We refer to this cash payment as the "Cash Settlement Amount." If the amount socalculated is equal to or less than zero, the payment will be zero.

The following graphic illustrates the formula to determine the Cash Settlement Amount, which has been simplified for ease of presentation:

Cash Settlement Amount = Closing Indicative Value, on last Index Business Day in Final Measurement Period

You may lose all or a substantial portion of your investment at maturity. The combined negative effect of the Accrued Fees will reduce your final payment. If the compounded leveraged quarterly return of the Index (or the unleveraged return of the Index, following a Permanent Deleveraging Event) is insufficient to offset the negative effect of the Accrued Fees (less any Coupon Amounts you may be entitled to receive), or if the compounded leveraged quarterly return of the Index (or the unleveraged return of the Index, following a Permanent Deleveraging Event) is negative, you may lose all or a substantial portion of your investment at maturity. The occurrence of Loss Rebalancing Events will result in more frequent than quarterly compounding.

The Securities may be called by UBS prior to the Maturity Date pursuant to UBS's Call Right and, upon the occurrence of a Zero Value Event, the Securities will be automatically accelerated and mandatorily redeemed by UBS. If the Securities are called by UBS or accelerated upon the occurrence of a Zero Value Event, the Call Settlement Amount or Zero Value Settlement Amount, as applicable, may be zero and you may lose all or a substantial portion of your investment. See "Specific Terms of the Securities — UBS's Call Right" and "Specific Terms of the Securities — Automatic Acceleration Upon Zero Value Event".

The "Stated Principal Amount" of each Security is \$25.00. The Securities may be issued and sold over time at then-current market prices which may be significantly higher or lower than the Stated Principal Amount. If the Securities undergo a split or reverse split, the Stated Principal Amount will be adjusted accordingly.

The "Closing Indicative Value" per Security, will be calculated as follows:

- a) On the Initial Trade Date, \$25.00 per Security;
- b) On any other calendar day, prior to the first day of an applicable Measurement Period, an amountper Security equal to:
  - (Current Principal Amount on the immediately preceding calendar day  $\times$  Index Factor) Accrued Fees + Accrued Dividend
- c) From and including the first day of an applicable Measurement Period, an amount per Securityequal to:
  - (Current Principal Amount, on the calendar day immediately preceding the first day of the Measurement Period × Index Factor × Residual Factor) Accrued Fees + Accrued Dividend +Measurement Period Cash Amount
- d) The minimum value of the Closing Indicative Value on any calendar day will be zero.

If a Zero Value Event occurs on any Index Business Day then the Closing Indicative Value will be equal to the Zero Value Settlement Amount on the date on which the Zero Value Event occurred, and on all future calendar days. Upon the occurrence of a Zero Value Event, investors will likely lose all or substantially all of their investment. You will not benefit from any future exposure to the Index after the occurrence of a Zero Value Event. See "— Automatic Acceleration Upon Zero Value Event".

The actual trading price of the Securities in the secondary market may vary significantly from their Closing Indicative Value.

If the Securities undergo a split or reverse split, the Closing Indicative Value will be adjusted accordingly.

The "Current Principal Amount" represents the unleveraged investment in the Index Constituent Securities per Security at the close of trading on any Reset Valuation Date. The notional financing amount per Security in order to generate the leveraged returns would be approximately half of the Current Principal Amount at the close of trading on any Reset Valuation Date. If a Permanent Deleveraging Event occurs, the leverage of your Securities will be permanently reset to 1.0 and the notional financing amount will be equal to zero. If a Zero Value Event occurs prior to your Securities permanently resetting to 1.0 at the end of the Second Permanent Deleveraging Valuation Date, then your Securities will be fully redeemed and you will receive the Zero Value Settlement Amount (which amount may be zero).

The Current Principal Amount per Security, will be calculated as follows:

- (1) From and including the Initial Trade Date to and excluding the subsequent Reset Valuation Date, \$25.00 per Security;
- (2) At the close of trading on each Reset Valuation Date after the Initial Trade Date, the CurrentPrincipal Amount of the Securities will be reset as follows:

New Current Principal Amount = (Current Principal Amount on immediately preceding calendar day  $\times$  Index Factor) – Accrued Fees

The Current Principal Amount will not change until the subsequent Reset Valuation Date.

If a day that would otherwise be a Reset Valuation Date occurs on or after the first day of an applicable Measurement Period, such day will not be a valid Reset Valuation Date.

If a Zero Value Event occurs on any Index Business Day then the Current Principal Amount will be equal to zero on the date on which the Zero Value Event occurred, and on all future calendar days. Upon the occurrence of a Zero Value Event, investors will likely lose all or substantially all of their investment.

You will not benefit from any future exposure to the Index after the occurrence of a Zero Value Event. See "Specific Terms of the Securities — Automatic Acceleration Upon Zero Value Event".

If the Securities undergo a split or reverse split, the Current Principal Amount will be adjusted accordingly.

At the close of trading on each Reset Valuation Date, the Current Principal Amount is reset.

## The "Reset Valuation Date" means:

- (1) Any calendar day up to and including the Second Permanent Deleveraging Valuation Date, that is either: (i) the Initial Trade Date, (ii) a Quarterly Reset Valuation Date, (iii) a Loss Rebalancing Valuation Date (iv) the First Permanent Deleveraging Valuation Date, or (v) the Second Permanent Deleveraging Valuation Date; and
- (2) Any calendar day following the Second Permanent Deleveraging Valuation Date.

The definition of each valuation date is set forth below.

If a day that would otherwise be a Reset Valuation Date occurs on or after the first day of an applicable Measurement Period, such day will not be a valid Reset Valuation Date and the Last Reset Index Closing Level will remain the same.

The "Quarterly Reset Valuation Date" is the last Index Business Day of January, April, July and October of each calendar year beginning on July 31, 2020 and ending on April 29, 2050 (other than an Excluded Day), subject to adjustment as described under "— Market Disruption Event."

For purposes of the "Quarterly Reset Valuation Date" definition, an "Excluded Day" means (i) the Index Business Day immediately preceding the first day of an applicable Measurement Period, and any calendar day thereafter, and (ii) any calendar day after the Second Permanent Deleveraging Valuation Date.

The "Index Factor" is:  $1 + (Leverage Factor \times Index Performance Ratio)$ .

The Index Factor represents the leveraged percentage change in the Index level since the Last Reset Index Closing Level. The Index Factor *times* the applicable Current Principal Amount on the preceding calendar day represents the current value of the unleveraged notional amount per Security that is deemed invested in the Index on any calendar day. This does not reflect the Redemption Amount that an investor would receive upon early redemption on such calendar day.

If a Zero Value Event occurs at any time during any Index Business Day then the Index Factor will be equal to zero subsequent to the event on the date on which the Zero Value Event occurred, and on all future calendar days. Upon the occurrence of a Zero Value Event, investors will likely lose all or substantially all of their investment. You will not benefit from any future exposure to the Index after the occurrence of a Zero Value Event. See "Specific Terms of the Securities — Automatic Acceleration Upon Zero Value Event".

The "Residual Factor" will be calculated as follows:

- a) on any calendar day, to but excluding the first day of an applicable Measurement Period.
- b) From and including the first day of an applicable four-day Measurement Period, (a) the number of Index Business Days from, but excluding, the date of determination to, and including, the last Index Business Day in such four-day Measurement Period, *divided by* (b) four. For example, on the first Index Business Day in an applicable four-day Measurement Period, the Residual Factor will equal (3/4), on the second Index Business Day in an applicable four-day Measurement Period, the Residual Factor will equal (2/4), on the third Index Business Day in an applicable four-day Measurement Period, the Residual Factor will equal (1/4) and on the last Index Business Day in an applicable four-day Measurement Period, the Residual Factor will equal zero.
- c) On any calendar day from and including the last Index Business Day of an applicable Measurement Period, the Residual Factor will be equal to zero.

The Residual Factor is intended to approximate the percentage of the Current Principal Amount that is tracking the Index on any given day. The Residual Factor is relevant only during an applicable Measurement Period but otherwise is not a component of the Closing Indicative Value or Current Indicative Value formulas. At the close of trading on each Index Business Day during a four-day Measurement Period, approximately 25% of the Current Principal Amount and the corresponding amount of financing will be deemed converted to cash. In case of a one-day Measurement Period, approximately 100% of the Current Principal Amount and the corresponding amount of financing will be deemed converted to cash.

The "Leverage Factor" on any calendar day until the occurrence of a Permanent Deleveraging Event and the close of trading on the Second Permanent Deleveraging Valuation Date, will equal 1.5. If a Permanent Deleveraging Event occurs, then on any calendar day following the Second Permanent Deleveraging Valuation Date, the Leverage Factor will equal 1.0.

The "Index Performance Ratio" on any Index Business Day will be equal to:

<u>Index Closing Level – Last Reset Index Closing Level</u>
Last Reset Index Closing Level

On any calendar day that is not an Index Business Day, the Index Closing Level will be equal to the Index Closing Level on the Index Business Day immediately preceding such calendar day.

The "Last Reset Index Closing Level" is the Index Closing Level on the most recent Reset Valuation Date prior to such day. The initial Last Reset Index Closing Level is 147.1048, the Index Closing Level on the Initial Trade Date, as reported by Bloomberg L.P. and Reuters.

The "Index Closing Level" on any date of determination is the closing level of the Index, as reported on Bloomberg L.P. and Reuters; provided, however, that if the closing level of the Index as reported on Bloomberg L.P. (or any successor) differs from the closing level of the Index as reported on Reuters (or any successor), then the Index Closing Level will be the closing level of the Index as calculated by the Index Calculation Agent. The initial Index Closing Level (which is also the first Last Reset Index Closing Level) is 147.1048, the Index Closing Level measured on the Initial Trade Date, as determined by the Security Calculation Agent.

On any calendar day that is not an Index Business Day, the Index Closing level will be equal to the Index Closing Level on the Index Business Day immediately preceding such calendar day.

"Measurement Period" means the Final Measurement Period or Call Measurement Period, as applicable.

The "Current Indicative Value" or "intraday indicative value", as determined by the Security Calculation Agent, is an amount per Security, on an intraday basis on any Index Business Day, equal to:

a) On the Initial Trade Date, \$25.00.

- b) On any other calendar day prior to the first day of an applicable Measurement Period: (Current Principal Amount on the immediately preceding calendar day × Index Factor, calculated using the Intraday Index Value) Accrued Fees + Accrued Dividend.
- c) From and including the first day of an applicable Measurement Period, an amount per Security equal to: (Current Principal Amount, on the calendar day immediately preceding the first day of the Measurement Period × Index Factor, calculated using the Intraday Index Value × Residual Factor, from the immediately preceding calendar day) - Accrued Fees + Accrued Dividend + Measurement Period Cash Amount, from the immediately preceding calendar day
- d) The minimum value of the Current Indicative Value on any calendar day will be zero.

The actual trading price of the Securities in the secondary market may vary significantly from their Current Indicative Value (or intraday indicative value). If a Zero Value Event occurs during any Index Business Day then the Current Indicative Value (or "intraday indicative value") will be equal to the Zero Value Settlement Amount, subsequent to the event on the date on which the Zero Value Event occurred, and on all future calendar days. Upon the occurrence of a Zero Value Event, investors will likely lose all or substantially all of their investment. You will not benefit from any future exposure to the Index after the occurrence of a Zero Value Event. See "Specific Terms of the Securities — Automatic Acceleration Upon Zero Value Event".

If the Securities undergo a split or reverse split, the Current Indicative Value (or intraday indicative value) will be adjusted accordingly.

The "Accrued Fees" as of any date of determination means the Accrued Tracking Fee + the Accrued Financing Fee.

If the Securities undergo a split or reverse split, the Accrued Fees will be adjusted accordingly.

The Securities are subject to an "Accrued Tracking Fee" per Security, calculated as follows:

- a) On the Initial Trade Date, the Accrued Tracking Fee is equal to zero.
- b) On any subsequent calendar day, the Accrued Tracking Fee is equal to: (a) the Accrued Tracking Fee as of the immediately preceding calendar day, *plus* the Daily Tracking Fee on such calendar day.
- c) On the calendar day after each Reset Valuation Date, the Accrued Tracking Fee is reset to be equal to the Daily Tracking Fee on such calendar day.

The "Daily Tracking Fee" is an amount per Security calculated as follows:

- a) On the Initial Trade Date, the Daily Tracking Fee is zero.
- b) On any subsequent calendar day, the Daily Tracking Fee is equal to: (a) (i) 0.95%, *times* (ii) the Current Principal Amount on the immediately preceding calendar day, *times* (iii) the Index Factor, on such calendar day, *times* (iv) the Residual Factor, on the immediately preceding calendar day, *divided by* (b) 365.
- c) The minimum value of the Daily Tracking Fee on any calendar day will be zero.

The Daily Tracking Fee represents the investor fees calculated each day on the current value of the unleveraged notional amount invested in the Index per Security. These charges accrue and compound during the applicable period, and will reduce any amount you are entitled to receive at maturity, early redemption, call or acceleration upon the occurrence of a Zero Value Event.

If the Securities undergo a split or reverse split, the Daily Tracking Fee will be adjusted accordingly.

The Securities are subject to an "Accrued Financing Fee" per Security calculated as follows:

- a) On the Initial Trade Date, the Accrued Financing Fee is equal to zero.
- b) On any subsequent calendar day, the Accrued Financing Fee is equal to: (a) the Accrued Financing Fee as of the immediately preceding calendar day, *plus* (b) the Daily Financing Fee on such calendar day.
- c) On the calendar day after each Reset Valuation Date, the Accrued Financing Fee is reset to be equal to the Daily Financing Fee on such calendar day.
- d) If a Permanent Deleveraging Event occurs, then on any calendar day following the SecondPermanent Deleveraging Valuation Date, the Accrued Financing Fee will be equal to zero.

"CME Term SOFR" means the CME Term SOFR Reference Rates published for one-, three-, six-, and 12-month tenors as administered by CME Group Benchmark Administration, Ltd. (or any successor administrator thereof).

The "Daily Financing Fee" is an amount per Security calculated as follows:

- a) On the Initial Trade Date, the Daily Financing Fee is equal to zero.
- b) On any subsequent calendar day, the Daily Financing Fee is equal to: (a) (i) 0.5, *times* (ii) the Financing Rate, on such calendar day, *times* (iii) the Current Principal Amount, on the immediately preceding calendar day, *times* (iv) the Residual Factor, on the immediately preceding calendar day, *divided by* (b) 360.
- c) If a Permanent Deleveraging Event occurs, then on any calendar day following the Second Permanent Deleveraging Valuation Date, the Daily Financing Fee will be equal to zero.
- d) The minimum value of the Daily Financing Fee on any calendar day will be zero.

The Daily Financing Fee seeks to compensate UBS for providing investors with a leveraged participation in movements of the Index and is intended to approximate the financing costs that investors may have otherwise incurred had they sought to borrow funds at a similar rate from a third party to invest in the Securities. These charges accrue and compound during the applicable period, and will reduce any amount that you will be entitled to receive at maturity, early redemption, call or acceleration upon the occurrence of a Zero Value Event.

If the Securities undergo a split or reverse split, the Daily Financing Fee will be adjusted accordingly.

The "Financing Rate" will equal the sum of (a) 0.95% and (b) three-month CME Term SOFR rate plus a 0.2616% adjustment on the immediately preceding U.S. Government Securities Business Day. The minimum Financing Rate at any time will be 0.95%

For example, 5.24665% was the three-month CME Term SOFR rate on June 29, 2023. The Financing Rate (if it were based on the SOFR-Based Benchmark Replacement) on June 30, 2023 would have therefore been equal to: 0.95% + 5.24665% + 0.2616%, or 6.45825%.

The "Measurement Period Cash Amount" is an amount per Security equal to:

- a) \$0.00 on any calendar day, to but excluding the first day of an applicable Measurement Period.
- b) On the first day of an applicable one-day Measurement Period:
- c) At the close of trading on such Index Business Day, (the Current Principal Amount on the immediately preceding calendar day × Index Factor on such Index Business Day)
- d) From and including the first day of an applicable four-day Measurement Period:
  - i. At the close of trading on each Index Business Day during the applicable four-day Measurement Period, the Measurement Period Cash Amount on the immediately preceding calendar day + (Current Principal Amount, on the calendar day immediately preceding the first day of such Measurement Period × 0.25 × Index Factor, on such Index Business Day).
  - ii. On any calendar day during an applicable four-day Measurement Period that is not an Index Business Day, the Measurement Period Cash Amount on the immediately preceding Index Business Day.
- e) On any calendar day after the last Index Business Day of an applicable Measurement Period, the Measurement Period Cash Amount on the last Index Business Day of such Measurement Period.

The Measurement Period Cash Amount represents the portion of the Current Principal Amount that has been converted to cash on any given day of an applicable Measurement Period and is no longer tracking the Index.

At the close of trading of each Index Business day during a four-day Measurement Period, approximately 25% of the Current Principal Amount, on the calendar day immediately preceding the first day of the Measurement Period, will be deemed converted to cash and an applicable amount of financing will separately be deemed converted to cash as well. After the close of trading on the final Index Business Day of an applicable four-day Measurement Period, the Measurement Period Cash Amount will represent the averaged value of the Current Principal Amount that was deemed converted to cash across the four-days of such Measurement Period. In case of a one-day Measurement Period, approximately 100% of the Current Principal Amount will be deemed converted to cash and an applicable amount of financing will separately be deemed converted to cash, at the close of trading of the first day of such Measurement Period.

If the Securities undergo a split or reverse split, the Measurement Period Cash Amount will be adjusted accordingly.

#### The "Final Measurement Period" means:

- a) if the Market Value of Securities outstanding as at the close of trading on the Index Business Day immediately preceding the Calculation Date is less than \$100,000,000, the Calculation Date, subject to adjustments as described under "— Market Disruption Event";
- b) if the Market Value of Securities outstanding as at the close of trading on the Index Business Day immediately preceding the Calculation Date is equal to or greater than \$100,000,000, the four (4) Index Business Days from and including the Calculation Date, subject to adjustments as described under "— Market Disruption Event."

For the purpose of determining the Final Measurement Period, the "Market Value" of the Securities outstanding as of the close of trading on the Index Business Day immediately preceding the Calculation Date, will equal:

(i) the Closing Indicative Value as of such Index Business Day, *times* (ii) the number of Securities outstanding as reported by MLPRSO <Index> on Bloomberg L.P.

The "Index Calculation Agent" means the entity that calculates and publishes the level of the Index, which is currently S&P Dow Jones Indices.

The "Calculation Date" means June 2, 2050, unless such day is not an Index Business Day, in which case the Calculation Date will be the next Index Business Day, subject to adjustments.

The Calculation Date represents the first Index Business Day of the Final Measurement Period.

"Index Business Day" means any day on which the Primary Exchange or market for trading of the Securities is scheduled to be open for trading.

"Primary Exchange" means, with respect to each Index Constituent Security or each constituent underlying a successor index, the primary exchange or market of trading such Index Constituent Security or such constituent underlying a successor index.

"U.S. Government Securities Business Day" means any day except for a Saturday, a Sunday or a day on which the Securities Industry and Financial Markets Association recommends that the fixed income departments of its members be closed for the entire day for purposes of trading in U.S. government securities.

#### **Underlying Index**

The return of the Securities is based upon the performance of the Alerian MLP Index (Bloomberg: "AMZ"). The Index measures the composite performance of energy master limited partnerships ("MLPs"), and is calculated by S&P Dow Jones Indices using a capped, float-adjusted, capitalization weighted methodology. We refer to the MLPs included in the Index as the "Index Constituent Securities." The Index Constituent Securities earn the majority of their cash flow from qualifying activities involving energy commodities, which include pipeline transportation, gathering and processing, storage, production and mining, marketing, marine transportation, services, catalytic conversion, mineral interest, refining, regasification and other related activities.

## Early Redemption at the Option of the Holders

Subject to your compliance with the procedures described below and the potential postponements and adjustments as described under "— Market Disruption Event," you may submit a request to have us redeem your Securities on any Index Business Day no later than 12:00 noon, New York City time, and a confirmation of redemption by no later than 5:00 p.m., New York City time, on the same Index Business Day, provided that you request that we redeem a minimum of 50,000 Securities. We reserve the right from time to time to waive this minimum redemption amount in our sole discretion on a case-by-case basis. You should not assume you will be entitled to the benefit of any such waiver. For any applicable redemption request, the "Redemption Valuation Date" will be the first Index Business Day following the date that the applicable redemption notice and redemption confirmation are delivered, except that we reserve the right from time to time to accelerate, in our sole discretion on a case-by-case basis, the Redemption Valuation Date to the date on which the notice of redemption is received by UBS rather than the following Index Business Day. You should not assume you will be entitled to any such acceleration. To satisfy the minimum redemption amount, your broker or other financial intermediary may bundle your Securities for redemption with those of other investors to reach this minimum amount of 50,000 Securities.

The Securities will be redeemed and the holders will receive payment for their Securities on the second Index Business Day following the applicable Redemption Valuation Date (the "Redemption Date"). The first Redemption Date will be the fourth Index Business Day immediately following the Initial Trade Date and the Final Redemption Date will be the fourth Index Business Day immediately preceding the Maturity date, subject to adjustments. In addition, if a call notice has been issued, the last Redemption Valuation Date will be the fourth Index Business Day prior to the Call Settlement Date, as applicable. If a Zero Value Event occurs, the last Redemption Date will be the date on which the Zero Value Event occurred.

If a Market Disruption Event is continuing or occurs on the applicable scheduled Redemption Valuation Date with respect to any of the Index Constituent Securities, such Redemption Valuation Date may be postponed as described under "— Market Disruption Event."

As of any Redemption Valuation Date, the "Redemption Fee Amount" means an amount per Security equal to:

(0.125% × Closing Indicative Value of the Security as of the Redemption Valuation Date).

If you exercise your right to have us redeem your Securities, subject to your compliance with the procedures described under "— Redemption Procedures," for each applicable Security you will receive a cash payment on the relevant Redemption Date equal to:

Closing Indicative Value as of the Redemption Valuation Date – Redemption Fee Amount.

We refer to this cash payment as the "**Redemption Amount**." If the amount calculated above is equal to or less than zero, the payment upon early redemption will be zero. We reserve the right from time to time to waive the Redemption Fee Amount in our sole discretion and on a case-by-case basis. There can be no assurance that we will elect to waive this fee and you should not assume you will be entitled to such fee waiver.

We will inform you of such Redemption Amount on the first Business Day following the applicable Redemption Valuation Date.

The redemption feature is intended to induce arbitrageurs to counteract any trading of the Securities at a discount to their indicative value, though there can be no assurance that arbitrageurs will employ the redemption feature in this manner or that they will be successful in counteracting any divergence in the market price of the Securities and their indicative value.

The following graphic illustrates the formula to determine the Redemption Amount, which has been simplified for ease of presentation:

Redemption = Closing Indicative Value - Redemption Fee Amount

You may lose all or a substantial portion of your investment upon early redemption. The combined negative effect of the Accrued Fees and the Redemption Fee Amount will reduce your final payment. If the compounded leveraged quarterly return of the Index (or the unleveraged return of the Index, following a Permanent Deleveraging Event) is insufficient to offset the negative effect of the Accrued Fees and the Redemption Fee Amount, if applicable (less any Coupon Amounts you may be entitled to receive as of the Redemption Valuation Date), or if the compounded leveraged quarterly return of the Index (or the unleveraged return of the Index, following a Permanent Deleveraging Event) is negative, you may lose all or a substantial portion of your investment upon early redemption. The occurrence of Loss Rebalancing Events will result in more frequent than quarterly compounding.

The Securities may be called by UBS prior to the Maturity Date pursuant to UBS's Call Right and, upon the occurrence of a Zero Value Event, the Securities will be automatically accelerated and mandatorily redeemed by UBS. See "Specific Terms of the Securities — UBS's Call Right" and "Specific Terms of the Securities — Automatic Acceleration Upon Zero Value Event".

We discuss these matters in the accompanying prospectus under "Description of Debt Securities We May Offer — Redemption and Repayment."

The Redemption Amount is meant to induce arbitrageurs to counteract any trading of the Securities at a premium or discount to their indicative value, though there can be no assurance that arbitrageurs will employ the redemption feature in this manner.

#### **Redemption Procedures**

To redeem your Securities, you must instruct your broker or other person through whom you hold your Securities to take the following steps through normal clearing system channels:

- deliver a notice of redemption, which we refer to as a "**Redemption Notice**" to UBS via email no later than 12:00 noon (New York City time) on the Index Business Day on which you elect to exercise your redemption right. If we receive your Redemption Notice by the time specified in the preceding sentence, we will respond by sending you a form of confirmation of redemption;
- deliver the signed confirmation of redemption, which we refer to as the "**Redemption Confirmation**", to us via email in the specified form by 5:00 p.m. (New York City time) on the same day. We or our affiliate must acknowledge receipt in order for your Redemption Confirmation to be effective;
- instruct your DTC custodian to book a delivery vs. payment trade with respect to your Securities on the applicable Redemption Date at a price equal to the Redemption Amount; and
- cause your DTC custodian to deliver the trade as booked for settlement via DTC at or prior to 12:00 noon (New York City time) on the applicable Redemption Date.

Different brokerage firms may have different deadlines for accepting instructions from their customers. Accordingly, as a beneficial owner of the Securities, you should consult the brokerage firm through which you own your interest for the relevant deadline. If your broker delivers your Redemption Notice after 12:00 noon (New York City time), or your Redemption Confirmation after 5:00 p.m. (New York City time), on the Business Day prior to the applicable Redemption Valuation Date, your Redemption Notice will not be effective, you will not be able to redeem your Securities until the following Redemption Date and your broker will need to complete all the required steps if you should wish to redeem your Securities on any subsequent Redemption Date. In addition, UBS may request a medallion signature guarantee or such assurances of delivery as it may deem necessary in its sole discretion. All instructions given to participants from beneficial owners of Securities relating to the right to redeem their Securities will be irrevocable. If your DTC custodian or your brokerage firm is not a current UBS customer, UBS will be required to on-board such DTC custodian or brokerage firm, in compliance with its internal policies and procedures, before it can accept your Redemption Notice, your Redemption Confirmation or otherwise process your redemption request. This on-boarding process may delay your Redemption Valuation Date and Redemption Date. Furthermore, in certain circumstances, UBS may be unable to on-board your DTC custodian or your brokerage firm.

We reserve the right from time to time to waive the minimum redemption amount or the Redemption Fee Amount in our sole discretion on a case-by-case basis. In addition, we reserve the right from time to time to accelerate, in our sole discretion on a case-by-case basis, the Redemption Valuation Date to the date on which the Redemption Notice is received by UBS rather than the following Index Business Day. You should not assume you will be entitled to any such waiver or election to accelerate the Redemption Valuation Date.

#### **UBS's Call Right**

We have the right to redeem all, but not less than all, of the Securities upon not less than eighteen (18) calendar days' prior notice to the holders of the Securities (which may be provided via press release), such redemption to occur on any Business Day that we may specify through and including the Maturity Date. Upon early redemption in the event we exercise this call right, you will receive a cash payment equal to the Closing Indicative Value on the last Index Business Day in the Call Measurement Period. We refer to this cash payment as the "Call Settlement Amount."

If the amount calculated above is equal to or less than zero, the payment upon UBS's exercise of its Call Right will be zero.

We will inform you of such Call Settlement Amount on the first Business Day following the last Index Business Day in the Call Measurement Period.

The holders will receive payment for their Securities on the third Business Day following the last Index Business Day in the Call Measurement Period (the "Call Settlement Date"). If a Market Disruption Event is continuing or occurs on the scheduled Call Valuation Date with respect to any of the Index Constituent Securities, such Call Valuation Date may be postponed as described under "— Market Disruption Event."

The "Call Measurement Period" means:

- a) if the Market Value of Securities outstanding as at the close of trading on the Index Business Day immediately preceding the date of delivery by UBS of its notice to holders (which may be provided via press release) of its exercise of the UBS Call Right is less than \$100,000,000, the Call Valuation Date, subject to adjustments as described under "— Market Disruption Event";
- b) if the Market Value of Securities outstanding as at the close of trading on the Index Business Day immediately preceding the date of delivery by UBS of its notice to holders (which may be provided via press release) of its exercise of the UBS Call Right is equal to or greater than \$100,000,000, the four (4) Index Business Days from and including the Call Valuation Date, subject to adjustments as described under "— Market Disruption Event."

For the purpose of determining the Final Measurement Period, the "Market Value" of the Securities outstanding as of the close of trading on the Index Business Day immediately preceding the date of delivery by UBS of its notice to holders (which may be provided via press release) of its exercise of the UBS Call Right will equal:

(i) The Closing Indicative Value as of such Index Business Day, *times* (ii) the number of Securities outstanding as reported by MLPRSO <Index> on Bloomberg L.P.

The "Call Valuation Date" means the date disclosed as such by UBS in its notice to holders (which may be provided via press release) of its exercise of the UBS Call Right.

In any notice to holders exercising the UBS Call Right, we will specify how many days are included in the Call Measurement Period.

The following graphic illustrates the formula to determine the Call Settlement Amount, which has been simplified for ease of presentation:

Call Settlement Amount = Closing Indicative Value, on last Index
Business Day in Call Measurement Period

You may lose all or a substantial portion of your investment upon a call. The combined negative effect of the Accrued Fees will reduce your final payment. If the compounded leveraged quarterly return of the Index (or the unleveraged return of the Index, following a Permanent Deleveraging Event) is insufficient to offset the negative effect of the Accrued Fees (less any Coupon Amounts you may be entitled to receive), or if the compounded leveraged quarterly return of the Index (or the unleveraged return of the Index, following a Permanent Deleveraging Event) is negative, you may lose all or a substantial portion of your investment upon a call. The occurrence of Loss Rebalancing Events will result in more frequent than quarterly compounding.

In addition, upon the occurrence of a Zero Value Event, the Securities may be automatically accelerated and mandatorily redeemed by UBS. See "Specific Terms of the Securities — Automatic Acceleration Upon Zero Value Event" below.

## **Automatic Acceleration Upon Zero Value Event**

A "Zero Value Event" occurs if, on any Index Business Day (other than an Excluded Day), the Intraday Index Value decreases by 66.66667% or more in value from the Last Reset Index Closing Level. From immediately after the Zero Value Event and on all future calendar days, the Index Factor and the Current Principal Amount will be set equal to zero. The Accrued Dividend and Accrued Fees will be fixed at their respective values on the Zero Value Event date and will stay unchanged on all future calendar days.

When the Intraday Index Value decreases 66.66667% in value from the Last Reset Index Closing Level, the Index Factor will equal zero. A Zero Value Event represents the first instance when the effective unleveraged notional amount that is deemed invested in the Index per Security equals zero. It will have the effect of permanently resetting the value of your Securities to a fixed value (which may be zero) and accelerating the Securities. You will not benefit from any future exposure to the Index after the occurrence of a Zero Value Event. A Zero Value Event is expected to occur only in the narrow window of time between the occurrence of a Permanent Deleveraging Event and completion of the leverage reset to 1.0 at the end of the Second Permanent Deleveraging Valuation Date.

For the purposes of the "Zero Value Event" definition, an "Excluded Day" means (i) any calendar day after the Second Permanent Deleveraging Valuation Date (ii) any calendar day on which a Zero Value Event has already occurred, (iii) any calendar day after the occurrence of a Zero Value Event, and (iv) any calendar day after the last day of an applicable Measurement Period.

If a Zero Value Event occurs, all issued and outstanding Securities will be automatically terminated and mandatorily redeemed by UBS and you will receive the Zero Value Settlement Amount on the Zero Value Settlement Date. You will not benefit from any future exposure to the Index after the occurrence of a Zero Value Event.

In the event that a Zero Value Event has occurred, UBS will issue a press release shortly after the event and specify the relevant Zero Value Settlement Date and Zero Value Settlement Amount in respect of your investment in the Securities. The Securities will be suspended from trading intra-day shortly after the event occurs and will likely not be open for trading again on NYSE Area before the Zero Value Settlement Date.

If a Zero Value Event occurs on an Index Business Day that would otherwise be a Coupon Ex-Date, such day will not be a valid Coupon Ex-Date and all further Coupon Ex-Dates will be suspended.

The "Zero Value Settlement Amount" per Security will be calculated as follows:

- a) On any calendar day, to but excluding the first day of an applicable Measurement Period:(i) the Accrued Dividend, minus (ii) the Accrued Fees, on the date on which the Zero Value Event occurred.
- b) From and including the first day of an applicable Measurement Period:
  (i) the Measurement Period Cash Amount on the immediately preceding calendar day, *plus* (ii) the Accrued Dividend, *minus* (iii) the Accrued Fees, on the date on which the Zero Value Event occurred.
- c) The minimum value of the Zero Value Settlement Amount will be zero.

#### For example:

- a) If the Accrued Dividend was \$0.04, the Accrued Fees was \$0.01, and the Measurement Period Cash Amount was \$0, then the Zero Value Settlement Amount would be \$0.03.
- b) If the Accrued Dividend was \$0.01, the Accrued Fees was \$0.05, and the Measurement Period Cash Amount was \$0, then the Zero Value Settlement Amount would be \$0.
- c) If the Zero Value Event occurred during a four-day Measurement Period, and the Accrued Dividend was \$0.01, the Accrued Fees was \$0.03, and the Measurement Period Cash Amount on the immediately preceding calendar day was \$6.59, then the Zero Value Settlement Amount would be \$6.57.

The following graphics illustrate the formula to determine the Zero Value Settlement Amount, which has been simplified for ease of presentation:

On any calendar day, to but excluding the first day of an applicable four-day Measurement Period:

Zero Value Settlement = Accrued Dividend - Accrued Fees on date Zero Value Event occurred

From and including the first day of an applicable Measurement Period:

Zero Value Settlement Amount = Measurement Period Cash
Amount on immediately preceding calendar day + Accrued Dividend Event occurred

Accrued Fees on date Zero Value Event occurred

The "Zero Value Settlement Date" will be the third Index Business Day following the date on which the Zero Value Event occurred. For a detailed description of how the Current Indicative Value (or intraday indicative value) of the Securities is calculated see "Valuation of the Index and the Securities".

You may lose all or a substantial portion of your investment upon the occurrence of a Zero Value Event. Upon the occurrence of a Zero Value Event you will receive on the Zero Value Settlement Date only the Zero Value Settlement Amount per Security.

In addition, the Securities may be called by UBS prior to the Maturity Date pursuant to UBS's Call Right. See "Specific Terms of the Securities — UBS's Call Right".

#### **Loss Rebalancing Events**

A Loss Rebalancing Event will have the effect of deleveraging your Securities with the aim of resetting the then-current leverage to approximately 1.5. This means that after a Loss Rebalancing Event, a constant percentage increase in the Index Closing Level will have less of a positive effect on the value of your Securities relative to before the occurrence of the Loss Rebalancing Event.

A "Loss Rebalancing Event" occurs if, at any time, the Intraday Index Value on such Index Business Day (other than an Excluded Day) decreases by 15% or more in value from the previously Last Reset Index Closing Level.

Loss Rebalancing Events may occur multiple times over the term of the Securities and may occur multiple times during a single calendar quarter. This means both that (i) the Current Principal Amount may be reset more frequently than quarterly and (ii) the cumulative effect of compounding and fees will have increased as a result of the Loss Rebalancing Event(s). Because each Loss Rebalancing Event will have the effect of deleveraging your Securities, following a Loss Rebalancing Event your Securities will have less exposure to a potential positive gain in value relative to the exposure before the occurrence of such Loss Rebalancing Event.

For purposes of the "Loss Rebalancing Event" definition, an "**Excluded Day**" means (i) the Index Business Day immediately preceding any Quarterly Reset Valuation Date, if a Loss Rebalancing Event occurs after 3:15pm on such day, (ii) any Quarterly Reset Valuation Date, (iii) any Loss Rebalancing Valuation Date, (iv) the Index Business Day immediately preceding the first day of an applicable Measurement Period, if a Loss Rebalancing Event occurs after 3:15pm on such day (v) any calendar day from and including the first day of an applicable Measurement Period, (vi) the First or Second Permanent Deleveraging Valuation Dates, (vii) any calendar day after the Second Permanent Deleveraging Valuation Date, (viii) a Zero Value Event date, and (ix) any calendar day after the Zero Value Event date.

## "Loss Rebalancing Valuation Date" means:

- a) if a Loss Rebalancing Event occurs at or prior to 3:15 p.m. on an Index Business Day, the day that such Loss Rebalancing Event occurs, subject to adjustment as described under "— Market Disruption Event";
- b) if a Loss Rebalancing Event occurs after 3:15 p.m. on an Index Business Day, the first Index Business Day following the occurrence of such Loss Rebalancing Event, subject to adjustment as described under "— Market Disruption Event."

## **Permanent Deleveraging Event**

A Permanent Deleveraging Event will have the effect of deleveraging your Securities, with the aim of permanently resetting the then-current leverage to 1.0, over two Index Business Days. The leverage at the end of the First Permanent Deleveraging Valuation Date is reset to approximately 1.5 and the leverage at the end of the Second Permanent Deleveraging Valuation Date is reset to 1.0. This means that after a Permanent Deleveraging Event, a constant percentage increase in the Index Closing Level will have less of a positive effect on the value of your Securities relative to before the occurrence of the Permanent Deleveraging Event. A Permanent Deleveraging Event is expected to occur only in the narrow window of time between the occurrence of a Loss Rebalancing Event and completion of the leverage reset to 1.5 at the end of the Loss Rebalancing Valuation Date.

A "Permanent Deleveraging Event" occurs if, at any time, the Intraday Index Value on such Index Business Day (other than an Excluded Day) decreases by 50% or more in value from the Last Reset Index Closing Level.

For purposes of the "Permanent Deleveraging Event" definition, an "Excluded Day" means (i) the First or Second Permanent Deleveraging Valuation Dates, (ii) any calendar day after the Second Permanent Deleveraging Valuation Date, (iii) a day upon which a Zero Value Event occurs, (iv) any calendar day after the occurrence of a Zero Value Event, (v) the day which is two Index Business Days prior to the first day of an applicable Measurement Period, if a Permanent Deleveraging Event occurs after 3:15pm on such day and (vi) any calendar day from and including the Index Business Day immediately preceding the first day of an applicable Measurement Period.

In the event that a Permanent Deleveraging Event has occurred, UBS will issue a press release before 9:00 a.m. on the Index Business Day immediately following the date on which the Permanent Deleveraging Event occurred, announcing the Permanent Deleveraging Event and notifying you of the Permanent Deleveraging Valuation Dates.

"Permanent Deleveraging Valuation Dates" means the First Permanent Deleveraging Valuation Date and the Second Permanent Deleveraging Valuation Date, each as defined below:

- a) The "First Permanent Deleveraging Valuation Date" means:
  - i. Any Index Business Day, which otherwise would have been a Loss Rebalancing Valuation Date, but on which a Permanent Deleveraging Event has occurred, subject to adjustment as described under "- Market Disruption Event";
  - ii. If a Permanent Deleveraging Event occurs after 3:15pm on any Index Business Day which would not otherwise have been a Loss Rebalancing Valuation Date, then the first Index Business Day following the occurrence of such Permanent Deleveraging Event, subject to adjustment as described under "— Market Disruption Event".

The leverage of your Securities will be reset to approximately 1.5 at the close of trading on the First Permanent Deleveraging Valuation Date.

b) The "Second Permanent Deleveraging Valuation Date" means the Index Business Day immediately following the First Permanent Deleveraging Valuation Date, subject to adjustment as described under "— Market Disruption Event".

The leverage of your Securities will be reset to approximately 1.0 at the close of trading on the Second Permanent Deleveraging Valuation Date.

#### **Security Calculation Agent**

UBS Securities LLC will act as the Security Calculation Agent. The Security Calculation Agent will be solely responsible for all determinations and calculations regarding the value of the Securities, including, among other things, at maturity or upon early redemption or call, or at other times, the Current Principal Amount, Current Indicative Value (or the "intraday indicative value"), Closing Indicative Value, Market Disruption Events, Business Days, Index Business Days, the Leverage Factor, the Index Factor, the Index Performance Ratio, the Residual Factor, the Index Closing Level, the Financing Rate, the Accrued Fees (including determining any successor to the LIBOR base rate), the Coupon Amount, the Accrued Dividend, the Daily Dividend, if any, the Redemption Fee Amount, the Cash Settlement Amount, if any, that we will pay you at maturity, the Coupon Ex-Dates, the Coupon Record Dates, the Redemption Amount, if any, that we will pay you upon redemption, if applicable, the Zero Value Settlement Amount, if any, that we will pay you upon acceleration following the occurrence of a Zero Value Event, the Call Settlement Amount, if any, that we will pay you in the event that UBS calls the Securities, whether a Loss Rebalancing Event has occurred, whether a Permanent Deleveraging Event has occurred and whether any day is a Business Day or an Index Business Day and all such other matters as may be specified elsewhere herein as matters to be determined by the Security Calculation Agent. The Security Calculation Agent will also be responsible for determining whether the Index has been discontinued and whether there has been a material change in the Index. The Security Calculation Agent will make all such determinations and calculations in its sole discretion, and absent manifest error, all determinations of the Security Calculation Agent will be conclusive for all purposes and binding on us, you, and all other persons having an interest in the Security, without liability on the part of the Security Calculation Agent. You will not be entitled to any compensation from us for any loss suffered as a result of any determinations or calculations made by the Security Calculation Agent. We may appoint a different Security Calculation Agent from time to time after the date of this prospectus supplement without your consent and without notifying you.

The Security Calculation Agent will provide written notice to the trustee at its New York office, on which notice the trustee may conclusively rely, of the amount to be paid at maturity, call or acceleration upon the occurrence of a Zero Value Event, or upon early redemption, or on a Coupon Payment Date on or prior to 12:00 noon, New York City time, on the Business Day immediately preceding the Maturity Date, any Redemption Date, any Call Settlement Date, Zero Value Settlement Date or any Coupon Payment Date, as applicable.

All dollar amounts related to determination of the Coupon Amount, the Accrued Dividend, the Daily Dividend, if any, the Accrued Fees, the Redemption Amount and Redemption Fee Amount, if any, per Security, the Call Settlement Amount, if any, per Security, the Current Principal Amount, the Zero Value Settlement Amount, and the Cash Settlement Amount, if any, per Security, will be rounded to the nearest ten-thousandth, with five one hundred-thousandths rounded upward (*e.g.*, .76545 would be rounded up to .7655); and all dollar amounts paid on the Stated Principal Amount of the Securities per holder will be rounded to the nearest cent, with one-half cent rounded upward.

## **Market Disruption Event**

To the extent a Market Disruption Event with respect to the Index has occurred or is continuing during a four-day Measurement Period, the Index Closing Level for such day will be determined by the Security Calculation Agent or one of its affiliates on the first succeeding Index Business Day on which a Market Disruption Event does not occur or is not continuing with respect to the Index. The remaining Index Business Days in the Measurement Period will be postponed accordingly, and the remaining Index Business Days in the Measurement Period will resume again following the suspension of the Market Disruption Event. For example, if the four-day Measurement Period for purposes of calculating the Call Settlement Amount, is scheduled for June 2, June 3, June 4 and June 5, and there is a Market Disruption Event with respect to the Index on June 2, but no other Market Disruption Event during such Call Measurement Period, then June 3 will become the first Index Business Day of the Measurement Period, June 4th the second Index Business Day, June 5th the third Index Business Day and the next Index Business Day after June 5th would be the final day of the Measurement Period. The same approach would be applied if there is a Market Disruption Event during a four-day Final Measurement Period.

To the extent a Market Disruption Event with respect to the Index has occurred or is continuing on the Redemption Valuation Date, Call Valuation Date (in the event that the Call Measurement Period is the Call Valuation Date), Calculation Date (in the event that the Final Measurement Period is the Calculation Date) or any Reset Valuation Date, the Index Closing Level for such Redemption Valuation Date, Call Valuation Date, Calculation Date or Reset Valuation Date will be determined by the Security Calculation Agent or one of its affiliates on the first succeeding Index Business Day on which a Market Disruption Event does not occur or is not continuing with respect to the Index. For example, if the Redemption Valuation Date, for purposes of calculating a Redemption Amount, is based on the Index Closing Level on June 2 and there is a Market Disruption Event with respect to the Index on June 2, then the Index Closing Level on June 3 will be used to calculate the Redemption Amount, assuming that no such Market Disruption Event has occurred or is continuing on June 3.

In no event, however, will any postponement pursuant to the two immediately preceding paragraphs result in the affected Index Business Day of the Measurement Period or any Redemption Valuation Date, Call Valuation Date (in the event that the Call Measurement Period is the Call Valuation Date), Calculation Date (in the event that the Final Measurement Period is the Calculation Date) or Reset Valuation Date occurring more than five Index Business Days following the day originally scheduled to be such Index Business Day of the Measurement Period or such Redemption Valuation Date, Call Valuation Date, Calculation Date or Reset Valuation Date. If a Market Disruption Event has occurred or is continuing with respect to the Index on the fifth Index Business Day following the date originally scheduled to be such Index Business Day of the Measurement Period or any Redemption Valuation Date, Call Valuation Date, Calculation Date or any Reset Valuation Date, the Security Calculation Agent or one of its affiliates will determine the Index Closing Level based on its good faith estimate of the Index Closing Level that would have prevailed on such fifth Index Business Day but for such Market Disruption Event.

Any of the following will be a Market Disruption Event with respect to the Index, in each case as determined by the Security Calculation Agent in its sole discretion:

- a) suspension, absence or material limitation of trading in a material number of Index Constituent Securities, whether by reason of movements in price exceeding limits permitted by the Primary Exchange or otherwise;
- b) suspension, absence or material limitation of trading in option or futures contracts relating to the Index or to a material number of Index Constituent Securities in the primary market or markets for those contracts;
- c) the Index is not published; or
- d) in any other event, if the Security Calculation Agent determines in its sole discretion that the event materially interferes with our ability or the ability of any of our affiliates to unwind all or a material portion of a hedge with respect to the Securities that we or our affiliates have effected or may effect as described in the section entitled "Use of Proceeds and Hedging".

The following events will not be Market Disruption Events with respect to the Index:

- a) a limitation on the hours or numbers of days of trading, but only if the limitation results from an announced change in the regular business hours of the relevant market; or
- b) a decision to permanently discontinue trading in the option or futures contracts relating to the Index or any Index Constituent Securities.

For this purpose, an "absence of trading" in the primary securities market on which option or futures contracts related to the Index or any Index Constituent Securities are traded will not include any time when that market is itself closed for trading under ordinary circumstances.

#### **Redemption Price Upon Optional Tax Redemption**

We have the right to redeem the Securities in the circumstances described under "Description of Debt Securities We May Offer — Optional Tax Redemption" in the accompanying prospectus. If we exercise this right, the redemption price of the Securities will be determined by the Security Calculation Agent in a manner reasonably calculated to preserve your and our relative economic positions.

#### **Default Amount on Acceleration**

If an event of default occurs and the maturity of the Securities is accelerated, we will pay the default amount in respect of the principal of the Securities at maturity. We describe the default amount below under "— Default Amount."

In addition to the default amount described below, we will also pay the Coupon Amount per Security, if any, with respect to the final Coupon Payment Date, as described above under "— Coupon Payment," calculated as if the date of acceleration was the last Index Business Day in the Final Measurement Period and the three Index Business Days immediately preceding the date of acceleration were the corresponding Index Business Days in the accelerated Final Measurement Period, with the third Index Business Day immediately preceding the date of accelerated Calculation Date and the accelerated final Coupon Valuation Date, and the Index Business Day immediately preceding the date of acceleration being the relevant final Coupon Valuation Date.

For the purpose of determining whether the holders of our Medium-Term Notes, Series B, of which the Securities are a part, are entitled to take any action under the indenture, we will treat the outstanding principal amount of the Medium-Term Notes, Series B, as constituting the outstanding principal amount of the Securities. Although the terms of the Securities may differ from those of the other Medium-Term Notes, Series B, holders of specified percentages in principal amount of all Medium-Term Notes, Series B, together in some cases with other series of our debt securities, will be able to take action affecting all the Medium-Term Notes, Series B, including the Securities. This action may involve changing some of the terms that apply to the Medium-Term Notes, Series B, accelerating the maturity of the Medium-Term Notes, Series B after a default or waiving some of our obligations under the indenture. We discuss these matters in the attached prospectus under "Description of Debt Securities We May Offer — Default, Remedies and Waiver of Default" and "Description of Debt Securities We May Offer — Modification and Waiver of Covenants."

#### **Default Amount**

The default amount for the Securities on any day will be an amount, in U.S. dollars as determined by the Security Calculation Agent in its sole discretion, for the aggregate Stated Principal Amount of the Securities, equal to the cost of having a qualified financial institution, of the kind and selected as described below, expressly assume all our payment and other obligations with respect to the Securities as of that day and as if no default or acceleration had occurred, or to undertake other obligations providing substantially equivalent economic value to you with respect to the Securities. That cost will equal:

the lowest amount that a qualified financial institution would charge to effect this assumption or undertaking,

plus

the reasonable expenses, including reasonable attorneys' fees, incurred by the holders of the Securities in preparing any documentation necessary for this assumption or undertaking.

During the default quotation period for the Securities, which we describe below, the holders of the Securities and/or we may request a qualified financial institution to provide a quotation of the amount it would charge to effect this assumption or undertaking. If either party obtains a quotation, it must notify the other party in writing of the quotation. The amount referred to in the first bullet point above will equal the lowest — or, if there is only one, the only — quotation obtained, and as to which notice is so given, during the default quotation period. With respect to any quotation, however, the party not obtaining the quotation may object, on reasonable and significant grounds, to the assumption or undertaking by the qualified financial institution providing the quotation and notify the other party in writing of those grounds within two Business Days after the last day of the default quotation period, in which case that quotation will be disregarded in determining the default amount.

## **Default Quotation Period**

The default quotation period is the period beginning on the day the default amount first becomes due and ending on the third Business Day after that day, unless:

- > no quotation of the kind referred to above is obtained, or
- > every quotation of that kind obtained is objected to within five (5) Business Days after the due date as described above.

If either of these two events occurs, the default quotation period will continue until the third Business Day after the first Business Day on which prompt notice of a quotation is given as described above. If that quotation is objected to as described above within five (5) Business Days after that first Business Day, however, the default quotation period will continue as described in the prior sentence and this sentence.

In any event, if the default quotation period and the subsequent two Business Day objection period have not ended before the Calculation Date, then the default amount will equal the Stated Principal Amount of the Securities.

## **Qualified Financial Institutions**

For the purpose of determining the default amount at any time, a qualified financial institution must be a financial institution organized under the laws of any jurisdiction in the United States of America, Europe or Japan, which at that time has outstanding debt obligations with a stated maturity of one year or less from the date of issue and rated either:

- A-1 or higher by Standard & Poor's Financial Services LLC, a subsidiary of The McGraw-Hill Companies, Inc., or any successor, or any other comparable rating then used by that rating agency, or
- > P-1 or higher by Moody's Investors Service or any successor, or any other comparable rating then used by that rating agency.

## Discontinuance of or Adjustments to the Index or Termination of Our License Agreement with the Index Sponsor; Alteration of Method of Calculation

If (i) the Index Sponsor or Index Calculation Agent discontinue publication of, or otherwise fails to publish, the Index, (ii) our license agreement with the Index Sponsor terminates or (iii) the Index Sponsor or Index Calculation Agent does not make the Index Constituent Securities and/or their unit weighting available to the Security Calculation Agent, and, in each case, any other person or entity publishes an index licensed to UBS that the Security Calculation Agent determines is comparable to the Index and for which the Index Constituent Securities and/or their unit weighting are available to the Security Calculation Agent (such index being referred to herein as a "successor index"), and the Security Calculation Agent approves such index as a successor index, then the Security Calculation Agent will determine the Index Closing Level on the applicable dates of determination, Coupon Amounts and the amount payable at maturity, call, acceleration upon the occurrence of a Zero Value Event or upon early redemption and all other related payments terms by reference to such successor index.

Upon any selection by the Security Calculation Agent of a successor index, the Security Calculation Agent will cause written notice thereof to be furnished to the trustee, to us and to the holders of the Securities.

If the Index Sponsor or Index Calculation Agent discontinue publication of the Index, our license agreement with the Index Sponsor terminates or the Index Sponsor or Index Calculation Agent do not make the Index Constituent Securities and/or their unit weighting available to the Security Calculation Agent, prior to, and such discontinuation, termination or unavailability is continuing on the Calculation Date or any Index Business Day during a Measurement Period, or on the Redemption Valuation Date or on any Reset Valuation Date, as applicable, or on any other relevant date on which the Index Closing Level is to be determined and the Security Calculation Agent determines that no successor index is available at such time, or the Security Calculation Agent has previously selected a successor index and publication of such successor index is discontinued prior to, and such discontinuation is continuing on the Calculation Date or any Index Business Day during a Measurement Period, or on the Redemption Valuation Date or on any Reset Valuation Date, or any other relevant date on which the Index Closing Level is to be determined, then the Security Calculation Agent will determine the Index Closing Level using the Index Closing Level on the last Index Business Day immediately prior to such discontinuation or unavailability, as adjusted for certain corporate actions. In such event, the Security Calculation Agent will cause notice thereof to be furnished to the trustee, to us and to the holders of the Securities.

Notwithstanding these alternative arrangements, discontinuation of the publication of the Index or successor index, as applicable, may adversely affect the value of the Securities.

In addition, if an Index Replacement Event (as defined below) occurs at any time and the Index Sponsor or anyone else publishes an index that the Security Calculation Agent determines is comparable to the Index (the "Substitute Index"), then the Security Calculation Agent may elect, in its sole discretion, to permanently replace the original Index with the Substitute Index for all purposes under the Securities, and all provisions described in this prospectus supplement as applying to the Index will thereafter apply to the Substitute Index instead. In such event, the Security Calculation Agent will make such adjustments, if any, to any level of the Index or Substitute Index that is used for purposes of the Securities as it determines are appropriate in the circumstances. If the Security Calculation Agent elects to replace the original Index with a Substitute Index, then the Security Calculation Agent will determine all amounts hereunder, including the Coupon Amounts, Current Principal Amount, Current Indicative Value or intraday indicative value, Closing Indicative Value, Index Factor, Index Performance Ratio, Residual Factor, Accrued Fees, Index Closing Levels on the applicable dates of determination, all other related payment terms and the amount payable at maturity, call, upon early redemption or upon acceleration upon the occurrence of a Zero Value Event by reference to such Substitute Index. If the Security Calculation Agent so elects to replace the original Index with a Substitute Index, the Security Calculation Agent will cause written notice thereof to be furnished to the trustee, to us and to the holders of the Securities of the Securities.

#### An "Index Replacement Event" means:

a) an amendment to or change (including any officially announced proposed change) in the laws, regulations or rules of the United States (or any political subdivision thereof), or any jurisdiction in which a Primary Exchange (as defined herein) is located that (i) makes it illegal for UBS AG or its affiliates to hold, acquire or dispose of the Index Constituent Securities included in the Index or options, futures, swaps or other derivatives on the Index or on the Index Constituent Securities included in the Index (including but not limited to exchange-imposed position limits), (ii) materially increases the cost to us, our affiliates, third parties with whom we transact or similarly situated third parties in performing our or their obligations in connection with the Securities, (iii) has a material adverse effect on any of these parties' ability to perform their obligations in connection with the Securities or (iv) materially affects our ability to issue or transact in exchange traded notes similar to the Securities, each as determined by the Security Calculation Agent;

- b) any official administrative decision, judicial decision, administrative action, regulatory interpretation or other official pronouncement interpreting or applying those laws, regulations or rules that is announced on or after June 2, 2020 that (i) makes it illegal for UBS AG or its affiliates to hold, acquire or dispose of the Index Constituent Securities included in the Index or options, futures, swaps or other derivatives on the Index or on the Index Constituent Securities (including but not limited to exchange-imposed position limits), (ii) materially increases the cost to us, our affiliates, third parties with whom we transact or similarly situated third parties in performing our or their obligations in connection with the Securities, (iii) has a material adverse effect on the ability of us, our affiliates, third parties with whom we transact or a similarly situated third party to perform our or their obligations in connection with the Securities or (iv) materially affects our ability to issue or transact in exchange traded notes similar to the Securities, each as determined by the Security Calculation Agent;
- c) any event that occurs on or after June 2, 2020 that makes it a violation of any law, regulation or rule of the United States (or any political subdivision thereof), or any jurisdiction in which a Primary Exchange (as defined herein) is located, or of any official administrative decision, judicial decision, administrative action, regulatory interpretation or other official pronouncement interpreting or applying those laws, regulations or rules, (i) for UBS AG or its affiliates to hold, acquire or dispose of the Index Constituent Securities or options, futures, swaps or other derivatives on the Index or on the Index Constituent Securities (including but not limited to exchange-imposed position limits), (ii) for us, our affiliates, third parties with whom we transact or similarly situated third parties to perform our or their obligations in connection with the Securities or (iii) for us to issue or transact in exchange traded notes similar to the Securities, each as determined by the Security Calculation Agent;
- d) any event, as determined by the Security Calculation Agent, as a result of which we or any of our affiliates or a similarly situated party would, after using commercially reasonable efforts, be unable to, or would incur a materially increased amount of tax, duty, expense or fee (other than brokerage commissions) to, acquire, establish, re-establish, substitute, maintain, unwind or dispose of any transaction or asset it deems necessary to hedge the risk of the Securities, or realize, recover or remit the proceeds of any such transaction or asset; or
- e) as determined by the Security Calculation Agent, the primary exchange or market for trading for the Securities, if any, announces that pursuant to the rules of such exchange or market, as applicable, the Securities cease (or will cease) to be listed, traded or publicly quoted on such exchange or market, as applicable, for any reason and are not immediately re-listed, re-traded or re-quoted on an exchange or quotation system located in the same country as such exchange or market, as applicable.

Notwithstanding these alternative arrangements, discontinuation of the publication of the Index or successor index, as applicable, may adversely affect the value of the Securities.

If at any time the method of calculating the Index, a successor index or a substitute index, or the value thereof, is changed in a material respect, or if the Index or a successor index is in any other way modified so that the Index Closing Level of the Index or such successor index does not, in the opinion of the Security Calculation Agent, fairly represent the Index Closing Level of the Index or such successor index had such changes or modifications not been made, then the Security Calculation Agent will make such calculations and adjustments as, in the good faith judgment of the Security Calculation Agent, may be necessary in order to arrive at an Index Closing Level of an index comparable to the Index or such successor index, as the case may be, as if such changes or modifications had not been made, and the Security Calculation Agent will calculate the Index Closing Level for the Index or such successor index with reference to the Index or such successor index, as adjusted. The Security Calculation Agent will accordingly calculate the Index Closing Level, the Index Performance Ratio, the Coupon Amount, the Accrued Dividend, the Daily Dividend, if any, the Accrued Fees, the Redemption Fee Amount, if any, the Cash Settlement Amount, if any, that we will pay you at maturity, the Redemption Amount, if any, upon early redemption, if applicable, the Call Settlement Amount, if any, that we will pay you in the event UBS calls the Securities, the Zero Value Settlement Amount, if any, that we will pay you in the event of acceleration upon the occurrence of a Zero Value Event, if applicable, the Last Reset Index Closing Level and all related payment terms based on the Index Closing Level calculated by the Security Calculation Agent, as adjusted. Accordingly, if the method of calculating the Index or a successor index is modified so that the level of the Index or such successor index is a fraction of what it would have been if there had been no such modification (e.g., due to a split in the Index), which, in turn, causes the Index Closing Level of the Index or such successor index to be a fraction of what it would have been if there had been no such modification, then the Security Calculation Agent will make such calculations and adjustments in order to arrive at an Index Closing Level for the Index or such successor index as if it had not been modified (e.g., as if such split had not occurred).

In the event that the Security Calculation Agent elects to replace the Index with a successor index or a Substitute Index, UBS may, in its sole discretion, amend the title of the Securities in order to remove reference the former Index and to make such other changes to the title of the Securities as it considers necessary or desirable to reflect the name and/or characteristics of the relevant successor index or Substitute Index, as applicable.

All determinations and adjustments to be made by the Security Calculation Agent may be made in the Security Calculation Agent's sole discretion. See "Risk Factors — There are potential conflicts of interest between you and the Security Calculation Agent" in this prospectus supplement for a discussion of certain conflicts of interest which may arise with respect to the Security Calculation Agent.

#### **Manner of Payment and Delivery**

Any payment on or delivery of the Securities at maturity, call or acceleration upon the occurrence of a Zero Value Event, or upon early redemption, will be made to accounts designated by you and approved by us, or at the corporate trust office of the trustee in New York City, but only when the Securities are surrendered to the trustee at that office. We also may make any payment or delivery in accordance with the applicable procedures of the depositary.

#### **Business Day**

When we refer to a Business Day or a New York Business Day with respect to the Securities, we mean a day that is a Business Day of the kind described in "Description of Debt Securities We May Offer — Payment Mechanics for Debt Securities" in the accompanying prospectus.

## **Modified Business Day**

As described in "Description of Debt Securities We May Offer — Payment Mechanics for Debt Securities" in the attached prospectus, any payment on the Securities that would otherwise be due on a day that is not a Business Day may instead be paid on the next day that is a Business Day, with the same effect as if paid on the original due date, except as described under "— Cash Settlement Amount at Maturity," "— UBS's Call Right" and "— Early Redemption at the Option of the Holders" above.

#### Reissuances or Reopened Issues

We may, at our sole discretion, "reopen" or reissue the Securities. We issued the Securities initially in an amount having the aggregate Stated Principal Amount specified on the cover of this prospectus supplement. We may issue additional Securities in amounts that exceed the amount on the cover at any time, without your consent and without notifying you. The Securities do not limit our ability to incur other indebtedness or to issue other securities. Also, we are not subject to financial or similar restrictions by the terms of the Securities. For more information, please refer to "Description of Debt Securities We May Offer — Amounts That We May Issue" in the accompanying prospectus.

These further issuances, if any, will be consolidated to form a single class with the originally issued Securities and will have the same CUSIP number and will trade interchangeably with the Securities immediately upon settlement. Any additional issuances will increase the aggregate Stated Principal Amount of the outstanding Securities of the class. The price of any additional offering will be determined at the time of pricing of that offering.

#### **Booking Branch**

The Securities will be booked through UBS AG, London Branch.

## **Clearance and Settlement**

The DTC participants that hold the Securities through DTC on behalf of investors will follow the settlement practices applicable to equity securities in DTC's settlement system with respect to the primary distribution of the Securities and secondary market trading between DTC participants.

## 10. ETRACS Quarterly Pay 1.5X Leveraged MarketVector BDC Liquid Index ETN due June 10, 2050

## **Specific Terms of the Securities**

In this section, references to "holders" mean those who own the Securities registered in their own names, on the books that we or the trustee maintains for this purpose, and not those who own beneficial interests in the Securities registered in street name or in the Securities issued in book-entry form through The Depository Trust Company ("DTC") or another depositary. Owners of beneficial interests in the Securities should read the section entitled "Legal Ownership and Book-Entry Issuance" under "Medium-Term Notes, Series B" above.

The Securities are part of a series of UBS AG debt securities entitled "Medium-Term Notes, Series B" that we may issue, from time to time, under the indenture more particularly described in the accompanying prospectus. This prospectus supplement summarizes specific financial and other terms that apply to the Securities. Terms that apply generally to all Medium-Term Notes, Series B are described in "Description of Debt Securities We May Offer" in the accompanying prospectus. The terms described here (*i.e.*, in this prospectus supplement) supplement those described in the accompanying prospectus and, if the terms described here are inconsistent with those described there, the terms described here are controlling.

The Securities are part of a single series of senior debt securities issued under our indenture, dated as of June 12, 2015 between us and U.S. Bank Trust National Association, as trustee.

We describe the terms of the Securities in more detail below.

The Stated Principal Amount of each Security is \$25.00.

The Securities do not guarantee any return of principal at, or prior to, maturity, call or acceleration upon the occurrence of a Zero Value Event, or upon early redemption. Instead, at maturity, you will receive a cash payment per Security the amount of which will vary depending on the performance and path of the Index and will be reduced by the Accrued Fees as of the last Index Business Day in the Final Measurement Period as described under "— Cash Settlement Amount at Maturity." If the amount as calculated is equal to or less than zero, the Cash Settlement Amount will be zero and you will not receive a cash payment.

If you exercise your right to have us redeem your Securities, subject to compliance with the redemption procedures, for each Security you will receive a cash payment per Security on the relevant Redemption Date equal to the Redemption Amount as described under "— Early Redemption at the Option of the Holders." If the amount as calculated is equal to or less than zero, the Redemption Amount will be zero and you will not receive a cash payment.

If a Zero Value Event occurs, for each Security you will receive a cash payment per Security on the Zero Value Settlement Date equal to the (i) the Measurement Period Cash Amount, on the immediately preceding calendar day, *plus* (ii) the Accrued Dividend, on the date on which the Zero Value Event occurred, *minus* (iii) the Accrued Fees, on the date on which the Zero Value Event occurred, as described under "— Automatic Acceleration Upon Zero Value Event."

## **Coupon Payment**

For each Security you hold on the applicable Coupon Record Date, on each Coupon Payment Date you will receive an amount in cash equal to the Coupon Amount. The Coupon Amount will equal the sum of the cash distributions that a hypothetical holder of Index constituents would have been entitled to receive in respect of the Index constituents during the relevant period. The Coupon Amount may be equal to zero.

The "Coupon Amount" means (i) on any calendar day that is not a Coupon Ex-Date, zero; and (ii) on any calendar day that is a Coupon Ex-Date, an amount per Security equal to the Accrued Dividend on the Coupon Valuation Date immediately preceding such Coupon Ex-Date. The minimum value of the Coupon Amount will be zero.

The following graphic illustrates the formula to determine the Coupon Amount on a Coupon Ex-Date, which has been simplified for ease of presentation:

Coupon Amount = Accrued Dividend, on the immediately preceding Coupon Valuation Date

If the Securities undergo a split or reverse split, the Coupon Amount will be adjusted accordingly.

The "Accrued Dividend" means (i) on the Initial Trade Date, zero; and (ii) on any subsequent calendar day, an amount per Security equal to (a) the Accrued Dividend as of the immediately preceding calendar day, *plus* (b) the Daily Dividend on such calendar day, *minus* the Coupon Amount on such calendar day.

If the Securities undergo a split or reverse split, the Accrued Dividend will be adjusted accordingly.

The "**Daily Dividend**" means, on any calendar day, an amount per Security equal to (a)(i) the Index Dividend Point, *times* (ii) the Leverage Factor, *times* (iii) the Current Principal Amount on the immediately preceding calendar day, *times* (iv) the Residual Factor on the immediately preceding calendar day, *divided by* (b) the Last Reset Index Closing Level.

The "Index Dividend Point" means, on any calendar day, an amount per Security equal to the *sum of the products* of (i) the cash value of distributions that a hypothetical holder of one share of each Index Constituent Security on such calendar day would have been entitled to receive in respect of that Index Constituent Security for those cash distributions whose "exdividend date" occurs on such calendar day and (ii) the number of units of that Index Constituent Security included in the Index as of such date.

The Index Dividend Point may not be publicly disseminated by the Index Calculation Agent. The data used to calculate the Index Dividend Point is the property of the Index Calculation Agent and investors may be required to pay a fee and meet any other requirements of the Index Calculation Agent, in order to access such information. See "Risk Factors — The value of the Index Dividend Point may not be publicly disseminated or otherwise freely accessible to investors".

The Index Dividend Point, on any calendar day, represents the total cash value of distributions that a hypothetical holder of the Index Constituent Securities, in proportion to the weights of the Index Constituent Securities, would have been entitled to receive with respect to any Index Constituent Securities for those cash distributions whose "ex-dividend date" occurs on such calendar day.

The "Coupon Payment Date" means the fifteenth (15th) Index Business Day following each Coupon Valuation Date. If such day is not a Coupon Business Day, the Coupon Payment Date shall be the following Coupon Business Day

If the final Coupon Ex-Date occurs prior to the Maturity Date, but the final Coupon Payment Date otherwise occurs after the Maturity Date, in such case, the final Coupon Payment Date will be the Maturity Date, subject to adjustment as provided herein.

The "Coupon Record Date" means the ninth Index Business Day following each Coupon Valuation Date. If such day is not a Coupon Business Day, the Coupon Record Date shall be the immediately preceding Coupon Business Day.

The "Coupon Ex-Date," with respect to a Coupon Amount, means the first Coupon Business Day on which the Securities trade without the right to receive such Coupon Amount. Under current NYSE Area practice, the Coupon Ex-Date will generally be the Coupon Business Day immediately preceding the applicable Coupon Record Date.

If a Zero Value Event occurs on an Index Business Day that would otherwise be a Coupon Ex-Date, such day will not be a valid Coupon Ex-Date and all further Coupon Ex-Dates will be suspended. In this case, the Coupon Amount corresponding to such Coupon Ex-Date will be included in the Zero Value Settlement Amount payable on the Zero Value Settlement Date.

In addition, if a day that would otherwise by a Coupon Ex-Date occurs on or after the first day of an applicable Measurement Period, such day will not be a valid Coupon Ex-Date and all further Coupon Ex-Dates will be suspended. In this case, the Coupon Amount corresponding to such Coupon Ex-date will be included in the Cash Settlement Amount or Call Settlement Amount payable at maturity or call, respectively.

The "Coupon Valuation Date" means the 30th day of each March, June, September and December, of each calendar year during the term of the Securities or if such date is not an Index Business Day, then the first Index Business Day following such date, provided that the final Coupon Valuation Date will be the Calculation Date, subject to adjustment described herein.

Notwithstanding the foregoing, with respect to cash distributions or dividends on an Index Constituent Security which is scheduled to be paid prior to the applicable Coupon Ex-Date, if, and only if, the issuer of such Index Constituent Security fails to pay the dividend or distribution to holders of such Index Constituent Security by the scheduled payment date for such dividend or distribution, such dividend or distribution will be assumed to be zero for the purposes of calculating the applicable Coupon Amount. Any such delayed dividend or distribution payment from the issuer of an Index Constituent Security will be attributed back to the Accrued Dividend and included in the next Coupon Amount.

"Coupon Business Day" means any Index Business day other than an Index Business Day on which banking institutions in New York are generally not authorized or obligated by law, regulation or executive order to open.

"record date" means, (i) with respect to a distribution on an Index Constituent Security, the date on which a holder of the Index Constituent Security must be registered as a stockholder/unitholder of such Index Constituent Security in order to be entitled to receive such distribution and (ii) with respect to any split or reverse split, the tenth Business Day after the announcement date.

"ex-dividend date" means, with respect to a distribution on an Index Constituent Security, the first Business Day on which transactions in such Index Constituent Security trade on the Primary Exchange without the right to receive such distribution.

## **Cash Settlement Amount at Maturity**

The "Maturity Date" is June 10, 2050, which will be the third Business Day following the last Index Business Day in the Final Measurement Period, subject to adjustment as described below under "— Market Disruption Event."

For each Security, unless earlier called, redeemed or accelerated, you will receive at maturity a cash payment equal to the Closing Indicative Value on the last Index Business Day in the applicable Measurement Period. We refer to this cash payment as the "Cash Settlement Amount." If the amount so calculated is equal to or less than zero, the payment will be zero.

The following graphic illustrates the formula to determine the Cash Settlement Amount, which has been simplified for ease of presentation:

Cash Settlement Amount = Closing Indicative Value, on last Index
Business Day in Final Measurement Period

You may lose all or a substantial portion of your investment at maturity. The combined negative effect of the Accrued Fees will reduce your final payment. If the compounded leveraged quarterly return of the Index (or the unleveraged return of the Index, following a Permanent Deleveraging Event) is insufficient to offset the negative effect of the Accrued Fees (less any Coupon Amounts you may be entitled to receive), or if the compounded leveraged quarterly return of the Index (or the unleveraged return of the Index, following a Permanent Deleveraging Event) is negative, you may lose all or a substantial portion of your investment at maturity. The occurrence of Loss Rebalancing Events will result in more frequent than quarterly compounding.

The Securities may be called by UBS prior to the Maturity Date pursuant to the UBS Call Right and, upon the occurrence of a Zero Value Event, the Securities will be automatically accelerated and mandatorily redeemed by UBS. If the Securities are called by UBS or accelerated upon the occurrence of a Zero Value Event, the Call Settlement Amount or Zero Value Settlement Amount, as applicable, may be zero and you may lose all or a substantial portion of your investment. See "Specific Terms of the Securities — UBS Call Right" and "Specific Terms of the Securities — Automatic Acceleration Upon Zero Value Event".

The "Stated Principal Amount" of each Security is \$25.00. The Securities may be issued and sold over time at then-current market prices which may be significantly higher or lower than the Stated Principal Amount. If the Securities undergo a split or reverse split, the Stated Principal Amount will be adjusted accordingly.

The "Closing Indicative Value" per Security, will be calculated as follows:

- a) On the Initial Trade Date, \$25.00 per Security;
- b) On any other calendar day, prior to the first day of an applicable Measurement Period, an amount per Security equal to:
  - (Current Principal Amount on the immediately preceding calendar day × Index Factor) Accrued Fees + Accrued Dividend
- c) From and including the first day of an applicable Measurement Period, an amount per Security equal to:
  - (Current Principal Amount, on the calendar day immediately preceding the first day of the Measurement Period × Index Factor × Residual Factor) Accrued Fees + Accrued Dividend + Measurement Period Cash Amount
- d) The minimum value of the Closing Indicative Value on any calendar day will be zero.

If a Zero Value Event occurs on any Index Business Day then the Closing Indicative Value will be equal to the Zero Value Settlement Amount on the date on which the Zero Value Event occurred, and on all future calendar days. Upon the occurrence of a Zero Value Event, investors will likely lose all or substantially all of their investment. You will not benefit from any future exposure to the Index after the occurrence of a Zero Value Event. See "— Automatic Acceleration Upon Zero Value Event".

The actual trading price of the Securities in the secondary market may vary significantly from their Closing Indicative Value.

If the Securities undergo a split or reverse split, the Closing Indicative Value will be adjusted accordingly.

The "Current Principal Amount" represents the unleveraged investment in the Index Constituent Securities per Security at the close of trading on any Reset Valuation Date. The notional financing amount per Security in order to generate the leveraged returns would be approximately half of the Current Principal Amount at the close of trading on any Reset Valuation Date. If a Permanent Deleveraging Event occurs, the leverage of your Securities will be permanently reset to 1.0 and the notional financing amount will be equal to zero. If a Zero Value Event occurs prior to your Securities permanently resetting to 1.0 at the end of the Second Permanent Deleveraging Valuation Date, then your Securities will be fully redeemed and you will receive the Zero Value Settlement Amount (which amount may be zero).

The Current Principal Amount per Security, will be calculated as follows:

- e) From and including the Initial Trade Date to and excluding the subsequent Reset Valuation Date, \$25.00 per Security;
- f) At the close of trading on each Reset Valuation Date after the Initial Trade Date, the Current Principal Amount of the Securities will be reset as follows:

New Current Principal Amount = (Current Principal Amount on immediately preceding calendar day × Index Factor) – Accrued Fees

The Current Principal Amount will not change until the subsequent Reset Valuation Date.

If a day that would otherwise be a Reset Valuation Date occurs on or after the first day of an applicable Measurement Period, such day will not be a valid Reset Valuation Date.

If a Zero Value Event occurs on any Index Business Day then the Current Principal Amount will be equal to zero on the date on which the Zero Value Event occurred, and on all future calendar days. Upon the occurrence of a Zero Value Event, investors will likely lose all or substantially all of their investment. You will not benefit from any future exposure to the Index after the occurrence of a Zero Value Event. See "Specific Terms of the Securities — Automatic Acceleration Upon Zero Value Event".

If the Securities undergo a split or reverse split, the Current Principal Amount will be adjusted accordingly.

At the close of trading on each Reset Valuation Date, the Current Principal Amount is reset.

## The "Reset Valuation Date" means:

- 1. Any calendar day up to and including the Second Permanent Deleveraging Valuation Date, that is either: (i) the Initial Trade Date, (ii) a Quarterly Reset Valuation Date, (iii) a Loss Rebalancing Valuation Date (iv) the First Permanent Deleveraging Valuation Date, or (v) the Second Permanent Deleveraging Valuation Date; and
- 2. Any calendar day following the Second Permanent Deleveraging Valuation Date.

The definition of each valuation date is set forth below.

If a day that would otherwise be a Reset Valuation Date occurs on or after the first day of an applicable Measurement Period, such day will not be a valid Reset Valuation Date and the Last Reset Index Closing Level will remain the same.

The "Quarterly Reset Valuation Date" is the last Index Business Day of January, April, July and October of each calendar year beginning on July 31, 2020 and ending on April 29, 2050 (other than an Excluded Day), subject to adjustment as described under "— Market Disruption Event."

For purposes of the "Quarterly Reset Valuation Date" definition, an "Excluded Day" means (i) the Index Business Day immediately preceding the first day of an applicable Measurement Period, and any calendar day thereafter, and (ii) any calendar day after the Second Permanent Deleveraging Valuation Date.

The "Index Factor" is: 1 + (Leverage Factor × Index Performance Ratio).

The Index Factor represents the leveraged percentage change in the Index level since the Last Reset Index Closing Level. The Index Factor *times* the applicable Current Principal Amount on the preceding calendar day represents the current value of the unleveraged notional amount per Security that is deemed invested in the Index on any calendar day. This does not reflect the Redemption Amount that an investor would receive upon early redemption on such calendar day.

If a Zero Value Event occurs at any time during any Index Business Day then the Index Factor will be equal to zero subsequent to the event on the date on which the Zero Value Event occurred, and on all future calendar days. Upon the occurrence of a Zero Value Event, investors will likely lose all or substantially all of their investment. You will not benefit from any future exposure to the Index after the occurrence of a Zero Value Event. See "Specific Terms of the Securities — Automatic Acceleration Upon Zero Value Event".

The "Residual Factor" will be calculated as follows:

- a) 1.0 on any calendar day, to but excluding the first day of an applicable Measurement Period.
- b) From and including the first day of an applicable four-day Measurement Period, (a) the number of Index Business Days from, but excluding, the date of determination to, and including, the last Index Business Day in such four-day Measurement Period, *divided by* (b) four.

  For example, on the first Index Business Day in an applicable four-day Measurement Period, the Residual Factor will equal (3/4), on the second Index Business Day in an applicable four-day Measurement Period, the Residual Factor will equal (2/4), on the third Index Business Day in an applicable four-day Measurement Period, the Residual Factor will equal (1/4) and on the last Index Business Day in an applicable four-day Measurement Period, the Residual Factor will equal zero
- c) On any calendar day from and including the last Index Business Day of an applicable Measurement Period, the Residual Factor will be equal to zero.

The Residual Factor is intended to approximate the percentage of the Current Principal Amount that is tracking the Index on any given day. The Residual Factor is relevant only during an applicable Measurement Period but otherwise is not a component of the Closing Indicative Value or Current Indicative Value formulas. At the close of trading on each Index Business Day during a four-day Measurement Period, approximately 25% of the Current Principal Amount and the corresponding amount of financing will be deemed converted to cash. In case of a one-day Measurement Period, approximately 100% of the Current Principal Amount and the corresponding amount of financing will be deemed converted to cash.

The "Leverage Factor" on any calendar day until the occurrence of a Permanent Deleveraging Event and the close of trading on the Second Permanent Deleveraging Valuation Date, will equal 1.5. If a Permanent Deleveraging Event occurs, then on any calendar day following the Second Permanent Deleveraging Valuation Date, the Leverage Factor will equal 1.0.

The "Index Performance Ratio" on any Index Business Day will be equal to:

# <u>Index Closing Level – Last Reset Index Closing Level</u> Last Reset Index Closing Level

On any calendar day that is not an Index Business Day, the Index Closing Level will be equal to the Index Closing Level on the Index Business Day immediately preceding such calendar day.

The "Last Reset Index Closing Level" is the Index Closing Level on the most recent Reset Valuation Date prior to such day. Immediately after market close on the Effective Date, the Last Reset Index Closing Level is adjusted to be 536.663, the Index Closing Level of the successor index on the Effective Date, as reported by Bloomberg L.P.

The "Index Closing Level" on any date of determination is the closing level of the Index, as reported on Bloomberg L.P. 536.663 is the Index Closing Level of the successor index on the Effective Date, as determined by the Security Calculation Agent.

On any calendar day that is not an Index Business Day, the Index Closing Level will be equal to the Index Closing Level on the Index Business Day immediately preceding such calendar day.

"Measurement Period" means the Final Measurement Period or Call Measurement Period, as applicable.

The "Current Indicative Value" or "intraday indicative value", as determined by the Security Calculation Agent, is an amount per Security, on an intraday basis on any Index Business Day, equal to:

- a) On the Initial Trade Date, \$25.00.
- b) On any other calendar day prior to the first day of an applicable Measurement Period:
  - (Current Principal Amount on the immediately preceding calendar day × Index Factor, calculated using the Intraday Index Value) Accrued Fees + Accrued Dividend.
- c) From and including the first day of an applicable Measurement Period, an amount per Security equal to:
  - (Current Principal Amount, on the calendar day immediately preceding the first day of the Measurement Period × Index Factor, calculated using the Intraday Index Value× Residual Factor, from the immediately preceding calendar day) Accrued Fees + Accrued Dividend + Measurement Period Cash Amount, from the immediately preceding calendar day
- d) The minimum value of the Current Indicative Value on any calendar day will be zero.

The actual trading price of the Securities in the secondary market may vary significantly from their Current Indicative Value (or intraday indicative value). If a Zero Value Event occurs during any Index Business Day then the Current Indicative Value (or "intraday indicative value") will be equal to the Zero Value Settlement Amount, subsequent to the event on the date on which the Zero Value Event occurred, and on all future calendar days. Upon the occurrence of a Zero Value Event, investors will likely lose all or substantially all of their investment. You will not benefit from any future exposure to the Index after the occurrence of a Zero Value Event. See "Specific Terms of the Securities — Automatic Acceleration Upon Zero Value Event".

If the Securities undergo a split or reverse split, the Current Indicative Value (or intraday indicative value) will be adjusted accordingly.

The "Accrued Fees" as of any date of determination means the Accrued Tracking Fee + the Accrued Financing Fee.

If the Securities undergo a split or reverse split, the Accrued Fees will be adjusted accordingly.

The Securities are subject to an "Accrued Tracking Fee" per Security, calculated as follows:

- a) On the Initial Trade Date, the Accrued Tracking Fee is equal to zero.
- b) On any subsequent calendar day, the Accrued Tracking Fee is equal to: (a) the Accrued Tracking Fee as of the immediately preceding calendar day, *plus* the Daily Tracking Fee on such calendar day.
- c) On the calendar day after each Reset Valuation Date, the Accrued Tracking Fee is reset to be equal to the Daily Tracking Fee on such calendar day.

The "Daily Tracking Fee" is an amount per Security calculated as follows:

- a) On the Initial Trade Date, the Daily Tracking Fee is zero.
- b) On any subsequent calendar day, the Daily Tracking Fee is equal to: (a) (i) 0.95%, *times* (ii) the Current Principal Amount on the immediately preceding calendar day, *times* (iii) the Index Factor, on such calendar day, *times* (iv) the Residual Factor, on the immediately preceding calendar day, *divided by* (b) 365.
- c) The minimum value of the Daily Tracking Fee on any calendar day will be zero.

The Daily Tracking Fee represents the investor fees calculated each day on the current value of the unleveraged notional amount invested in the Index per Security. These charges accrue and compound during the applicable period, and will reduce any amount you are entitled to receive at maturity, early redemption, call or acceleration upon the occurrence of a Zero Value Event.

If the Securities undergo a split or reverse split, the Daily Tracking Fee will be adjusted accordingly.

The Securities are subject to an "Accrued Financing Fee" per Security calculated as follows:

- a) On the Initial Trade Date, the Accrued Financing Fee is equal to zero.
- b) On any subsequent calendar day, the Accrued Financing Fee is equal to: (a) the Accrued Financing Fee as of the immediately preceding calendar day, *plus* (b) the Daily Financing Fee on such calendar day.
- c) On the calendar day after each Reset Valuation Date, the Accrued Financing Fee is reset to be equal to the Daily Financing Fee on such calendar day.
- d) If a Permanent Deleveraging Event occurs, then on any calendar day following the Second Permanent Deleveraging Valuation Date, the Accrued Financing Fee will be equal to zero.

"CME Term SOFR" means the CME Term SOFR Reference Rates published for one-, three-, six-, and 12-month tenors as administered by CME Group Benchmark Administration, Ltd. (or any successor administrator thereof).

The "Daily Financing Fee" is an amount per Security calculated as follows:

- a) On the Initial Trade Date, the Daily Financing Fee is equal to zero.
- b) On any subsequent calendar day, the Daily Financing Fee is equal to: (a) (i) 0.5, *times* (ii) the Financing Rate, on such calendar day, *times* (iii) the Current Principal Amount, on the immediately preceding calendar day, *times* (iv) the Residual Factor, on the immediately preceding calendar day, *divided by* (b) 360.

- c) If a Permanent Deleveraging Event occurs, then on any calendar day following the Second Permanent Deleveraging Valuation Date, the Daily Financing Fee will be equal to zero.
- d) The minimum value of the Daily Financing Fee on any calendar day will be zero.

The Daily Financing Fee seeks to compensate UBS for providing investors with a leveraged participation in movements of the Index and is intended to approximate the financing costs that investors may have otherwise incurred had they sought to borrow funds at a similar rate from a third party to invest in the Securities. These charges accrue and compound during the applicable period, and will reduce any amount that you will be entitled to receive at maturity, early redemption, call or acceleration upon the occurrence of a Zero Value Event.

If the Securities undergo a split or reverse split, the Daily Financing Fee will be adjusted accordingly.

The "Financing Rate" will equal the sum of (a) 0.95% and (b) three-month CME Term SOFR rate plus a 0.2616% adjustment (the "SOFR-Based Benchmark Replacement") which is displayed on Chicago Mercantile Exchange's website and will be published on U.S. Government Securities Business Day. The minimum value of the SOFR-Based Benchmark Replacement(or any successor base rate, as described below) used on any calendar day will be zero. The minimum Financing Rate at any time will be 0.95%

For example, 5.24938% was the three-month CME Term SOFR rate on June 12, 2023. The Financing Rate on June 13, 2023 would therefore have been equal to: 0.95% + 5.24938% + 0.2616%, or 6.46098%.

### The "Measurement Period Cash Amount" is an amount per Security equal to:

- a) \$0.00 on any calendar day, to but excluding the first day of an applicable Measurement Period.
- b) On the first day of an applicable one-day Measurement Period:

At the close of trading on such Index Business Day, (the Current Principal Amount on the immediately preceding calendar day × Index Factor on such Index Business Day)

- c) From and including the first day of an applicable four-day Measurement Period:
  - i. At the close of trading on each Index Business Day during the applicable four-day Measurement Period, the Measurement Period Cash Amount on the immediately preceding calendar day + (Current Principal Amount, on the calendar day immediately preceding the first day of such Measurement Period × 0.25 × Index Factor, on such Index Business Day).
  - ii. On any calendar day during an applicable four-day Measurement Period that is not an Index Business Day, the Measurement Period Cash Amount on the immediately preceding Index Business Day.
- d) On any calendar day after the last Index Business Day of an applicable Measurement Period, the Measurement Period Cash Amount on the last Index Business Day of such Measurement Period.

The Measurement Period Cash Amount represents the portion of the Current Principal Amount that has been converted to cash on any given day of an applicable Measurement Period and is no longer tracking the Index.

At the close of trading of each Index Business Day during a four-day Measurement Period, approximately 25% of the Current Principal Amount, on the calendar day immediately preceding the first day of the Measurement Period, will be deemed converted to cash and an applicable amount of financing will separately be deemed converted to cash as well. After the close of trading on the final Index Business Day of an applicable four-day Measurement Period, the Measurement Period Cash Amount will represent the averaged value of the Current Principal Amount that was deemed converted to cash across the four-days of such Measurement Period. In case of a one-day Measurement Period, approximately 100% of the Current Principal Amount will be deemed converted to cash and an applicable amount of financing will separately be deemed converted to cash, at the close of trading of the first day of such Measurement Period.

If the Securities undergo a split or reverse split, the Measurement Period Cash Amount will be adjusted accordingly.

## The "Final Measurement Period" means:

a) if the Market Value of Securities outstanding as at the close of trading on the Index Business Day immediately preceding the Calculation Date is less than \$25,000,000, the Calculation Date, subject to adjustments as described under "— Market Disruption Event";

b) if the Market Value of Securities outstanding as at the close of trading on the Index Business Day immediately preceding the Calculation Date is equal to or greater than \$25,000,000, the four (4) Index Business Days from and including the Calculation Date, subject to adjustments as described under "— Market Disruption Event."

For the purpose of determining the Final Measurement Period, the "Market Value" of the Securities outstanding as of the close of trading on the Index Business Day immediately preceding the Calculation Date, will equal:

(i) the Closing Indicative Value as of such Index Business Day, *times* (ii) the number of Securities outstanding as reported by BDCXSO <Index> on Bloomberg L.P.

The "Index Calculation Agent" means the entity that calculates and publishes the level of the Index, which is Solactive AG as of market close on July 30, 2021.

The "Calculation Date" means June 2, 2050, unless such day is not an Index Business Day, in which case the Calculation Date will be the next Index Business Day, subject to adjustments.

The Calculation Date represents the first Index Business Day of the Final Measurement Period.

"Index Business Day" means any day on which the Primary Exchange or market for trading of the Securities is scheduled to be open for trading.

"Primary Exchange" means, with respect to each Index Constituent Security or each constituent underlying a successor index, the primary exchange or market of trading such Index Constituent Security or such constituent underlying a successor index.

"U.S. Government Securities Business Day" means any day except for a Saturday, a Sunday or a day on which the Securities Industry and Financial Markets Association recommends that the fixed income departments of its members be closed for the entire day for purposes of trading in U.S. government securities.

## **Underlying Index**

The return on the Securities is linked to the performance of the MarketVector US Business Development Companies Liquid Index, the successor index to the Wells Fargo Business Development Company Index (the "Original Index") effective after market close on the July 30, 2021 (the "Effective Date") (Bloomberg: "MVBIZD"), which was renamed from MVIS US Business Development Companies Index effective after market close on June 16, 2023. On April 26, 2021, the Security Calculation Agent announced that, pursuant to the terms of the Securities, it has determined that the Index is comparable to the Original Index and approved the Index as the successor index for the Securities following the discontinuation of publication of the Original Index. The Index is intended to measure the performance of the largest and most liquid companies which are treated as business development companies and are incorporated in the United States. The "Index Sponsor" is MarketVector Indexes GmbH.

## Early Redemption at the Option of the Holders

Subject to your compliance with the procedures described below and the potential postponements and adjustments as described under "— Market Disruption Event," you may submit a request to have us redeem your Securities on any Index Business Day no later than 12:00 noon, New York City time, and a confirmation of redemption by no later than 5:00 p.m., New York City time, on the same Index Business Day, provided that you request that we redeem a minimum of 50,000 Securities. We reserve the right from time to time to waive this minimum redemption amount in our sole discretion on a case-by-case basis. You should not assume you will be entitled to the benefit of any such waiver. For any applicable redemption request, the "Redemption Confirmation are delivered, except that we reserve the right from time to time to accelerate, in our sole discretion on a case-by-case basis, the Redemption Valuation Date to the date on which the notice of redemption is received by UBS rather than the following Index Business Day. You should not assume you will be entitled to any such acceleration. To satisfy the minimum redemption amount, your broker or other financial intermediary may bundle your Securities for redemption with those of other investors to reach this minimum amount of 50,000 Securities.

The Securities will be redeemed and the holders will receive payment for their Securities on the second Index Business Day following the applicable Redemption Valuation Date (the "Redemption Date"). The first Redemption Date will be the fourth Index Business Day immediately following the Initial Trade Date and the Final Redemption Date will be the fourth Index Business Day immediately preceding the Maturity Date, subject to adjustments. In addition, if a call notice has been issued, the last Redemption Valuation Date will be the fourth Index Business Day prior to the Call Settlement Date, as applicable. If a Zero Value Event occurs, the last Redemption Date will be the date on which the Zero Value Event occurred.

If a market disruption event is continuing or occurs on the applicable scheduled Redemption Valuation Date with respect to any of the Index Constituent Securities, such Redemption Valuation Date may be postponed as described under "— Market Disruption Event."

As of any Redemption Valuation Date, the "Redemption Fee Amount" means an amount per Security equal to:

(0.125% × Closing Indicative Value of the Security as of the Redemption Valuation Date).

If you exercise your right to have us redeem your Securities, subject to your compliance with the procedures described under "— Redemption Procedures," for each applicable Security you will receive a cash payment on the relevant Redemption Date equal to:

Closing Indicative Value as of the Redemption Valuation Date – Redemption Fee Amount.

We refer to this cash payment as the "**Redemption Amount**." If the amount calculated above is equal to or less than zero, the payment upon early redemption will be zero. We reserve the right from time to time to waive the Redemption Fee Amount in our sole discretion and on a case-by-case basis. There can be no assurance that we will elect to waive this fee and you should not assume you will be entitled to such fee waiver.

We will inform you of such Redemption Amount on the first Business Day following the applicable Redemption Valuation Date.

The redemption feature is intended to induce arbitrageurs to counteract any trading of the Securities at a discount to their indicative value, though there can be no assurance that arbitrageurs will employ the redemption feature in this manner or that they will be successful in counteracting any divergence in the market price of the Securities and their indicative value.

The following graphic illustrates the formula to determine the Redemption Amount, which has been simplified for ease of presentation:

Redemption = Closing Indicative Value - Redemption Fee Amount

You may lose all or a substantial portion of your investment upon early redemption. The combined negative effect of the Accrued Fees and the Redemption Fee Amount will reduce your final payment. If the compounded leveraged quarterly return of the Index (or the unleveraged return of the Index, following a Permanent Deleveraging Event) is insufficient to offset the negative effect of the Accrued Fees and the Redemption Fee Amount, if applicable (less any Coupon Amounts you may be entitled to receive as of the Redemption Valuation Date), or if the compounded leveraged quarterly return of the Index (or the unleveraged return of the Index, following a Permanent Deleveraging Event) is negative, you may lose all or a substantial portion of your investment upon early redemption. The occurrence of Loss Rebalancing Events will result in more frequent than quarterly compounding.

The Securities may be called by UBS prior to the Maturity Date pursuant to the UBS Call Right and, upon the occurrence of a Zero Value Event, the Securities will be automatically accelerated and mandatorily redeemed by UBS. See "Specific Terms of the Securities — UBS Call Right" and "Specific Terms of the Securities — Automatic Acceleration Upon Zero Value Event".

We discuss these matters in the accompanying prospectus under "Description of Debt Securities We May Offer — Redemption and Repayment."

The Redemption Amount is meant to induce arbitrageurs to counteract any trading of the Securities at a premium or discount to their indicative value, though there can be no assurance that arbitrageurs will employ the redemption feature in this manner.

## **Redemption Procedures**

To redeem your Securities, you must instruct your broker or other person through whom you hold your Securities to take the following steps through normal clearing system channels:

- deliver a notice of redemption, which we refer to as a "**Redemption Notice**" to UBS via email no later than 12:00 noon (New York City time) on the Index Business Day on which you elect to exercise your redemption right. If we receive your Redemption Notice by the time specified in the preceding sentence, we will respond by sending you a form of confirmation of redemption;
- deliver the signed confirmation of redemption, which we refer to as the "**Redemption Confirmation**", to us via email in the specified form by 5:00 p.m. (New York City time) on the same day. We or our affiliate must acknowledge receipt in order for your Redemption Confirmation to be effective;
- instruct your DTC custodian to book a delivery vs. payment trade with respect to your Securities on the applicable Redemption Date at a price equal to the Redemption Amount; and
- cause your DTC custodian to deliver the trade as booked for settlement via DTC at or prior to 12:00 noon (New York City time) on the applicable Redemption Date.

Different brokerage firms may have different deadlines for accepting instructions from their customers. Accordingly, as a beneficial owner of the Securities, you should consult the brokerage firm through which you own your interest for the relevant deadline. If your broker delivers your Redemption Notice after 12:00 noon (New York City time), or your Redemption Confirmation after 5:00 p.m. (New York City time), on the Business Day prior to the applicable Redemption Valuation Date, your Redemption Notice will not be effective, you will not be able to redeem your Securities until the following Redemption Date and your broker will need to complete all the required steps if you should wish to redeem your Securities on any subsequent Redemption Date. In addition, UBS may request a medallion signature guarantee or such assurances of delivery as it may deem necessary in its sole discretion. All instructions given to participants from beneficial owners of Securities relating to the right to redeem their Securities will be irrevocable. If your DTC custodian or your brokerage firm is not a current UBS customer, UBS will be required to on-board such DTC custodian or brokerage firm, in compliance with its internal policies and procedures, before it can accept your Redemption Notice, your Redemption Confirmation or otherwise process your redemption request. This on-boarding process may delay your Redemption Valuation Date and Redemption Date. Furthermore, in certain circumstances, UBS may be unable to on-board your DTC custodian or your brokerage firm.

We reserve the right from time to time to waive the minimum redemption amount or the Redemption Fee Amount in our sole discretion on a case-by-case basis. In addition, we reserve the right from time to time to accelerate, in our sole discretion on a case-by-case basis, the Redemption Valuation Date to the date on which the Redemption Notice is received by UBS rather than the following Index Business Day. You should not assume you will be entitled to any such waiver or election to accelerate the Redemption Valuation Date.

## **UBS Call Right**

We have the right to redeem all, but not less than all, of the Securities upon not less than eighteen (18) calendar days' prior notice to the holders of the Securities (which may be provided via press release), such redemption to occur on any Business Day that we may specify through and including the Maturity Date. Upon early redemption in the event we exercise this call right, you will receive a cash payment equal to the Closing Indicative Value on the last Index Business Day in the Call Measurement Period. We refer to this cash payment as the "Call Settlement Amount."

If the amount calculated above is equal to or less than zero, the payment upon UBS's exercise of its call right will be zero.

We will inform you of such Call Settlement Amount on the first Business Day following the last Index Business Day in the Call Measurement Period.

The holders will receive payment for their Securities on the third Business Day following the last Index Business Day in the Call Measurement Period (the "Call Settlement Date"). If a market disruption event is continuing or occurs on the scheduled Call Valuation Date with respect to any of the Index Constituent Securities, such Call Valuation Date may be postponed as described under "— Market Disruption Event."

### The "Call Measurement Period" means:

- a) if the Market Value of Securities outstanding as at the close of trading on the Index Business Day immediately preceding the date of delivery by UBS of its notice to holders (which may be provided via press release) of its exercise of the UBS Call Right is less than \$25,000,000, the Call Valuation Date, subject to adjustments as described under "— Market Disruption Event";
- b) if the Market Value of Securities outstanding as at the close of trading on the Index Business Day immediately preceding the date of delivery by UBS of its notice to holders (which may be provided via press release) of its exercise of the UBS Call Right is equal to or greater than \$25,000,000, the four (4) Index Business Days from and including the Call Valuation Date, subject to adjustments as described under "— Market Disruption Event."

For the purpose of determining the Final Measurement Period, the "Market Value" of the Securities outstanding as of the close of trading on the Index Business Day immediately preceding the date of delivery by UBS of its notice to holders (which may be provided via press release) of its exercise of the UBS Call Right will equal:

(i) The Closing Indicative Value as of such Index Business Day, *times* (ii) the number of Securities outstanding as reported by BDCXSO <Index> on Bloomberg L.P.

The "Call Valuation Date" means the date disclosed as such by UBS in its notice to holders (which may be provided via press release) of its exercise of the UBS Call Right.

In any notice to holders exercising the UBS Call Right, we will specify how many days are included in the Call Measurement Period.

The following graphic illustrates the formula to determine the Call Settlement Amount, which has been simplified for ease of presentation:

You may lose all or a substantial portion of your investment upon a call. The combined negative effect of the Accrued Fees will reduce your final payment. If the compounded leveraged quarterly return of the Index (or the unleveraged return of the Index, following a Permanent Deleveraging Event) is insufficient to offset the negative effect of the Accrued Fees (less any Coupon Amounts you may be entitled to receive), or if the compounded leveraged quarterly return of the Index (or the unleveraged return of the Index, following a Permanent Deleveraging Event) is negative, you may lose all or a substantial portion of your investment upon a call. The occurrence of Loss Rebalancing Events will result in more frequent than quarterly compounding.

In addition, upon the occurrence of a Zero Value Event, the Securities may be automatically accelerated and mandatorily redeemed by UBS. See "Specific Terms of the Securities — Automatic Acceleration Upon Zero Value Event" below.

## Automatic Acceleration Upon Zero Value Event

A "Zero Value Event" occurs if, on any Index Business Day (other than an Excluded Day), the Intraday Index Value decreases by 66.66667% or more in value from the Last Reset Index Closing Level. From immediately after the Zero Value Event and on all future calendar days, the Index Factor and the Current Principal Amount will be set equal to zero. The Accrued Dividend and Accrued Fees will be fixed at their respective values on the Zero Value Event date and will stay unchanged on all future calendar days.

When the Intraday Index Value decreases 66.66667% in value from the Last Reset Index Closing Level, the Index Factor will equal zero. A Zero Value Event represents the first instance when the effective unleveraged notional amount that is deemed invested in the Index per Security equals zero. It will have the effect of permanently resetting the value of your Securities to a fixed value (which may be zero) and accelerating the Securities. You will not benefit from any future exposure to the Index after the occurrence of a Zero Value Event. A Zero Value Event is expected to occur only in the narrow window of time between the occurrence of a Permanent Deleveraging Event and completion of the leverage reset to 1.0 at the end of the Second Permanent Deleveraging Valuation Date.

For the purposes of the "Zero Value Event" definition, an "Excluded Day" means (i) any calendar day after the Second Permanent Deleveraging Valuation Date (ii) any calendar day on which a Zero Value Event has already occurred, (iii) any calendar day after the occurrence of a Zero Value Event, and (iv) any calendar day after the last day of an applicable Measurement Period.

If a Zero Value Event occurs, all issued and outstanding Securities will be automatically terminated and mandatorily redeemed by UBS and you will receive the Zero Value Settlement Amount on the Zero Value Settlement Date. You will not benefit from any future exposure to the Index after the occurrence of a Zero Value Event.

In the event that a Zero Value Event has occurred, UBS will issue a press release shortly after the event and specify the relevant Zero Value Settlement Date and Zero Value Settlement Amount in respect of your investment in the Securities. The Securities will be suspended from trading intra-day shortly after the event occurs and will likely not be open for trading again on NYSE Arca before the Zero Value Settlement Date.

If a Zero Value Event occurs on an Index Business Day that would otherwise be a Coupon Ex-Date, such day will not be a valid Coupon Ex-Date and all further Coupon Ex-Dates will be suspended.

The "Zero Value Settlement Amount" per Security will be calculated as follows:

- a) On any calendar day, to but excluding the first day of an applicable Measurement Period:
  - (i) the Accrued Dividend, minus (ii) the Accrued Fees, on the date on which the Zero Value Event occurred.
- b) From and including the first day of an applicable Measurement Period:
  - (i) the Measurement Period Cash Amount on the immediately preceding calendar day, *plus* (ii) the Accrued Dividend, *minus* (iii) the Accrued Fees, on the date on which the Zero Value Event occurred.
- c) The minimum value of the Zero Value Settlement Amount will be zero.

## For example:

a) If the Accrued Dividend was \$0.04, the Accrued Fees was \$0.01, and the Measurement Period Cash Amount was \$0, then the Zero Value Settlement Amount would be \$0.03.

- b) If the Accrued Dividend was \$0.01, the Accrued Fees was \$0.05, and the Measurement Period Cash Amount was \$0, then the Zero Value Settlement Amount would be \$0.
- c) If the Zero Value Event occurred during a four-day Measurement Period, and the Accrued Dividend was \$0.01, the Accrued Fees was \$0.03, and the Measurement Period Cash Amount on the immediately preceding calendar day was \$6.59, then the Zero Value Settlement Amount would be \$6.57.

The following graphics illustrate the formula to determine the Zero Value Settlement Amount, which has been simplified for ease of presentation:

On any calendar day, to but excluding the first day of an applicable four-day Measurement Period:

Zero Value Settlement
Amount = Accrued Dividend - Accrued Fees on date
Zero Value Event
occurred

From and including the first day of an applicable Measurement Period:

Zero Value Measurement Period Cash Accrued Fees on date

Settlement = Amount on immediately + Accrued Dividend - Zero Value Event

Amount preceding calendar day occurred

The "Zero Value Settlement Date" will be the third Index Business Day following the date on which the Zero Value Event occurred. For a detailed description of how the Current Indicative Value (or intraday indicative value) of the Securities is calculated see "Valuation of the Index and the Securities".

You may lose all or a substantial portion of your investment upon the occurrence of a Zero Value Event. Upon the occurrence of a Zero Value Event you will receive on the Zero Value Settlement Date only the Zero Value Settlement Amount per Security.

In addition, the Securities may be called by UBS prior to the Maturity Date pursuant to the UBS Call Right. See "Specific Terms of the Securities — UBS Call Right".

## **Loss Rebalancing Events**

A Loss Rebalancing Event will have the effect of deleveraging your Securities with the aim of resetting the then-current leverage to approximately 1.5. This means that after a Loss Rebalancing Event, a constant percentage increase in the Index Closing Level will have less of a positive effect on the value of your Securities relative to before the occurrence of the Loss Rebalancing Event.

A "Loss Rebalancing Event" occurs if, at any time, the Intraday Index Value on such Index Business Day (other than an Excluded Day) decreases by 15% or more in value from the previously Last Reset Index Closing Level.

Loss Rebalancing Events may occur multiple times over the term of the Securities and may occur multiple times during a single calendar quarter. This means both that (i) the Current Principal Amount may be reset more frequently than quarterly and (ii) the cumulative effect of compounding and fees will have increased as a result of the Loss Rebalancing Event(s). Because each Loss Rebalancing Event will have the effect of deleveraging your Securities, following a Loss Rebalancing Event your Securities will have less exposure to a potential positive gain in value relative to the exposure before the occurrence of such Loss Rebalancing Event.

For purposes of the "Loss Rebalancing Event" definition, an "Excluded Day" means (i) the Index Business Day immediately preceding any Quarterly Reset Valuation Date, if a Loss Rebalancing Event occurs after 3:15pm on such day, (ii) any Quarterly Reset Valuation Date, (iii) any Loss Rebalancing Valuation Date, (iv) the Index Business Day immediately preceding the first day of an applicable Measurement Period, if a Loss Rebalancing Event occurs after 3:15pm on such day (v) any calendar day from and including the first day of an applicable Measurement Period, (vi) the First or Second Permanent Deleveraging Valuation Dates, (vii) any calendar day after the Second Permanent Deleveraging Valuation Date, (viii) a Zero Value Event date, and (ix) any calendar day after the Zero Value Event date.

## "Loss Rebalancing Valuation Date" means:

- a) if a Loss Rebalancing Event occurs at or prior to 3:15 p.m. on an Index Business Day, the day that such Loss Rebalancing Event occurs, subject to adjustment as described under "— Market Disruption Event";
- b) if a Loss Rebalancing Event occurs after 3:15 p.m. on an Index Business Day, the first Index Business Day following the occurrence of such Loss Rebalancing Event, subject to adjustment as described under "— Market Disruption Event."

## **Permanent Deleveraging Event**

A Permanent Deleveraging Event will have the effect of deleveraging your Securities, with the aim of permanently resetting the then-current leverage to 1.0, over two Index Business Days. The leverage at the end of the First Permanent Deleveraging Valuation Date is reset to approximately 1.5 and the leverage at the end of the Second Permanent Deleveraging Valuation Date is reset to 1.0. This means that after a Permanent Deleveraging Event, a constant percentage increase in the Index Closing Level will have less of a positive effect on the value of your Securities relative to before the occurrence of the Permanent Deleveraging Event. A Permanent Deleveraging Event is expected to occur only in the narrow window of time between the occurrence of a Loss Rebalancing Event and completion of the leverage reset to 1.5 at the end of the Loss Rebalancing Valuation Date.

A "Permanent Deleveraging Event" occurs if, at any time, the Intraday Index Value on such Index Business Day (other than an Excluded Day) decreases by 50% or more in value from the Last Reset Index Closing Level.

For purposes of the "Permanent Deleveraging Event" definition, an "Excluded Day" means (i) the First or Second Permanent Deleveraging Valuation Dates, (ii) any calendar day after the Second Permanent Deleveraging Valuation Date, (iii) a day upon which a Zero Value Event occurs, (iv) any calendar day after the occurrence of a Zero Value Event, (v) the day which is two Index Business Days prior to the first day of an applicable Measurement Period, if a Permanent Deleveraging Event occurs after 3:15pm on such day and (vi) any calendar day from and including the Index Business Day immediately preceding the first day of an applicable Measurement Period.

In the event that a Permanent Deleveraging Event has occurred, UBS will issue a press release before 9:00 a.m. on the Index Business Day immediately following the date on which the Permanent Deleveraging Event occurred, announcing the Permanent Deleveraging Event and notifying you of the Permanent Deleveraging Valuation Dates.

"Permanent Deleveraging Valuation Dates" means the First Permanent Deleveraging Valuation Date and the Second Permanent Deleveraging Valuation Date, each as defined below:

- a) The "First Permanent Deleveraging Valuation Date" means:
  - i. Any Index Business Day, which otherwise would have been a Loss Rebalancing Valuation Date, but on which a Permanent Deleveraging Event has occurred, subject to adjustment as described under "- Market Disruption Event";
  - ii. If a Permanent Deleveraging Event occurs after 3:15pm on any Index Business Day which would not otherwise have been a Loss Rebalancing Valuation Date, then the first Index Business Day following the occurrence of such Permanent Deleveraging Event, subject to adjustment as described under "— Market Disruption Event".

The leverage of your Securities will be reset to approximately 1.5 at the close of trading on the First Permanent Deleveraging Valuation Date.

b) The "Second Permanent Deleveraging Valuation Date" means the Index Business Day immediately following the First Permanent Deleveraging Valuation Date, subject to adjustment as described under "— Market Disruption Event".

The leverage of your Securities will be reset to approximately 1.0 at the close of trading on the Second Permanent Deleveraging Valuation Date.

## **Security Calculation Agent**

UBS Securities LLC will act as the Security Calculation Agent. The Security Calculation Agent will be solely responsible for all determinations and calculations regarding the value of the Securities, including, among other things, at maturity or upon early redemption or call, or at other times, the Current Principal Amount, Current Indicative Value (or the "intraday indicative value"), Closing Indicative Value, market disruption events, Business Days, Index Business Days, the Leverage Factor, the Index Factor, the Index Performance Ratio, the Residual Factor, the Index Closing Level, the Financing Rate, the Accrued Fees (including determining any successor to the LIBOR base rate), the Coupon Amount, the Accrued Dividend, the Daily Dividend, if any, the Redemption Fee Amount, the Cash Settlement Amount, if any, that we will pay you at maturity, the Coupon Ex-Dates, the Coupon Record Dates, the Redemption Amount, if any, that we will pay you upon redemption, if applicable, the Zero Value Settlement Amount, if any, that we will pay you upon acceleration following the occurrence of a Zero Value Event, the Call Settlement Amount, if any, that we will pay you in the event that UBS calls the Securities, whether a Loss Rebalancing Event has occurred, whether a Permanent Deleveraging Event has occurred and whether any day is a Business Day or an Index Business Day and all such other matters as may be specified elsewhere herein as matters to be determined by the Security Calculation Agent. The Security Calculation Agent will also be responsible for determining whether the Index has been discontinued and whether there has been a material change in the Index. The Security Calculation Agent will make all such determinations and calculations in its sole discretion, and absent manifest error, all determinations of the Security Calculation Agent will be conclusive for all purposes and binding on us, you, and all other persons having an interest in the Security, without liability on the part of the Security Calculation Agent. You will not be entitled to any compensation from us for any loss suffered as a result of any determinations or calculations made by the Security Calculation Agent. We may appoint a different Security Calculation Agent from time to time after the date of this prospectus supplement without your consent and without notifying you.

The Security Calculation Agent will provide written notice to the trustee at its New York office, on which notice the trustee may conclusively rely, of the amount to be paid at maturity, call or acceleration upon the occurrence of a Zero Value Event, or upon early redemption, or on a Coupon Payment Date on or prior to 12:00 noon, New York City time, on the Business Day immediately preceding the Maturity Date, any Redemption Date, any Call Settlement Date, Zero Value Settlement Date or any Coupon Payment Date, as applicable.

All dollar amounts related to determination of the Coupon Amount, the Accrued Dividend, the Daily Dividend, if any, the Accrued Fees, the Redemption Amount and Redemption Fee Amount, if any, per Security, the Call Settlement Amount, if any, per Security, the Current Principal Amount, the Zero Value Settlement Amount, and the Cash Settlement Amount, if any, per Security, will be rounded to the nearest ten-thousandth, with five one hundred-thousandths rounded upward (*e.g.*, .76545 would be rounded up to .7655); and all dollar amounts paid on the Stated Principal Amount of the Securities per holder will be rounded to the nearest cent, with one-half cent rounded upward.

# **Market Disruption Event**

To the extent a market disruption event with respect to the Index has occurred or is continuing during a four-day Measurement Period, the Index Closing Level for such day will be determined by the Security Calculation Agent or one of its affiliates on the first succeeding Index Business Day on which a market disruption event does not occur or is not continuing with respect to the Index. The remaining Index Business Days in the Measurement Period will be postponed accordingly, and the remaining Index Business Days in the Measurement Period will resume again following the suspension of the market disruption event. For example, if the four-day Measurement Period for purposes of calculating the Call Settlement Amount, is scheduled for June 2, June 3, June 4 and June 5, and there is a market disruption event with respect to the Index on June 2, but no other market disruption event during such Call Measurement Period, then June 3 will become the first Index Business Day of the Measurement Period, June 4<sup>th</sup> the second Index Business Day, June 5<sup>th</sup> the third Index Business Day and the next Index Business Day after June 5<sup>th</sup> would be the final day of the Measurement Period. The same approach would be applied if there is a market disruption event during a four-day Final Measurement Period.

To the extent a market disruption event with respect to the Index has occurred or is continuing on the Redemption Valuation Date, Call Valuation Date (in the event that the Call Measurement Period is the Call Valuation Date), Calculation Date (in the event that the Final Measurement Period is the Calculation Date) or any Reset Valuation Date, the Index Closing Level for such Redemption Valuation Date, Call Valuation Date, Calculation Date or Reset Valuation Date will be determined by the Security Calculation Agent or one of its affiliates on the first succeeding Index Business Day on which a market disruption event does not occur or is not continuing with respect to the Index. For example, if the Redemption Valuation Date, for purposes of calculating a Redemption Amount, is based on the Index Closing Level on June 2 and there is a market disruption event with respect to the Index on June 2, then the Index Closing Level on June 3 will be used to calculate the Redemption Amount, assuming that no such market disruption event has occurred or is continuing on June 3.

In no event, however, will any postponement pursuant to the two immediately preceding paragraphs result in the affected Index Business Day of the Measurement Period or any Redemption Valuation Date, Call Valuation Date (in the event that the Call Measurement Period is the Call Valuation Date), Calculation Date (in the event that the Final Measurement Period is the Calculation Date) or Reset Valuation Date occurring more than five Index Business Days following the day originally scheduled to be such Index Business Day of the Measurement Period or such Redemption Valuation Date, Call Valuation Date, Calculation Date or Reset Valuation Date. If a market disruption event has occurred or is continuing with respect to the Index on the fifth Index Business Day following the date originally scheduled to be such Index Business Day of the Measurement Period or any Redemption Valuation Date, Call Valuation Date, Calculation Date or any Reset Valuation Date, the Security Calculation Agent or one of its affiliates will determine the Index Closing Level based on its good faith estimate of the Index Closing Level that would have prevailed on such fifth Index Business Day but for such market disruption event.

Any of the following will be a market disruption event with respect to the Index, in each case as determined by the Security Calculation Agent in its sole discretion:

- a) suspension, absence or material limitation of trading in a material number of Index Constituent Securities, whether by reason of movements in price exceeding limits permitted by the Primary Exchange or otherwise;
- b) suspension, absence or material limitation of trading in option or futures contracts relating to the Index or to a material number of Index Constituent Securities in the primary market or markets for those contracts;
- c) the Index is not published; or
- d) in any other event, if the Security Calculation Agent determines in its sole discretion that the event materially interferes with our ability or the ability of any of our affiliates to unwind all or a material portion of a hedge with respect to the Securities that we or our affiliates have effected or may effect as described in the section entitled "Use of Proceeds and Hedging".

The following events will not be market disruption events with respect to the Index:

- a) a limitation on the hours or numbers of days of trading, but only if the limitation results from an announced change in the regular business hours of the relevant market; or
- b) a decision to permanently discontinue trading in the option or futures contracts relating to the Index or any Index Constituent Securities.

For this purpose, an "absence of trading" in the primary securities market on which option or futures contracts related to the Index or any Index Constituent Securities are traded will not include any time when that market is itself closed for trading under ordinary circumstances.

## **Redemption Price Upon Optional Tax Redemption**

We have the right to redeem the Securities in the circumstances described under "Description of Debt Securities We May Offer — Optional Tax Redemption" in the accompanying prospectus. If we exercise this right, the redemption price of the Securities will be determined by the Security Calculation Agent in a manner reasonably calculated to preserve your and our relative economic positions.

# **Default Amount on Acceleration**

If an event of default occurs and the maturity of the Securities is accelerated, we will pay the default amount in respect of the principal of the Securities at maturity. We describe the default amount below under "— Default Amount."

In addition to the default amount described below, we will also pay the Coupon Amount per Security, if any, with respect to the final Coupon Payment Date, as described above under "— Coupon Payment," calculated as if the date of acceleration was the last Index Business Day in the Final Measurement Period and the three Index Business Days immediately preceding the date of acceleration were the corresponding Index Business Days in the accelerated Final Measurement Period, with the third Index Business Day immediately preceding the date of accelerated Calculation Date and the accelerated final Coupon Valuation Date, and the Index Business Day immediately preceding the date of acceleration being the relevant final Coupon Valuation Date.

For the purpose of determining whether the holders of our Medium-Term Notes, Series B, of which the Securities are a part, are entitled to take any action under the indenture, we will treat the outstanding principal amount of the Medium-Term Notes, Series B, as constituting the outstanding principal amount of the Securities. Although the terms of the Securities may differ from those of the other Medium-Term Notes, Series B, holders of specified percentages in principal amount of all Medium-Term Notes, Series B, together in some cases with other series of our debt securities, will be able to take action affecting all the Medium-Term Notes, Series B, including the Securities. This action may involve changing some of the terms that apply to the Medium-Term Notes, Series B, accelerating the maturity of the Medium-Term Notes, Series B after a default or waiving some of our obligations under the indenture. We discuss these matters in the attached prospectus under "Description of Debt Securities We May Offer — Default, Remedies and Waiver of Default" and "Description of Debt Securities We May Offer — Modification and Waiver of Covenants."

#### **Default Amount**

The default amount for the Securities on any day will be an amount, in U.S. dollars as determined by the Security Calculation Agent in its sole discretion, for the aggregate Stated Principal Amount of the Securities, equal to the cost of having a qualified financial institution, of the kind and selected as described below, expressly assume all our payment and other obligations with respect to the Securities as of that day and as if no default or acceleration had occurred, or to undertake other obligations providing substantially equivalent economic value to you with respect to the Securities. That cost will equal: the lowest amount that a qualified financial institution would charge to effect this assumption or undertaking,

plus

the reasonable expenses, including reasonable attorneys' fees, incurred by the holders of the Securities in preparing any documentation necessary for this assumption or undertaking.

During the default quotation period for the Securities, which we describe below, the holders of the Securities and/or we may request a qualified financial institution to provide a quotation of the amount it would charge to effect this assumption or undertaking. If either party obtains a quotation, it must notify the other party in writing of the quotation. The amount referred to in the first bullet point above will equal the lowest — or, if there is only one, the only — quotation obtained, and as to which notice is so given, during the default quotation period. With respect to any quotation, however, the party not obtaining the quotation may object, on reasonable and significant grounds, to the assumption or undertaking by the qualified financial institution providing the quotation and notify the other party in writing of those grounds within two Business Days after the last day of the default quotation period, in which case that quotation will be disregarded in determining the default amount.

## **Default Quotation Period**

The default quotation period is the period beginning on the day the default amount first becomes due and ending on the third Business Day after that day, unless:

- > no quotation of the kind referred to above is obtained, or
- > every quotation of that kind obtained is objected to within five (5) Business Days after the due date as described above.

If either of these two events occurs, the default quotation period will continue until the third Business Day after the first Business Day on which prompt notice of a quotation is given as described above. If that quotation is objected to as described above within five (5) Business Days after that first Business Day, however, the default quotation period will continue as described in the prior sentence and this sentence.

In any event, if the default quotation period and the subsequent two Business Day objection period have not ended before the Calculation Date, then the default amount will equal the Stated Principal Amount of the Securities.

## **Qualified Financial Institutions**

For the purpose of determining the default amount at any time, a qualified financial institution must be a financial institution organized under the laws of any jurisdiction in the United States of America, Europe or Japan, which at that time has outstanding debt obligations with a stated maturity of one year or less from the date of issue and rated either:

- A-1 or higher by Standard & Poor's Financial Services LLC, a subsidiary of The McGraw-Hill Companies, Inc., or any successor, or any other comparable rating then used by that rating agency, or
- ➤ P-1 or higher by Moody's Investors Service or any successor, or any other comparable rating then used by that rating agency.

# Discontinuance of or Adjustments to the Index or Termination of Our License Agreement with the Index Sponsor; Alteration of Method of Calculation

If (i) the Index Sponsor or Index Calculation Agent discontinues publication of, or otherwise fails to publish, the Index, (ii) our license agreement with the Index Sponsor terminates or (iii) the Index Sponsor or Index Calculation Agent does not make the Index Constituent Securities and/or their unit weighting available to the Security Calculation Agent, and, in each case, any other person or entity publishes an index licensed to UBS that the Security Calculation Agent determines is comparable to the Index and for which the Index Constituent Securities and/or their unit weighting are available to the Security Calculation Agent (such index being referred to herein as a "successor index"), and the Security Calculation Agent approves such index as a successor index, then the Security Calculation Agent will determine the Index Closing Level on the applicable dates of determination, Coupon Amounts and the amount payable at maturity, call, acceleration upon the occurrence of a Zero Value Event or upon early redemption and all other related payments terms by reference to such successor index.

Upon any selection by the Security Calculation Agent of a successor index, the Security Calculation Agent will cause written notice thereof to be furnished to the trustee, to us and to the holders of the Securities.

If the Index Sponsor or Index Calculation Agent discontinues publication of the Index, our license agreement with the Index Sponsor terminates or the Index Sponsor or Index Calculation Agent do not make the Index Constituent Securities and/or their unit weighting available to the Security Calculation Agent, prior to, and such discontinuation, termination or unavailability is continuing on the Calculation Date or any Index Business Day during a Measurement Period, or on the Redemption Valuation Date or on any Reset Valuation Date, as applicable, or on any other relevant date on which the Index Closing Level is to be determined and the Security Calculation Agent determines that no successor index is available at such time, or the Security Calculation Agent has previously selected a successor index and publication of such successor index is discontinued prior to, and such discontinuation is continuing on the Calculation Date or any Index Business Day during a Measurement Period, or on the Redemption Valuation Date or on any Reset Valuation Date, or any other relevant date on which the Index Closing Level is to be determined, then the Security Calculation Agent will determine the Index Closing Level using the Index Closing Level on the last Index Business Day immediately prior to such discontinuation or unavailability, as adjusted for certain corporate actions. In such event, the Security Calculation Agent will cause notice thereof to be furnished to the trustee, to us and to the holders of the Securities.

Notwithstanding these alternative arrangements, discontinuation of the publication of the Index or successor index, as applicable, may adversely affect the value of the Securities.

In addition, if an Index Replacement Event (as defined below) occurs at any time and the Index Sponsor or anyone else publishes an index that the Security Calculation Agent determines is comparable to the Index (the "Substitute Index"), then the Security Calculation Agent may elect, in its sole discretion, to permanently replace the original Index with the Substitute Index for all purposes under the Securities, and all provisions described in this prospectus supplement as applying to the Index will thereafter apply to the Substitute Index instead. In such event, the Security Calculation Agent will make such adjustments, if any, to any level of the Index or Substitute Index that is used for purposes of the Securities as it determines are appropriate in the circumstances. If the Security Calculation Agent elects to replace the original Index with a Substitute Index, then the Security Calculation Agent will determine all amounts hereunder, including the Coupon Amounts, Current Principal Amount, Current Indicative Value or intraday indicative value, Closing Indicative Value, Index Factor, Index Performance Ratio, Residual Factor, Accrued Fees, Index Closing Levels on the applicable dates of determination, all other related payment terms and the amount payable at maturity, call, upon early redemption or upon acceleration upon the occurrence of a Zero Value Event by reference to such Substitute Index. If the Security Calculation Agent so elects to replace the original Index with a Substitute Index, the Security Calculation Agent will cause written notice thereof to be furnished to the trustee, to us and to the holders of the Securities of the Securities.

## An "Index Replacement Event" means:

a) an amendment to or change (including any officially announced proposed change) in the laws, regulations or rules of the United States (or any political subdivision thereof), or any jurisdiction in which a Primary Exchange (as defined herein) is located that (i) makes it illegal for UBS AG or its affiliates to hold, acquire or dispose of the Index Constituent Securities included in the Index or options, futures, swaps or other derivatives on the Index or on the Index Constituent Securities included in the Index (including but not limited to exchange-imposed position limits), (ii) materially increases the cost to us, our affiliates, third parties with whom we transact or similarly situated third parties in performing our or their obligations in connection with the Securities, (iii) has a material adverse effect on any of these parties' ability to perform their obligations in connection with the Securities or (iv) materially affects our ability to issue or transact in exchange traded notes similar to the Securities, each as determined by the Security Calculation Agent;

- b) any official administrative decision, judicial decision, administrative action, regulatory interpretation or other official pronouncement interpreting or applying those laws, regulations or rules that is announced on or after June 2, 2020 that (i) makes it illegal for UBS AG or its affiliates to hold, acquire or dispose of the Index Constituent Securities included in the Index or options, futures, swaps or other derivatives on the Index or on the Index Constituent Securities (including but not limited to exchange-imposed position limits), (ii) materially increases the cost to us, our affiliates, third parties with whom we transact or similarly situated third parties in performing our or their obligations in connection with the Securities, (iii) has a material adverse effect on the ability of us, our affiliates, third parties with whom we transact or a similarly situated third party to perform our or their obligations in connection with the Securities or (iv) materially affects our ability to issue or transact in exchange traded notes similar to the Securities, each as determined by the Security Calculation Agent;
- c) any event that occurs on or after June 2, 2020 that makes it a violation of any law, regulation or rule of the United States (or any political subdivision thereof), or any jurisdiction in which a Primary Exchange (as defined herein) is located, or of any official administrative decision, judicial decision, administrative action, regulatory interpretation or other official pronouncement interpreting or applying those laws, regulations or rules, (i) for UBS AG or its affiliates to hold, acquire or dispose of the Index Constituent Securities or options, futures, swaps or other derivatives on the Index or on the Index Constituent Securities (including but not limited to exchange-imposed position limits), (ii) for us, our affiliates, third parties with whom we transact or similarly situated third parties to perform our or their obligations in connection with the Securities or (iii) for us to issue or transact in exchange traded notes similar to the Securities, each as determined by the Security Calculation Agent;
- d) any event, as determined by the Security Calculation Agent, as a result of which we or any of our affiliates or a similarly situated party would, after using commercially reasonable efforts, be unable to, or would incur a materially increased amount of tax, duty, expense or fee (other than brokerage commissions) to, acquire, establish, re-establish, substitute, maintain, unwind or dispose of any transaction or asset it deems necessary to hedge the risk of the Securities, or realize, recover or remit the proceeds of any such transaction or asset; or
- e) as determined by the Security Calculation Agent, the primary exchange or market for trading for the Securities, if any, announces that pursuant to the rules of such exchange or market, as applicable, the Securities cease (or will cease) to be listed, traded or publicly quoted on such exchange or market, as applicable, for any reason and are not immediately re-listed, re-traded or re-quoted on an exchange or quotation system located in the same country as such exchange or market, as applicable.

Notwithstanding these alternative arrangements, discontinuation of the publication of the Index or successor index, as applicable, may adversely affect the value of the Securities.

If at any time the method of calculating the Index, a successor index or a substitute index, or the value thereof, is changed in a material respect, or if the Index or a successor index is in any other way modified so that the Index Closing Level of the Index or such successor index does not, in the opinion of the Security Calculation Agent, fairly represent the Index Closing Level of the Index or such successor index had such changes or modifications not been made, then the Security Calculation Agent will make such calculations and adjustments as, in the good faith judgment of the Security Calculation Agent, may be necessary in order to arrive at an Index Closing Level of an index comparable to the Index or such successor index, as the case may be, as if such changes or modifications had not been made, and the Security Calculation Agent will calculate the Index Closing Level for the Index or such successor index with reference to the Index or such successor index, as adjusted. The Security Calculation Agent will accordingly calculate the Index Closing Level, the Index Performance Ratio, the Coupon Amount, the Accrued Dividend, the Daily Dividend, if any, the Accrued Fees, the Redemption Fee Amount, if any, the Cash Settlement Amount, if any, that we will pay you at maturity, the Redemption Amount, if any, upon early redemption, if applicable, the Call Settlement Amount, if any, that we will pay you in the event UBS calls the Securities, the Zero Value Settlement Amount, if any, that we will pay you in the event of acceleration upon the occurrence of a Zero Value Event, if applicable, the Last Reset Index Closing Level and all related payment terms based on the Index Closing Level calculated by the Security Calculation Agent, as adjusted. Accordingly, if the method of calculating the Index or a successor index is modified so that the level of the Index or such successor index is a fraction of what it would have been if there had been no such modification (e.g., due to a split in the Index), which, in turn, causes the Index Closing Level of the Index or such successor index to be a fraction of what it would have been if there had been no such modification, then the Security Calculation Agent will make such calculations and adjustments in order to arrive at an Index Closing Level for the Index or such successor index as if it had not been modified (e.g., as if such split had not occurred).

In the event that the Security Calculation Agent elects to replace the Index with a successor index or a Substitute Index, UBS may, in its sole discretion, amend the title of the Securities in order to remove reference the former Index and to make such other changes to the title of the Securities as it considers necessary or desirable to reflect the name and/or characteristics of the relevant successor index or Substitute Index, as applicable.

All determinations and adjustments to be made by the Security Calculation Agent may be made in the Security Calculation Agent's sole discretion. See "Risk Factors — There are potential conflicts of interest between you and the Security Calculation Agent" in this prospectus supplement for a discussion of certain conflicts of interest which may arise with respect to the Security Calculation Agent.

## **Manner of Payment and Delivery**

Any payment on or delivery of the Securities at maturity, call or acceleration upon the occurrence of a Zero Value Event, or upon early redemption, will be made to accounts designated by you and approved by us, or at the corporate trust office of the trustee in New York City, but only when the Securities are surrendered to the trustee at that office. We also may make any payment or delivery in accordance with the applicable procedures of the depositary.

## **Business Day**

When we refer to a Business Day or a New York Business Day with respect to the Securities, we mean a day that is a Business Day of the kind described in "Description of Debt Securities We May Offer — Payment Mechanics for Debt Securities" in the accompanying prospectus.

## **Modified Business Day**

As described in "Description of Debt Securities We May Offer — Payment Mechanics for Debt Securities" in the attached prospectus, any payment on the Securities that would otherwise be due on a day that is not a Business Day may instead be paid on the next day that is a Business Day, with the same effect as if paid on the original due date, except as described under "— Cash Settlement Amount at Maturity," "— UBS Call Right" and "— Early Redemption at the Option of the Holders" above.

## Reissuances or Reopened Issues

We may, at our sole discretion, "reopen" or reissue the Securities. We issued the Securities initially in an amount having the aggregate Stated Principal Amount specified on the cover of this prospectus supplement. We may issue additional Securities in amounts that exceed the amount on the cover at any time, without your consent and without notifying you. The Securities do not limit our ability to incur other indebtedness or to issue other securities. Also, we are not subject to financial or similar restrictions by the terms of the Securities. For more information, please refer to "Description of Debt Securities We May Offer — Amounts That We May Issue" in the accompanying prospectus.

These further issuances, if any, will be consolidated to form a single class with the originally issued Securities and will have the same CUSIP number and will trade interchangeably with the Securities immediately upon settlement. Any additional issuances will increase the aggregate Stated Principal Amount of the outstanding Securities of the class. The price of any additional offering will be determined at the time of pricing of that offering.

# **Booking Branch**

The Securities will be booked through UBS AG, London Branch.

## **Clearance and Settlement**

The DTC participants that hold the Securities through DTC on behalf of investors will follow the settlement practices applicable to equity securities in DTC's settlement system with respect to the primary distribution of the Securities and secondary market trading between DTC participants.

## 11. ETRACS Monthly Pay 1.5x Leveraged Mortgage REIT ETN due June 10, 2050

## **Specific Terms of the Securities**

In this section, references to "holders" mean those who own the Securities registered in their own names, on the books that we or the trustee maintains for this purpose, and not those who own beneficial interests in the Securities registered in street name or in the Securities issued in book-entry form through The Depository Trust Company ("DTC") or another depositary. Owners of beneficial interests in the Securities should read the section entitled "Legal Ownership and Book-Entry Issuance" under "Medium-Term Notes, Series B" above.

The Securities are part of a series of UBS AG debt securities entitled "Medium-Term Notes, Series B" that we may issue, from time to time, under the indenture more particularly described in the accompanying prospectus. This prospectus supplement summarizes specific financial and other terms that apply to the Securities. Terms that apply generally to all Medium-Term Notes, Series B are described in "Description of Debt Securities We May Offer" in the accompanying prospectus. The terms described here (*i.e.*, in this prospectus supplement) supplement those described in the accompanying prospectus and, if the terms described here are inconsistent with those described there, the terms described here are controlling.

The Securities are part of a single series of senior debt securities issued under our indenture, dated as of June 12, 2015 between us and U.S. Bank Trust National Association, as trustee.

We describe the terms of the Securities in more detail below.

The Stated Principal Amount of each Security is \$25.00.

The Securities do not guarantee any return of principal at, or prior to, maturity, call or acceleration upon the occurrence of a Zero Value Event, or upon early redemption. Instead, at maturity, you will receive a cash payment per Security the amount of which will vary depending on the performance and path of the Index and will be reduced by the Accrued Fees as of the last Index Business Day in the Final Measurement Period as described under "— Cash Settlement Amount at Maturity." If the amount as calculated is equal to or less than zero, the Cash Settlement Amount will be zero and you will not receive a cash payment.

If you exercise your right to have us redeem your Securities, subject to compliance with the redemption procedures, for each Security you will receive a cash payment per Security on the relevant Redemption Date equal to the Redemption Amount as described under "— Early Redemption at the Option of the Holders." If the amount as calculated is equal to or less than zero, the Redemption Amount will be zero and you will not receive a cash payment.

If a Zero Value Event occurs, for each Security you will receive a cash payment per Security on the Zero Value Settlement Date equal to the (i) the Measurement Period Cash Amount, on the immediately preceding calendar day, *plus* (ii) the Accrued Dividend, on the date on which the Zero Value Event occurred, *minus* (iii) the Accrued Fees, on the date on which the Zero Value Event occurred, as described under "— Automatic Acceleration Upon Zero Value Event."

## **Coupon Payment**

For each Security you hold on the applicable Coupon Record Date, on each Coupon Payment Date you will receive an amount in cash equal to the Coupon Amount. The Coupon Amount will equal the sum of the cash distributions that a hypothetical holder of Index constituents would have been entitled to receive in respect of the Index constituents during the relevant period. The Coupon Amount may be equal to zero.

The "Coupon Amount" means (i) on any calendar day that is not a Coupon Ex-Date, zero; and (ii) on any calendar day that is a Coupon Ex-Date, an amount per Security equal to the Accrued Dividend on the Coupon Valuation Date immediately preceding such Coupon Ex-Date. The minimum value of the Coupon Amount will be zero.

The following graphic illustrates the formula to determine the Coupon Amount on a Coupon Ex-Date, which has been simplified for ease of presentation:

Coupon Amount = Accrued Dividend, on the immediately preceding Coupon Valuation Date

If the Securities undergo a split or reverse split, the Coupon Amount will be adjusted accordingly.

The "Accrued Dividend" means (i) on the Initial Trade Date, zero; and (ii) on any subsequent calendar day, an amount per Security equal to (a) the Accrued Dividend as of the immediately preceding calendar day, *plus* (b) the Daily Dividend on such calendar day, *minus* the Coupon Amount on such calendar day.

If the Securities undergo a split or reverse split, the Accrued Dividend will be adjusted accordingly.

The "**Daily Dividend**" means, on any calendar day, an amount per Security equal to (a)(i) the Index Dividend Point, *times* (ii) the Leverage Factor, *times* (iii) the Current Principal Amount on the immediately preceding calendar day, *times* (iv) the Residual Factor on the immediately preceding calendar day, *divided by* (b) the Last Reset Index Closing Level.

The "Index Dividend Point" means, on any calendar day, an amount per Security equal to the *sum of the products* of (i) the cash value of distributions that a hypothetical holder of one share of each Index Constituent Security on such calendar day would have been entitled to receive in respect of that Index Constituent Security for those cash distributions whose "exdividend date" occurs on such calendar day and (ii) the number of units of that Index Constituent Security included in the Index as of such date.

The Index Dividend Point may not be publicly disseminated by the Index Calculation Agent. The data used to calculate the Index Dividend Point is the property of the Index Calculation Agent and investors may be required to pay a fee and meet any other requirements of the Index Calculation Agent, in order to access such information. See "Risk Factors — The value of the Index Dividend Point may not be publicly disseminated or otherwise freely accessible to investors".

The Index Dividend Point, on any calendar day, represents the total cash value of distributions that a hypothetical holder of the Index Constituent Securities, in proportion to the weights of the Index Constituent Securities, would have been entitled to receive with respect to any Index Constituent Securities for those cash distributions whose "ex-dividend date" occurs on such calendar day.

The "Coupon Payment Date" means the fifteenth (15th) Index Business Day following each Coupon Valuation Date. The first Coupon Payment Date will be July 22, 2020, subject to adjustment as provided herein. If such day is not a Coupon Business Day, the Coupon Payment Date shall be the following Coupon Business Day.

If the Final Coupon Ex-Date occurs prior to the Maturity Date, but the Final Coupon Payment Date otherwise occurs after the Maturity Date, in such case, the Final Coupon Payment Date will be the Maturity Date, subject to adjustment as provided herein.

The "Coupon Record Date" means the ninth Index Business Day following each Coupon Valuation Date. If such day is not a Coupon Business Day, the Coupon Record Date shall be the immediately preceding Coupon Business Day.

The "Coupon Ex-Date," with respect to a Coupon Amount, means the first Coupon Business Day on which the Securities trade without the right to receive such Coupon Amount. Under current NYSE Area practice, the Coupon Ex-Date will generally be the Coupon Business Day immediately preceding the applicable Coupon Record Date.

If a Zero Value Event occurs on an Index Business Day that would otherwise be a Coupon Ex-Date, such day will not be a valid Coupon Ex-Date and all further Coupon Ex-Dates will be suspended. In this case, the Coupon Amount corresponding to such Coupon Ex-Date will be included in the Zero Value Settlement Amount payable on the Zero Value Settlement Date.

In addition, if a day that would otherwise by a Coupon Ex-Date occurs on or after the first day of an applicable Measurement Period, such day will not be a valid Coupon Ex-Date and all further Coupon Ex-Dates will be suspended. In this case, the Coupon Amount corresponding to such Coupon Ex-date will be included in the Cash Settlement Amount or Call Settlement Amount payable at maturity or call, respectively.

The "Coupon Valuation Date" means the 30th day of each month and the 28th day of February, of each calendar year during the term of the Securities or if such date is not an Index Business Day, then the first Index Business Day following such date, provided that the final Coupon Valuation Date will be the Calculation Date, subject to adjustment described herein. The first Coupon Valuation Date will be June 30, 2020.

Notwithstanding the foregoing, with respect to cash distributions or dividends on an Index Constituent Security which is scheduled to be paid prior to the applicable Coupon Ex-Date, if, and only if, the issuer of such Index Constituent Security fails to pay the dividend or distribution to holders of such Index Constituent Security by the scheduled payment date for such dividend or distribution, such dividend or distribution will be assumed to be zero for the purposes of calculating the applicable Coupon Amount. Any such delayed dividend or distribution payment from the issuer of an Index Constituent Security will be attributed back to the Accrued Dividend and included in the next Coupon Amount.

"Coupon Business Day" means any Index Business Day other than an Index Business Day on which banking institutions in New York are generally not authorized or obligated by law, regulation or executive order to open.

"record date" means, (i) with respect to a distribution on an Index Constituent Security, the date on which a holder of the Index Constituent Security must be registered as a stockholder/unitholder of such Index Constituent Security in order to be entitled to receive such distribution and (ii) with respect to any split or reverse split, the tenth Business Day after the announcement date.

"ex-dividend date" means, with respect to a distribution on an Index Constituent Security, the first Business Day on which transactions in such Index Constituent Security trade on the Primary Exchange without the right to receive such distribution.

## **Cash Settlement Amount at Maturity**

The "Maturity Date" is June 10, 2050, which will be the third Business Day following the last Index Business Day in the Final Measurement Period, subject to adjustment as described below under "— Market Disruption Event."

For each Security, unless earlier called, redeemed or accelerated, you will receive at maturity a cash payment equal to the Closing Indicative Value on the last Index Business Day in the applicable Measurement Period. We refer to this cash payment as the "Cash Settlement Amount." If the amount so calculated is equal to or less than zero, the payment will be zero.

The following graphic illustrates the formula to determine the Cash Settlement Amount, which has been simplified for ease of presentation:

Cash Settlement Amount = Closing Indicative Value, on last Index
Business Day in Final Measurement Period

You may lose all or a substantial portion of your investment at maturity. The combined negative effect of the Accrued Fees will reduce your final payment. If the compounded leveraged quarterly return of the Index (or the unleveraged return of the Index, following a Permanent Deleveraging Event) is insufficient to offset the negative effect of the Accrued Fees (less any Coupon Amounts you may be entitled to receive), or if the compounded leveraged quarterly return of the Index (or the unleveraged return of the Index, following a Permanent Deleveraging Event) is negative, you may lose all or a substantial portion of your investment at maturity. The occurrence of Loss Rebalancing Events will result in more frequent than quarterly compounding.

The Securities may be called by UBS prior to the Maturity Date pursuant to UBS's Call Right and, upon the occurrence of a Zero Value Event, the Securities will be automatically accelerated and mandatorily redeemed by UBS. If the Securities are called by UBS or accelerated upon the occurrence of a Zero Value Event, the Call Settlement Amount or Zero Value Settlement Amount, as applicable, may be zero and you may lose all or a substantial portion of your investment. See "Specific Terms of the Securities — UBS's Call Right" and "Specific Terms of the Securities — Automatic Acceleration Upon Zero Value Event".

The "Stated Principal Amount" of each Security is \$25.00. The Securities may be issued and sold over time at then-current market prices which may be significantly higher or lower than the Stated Principal Amount. If the Securities undergo a split or reverse split, the Stated Principal Amount will be adjusted accordingly.

The "Closing Indicative Value" per Security, will be calculated as follows:

- a) On the Initial Trade Date, \$25.00 per Security;
- b) On any other calendar day, prior to the first day of an applicable Measurement Period, an amount per Security equal to:
  - (Current Principal Amount on the immediately preceding calendar day  $\times$  Index Factor) Accrued Fees + Accrued Dividend
- c) From and including the first day of an applicable Measurement Period, an amount per Security equal to:
  - (Current Principal Amount, on the calendar day immediately preceding the first day of the Measurement Period × Index Factor × Residual Factor) Accrued Fees + Accrued Dividend + Measurement Period Cash Amount
- d) The minimum value of the Closing Indicative Value on any calendar day will be zero.

If a Zero Value Event occurs on any Index Business Day then the Closing Indicative Value will be equal to the Zero Value Settlement Amount on the date on which the Zero Value Event occurred, and on all future calendar days. Upon the occurrence of a Zero Value Event, investors will likely lose all or substantially all of their investment. You will not benefit from any future exposure to the Index after the occurrence of a Zero Value Event. See "— Automatic Acceleration Upon Zero Value Event".

The actual trading price of the Securities in the secondary market may vary significantly from their Closing Indicative Value.

If the Securities undergo a split or reverse split, the Closing Indicative Value will be adjusted accordingly.

The "Current Principal Amount" represents the unleveraged investment in the Index Constituent Securities per Security at the close of trading on any Reset Valuation Date. The notional financing amount per Security in order to generate the leveraged returns would be approximately half of the Current Principal Amount at the close of trading on any Reset Valuation Date. If a Permanent Deleveraging Event occurs, the leverage of your Securities will be permanently reset to 1.0 and the notional financing amount will be equal to zero. If a Zero Value Event occurs prior to your Securities permanently resetting to 1.0 at the end of the Second Permanent Deleveraging Valuation Date, then your Securities will be fully redeemed and you will receive the Zero Value Settlement Amount (which amount may be zero).

The Current Principal Amount per Security, will be calculated as follows:

- 1) From and including the Initial Trade Date to and excluding the subsequent Reset Valuation Date, \$25.00 per Security;
- 2) At the close of trading on each Reset Valuation Date after the Initial Trade Date, the Current Principal Amount of the Securities will be reset as follows:

New Current Principal Amount = (Current Principal Amount on immediately preceding calendar day  $\times$  Index Factor) – Accrued Fees

The Current Principal Amount will not change until the subsequent Reset Valuation Date.

If a day that would otherwise be a Reset Valuation Date occurs on or after the first day of an applicable Measurement Period, such day will not be a valid Reset Valuation Date.

If a Zero Value Event occurs on any Index Business Day then the Current Principal Amount will be equal to zero on the date on which the Zero Value Event occurred, and on all future calendar days. Upon the occurrence of a Zero Value Event, investors will likely lose all or substantially all of their investment.

You will not benefit from any future exposure to the Index after the occurrence of a Zero Value Event. See "Specific Terms of the Securities — Automatic Acceleration Upon Zero Value Event".

If the Securities undergo a split or reverse split, the Current Principal Amount will be adjusted accordingly.

At the close of trading on each Reset Valuation Date, the Current Principal Amount is reset.

## The "Reset Valuation Date" means:

- 1) Any calendar day up to and including the Second Permanent Deleveraging Valuation Date, that is either: (i) the Initial Trade Date, (ii) a Quarterly Reset Valuation Date, (iii) a Loss Rebalancing Valuation Date (iv) the First Permanent Deleveraging Valuation Date; or (v) the Second Permanent Deleveraging Valuation Date; and.
- 2) Any calendar day following the Second Permanent Deleveraging Valuation Date.

The definition of each valuation date is set forth below.

If a day that would otherwise be a Reset Valuation Date occurs on or after the first day of an applicable Measurement Period, such day will not be a valid Reset Valuation Date and the Last Reset Index Closing Level will remain the same.

The "Quarterly Reset Valuation Date" is the last Index Business Day of January, April, July and October of each calendar year beginning on July 31, 2020 and ending on April 29, 2050 (other than an Excluded Day), subject to adjustment as described under "— Market Disruption Event."

For purposes of the "Quarterly Reset Valuation Date" definition, an "Excluded Day" means (i) the Index Business Day immediately preceding the first day of an applicable Measurement Period, and any calendar day thereafter, and (ii) any calendar day after the Second Permanent Deleveraging Valuation Date.

The "Index Factor" is: 1 + (Leverage Factor × Index Performance Ratio).

The Index Factor represents the leveraged percentage change in the Index level since the Last Reset Index Closing Level. The Index Factor *times* the applicable Current Principal Amount on the preceding calendar day represents the current value of the unleveraged notional amount per Security that is deemed invested in the Index on any calendar day. This does not reflect the Redemption Amount that an investor would receive upon early redemption on such calendar day.

If a Zero Value Event occurs at any time during any Index Business Day then the Index Factor will be equal to zero subsequent to the event on the date on which the Zero Value Event occurred, and on all future calendar days. Upon the occurrence of a Zero Value Event, investors will likely lose all or substantially all of their investment. You will not benefit from any future exposure to the Index after the occurrence of a Zero Value Event. See "Specific Terms of the Securities — Automatic Acceleration Upon Zero Value Event".

The "Residual Factor" will be calculated as follows:

- a) 1.0 on any calendar day, to but excluding the first day of an applicable Measurement Period.
- b) From and including the first day of an applicable four-day Measurement Period, (a) the number of Index Business Days from, but excluding, the date of determination to, and including, the last Index Business Day in such four-day Measurement Period, *divided by* (b) four.
  - For example, on the first Index Business Day in an applicable four-day Measurement Period, the Residual Factor will equal (3/4), on the second Index Business Day in an applicable four-day Measurement Period, the Residual Factor will equal (2/4), on the third Index Business Day in an applicable four-day Measurement Period, the Residual Factor will equal (1/4) and on the last Index Business Day in an applicable four-day Measurement Period, the Residual Factor will equal zero.
- c) On any calendar day from and including the last Index Business Day of an applicable Measurement Period, the Residual Factor will be equal to zero.

The Residual Factor is intended to approximate the percentage of the Current Principal Amount that is tracking the Index on any given day. The Residual Factor is relevant only during an applicable Measurement Period but otherwise is not a component of the Closing Indicative Value or Current Indicative Value formulas. At the close of trading on each Index Business Day during a four-day Measurement Period, approximately 25% of the Current Principal Amount and the corresponding amount of financing will be deemed converted to cash. In case of a one-day Measurement Period, approximately 100% of the Current Principal Amount and the corresponding amount of financing will be deemed converted to cash.

The "Leverage Factor" on any calendar day until the occurrence of a Permanent Deleveraging Event and the close of trading on the Second Permanent Deleveraging Valuation Date, will equal 1.5. If a Permanent Deleveraging Event occurs, then on any calendar day following the Second Permanent Deleveraging Valuation Date, the Leverage Factor will equal 1.0.

The "Index Performance Ratio" on any Index Business Day will be equal to:

<u>Index Closing Level – Last Reset Index Closing Level</u>
Last Reset Index Closing Level

On any calendar day that is not an Index Business Day, the Index Closing Level will be equal to the Index Closing Level on the Index Business Day immediately preceding such calendar day.

The "Last Reset Index Closing Level" is the Index Closing Level on the most recent Reset Valuation Date prior to such day. The initial Last Reset Index Closing Level is 156.926, the Index Closing Level on the Initial Trade Date, as reported by Bloomberg L.P. and Reuters.

The "Index Closing Level" on any date of determination is the closing level of the Index, as reported on Bloomberg L.P. and Reuters; provided, however, that if the closing level of the Index as reported on Bloomberg L.P. (or any successor) differs from the closing level of the Index as reported on Reuters (or any successor), then the Index Closing Level will be the closing level of the Index as calculated by the Index Calculation Agent. The initial Index Closing Level (which is also the first Last Reset Index Closing Level) is 156.926, the Index Closing Level measured on the Initial Trade Date, as determined by the Security Calculation Agent.

On any calendar day that is not an Index Business Day, the Index Closing level will be equal to the Index Closing Level on the Index Business Day immediately preceding such calendar day.

"Measurement Period" means the Final Measurement Period or Call Measurement Period, as applicable.

The "Current Indicative Value" or "intraday indicative value", as determined by the Security Calculation Agent, is an amount per Security, on an intraday basis on any Index Business Day, equal to:

- a) On the Initial Trade Date, \$25.00.
- b) On any other calendar day prior to the first day of an applicable Measurement Period:

(Current Principal Amount on the immediately preceding calendar day × Index Factor, calculated using the Intraday Index Value) - Accrued Fees + Accrued Dividend.

c) From and including the first day of an applicable Measurement Period, an amount per Security equal to:

(Current Principal Amount, on the calendar day immediately preceding the first day of the Measurement Period × Index Factor, calculated using the Intraday Index Value × Residual Factor, from the immediately preceding calendar day) - Accrued Fees + Accrued Dividend + Measurement Period Cash Amount, from the immediately preceding calendar day

d) The minimum value of the Current Indicative Value on any calendar day will be zero.

The actual trading price of the Securities in the secondary market may vary significantly from their Current Indicative Value (or intraday indicative value). If a Zero Value Event occurs during any Index Business Day then the Current Indicative Value (or "intraday indicative value") will be equal to the Zero Value Settlement Amount, subsequent to the event on the date on which the Zero Value Event occurred, and on all future calendar days. Upon the occurrence of a Zero Value Event, investors will likely lose all or substantially all of their investment. You will not benefit from any future exposure to the Index after the occurrence of a Zero Value Event. See "Specific Terms of the Securities — Automatic Acceleration Upon Zero Value Event".

If the Securities undergo a split or reverse split, the Current Indicative Value (or intraday indicative value) will be adjusted accordingly.

The "Accrued Fees" as of any date of determination means the Accrued Tracking Fee + the Accrued Financing Fee. If the Securities undergo a split or reverse split, the Accrued Fees will be adjusted accordingly.

The Securities are subject to an "Accrued Tracking Fee" per Security, calculated as follows:

- a) On the Initial Trade Date, the Accrued Tracking Fee is equal to zero.
- b) On any subsequent calendar day, the Accrued Tracking Fee is equal to: (a) the Accrued Tracking Fee as of the immediately preceding calendar day, *plus* the Daily Tracking Fee on such calendar day.
- c) On the calendar day after each Reset Valuation Date, the Accrued Tracking Fee is reset to be equal to the Daily Tracking Fee on such calendar day.

The "Daily Tracking Fee" is an amount per Security calculated as follows:

- a) On the Initial Trade Date, the Daily Tracking Fee is zero.
- b) On any subsequent calendar day, the Daily Tracking Fee is equal to: (a) (i) 0.95%, *times* (ii) the Current Principal Amount on the immediately preceding calendar day, *times* (iii) the Index Factor, on such calendar day, *times* (iv) the Residual Factor, on the immediately preceding calendar day, *divided by* (b) 365.
- c) The minimum value of the Daily Tracking Fee on any calendar day will be zero.

The Daily Tracking Fee represents the investor fees calculated each day on the current value of the unleveraged notional amount invested in the Index per Security. These charges accrue and compound during the applicable period, and will reduce any amount you are entitled to receive at maturity, early redemption, call or acceleration upon the occurrence of a Zero Value Event.

If the Securities undergo a split or reverse split, the Daily Tracking Fee will be adjusted accordingly.

The Securities are subject to an "Accrued Financing Fee" per Security calculated as follows:

- a) On the Initial Trade Date, the Accrued Financing Fee is equal to zero.
- b) On any subsequent calendar day, the Accrued Financing Fee is equal to: (a) the Accrued Financing Fee as of the immediately preceding calendar day, *plus* (b) the Daily Financing Fee on such calendar day.
- c) On the calendar day after each Reset Valuation Date, the Accrued Financing Fee is reset to be equal to the Daily Financing Fee on such calendar day.
- d) If a Permanent Deleveraging Event occurs, then on any calendar day following the Second Permanent Deleveraging Valuation Date, the Accrued Financing Fee will be equal to zero.

"CME Term SOFR" means the CME Term SOFR Reference Rates published for one-, three-, six-, and 12-month tenors as administered by CME Group Benchmark Administration, Ltd. (or any successor administrator thereof).

The "Daily Financing Fee" is an amount per Security calculated as follows:

- a) On the Initial Trade Date, the Daily Financing Fee is equal to zero.
- b) On any subsequent calendar day, the Daily Financing Fee is equal to: (a) (i) 0.5, *times* (ii) the Financing Rate, on such calendar day, *times* (iii) the Current Principal Amount, on the immediately preceding calendar day, *times* (iv) the Residual Factor, on the immediately preceding calendar day, *divided by* (b) 360.
- c) If a Permanent Deleveraging Event occurs, then on any calendar day following the Second Permanent Deleveraging Valuation Date, the Daily Financing Fee will be equal to zero.
- d) The minimum value of the Daily Financing Fee on any calendar day will be zero.

The Daily Financing Fee seeks to compensate UBS for providing investors with a leveraged participation in movements of the Index and is intended to approximate the financing costs that investors may have otherwise incurred had they sought to borrow funds at a similar rate from a third party to invest in the Securities. These charges accrue and compound during the applicable period, and will reduce any amount that you will be entitled to receive at maturity, early redemption, call or acceleration upon the occurrence of a Zero Value Event.

If the Securities undergo a split or reverse split, the Daily Financing Fee will be adjusted accordingly.

The "Financing Rate" will equal the sum of (a) 0.95% and (b) three-month CME Term SOFR rate plus a 0.2616% adjustment on the immediately preceding U.S. Government Securities Business Day. The minimum Financing Rate at any time will be 0.95%

For example, 5.24665% was the three-month CME Term SOFR rate on June 29, 2023. The Financing Rate (if it were based on the SOFR-Based Benchmark Replacement) on June 30, 2023 would have therefore been equal to: 0.95% + 5.24665% + 0.2616%, or 6.45825%.

## The "Measurement Period Cash Amount" is an amount per Security equal to:

- a) \$0.00 on any calendar day, to but excluding the first day of an applicable Measurement Period.
- b) On the first day of an applicable one-day Measurement Period:
  - At the close of trading on such Index Business Day, (the Current Principal Amount on the immediately preceding calendar day × Index Factor on such Index Business Day)
- c) From and including the first day of an applicable four-day Measurement Period:
  - i. At the close of trading on each Index Business Day during the applicable four-day Measurement Period, the Measurement Period Cash Amount on the immediately preceding calendar day + (Current Principal Amount, on the calendar day immediately preceding the first day of such Measurement Period × 0.25 × Index Factor, on such Index Business Day).
  - ii. On any calendar day during an applicable four-day Measurement Period that is not an Index Business Day, the Measurement Period Cash Amount on the immediately preceding Index Business Day.
- d) On any calendar day after the last Index Business Day of an applicable Measurement Period, the Measurement Period Cash Amount on the last Index Business Day of such Measurement Period.

The Measurement Period Cash Amount represents the portion of the Current Principal Amount that has been converted to cash on any given day of an applicable Measurement Period and is no longer tracking the Index.

At the close of trading of each Index Business day during a four-day Measurement Period, approximately 25% of the Current Principal Amount, on the calendar day immediately preceding the first day of the Measurement Period, will be deemed converted to cash and an applicable amount of financing will separately be deemed converted to cash as well. After the close of trading on the final Index Business Day of an applicable four-day Measurement Period, the Measurement Period Cash Amount will represent the averaged value of the Current Principal Amount that was deemed converted to cash across the four-days of such Measurement Period. In case of a one-day Measurement Period, approximately 100% of the Current Principal Amount will be deemed converted to cash and an applicable amount of financing will separately be deemed converted to cash, at the close of trading of the first day of such Measurement Period.

If the Securities undergo a split or reverse split, the Measurement Period Cash Amount will be adjusted accordingly.

#### The "Final Measurement Period" means:

- a) if the Market Value of Securities outstanding as at the close of trading on the Index Business Day immediately preceding the Calculation Date is less than \$100,000,000, the Calculation Date, subject to adjustments as described under "— Market Disruption Event";
- b) if the Market Value of Securities outstanding as at the close of trading on the Index Business Day immediately preceding the Calculation Date is equal to or greater than \$100,000,000, the four (4) Index Business Days from and including the Calculation Date, subject to adjustments as described under "— Market Disruption Event."

For the purpose of determining the Final Measurement Period, the "Market Value" of the Securities outstanding as of the close of trading on the Index Business Day immediately preceding the Calculation Date, will equal:

(i) the Closing Indicative Value as of such Index Business Day, *times* (ii) the number of Securities outstanding as reported by MVRLSO <Index> on Bloomberg L.P.

The "Index Calculation Agent" means the entity that calculates and publishes the level of the Index, which is currently Solactive AG.

The "Calculation Date" means June 2, 2050, unless such day is not an Index Business Day, in which case the Calculation Date will be the next Index Business Day, subject to adjustments.

The Calculation Date represents the first Index Business Day of the Final Measurement Period.

"Index Business Day" means any day on which the Primary Exchange or market for trading of the Securities is scheduled to be open for trading.

"Primary Exchange" means, with respect to each Index Constituent Security or each constituent underlying a successor index, the primary exchange or market of trading such Index Constituent Security or such constituent underlying a successor index.

"U.S. Government Securities Business Day" means any day except for a Saturday, a Sunday or a day on which the Securities Industry and Financial Markets Association recommends that the fixed income departments of its members be closed for the entire day for purposes of trading in U.S. government securities.

# **Underlying Index**

The return on the Securities is based upon the performance of the MVIS US Mortgage REITs Index (Bloomberg: "MVMORT"; Reuters: ".MVMORT"). The Index tracks the overall performance of publicly-traded mortgage REITs that are listed and incorporated in the United States and derive at least 50% of their revenues from mortgage-related activity.

## Early Redemption at the Option of the Holders

Subject to your compliance with the procedures described below and the potential postponements and adjustments as described under "— Market Disruption Event," you may submit a request to have us redeem your Securities on any Index Business Day no later than 12:00 noon, New York City time, and a confirmation of redemption by no later than 5:00 p.m., New York City time, on the same Index Business Day, provided that you request that we redeem a minimum of 50,000 Securities. We reserve the right from time to time to waive this minimum redemption amount in our sole discretion on a case-by-case basis. You should not assume you will be entitled to the benefit of any such waiver. For any applicable redemption request, the "Redemption Valuation Date" will be the first Index Business Day following the date that the applicable redemption notice and redemption confirmation are delivered, except that we reserve the right from time to time to accelerate, in our sole discretion on a case-by-case basis, the Redemption Valuation Date to the date on which the notice of redemption is received by UBS rather than the following Index Business Day. You should not assume you will be entitled to any such acceleration. To satisfy the minimum redemption amount, your broker or other financial intermediary may bundle your Securities for redemption with those of other investors to reach this minimum amount of 50,000 Securities.

The Securities will be redeemed and the holders will receive payment for their Securities on the second Index Business Day following the applicable Redemption Valuation Date (the "Redemption Date"). The first Redemption Date will be the fourth Index Business Day immediately following the Initial Trade Date and the Final Redemption Date will be the fourth Index Business Day immediately preceding the Maturity date, subject to adjustments. In addition, if a call notice has been issued, the last Redemption Valuation Date will be the fourth Index Business Day prior to the Call Settlement Date, as applicable. If a Zero Value Event occurs, the last Redemption Date will be the date on which the Zero Value Event occurred.

If a Market Disruption Event is continuing or occurs on the applicable scheduled Redemption Valuation Date with respect to any of the Index Constituent Securities, such Redemption Valuation Date may be postponed as described under "— Market Disruption Event."

As of any Redemption Valuation Date, the "Redemption Fee Amount" means an amount per Security equal to:

(0.125% × Closing Indicative Value of the Security as of the Redemption Valuation Date).

If you exercise your right to have us redeem your Securities, subject to your compliance with the procedures described under "— Redemption Procedures," for each applicable Security you will receive a cash payment on the relevant Redemption Date equal to:

Closing Indicative Value as of the Redemption Valuation Date – Redemption Fee Amount.

We refer to this cash payment as the "**Redemption Amount**." If the amount calculated above is equal to or less than zero, the payment upon early redemption will be zero. We reserve the right from time to time to waive the Redemption Fee Amount in our sole discretion and on a case-by-case basis. There can be no assurance that we will elect to waive this fee and you should not assume you will be entitled to such fee waiver.

We will inform you of such Redemption Amount on the first Business Day following the applicable Redemption Valuation Date.

The redemption feature is intended to induce arbitrageurs to counteract any trading of the Securities at a discount to their indicative value, though there can be no assurance that arbitrageurs will employ the redemption feature in this manner or that they will be successful in counteracting any divergence in the market price of the Securities and their indicative value.

The following graphic illustrates the formula to determine the Redemption Amount, which has been simplified for ease of presentation:

Redemption = Closing Indicative - Redemption Fee Value - Amount

You may lose all or a substantial portion of your investment upon early redemption. The combined negative effect of the Accrued Fees and the Redemption Fee Amount will reduce your final payment. If the compounded leveraged quarterly return of the Index (or the unleveraged return of the Index, following a Permanent Deleveraging Event) is insufficient to offset the negative effect of the Accrued Fees and the Redemption Fee Amount, if applicable (less any Coupon Amounts you may be entitled to receive as of the Redemption Valuation Date), or if the compounded leveraged quarterly return of the Index (or the unleveraged return of the Index, following a Permanent Deleveraging Event) is negative, you may lose all or a substantial portion of your investment upon early redemption. The occurrence of Loss Rebalancing Events will result in more frequent than quarterly compounding.

The Securities may be called by UBS prior to the Maturity Date pursuant to UBS's Call Right and, upon the occurrence of a Zero Value Event, the Securities will be automatically accelerated and mandatorily redeemed by UBS. See "Specific Terms of the Securities — UBS's Call Right" and "Specific Terms of the Securities — Automatic Acceleration Upon Zero Value Event".

We discuss these matters in the accompanying prospectus under "Description of Debt Securities We May Offer — Redemption and Repayment."

The Redemption Amount is meant to induce arbitrageurs to counteract any trading of the Securities at a premium or discount to their indicative value, though there can be no assurance that arbitrageurs will employ the redemption feature in this manner.

#### **Redemption Procedures**

To redeem your Securities, you must instruct your broker or other person through whom you hold your Securities to take the following steps through normal clearing system channels:

- deliver a notice of redemption, which we refer to as a "**Redemption Notice**" to UBS via email no later than 12:00 noon (New York City time) on the Index Business Day on which you elect to exercise your redemption right. If we receive your Redemption Notice by the time specified in the preceding sentence, we will respond by sending you a form of confirmation of redemption;
- deliver the signed confirmation of redemption, which we refer to as the "**Redemption Confirmation**", to us via email in the specified form by 5:00 p.m. (New York City time) on the same day. We or our affiliate must acknowledge receipt in order for your Redemption Confirmation to be effective;
- instruct your DTC custodian to book a delivery vs. payment trade with respect to your Securities on the applicable Redemption Date at a price equal to the Redemption Amount; and
- cause your DTC custodian to deliver the trade as booked for settlement via DTC at or prior to 12:00 noon (New York City time) on the applicable Redemption Date.

Different brokerage firms may have different deadlines for accepting instructions from their customers. Accordingly, as a beneficial owner of the Securities, you should consult the brokerage firm through which you own your interest for the relevant deadline. If your broker delivers your Redemption Notice after 12:00 noon (New York City time), or your Redemption Confirmation after 5:00 p.m. (New York City time), on the Business Day prior to the applicable Redemption Valuation Date, your Redemption Notice will not be effective, you will not be able to redeem your Securities until the following Redemption Date and your broker will need to complete all the required steps if you should wish to redeem your Securities on any subsequent Redemption Date. In addition, UBS may request a medallion signature guarantee or such assurances of delivery as it may deem necessary in its sole discretion. All instructions given to participants from beneficial owners of Securities relating to the right to redeem their Securities will be irrevocable. If your DTC custodian or your brokerage firm is not a current UBS customer, UBS will be required to on-board such DTC custodian or brokerage firm, in compliance with its internal policies and procedures, before it can accept your Redemption Notice, your Redemption Confirmation or otherwise process your redemption request. This on-boarding process may delay your Redemption Valuation Date and Redemption Date. Furthermore, in certain circumstances, UBS may be unable to on-board your DTC custodian or your brokerage firm.

We reserve the right from time to time to waive the minimum redemption amount or the Redemption Fee Amount in our sole discretion on a case-by-case basis. In addition, we reserve the right from time to time to accelerate, in our sole discretion on a case-by-case basis, the Redemption Valuation Date to the date on which the Redemption Notice is received by UBS rather than the following Index Business Day. You should not assume you will be entitled to any such waiver or election to accelerate the Redemption Valuation Date.

## **UBS's Call Right**

We have the right to redeem all, but not less than all, of the Securities upon not less than eighteen (18) calendar days' prior notice to the holders of the Securities (which may be provided via press release), such redemption to occur on any Business Day that we may specify through and including the Maturity Date. Upon early redemption in the event we exercise this call right, you will receive a cash payment equal to the Closing Indicative Value on the last Index Business Day in the Call Measurement Period. We refer to this cash payment as the "Call Settlement Amount."

If the amount calculated above is equal to or less than zero, the payment upon UBS's exercise of its Call Right will be zero.

We will inform you of such Call Settlement Amount on the first Business Day following the last Index Business Day in the Call Measurement Period.

The holders will receive payment for their Securities on the third Business Day following the last Index Business Day in the Call Measurement Period (the "Call Settlement Date"). If a Market Disruption Event is continuing or occurs on the scheduled Call Valuation Date with respect to any of the Index Constituent Securities, such Call Valuation Date may be postponed as described under "— Market Disruption Event."

The "Call Measurement Period" means:

- a) if the Market Value of Securities outstanding as at the close of trading on the Index Business Day immediately preceding the date of delivery by UBS of its notice to holders (which may be provided via press release) of its exercise of the UBS Call Right is less than \$100,000,000, the Call Valuation Date, subject to adjustments as described under "— Market Disruption Event";
- b) if the Market Value of Securities outstanding as at the close of trading on the Index Business Day immediately preceding the date of delivery by UBS of its notice to holders (which may be provided via press release) of its exercise of the UBS Call Right is equal to or greater than \$100,000,000, the four (4) Index Business Days from and including the Call Valuation Date, subject to adjustments as described under "— Market Disruption Event."

For the purpose of determining the Final Measurement Period, the "Market Value" of the Securities outstanding as of the close of trading on the Index Business Day immediately preceding the date of delivery by UBS of its notice to holders (which may be provided via press release) of its exercise of the UBS Call Right will equal:

(i) The Closing Indicative Value as of such Index Business Day, *times* (ii) the number of Securities outstanding as reported by MVRLSO <Index> on Bloomberg L.P.

The "Call Valuation Date" means the date disclosed as such by UBS in its notice to holders (which may be provided via press release) of its exercise of the UBS Call Right.

In any notice to holders exercising the UBS Call Right, we will specify how many days are included in the Call Measurement Period.

The following graphic illustrates the formula to determine the Call Settlement Amount, which has been simplified for ease of presentation:

Call Settlement Amount = Closing Indicative Value, on last Index
Business Day in Call Measurement Period

You may lose all or a substantial portion of your investment upon a call. The combined negative effect of the Accrued Fees will reduce your final payment. If the compounded leveraged quarterly return of the Index (or the unleveraged return of the Index, following a Permanent Deleveraging Event) is insufficient to offset the negative effect of the Accrued Fees (less any Coupon Amounts you may be entitled to receive), or if the compounded leveraged quarterly return of the Index (or the unleveraged return of the Index, following a Permanent Deleveraging Event) is negative, you may lose all or a substantial portion of your investment upon a call. The occurrence of Loss Rebalancing Events will result in more frequent than quarterly compounding.

In addition, upon the occurrence of a Zero Value Event, the Securities may be automatically accelerated and mandatorily redeemed by UBS. See "Specific Terms of the Securities — Automatic Acceleration Upon Zero Value Event" below.

## **Automatic Acceleration Upon Zero Value Event**

A "Zero Value Event" occurs if, on any Index Business Day (other than an Excluded Day), the Intraday Index Value decreases by 66.66667% or more in value from the Last Reset Index Closing Level. From immediately after the Zero Value Event and on all future calendar days, the Index Factor and the Current Principal Amount will be set equal to zero. The Accrued Dividend and Accrued Fees will be fixed at their respective values on the Zero Value Event date and will stay unchanged on all future calendar days.

When the Intraday Index Value decreases 66.66667% in value from the Last Reset Index Closing Level, the Index Factor will equal zero. A Zero Value Event represents the first instance when the effective unleveraged notional amount that is deemed invested in the Index per Security equals zero. It will have the effect of permanently resetting the value of your Securities to a fixed value (which may be zero) and accelerating the Securities. You will not benefit from any future exposure to the Index after the occurrence of a Zero Value Event. A Zero Value Event is expected to occur only in the narrow window of time between the occurrence of a Permanent Deleveraging Event and completion of the leverage reset to 1.0 at the end of the Second Permanent Deleveraging Valuation Date.

For the purposes of the "Zero Value Event" definition, an "Excluded Day" means (i) any calendar day after the Second Permanent Deleveraging Valuation Date (ii) any calendar day on which a Zero Value Event has already occurred, (iii) any calendar day after the occurrence of a Zero Value Event, and (iv) any calendar day after the last day of an applicable Measurement Period.

If a Zero Value Event occurs, all issued and outstanding Securities will be automatically terminated and mandatorily redeemed by UBS and you will receive the Zero Value Settlement Amount on the Zero Value Settlement Date. You will not benefit from any future exposure to the Index after the occurrence of a Zero Value Event.

In the event that a Zero Value Event has occurred, UBS will issue a press release shortly after the event and specify the relevant Zero Value Settlement Date and Zero Value Settlement Amount in respect of your investment in the Securities. The Securities will be suspended from trading intra-day shortly after the event occurs and will likely not be open for trading again on NYSE Arca before the Zero Value Settlement Date.

If a Zero Value Event occurs on an Index Business Day that would otherwise be a Coupon Ex-Date, such day will not be a valid Coupon Ex-Date and all further Coupon Ex-Dates will be suspended.

The "Zero Value Settlement Amount" per Security will be calculated as follows:

- a) On any calendar day, to but excluding the first day of an applicable Measurement Period:
  - (i) the Accrued Dividend, minus (ii) the Accrued Fees, on the date on which the Zero Value Event occurred.
- b) From and including the first day of an applicable Measurement Period:
  - (i) the Measurement Period Cash Amount on the immediately preceding calendar day, *plus* (ii) the Accrued Dividend, *minus* (iii) the Accrued Fees, on the date on which the Zero Value Event occurred.
- c) The minimum value of the Zero Value Settlement Amount will be zero.

## For example:

- a) If the Accrued Dividend was \$0.04, the Accrued Fees was \$0.01, and the Measurement Period Cash Amount was \$0, then the Zero Value Settlement Amount would be \$0.03.
- b) If the Accrued Dividend was \$0.01, the Accrued Fees was \$0.05, and the Measurement Period Cash Amount was \$0, then the Zero Value Settlement Amount would be \$0.
- c) If the Zero Value Event occurred during a four-day Measurement Period, and the Accrued Dividend was \$0.01, the Accrued Fees was \$0.03, and the Measurement Period Cash Amount on the immediately preceding calendar day was \$6.59, then the Zero Value Settlement Amount would be \$6.57.

The following graphics illustrate the formula to determine the Zero Value Settlement Amount, which has been simplified for ease of presentation:

On any calendar day, to but excluding the first day of an applicable four-day Measurement Period:

Zero Value Settlement = Accrued Dividend - Accrued Fees on date Zero Value Event occurred

From and including the first day of an applicable Measurement Period:

Zero Value Settlement
Amount = Measurement Period Cash Amount
on immediately preceding
calendar day + Accrued
Dividend
- Accrued Fees on date
Zero Value Event
occurred

The "Zero Value Settlement Date" will be the third Index Business Day following the date on which the Zero Value Event occurred. For a detailed description of how the Current Indicative Value (or intraday indicative value) of the Securities is calculated see "Valuation of the Index and the Securities".

You may lose all or a substantial portion of your investment upon the occurrence of a Zero Value Event. Upon the occurrence of a Zero Value Event you will receive on the Zero Value Settlement Date only the Zero Value Settlement Amount per Security.

In addition, the Securities may be called by UBS prior to the Maturity Date pursuant to UBS's Call Right. See "Specific Terms of the Securities — UBS's Call Right".

## **Loss Rebalancing Events**

A Loss Rebalancing Event will have the effect of deleveraging your Securities with the aim of resetting the then-current leverage to approximately 1.5. This means that after a Loss Rebalancing Event, a constant percentage increase in the Index Closing Level will have less of a positive effect on the value of your Securities relative to before the occurrence of the Loss Rebalancing Event.

A "Loss Rebalancing Event" occurs if, at any time, the Intraday Index Value on such Index Business Day (other than an Excluded Day) decreases by 15% or more in value from the previously Last Reset Index Closing Level.

Loss Rebalancing Events may occur multiple times over the term of the Securities and may occur multiple times during a single calendar quarter. This means both that (i) the Current Principal Amount may be reset more frequently than quarterly and (ii) the cumulative effect of compounding and fees will have increased as a result of the Loss Rebalancing Event(s). Because each Loss Rebalancing Event will have the effect of deleveraging your Securities, following a Loss Rebalancing Event your Securities will have less exposure to a potential positive gain in value relative to the exposure before the occurrence of such Loss Rebalancing Event.

For purposes of the "Loss Rebalancing Event" definition, an "**Excluded Day**" means (i) the Index Business Day immediately preceding any Quarterly Reset Valuation Date, if a Loss Rebalancing Event occurs after 3:15pm on such day, (ii) any Quarterly Reset Valuation Date, (iii) any Loss Rebalancing Valuation Date, (iv) the Index Business Day immediately preceding the first day of an applicable Measurement Period, if a Loss Rebalancing Event occurs after 3:15pm on such day (v) any calendar day from and including the first day of an applicable Measurement Period, (vi) the First or Second Permanent Deleveraging Valuation Dates, (vii) any calendar day after the Second Permanent Deleveraging Valuation Date, (viii) a Zero Value Event date, and (ix) any calendar day after the Zero Value Event date.

## "Loss Rebalancing Valuation Date" means:

- a) if a Loss Rebalancing Event occurs at or prior to 3:15 p.m. on an Index Business Day, the day that such Loss Rebalancing Event occurs, subject to adjustment as described under "— Market Disruption Event";
- b) if a Loss Rebalancing Event occurs after 3:15 p.m. on an Index Business Day, the first Index Business Day following the occurrence of such Loss Rebalancing Event, subject to adjustment as described under "— Market Disruption Event."

## **Permanent Deleveraging Event**

A Permanent Deleveraging Event will have the effect of deleveraging your Securities, with the aim of permanently resetting the then-current leverage to 1.0, over two Index Business Days. The leverage at the end of the First Permanent Deleveraging Valuation Date is reset to approximately 1.5 and the leverage at the end of the Second Permanent Deleveraging Valuation Date is reset to 1.0. This means that after a Permanent Deleveraging Event, a constant percentage increase in the Index Closing Level will have less of a positive effect on the value of your Securities relative to before the occurrence of the Permanent Deleveraging Event. A Permanent Deleveraging Event is expected to occur only in the narrow window of time between the occurrence of a Loss Rebalancing Event and completion of the leverage reset to 1.5 at the end of the Loss Rebalancing Valuation Date.

A "Permanent Deleveraging Event" occurs if, at any time, the Intraday Index Value on such Index Business Day (other than an Excluded Day) decreases by 50% or more in value from the Last Reset Index Closing Level.

For purposes of the "Permanent Deleveraging Event" definition, an "Excluded Day" means (i) the First or Second Permanent Deleveraging Valuation Dates, (ii) any calendar day after the Second Permanent Deleveraging Valuation Date, (iii) a day upon which a Zero Value Event occurs, (iv) any calendar day after the occurrence of a Zero Value Event, (v) the day which is two Index Business Days prior to the first day of an applicable Measurement Period, if a Permanent Deleveraging Event occurs after 3:15pm on such day and (vi) any calendar day from and including the Index Business Day immediately preceding the first day of an applicable Measurement Period.

In the event that a Permanent Deleveraging Event has occurred, UBS will issue a press release before 9:00 a.m. on the Index Business Day immediately following the date on which the Permanent Deleveraging Event occurred, announcing the Permanent Deleveraging Event and notifying you of the Permanent Deleveraging Valuation Dates.

"Permanent Deleveraging Valuation Dates" means the First Permanent Deleveraging Valuation Date and the Second Permanent Deleveraging Valuation Date, each as defined below:

- a) The "First Permanent Deleveraging Valuation Date" means:
  - i. Any Index Business Day, which otherwise would have been a Loss Rebalancing Valuation Date, but on which a Permanent Deleveraging Event has occurred, subject to adjustment as described under "- Market Disruption Event";
  - ii. If a Permanent Deleveraging Event occurs after 3:15pm on any Index Business Day which would not otherwise have been a Loss Rebalancing Valuation Date, then the first Index Business Day following the occurrence of such Permanent Deleveraging Event, subject to adjustment as described under "— Market Disruption Event".

The leverage of your Securities will be reset to approximately 1.5 at the close of trading on the First Permanent Deleveraging Valuation Date.

b) The "Second Permanent Deleveraging Valuation Date" means the Index Business Day immediately following the First Permanent Deleveraging Valuation Date, subject to adjustment as described under "— Market Disruption Event".

The leverage of your Securities will be reset to approximately 1.0 at the close of trading on the Second Permanent Deleveraging Valuation Date.

#### **Security Calculation Agent**

UBS Securities LLC will act as the Security Calculation Agent. The Security Calculation Agent will be solely responsible for all determinations and calculations regarding the value of the Securities, including, among other things, at maturity or upon early redemption or call, or at other times, the Current Principal Amount, Current Indicative Value (or the "intraday indicative value"), Closing Indicative Value, Market Disruption Events, Business Days, Index Business Days, the Leverage Factor, the Index Factor, the Index Performance Ratio, the Residual Factor, the Index Closing Level, the Financing Rate, the Accrued Fees (including determining any successor to the LIBOR base rate), the Coupon Amount, the Accrued Dividend, the Daily Dividend, if any, the Redemption Fee Amount, the Cash Settlement Amount, if any, that we will pay you at maturity, the Coupon Ex-Dates, the Coupon Record Dates, the Redemption Amount, if any, that we will pay you upon redemption, if applicable, the Zero Value Settlement Amount, if any, that we will pay you upon acceleration following the occurrence of a Zero Value Event, the Call Settlement Amount, if any, that we will pay you in the event that UBS calls the Securities, whether a Loss Rebalancing Event has occurred, whether a Permanent Deleveraging Event has occurred and whether any day is a Business Day or an Index Business Day and all such other matters as may be specified elsewhere herein as matters to be determined by the Security Calculation Agent. The Security Calculation Agent will also be responsible for determining whether the Index has been discontinued and whether there has been a material change in the Index. The Security Calculation Agent will make all such determinations and calculations in its sole discretion, and absent manifest error, all determinations of the Security Calculation Agent will be conclusive for all purposes and binding on us, you, and all other persons having an interest in the Security, without liability on the part of the Security Calculation Agent. You will not be entitled to any compensation from us for any loss suffered as a result of any determinations or calculations made by the Security Calculation Agent. We may appoint a different Security Calculation Agent from time to time after the date of this prospectus supplement without your consent and without notifying you.

The Security Calculation Agent will provide written notice to the trustee at its New York office, on which notice the trustee may conclusively rely, of the amount to be paid at maturity, call or acceleration upon the occurrence of a Zero Value Event, or upon early redemption, or on a Coupon Payment Date on or prior to 12:00 noon, New York City time, on the Business Day immediately preceding the Maturity Date, any Redemption Date, any Call Settlement Date, Zero Value Settlement Date or any Coupon Payment Date, as applicable.

All dollar amounts related to determination of the Coupon Amount, the Accrued Dividend, the Daily Dividend, if any, the Accrued Fees, the Redemption Amount and Redemption Fee Amount, if any, per Security, the Call Settlement Amount, if any, per Security, the Current Principal Amount, the Zero Value Settlement Amount, and the Cash Settlement Amount, if any, per Security, will be rounded to the nearest ten-thousandth, with five one hundred-thousandths rounded upward (*e.g.*, .76545 would be rounded up to .7655); and all dollar amounts paid on the Stated Principal Amount of the Securities per holder will be rounded to the nearest cent, with one-half cent rounded upward.

## **Market Disruption Event**

To the extent a Market Disruption Event with respect to the Index has occurred or is continuing during a four-day Measurement Period, the Index Closing Level for such day will be determined by the Security Calculation Agent or one of its affiliates on the first succeeding Index Business Day on which a Market Disruption Event does not occur or is not continuing with respect to the Index. The remaining Index Business Days in the Measurement Period will be postponed accordingly, and the remaining Index Business Days in the Measurement Period will resume again following the suspension of the Market Disruption Event. For example, if the four-day Measurement Period for purposes of calculating the Call Settlement Amount, is scheduled for June 2, June 3, June 4 and June 5, and there is a Market Disruption Event with respect to the Index on June 2, but no other Market Disruption Event during such Call Measurement Period, then June 3 will become the first Index Business Day of the Measurement Period, June 4th the second Index Business Day, June 5th the third Index Business Day and the next Index Business Day after June 5th would be the final day of the Measurement Period. The same approach would be applied if there is a Market Disruption Event during a four-day Final Measurement Period.

To the extent a Market Disruption Event with respect to the Index has occurred or is continuing on the Redemption Valuation Date, Call Valuation Date (in the event that the Call Measurement Period is the Call Valuation Date), Calculation Date (in the event that the Final Measurement Period is the Calculation Date) or any Reset Valuation Date, the Index Closing Level for such Redemption Valuation Date, Call Valuation Date, Calculation Date or Reset Valuation Date will be determined by the Security Calculation Agent or one of its affiliates on the first succeeding Index Business Day on which a Market Disruption Event does not occur or is not continuing with respect to the Index. For example, if the Redemption Valuation Date, for purposes of calculating a Redemption Amount, is based on the Index Closing Level on June 2 and there is a Market Disruption Event with respect to the Index on June 2, then the Index Closing Level on June 3 will be used to calculate the Redemption Amount, assuming that no such Market Disruption Event has occurred or is continuing on June 3.

In no event, however, will any postponement pursuant to the two immediately preceding paragraphs result in the affected Index Business Day of the Measurement Period or any Redemption Valuation Date, Call Valuation Date (in the event that the Call Measurement Period is the Call Valuation Date), Calculation Date (in the event that the Final Measurement Period is the Calculation Date) or Reset Valuation Date occurring more than five Index Business Days following the day originally scheduled to be such Index Business Day of the Measurement Period or such Redemption Valuation Date, Calculation Date or Reset Valuation Date. If a Market Disruption Event has occurred or is continuing with respect to the Index on the fifth Index Business Day following the date originally scheduled to be such Index Business Day of the Measurement Period or any Redemption Valuation Date, Call Valuation Date, Calculation Date or any Reset Valuation Date, the Security Calculation Agent or one of its affiliates will determine the Index Closing Level based on its good faith estimate of the Index Closing Level that would have prevailed on such fifth Index Business Day but for such Market Disruption Event.

Any of the following will be a Market Disruption Event with respect to the Index, in each case as determined by the Security Calculation Agent in its sole discretion:

- a) suspension, absence or material limitation of trading in a material number of Index Constituent Securities, whether by reason of movements in price exceeding limits permitted by the Primary Exchange or otherwise;
- b) suspension, absence or material limitation of trading in option or futures contracts relating to the Index or to a material number of Index Constituent Securities in the primary market or markets for those contracts;
- c) the Index is not published; or
- d) in any other event, if the Security Calculation Agent determines in its sole discretion that the event materially interferes with our ability or the ability of any of our affiliates to unwind all or a material portion of a hedge with respect to the Securities that we or our affiliates have effected or may effect as described in the section entitled "Use of Proceeds and Hedging".

The following events will not be Market Disruption Events with respect to the Index:

- a) a limitation on the hours or numbers of days of trading, but only if the limitation results from an announced change in the regular business hours of the relevant market; or
- b) a decision to permanently discontinue trading in the option or futures contracts relating to the Index or any Index Constituent Securities.

For this purpose, an "absence of trading" in the primary securities market on which option or futures contracts related to the Index or any Index Constituent Securities are traded will not include any time when that market is itself closed for trading under ordinary circumstances.

# **Redemption Price Upon Optional Tax Redemption**

We have the right to redeem the Securities in the circumstances described under "Description of Debt Securities We May Offer — Optional Tax Redemption" in the accompanying prospectus. If we exercise this right, the redemption price of the Securities will be determined by the Security Calculation Agent in a manner reasonably calculated to preserve your and our relative economic positions.

#### **Default Amount on Acceleration**

If an event of default occurs and the maturity of the Securities is accelerated, we will pay the default amount in respect of the principal of the Securities at maturity. We describe the default amount below under "— Default Amount."

In addition to the default amount described below, we will also pay the Coupon Amount per Security, if any, with respect to the final Coupon Payment Date, as described above under "— Coupon Payment," calculated as if the date of acceleration was the last Index Business Day in the Final Measurement Period and the three Index Business Days immediately preceding the date of acceleration were the corresponding Index Business Days in the accelerated Final Measurement Period, with the third Index Business Day immediately preceding the date of accelerated Calculation Date and the accelerated final Coupon Valuation Date, and the Index Business Day immediately preceding the date of acceleration being the relevant final Coupon Valuation Date.

For the purpose of determining whether the holders of our Medium-Term Notes, Series B, of which the Securities are a part, are entitled to take any action under the indenture, we will treat the outstanding principal amount of the Medium-Term Notes, Series B, as constituting the outstanding principal amount of the Securities. Although the terms of the Securities may differ from those of the other Medium-Term Notes, Series B, holders of specified percentages in principal amount of all Medium-Term Notes, Series B, together in some cases with other series of our debt securities, will be able to take action affecting all the Medium-Term Notes, Series B, including the Securities. This action may involve changing some of the terms that apply to the Medium-Term Notes, Series B, accelerating the maturity of the Medium-Term Notes, Series B after a default or waiving some of our obligations under the indenture. We discuss these matters in the attached prospectus under "Description of Debt Securities We May Offer — Default, Remedies and Waiver of Default" and "Description of Debt Securities We May Offer — Modification and Waiver of Covenants."

#### **Default Amount**

The default amount for the Securities on any day will be an amount, in U.S. dollars as determined by the Security Calculation Agent in its sole discretion, for the aggregate Stated Principal Amount of the Securities, equal to the cost of having a qualified financial institution, of the kind and selected as described below, expressly assume all our payment and other obligations with respect to the Securities as of that day and as if no default or acceleration had occurred, or to undertake other obligations providing substantially equivalent economic value to you with respect to the Securities. That cost will equal:

the lowest amount that a qualified financial institution would charge to effect this assumption or undertaking,

plus

the reasonable expenses, including reasonable attorneys' fees, incurred by the holders of the Securities in preparing any documentation necessary for this assumption or undertaking.

During the default quotation period for the Securities, which we describe below, the holders of the Securities and/or we may request a qualified financial institution to provide a quotation of the amount it would charge to effect this assumption or undertaking. If either party obtains a quotation, it must notify the other party in writing of the quotation. The amount referred to in the first bullet point above will equal the lowest — or, if there is only one, the only — quotation obtained, and as to which notice is so given, during the default quotation period. With respect to any quotation, however, the party not obtaining the quotation may object, on reasonable and significant grounds, to the assumption or undertaking by the qualified financial institution providing the quotation and notify the other party in writing of those grounds within two Business Days after the last day of the default quotation period, in which case that quotation will be disregarded in determining the default amount.

# **Default Quotation Period**

The default quotation period is the period beginning on the day the default amount first becomes due and ending on the third Business Day after that day, unless:

- > no quotation of the kind referred to above is obtained, or
- > every quotation of that kind obtained is objected to within five (5) Business Days after the due date as described above.

If either of these two events occurs, the default quotation period will continue until the third Business Day after the first Business Day on which prompt notice of a quotation is given as described above. If that quotation is objected to as described above within five (5) Business Days after that first Business Day, however, the default quotation period will continue as described in the prior sentence and this sentence.

In any event, if the default quotation period and the subsequent two Business Day objection period have not ended before the Calculation Date, then the default amount will equal the Stated Principal Amount of the Securities.

#### **Oualified Financial Institutions**

For the purpose of determining the default amount at any time, a qualified financial institution must be a financial institution organized under the laws of any jurisdiction in the United States of America, Europe or Japan, which at that time has outstanding debt obligations with a stated maturity of one year or less from the date of issue and rated either:

- A-1 or higher by Standard & Poor's Financial Services LLC, a subsidiary of The McGraw-Hill Companies, Inc., or any successor, or any other comparable rating then used by that rating agency, or
- > P-1 or higher by Moody's Investors Service or any successor, or any other comparable rating then used by that rating agency.

# Discontinuance of or Adjustments to the Index or Termination of Our License Agreement with the Index Sponsor; Alteration of Method of Calculation

If (i) the Index Sponsor or Index Calculation Agent discontinue publication of, or otherwise fails to publish, the Index, (ii) our license agreement with the Index Sponsor terminates or (iii) the Index Sponsor or Index Calculation Agent does not make the Index Constituent Securities and/or their unit weighting available to the Security Calculation Agent, and, in each case, any other person or entity publishes an index licensed to UBS that the Security Calculation Agent determines is comparable to the Index and for which the Index Constituent Securities and/or their unit weighting are available to the Security Calculation Agent (such index being referred to herein as a "successor index"), and the Security Calculation Agent approves such index as a successor index, then the Security Calculation Agent will determine the Index Closing Level on the applicable dates of determination, Coupon Amounts and the amount payable at maturity, call, acceleration upon the occurrence of a Zero Value Event or upon early redemption and all other related payments terms by reference to such successor index.

Upon any selection by the Security Calculation Agent of a successor index, the Security Calculation Agent will cause written notice thereof to be furnished to the trustee, to us and to the holders of the Securities.

If the Index Sponsor or Index Calculation Agent discontinue publication of the Index, our license agreement with the Index Sponsor terminates or the Index Sponsor or Index Calculation Agent do not make the Index Constituent Securities and/or their unit weighting available to the Security Calculation Agent, prior to, and such discontinuation, termination or unavailability is continuing on the Calculation Date or any Index Business Day during a Measurement Period, or on the Redemption Valuation Date or on any Reset Valuation Date, as applicable, or on any other relevant date on which the Index Closing Level is to be determined and the Security Calculation Agent determines that no successor index is available at such time, or the Security Calculation Agent has previously selected a successor index and publication of such successor index is discontinued prior to, and such discontinuation is continuing on the Calculation Date or any Index Business Day during a Measurement Period, or on the Redemption Valuation Date or on any Reset Valuation Date, or any other relevant date on which the Index Closing Level is to be determined, then the Security Calculation Agent will determine the Index Closing Level using the Index Closing Level on the last Index Business Day immediately prior to such discontinuation or unavailability, as adjusted for certain corporate actions. In such event, the Security Calculation Agent will cause notice thereof to be furnished to the trustee, to us and to the holders of the Securities.

Notwithstanding these alternative arrangements, discontinuation of the publication of the Index or successor index, as applicable, may adversely affect the value of the Securities.

In addition, if an Index Replacement Event (as defined below) occurs at any time and the Index Sponsor or anyone else publishes an index that the Security Calculation Agent determines is comparable to the Index (the "Substitute Index"), then the Security Calculation Agent may elect, in its sole discretion, to permanently replace the original Index with the Substitute Index for all purposes under the Securities, and all provisions described in this prospectus supplement as applying to the Index will thereafter apply to the Substitute Index instead. In such event, the Security Calculation Agent will make such adjustments, if any, to any level of the Index or Substitute Index that is used for purposes of the Securities as it determines are appropriate in the circumstances. If the Security Calculation Agent elects to replace the original Index with a Substitute Index, then the Security Calculation Agent will determine all amounts hereunder, including the Coupon Amounts, Current Principal Amount, Current Indicative Value or intraday indicative value, Closing Indicative Value, Index Factor, Index Performance Ratio, Residual Factor, Accrued Fees, Index Closing Levels on the applicable dates of determination, all other related payment terms and the amount payable at maturity, call, upon early redemption or upon acceleration upon the occurrence of a Zero Value Event by reference to such Substitute Index. If the Security Calculation Agent so elects to replace the original Index with a Substitute Index, the Security Calculation Agent will cause written notice thereof to be furnished to the trustee, to us and to the holders of the Securities of the Securities.

## An "Index Replacement Event" means:

a) an amendment to or change (including any officially announced proposed change) in the laws, regulations or rules of the United States (or any political subdivision thereof), or any jurisdiction in which a Primary Exchange (as defined herein) is located that (i) makes it illegal for UBS AG or its affiliates to hold, acquire or dispose of the Index Constituent Securities included in the Index or options, futures, swaps or other derivatives on the Index or on the Index Constituent Securities included in the Index (including but not limited to exchange-imposed position limits), (ii) materially increases the cost to us, our affiliates, third parties with whom we transact or similarly situated third parties in performing our or their obligations in connection with the Securities, (iii) has a material adverse effect on any of these parties' ability to perform their obligations in connection with the Securities or (iv) materially affects our ability to issue or transact in exchange traded notes similar to the Securities, each as determined by the Security Calculation Agent;

- b) any official administrative decision, judicial decision, administrative action, regulatory interpretation or other official pronouncement interpreting or applying those laws, regulations or rules that is announced on or after June 2, 2020 that (i) makes it illegal for UBS AG or its affiliates to hold, acquire or dispose of the Index Constituent Securities included in the Index or options, futures, swaps or other derivatives on the Index or on the Index Constituent Securities (including but not limited to exchange-imposed position limits), (ii) materially increases the cost to us, our affiliates, third parties with whom we transact or similarly situated third parties in performing our or their obligations in connection with the Securities, (iii) has a material adverse effect on the ability of us, our affiliates, third parties with whom we transact or a similarly situated third party to perform our or their obligations in connection with the Securities or (iv) materially affects our ability to issue or transact in exchange traded notes similar to the Securities, each as determined by the Security Calculation Agent;
- c) any event that occurs on or after June 2, 2020 that makes it a violation of any law, regulation or rule of the United States (or any political subdivision thereof), or any jurisdiction in which a Primary Exchange (as defined herein) is located, or of any official administrative decision, judicial decision, administrative action, regulatory interpretation or other official pronouncement interpreting or applying those laws, regulations or rules, (i) for UBS AG or its affiliates to hold, acquire or dispose of the Index Constituent Securities or options, futures, swaps or other derivatives on the Index or on the Index Constituent Securities (including but not limited to exchange-imposed position limits), (ii) for us, our affiliates, third parties with whom we transact or similarly situated third parties to perform our or their obligations in connection with the Securities or (iii) for us to issue or transact in exchange traded notes similar to the Securities, each as determined by the Security Calculation Agent;
- d) any event, as determined by the Security Calculation Agent, as a result of which we or any of our affiliates or a similarly situated party would, after using commercially reasonable efforts, be unable to, or would incur a materially increased amount of tax, duty, expense or fee (other than brokerage commissions) to, acquire, establish, re-establish, substitute, maintain, unwind or dispose of any transaction or asset it deems necessary to hedge the risk of the Securities, or realize, recover or remit the proceeds of any such transaction or asset; or
- e) as determined by the Security Calculation Agent, the primary exchange or market for trading for the Securities, if any, announces that pursuant to the rules of such exchange or market, as applicable, the Securities cease (or will cease) to be listed, traded or publicly quoted on such exchange or market, as applicable, for any reason and are not immediately re-listed, re-traded or re-quoted on an exchange or quotation system located in the same country as such exchange or market, as applicable.

Notwithstanding these alternative arrangements, discontinuation of the publication of the Index or successor index, as applicable, may adversely affect the value of the Securities.

If at any time the method of calculating the Index, a successor index or a substitute index, or the value thereof, is changed in a material respect, or if the Index or a successor index is in any other way modified so that the Index Closing Level of the Index or such successor index does not, in the opinion of the Security Calculation Agent, fairly represent the Index Closing Level of the Index or such successor index had such changes or modifications not been made, then the Security Calculation Agent will make such calculations and adjustments as, in the good faith judgment of the Security Calculation Agent, may be necessary in order to arrive at an Index Closing Level of an index comparable to the Index or such successor index, as the case may be, as if such changes or modifications had not been made, and the Security Calculation Agent will calculate the Index Closing Level for the Index or such successor index with reference to the Index or such successor index, as adjusted. The Security Calculation Agent will accordingly calculate the Index Closing Level, the Index Performance Ratio, the Coupon Amount, the Accrued Dividend, the Daily Dividend, if any, the Accrued Fees, the Redemption Fee Amount, if any, the Cash Settlement Amount, if any, that we will pay you at maturity, the Redemption Amount, if any, upon early redemption, if applicable, the Call Settlement Amount, if any, that we will pay you in the event UBS calls the Securities, the Zero Value Settlement Amount, if any, that we will pay you in the event of acceleration upon the occurrence of a Zero Value Event, if applicable, the Last Reset Index Closing Level and all related payment terms based on the Index Closing Level calculated by the Security Calculation Agent, as adjusted. Accordingly, if the method of calculating the Index or a successor index is modified so that the level of the Index or such successor index is a fraction of what it would have been if there had been no such modification (e.g., due to a split in the Index), which, in turn, causes the Index Closing Level of the Index or such successor index to be a fraction of what it would have been if there had been no such modification, then the Security Calculation Agent will make such calculations and adjustments in order to arrive at an Index Closing Level for the Index or such successor index as if it had not been modified (e.g., as if such split had not occurred).

In the event that the Security Calculation Agent elects to replace the Index with a successor index or a Substitute Index, UBS may, in its sole discretion, amend the title of the Securities in order to remove reference the former Index and to make such other changes to the title of the Securities as it considers necessary or desirable to reflect the name and/or characteristics of the relevant successor index or Substitute Index, as applicable.

All determinations and adjustments to be made by the Security Calculation Agent may be made in the Security Calculation Agent's sole discretion. See "Risk Factors — There are potential conflicts of interest between you and the Security Calculation Agent" in this prospectus supplement for a discussion of certain conflicts of interest which may arise with respect to the Security Calculation Agent.

#### **Manner of Payment and Delivery**

Any payment on or delivery of the Securities at maturity, call or acceleration upon the occurrence of a Zero Value Event, or upon early redemption, will be made to accounts designated by you and approved by us, or at the corporate trust office of the trustee in New York City, but only when the Securities are surrendered to the trustee at that office. We also may make any payment or delivery in accordance with the applicable procedures of the depositary.

# **Business Day**

When we refer to a Business Day or a New York Business Day with respect to the Securities, we mean a day that is a Business Day of the kind described in "Description of Debt Securities We May Offer — Payment Mechanics for Debt Securities" in the accompanying prospectus.

# **Modified Business Day**

As described in "Description of Debt Securities We May Offer — Payment Mechanics for Debt Securities" in the attached prospectus, any payment on the Securities that would otherwise be due on a day that is not a Business Day may instead be paid on the next day that is a Business Day, with the same effect as if paid on the original due date, except as described under "— Cash Settlement Amount at Maturity," "— UBS's Call Right" and "— Early Redemption at the Option of the Holders" above.

#### Reissuances or Reopened Issues

We may, at our sole discretion, "reopen" or reissue the Securities. We issued the Securities initially in an amount having the aggregate Stated Principal Amount specified on the cover of this prospectus supplement. We may issue additional Securities in amounts that exceed the amount on the cover at any time, without your consent and without notifying you. The Securities do not limit our ability to incur other indebtedness or to issue other securities. Also, we are not subject to financial or similar restrictions by the terms of the Securities. For more information, please refer to "Description of Debt Securities We May Offer — Amounts That We May Issue" in the accompanying prospectus.

These further issuances, if any, will be consolidated to form a single class with the originally issued Securities and will have the same CUSIP number and will trade interchangeably with the Securities immediately upon settlement. Any additional issuances will increase the aggregate Stated Principal Amount of the outstanding Securities of the class. The price of any additional offering will be determined at the time of pricing of that offering.

#### **Booking Branch**

The Securities will be booked through UBS AG, London Branch.

#### Clearance and Settlement

The DTC participants that hold the Securities through DTC on behalf of investors will follow the settlement practices applicable to equity securities in DTC's settlement system with respect to the primary distribution of the Securities and secondary market trading between DTC participants.

# 12. ETRACS Monthly Pay 1.5x Leveraged Closed-End Fund Index ETN due June 10, 2050

# **Specific Terms of the Securities**

In this section, references to "holders" mean those who own the Securities registered in their own names, on the books that we or the trustee maintains for this purpose, and not those who own beneficial interests in the Securities registered in street name or in the Securities issued in book-entry form through The Depository Trust Company ("DTC") or another depositary. Owners of beneficial interests in the Securities should read the section entitled "Legal Ownership and Book-Entry Issuance" under "Medium-Term Notes, Series B" above.

The Securities are part of a series of UBS AG debt securities entitled "Medium-Term Notes, Series B" that we may issue, from time to time, under the indenture more particularly described in the accompanying prospectus. This prospectus supplement summarizes specific financial and other terms that apply to the Securities. Terms that apply generally to all Medium-Term Notes, Series B are described in "Description of Debt Securities We May Offer" in the accompanying prospectus. The terms described here (*i.e.*, in this prospectus supplement) supplement those described in the accompanying prospectus and, if the terms described here are inconsistent with those described there, the terms described here are controlling.

The Securities are part of a single series of senior debt securities issued under our indenture, dated as of June 12, 2015 between us and U.S. Bank Trust National Association, as trustee.

We describe the terms of the Securities in more detail below.

The Stated Principal Amount of each Security is \$25.00.

The Securities do not guarantee any return of principal at, or prior to, maturity, call or acceleration upon the occurrence of a Zero Value Event, or upon early redemption. Instead, at maturity, you will receive a cash payment per Security the amount of which will vary depending on the performance and path of the Index and will be reduced by the Accrued Fees as of the last Index Business Day in the Final Measurement Period as described under "— Cash Settlement Amount at Maturity." If the amount as calculated is equal to or less than zero, the Cash Settlement Amount will be zero and you will not receive a cash payment.

If you exercise your right to have us redeem your Securities, subject to compliance with the redemption procedures, for each Security you will receive a cash payment per Security on the relevant Redemption Date equal to the Redemption Amount as described under "— Early Redemption at the Option of the Holders." If the amount as calculated is equal to or less than zero, the Redemption Amount will be zero and you will not receive a cash payment.

If a Zero Value Event occurs, for each Security you will receive a cash payment per Security on the Zero Value Settlement Date equal to the (i) the Measurement Period Cash Amount, on the immediately preceding calendar day, *plus* (ii) the Accrued Dividend, on the date on which the Zero Value Event occurred, *minus* (iii) the Accrued Fees, on the date on which the Zero Value Event occurred, as described under "— Automatic Acceleration Upon Zero Value Event."

# **Coupon Payment**

For each Security you hold on the applicable Coupon Record Date, on each Coupon Payment Date you will receive an amount in cash equal to the Coupon Amount. The Coupon Amount will equal the sum of the cash distributions that a hypothetical holder of Index constituents would have been entitled to receive in respect of the Index constituents during the relevant period. The Coupon Amount may be equal to zero.

The "Coupon Amount" means (i) on any calendar day that is not a Coupon Ex-Date, zero; and (ii) on any calendar day that is a Coupon Ex-Date, an amount per Security equal to the Accrued Dividend on the Coupon Valuation Date immediately preceding such Coupon Ex-Date. The minimum value of the Coupon Amount will be zero.

The following graphic illustrates the formula to determine the Coupon Amount on a Coupon Ex-Date, which has been simplified for ease of presentation:

Coupon Amount = Accrued Dividend, on the immediately preceding Coupon Valuation Date

If the Securities undergo a split or reverse split, the Coupon Amount will be adjusted accordingly.

The "Accrued Dividend" means (i) on the Initial Trade Date, zero; and (ii) on any subsequent calendar day, an amount per Security equal to (a) the Accrued Dividend as of the immediately preceding calendar day, *plus* (b) the Daily Dividend on such calendar day, *minus* the Coupon Amount on such calendar day.

If the Securities undergo a split or reverse split, the Accrued Dividend will be adjusted accordingly.

The "**Daily Dividend**" means, on any calendar day, an amount per Security equal to (a)(i) the Index Dividend Point, *times* (ii) the Leverage Factor, *times* (iii) the Current Principal Amount on the immediately preceding calendar day, *times* (iv) the Residual Factor on the immediately preceding calendar day, *divided by* (b) the Last Reset Index Closing Level.

The "Index Dividend Point" means, on any calendar day, an amount per Security equal to the *sum of the products* of (i) the cash value of distributions that a hypothetical holder of one share of each Index Constituent Security on such calendar day would have been entitled to receive in respect of that Index Constituent Security for those cash distributions whose "exdividend date" occurs on such calendar day and (ii) the number of units of that Index Constituent Security included in the Index as of such date.

The Index Dividend Point may not be publicly disseminated by the Index Calculation Agent. The data used to calculate the Index Dividend Point is the property of the Index Calculation Agent and investors may be required to pay a fee and meet any other requirements of the Index Calculation Agent, in order to access such information. See "Risk Factors — The value of the Index Dividend Point may not be publicly disseminated or otherwise freely accessible to investors".

The Index Dividend Point, on any calendar day, represents the total cash value of distributions that a hypothetical holder of the Index Constituent Securities, in proportion to the weights of the Index Constituent Securities, would have been entitled to receive with respect to any Index Constituent Securities for those cash distributions whose "ex-dividend date" occurs on such calendar day.

The "Coupon Payment Date" means the fifteenth (15th) Index Business Day following each Coupon Valuation Date. The first Coupon Payment Date will be July 22, 2020, subject to adjustment as provided herein. If such day is not a Coupon Business Day, the Coupon Payment Date shall be the following Coupon Business Day.

If the Final Coupon Ex-Date occurs prior to the Maturity Date, but the Final Coupon Payment Date otherwise occurs after the Maturity Date, in such case, the Final Coupon Payment Date will be the Maturity Date, subject to adjustment as provided herein.

The "Coupon Record Date" means the ninth Index Business Day following each Coupon Valuation Date. If such day is not a Coupon Business Day, the Coupon Record Date shall be the immediately preceding Coupon Business Day.

The "Coupon Ex-Date," with respect to a Coupon Amount, means the first Coupon Business Day on which the Securities trade without the right to receive such Coupon Amount. Under current NYSE Area practice, the Coupon Ex-Date will generally be the Coupon Business Day immediately preceding the applicable Coupon Record Date.

If a Zero Value Event occurs on an Index Business Day that would otherwise be a Coupon Ex-Date, such day will not be a valid Coupon Ex-Date and all further Coupon Ex-Dates will be suspended. In this case, the Coupon Amount corresponding to such Coupon Ex-Date will be included in the Zero Value Settlement Amount payable on the Zero Value Settlement Date.

In addition, if a day that would otherwise by a Coupon Ex-Date occurs on or after the first day of an applicable Measurement Period, such day will not be a valid Coupon Ex-Date and all further Coupon Ex-Dates will be suspended. In this case, the Coupon Amount corresponding to such Coupon Ex-date will be included in the Cash Settlement Amount or Call Settlement Amount payable at maturity or call, respectively.

The "Coupon Valuation Date" means the 30th day of each month and the 28th day of February, of each calendar year during the term of the Securities or if such date is not an Index Business Day, then the first Index Business Day following such date, provided that the final Coupon Valuation Date will be the Calculation Date, subject to adjustment described herein. The first Coupon Valuation Date will be June 30, 2020.

Notwithstanding the foregoing, with respect to cash distributions or dividends on an Index Constituent Security which is scheduled to be paid prior to the applicable Coupon Ex-Date, if, and only if, the issuer of such Index Constituent Security fails to pay the dividend or distribution to holders of such Index Constituent Security by the scheduled payment date for such dividend or distribution, such dividend or distribution will be assumed to be zero for the purposes of calculating the applicable Coupon Amount. Any such delayed dividend or distribution payment from the issuer of an Index Constituent Security will be attributed back to the Accrued Dividend and included in the next Coupon Amount.

"Coupon Business Day" means any Index Business Day other than an Index Business Day other than an Index Business Day on which banking institutions in New York are generally not authorized or obligated by law, regulation or executive order to open.

"record date" means, (i) with respect to a distribution on an Index Constituent Security, the date on which a holder of the Index Constituent Security must be registered as a stockholder/unitholder of such Index Constituent Security in order to be entitled to receive such distribution and (ii) with respect to any split or reverse split, the tenth Business Day after the announcement date.

"ex-dividend date" means, with respect to a distribution on an Index Constituent Security, the first Business Day on which transactions in such Index Constituent Security trade on the Primary Exchange without the right to receive such distribution.

#### **Cash Settlement Amount at Maturity**

The "Maturity Date" is June 10, 2050, which will be the third Business Day following the last Index Business Day in the Final Measurement Period, subject to adjustment as described below under "— Market Disruption Event."

For each Security, unless earlier called, redeemed or accelerated, you will receive at maturity a cash payment equal to the Closing Indicative Value on the last Index Business Day in the applicable Measurement Period. We refer to this cash payment as the "Cash Settlement Amount." If the amount so calculated is equal to or less than zero, the payment will be zero.

The following graphic illustrates the formula to determine the Cash Settlement Amount, which has been simplified for ease of presentation:

Cash Settlement Amount = Closing Indicative Value, on last Index Business Day in Final Measurement Period

You may lose all or a substantial portion of your investment at maturity. The combined negative effect of the Accrued Fees will reduce your final payment. If the compounded leveraged quarterly return of the Index (or the unleveraged return of the Index, following a Permanent Deleveraging Event) is insufficient to offset the negative effect of the Accrued Fees (less any Coupon Amounts you may be entitled to receive), or if the compounded leveraged quarterly return of the Index (or the unleveraged return of the Index, following a Permanent Deleveraging Event) is negative, you may lose all or a substantial portion of your investment at maturity. The occurrence of Loss Rebalancing Events will result in more frequent than quarterly compounding.

The Securities may be called by UBS prior to the Maturity Date pursuant to UBS's Call Right and, upon the occurrence of a Zero Value Event, the Securities will be automatically accelerated and mandatorily redeemed by UBS. If the Securities are called by UBS or accelerated upon the occurrence of a Zero Value Event, the Call Settlement Amount or Zero Value Settlement Amount, as applicable, may be zero and you may lose all or a substantial portion of your investment. See "Specific Terms of the Securities — UBS's Call Right" and "Specific Terms of the Securities — Automatic Acceleration Upon Zero Value Event".

The "Stated Principal Amount" of each Security is \$25.00. The Securities may be issued and sold over time at then-current market prices which may be significantly higher or lower than the Stated Principal Amount. If the Securities undergo a split or reverse split, the Stated Principal Amount will be adjusted accordingly.

The "Closing Indicative Value" per Security, will be calculated as follows:

- a) On the Initial Trade Date, \$25.00 per Security;
- b) On any other calendar day, prior to the first day of an applicable Measurement Period, an amount per Security equal to:
  - (Current Principal Amount on the immediately preceding calendar day × Index Factor)—Accrued Fees + Accrued Dividend
- c) From and including the first day of an applicable Measurement Period, an amount per Security equal to:
  - (Current Principal Amount, on the calendar day immediately preceding the first day of the Measurement Period × Index Factor × Residual Factor) Accrued Fees + Accrued Dividend + Measurement Period Cash Amount
- d) The minimum value of the Closing Indicative Value on any calendar day will be zero.

If a Zero Value Event occurs on any Index Business Day then the Closing Indicative Value will be equal to the Zero Value Settlement Amount on the date on which the Zero Value Event occurred, and on all future calendar days. Upon the occurrence of a Zero Value Event, investors will likely lose all or substantially all of their investment. You will not benefit from any future exposure to the Index after the occurrence of a Zero Value Event. See "— Automatic Acceleration Upon Zero Value Event".

The actual trading price of the Securities in the secondary market may vary significantly from their Closing Indicative Value.

If the Securities undergo a split or reverse split, the Closing Indicative Value will be adjusted accordingly.

The "Current Principal Amount" represents the unleveraged investment in the Index Constituent Securities per Security at the close of trading on any Reset Valuation Date. The notional financing amount per Security in order to generate the leveraged returns would be approximately half of the Current Principal Amount at the close of trading on any Reset Valuation Date. If a Permanent Deleveraging Event occurs, the leverage of your Securities will be permanently reset to 1.0 and the notional financing amount will be equal to zero. If a Zero Value Event occurs prior to your Securities permanently resetting to 1.0 at the end of the Second Permanent Deleveraging Valuation Date, then your Securities will be fully redeemed and you will receive the Zero Value Settlement Amount (which amount may be zero).

The Current Principal Amount per Security, will be calculated as follows:

- 1) From and including the Initial Trade Date to and excluding the subsequent Reset Valuation Date, \$25.00 per Security;
- 2) At the close of trading on each Reset Valuation Date after the Initial Trade Date, the Current Principal Amount of the Securities will be reset as follows:

New Current Principal Amount = (Current Principal Amount on immediately preceding calendar day  $\times$  Index Factor) – Accrued Fees

The Current Principal Amount will not change until the subsequent Reset Valuation Date.

If a day that would otherwise be a Reset Valuation Date occurs on or after the first day of an applicable Measurement Period, such day will not be a valid Reset Valuation Date.

If a Zero Value Event occurs on any Index Business Day then the Current Principal Amount will be equal to zero on the date on which the Zero Value Event occurred, and on all future calendar days. Upon the occurrence of a Zero Value Event, investors will likely lose all or substantially all of their investment.

You will not benefit from any future exposure to the Index after the occurrence of a Zero Value Event. See "Specific Terms of the Securities — Automatic Acceleration Upon Zero Value Event".

If the Securities undergo a split or reverse split, the Current Principal Amount will be adjusted accordingly.

At the close of trading on each Reset Valuation Date, the Current Principal Amount is reset.

#### The "Reset Valuation Date" means:

- 1) Any calendar day up to and including the Second Permanent Deleveraging Valuation Date, that is either: (i) the Initial Trade Date, (ii) a Quarterly Reset Valuation Date, (iii) a Loss Rebalancing Valuation Date (iv) the First Permanent Deleveraging Valuation Date, or (v) the Second Permanent Deleveraging Valuation Date; and.
- 2) Any calendar day following the Second Permanent Deleveraging Valuation Date.

The definition of each valuation date is set forth below.

If a day that would otherwise be a Reset Valuation Date occurs on or after the first day of an applicable Measurement Period, such day will not be a valid Reset Valuation Date and the Last Reset Index Closing Level will remain the same.

The "Quarterly Reset Valuation Date" is the last Index Business Day of January, April, July and October of each calendar year beginning on July 31, 2020 and ending on April 29, 2050 (other than an Excluded Day), subject to adjustment as described under "— Market Disruption Event."

For purposes of the "Quarterly Reset Valuation Date" definition, an "Excluded Day" means (i) the Index Business Day immediately preceding the first day of an applicable Measurement Period, and any calendar day thereafter, and (ii) any calendar day after the Second Permanent Deleveraging Valuation Date.

The "Index Factor" is: 1 + (Leverage Factor × Index Performance Ratio).

The Index Factor represents the leveraged percentage change in the Index level since the Last Reset Index Closing Level. The Index Factor *times* the applicable Current Principal Amount on the preceding calendar day represents the current value of the unleveraged notional amount per Security that is deemed invested in the Index on any calendar day. This does not reflect the Redemption Amount that an investor would receive upon early redemption on such calendar day.

If a Zero Value Event occurs at any time during any Index Business Day then the Index Factor will be equal to zero subsequent to the event on the date on which the Zero Value Event occurred, and on all future calendar days. Upon the occurrence of a Zero Value Event, investors will likely lose all or substantially all of their investment. You will not benefit from any future exposure to the Index after the occurrence of a Zero Value Event. See "Specific Terms of the Securities — Automatic Acceleration Upon Zero Value Event".

The "Residual Factor" will be calculated as follows:

a) 1.0 on any calendar day, to but excluding the first day of an applicable Measurement Period.

- b) From and including the first day of an applicable four-day Measurement Period, (a) the number of Index Business Days from, but excluding, the date of determination to, and including, the last Index Business Day in such four-day Measurement Period, *divided by* (b) four. For example, on the first Index Business Day in an applicable four-day Measurement Period, the Residual Factor will equal (3/4), on the second Index Business Day in an applicable four-day Measurement Period, the Residual Factor will equal (2/4), on the third Index Business Day in an applicable four-day Measurement Period, the Residual Factor will equal (1/4) and on the last Index Business Day in an applicable four-day Measurement Period, the Residual Factor will equal zero.
- c) On any calendar day from and including the last Index Business Day of an applicable Measurement Period, the Residual Factor will be equal to zero.

The Residual Factor is intended to approximate the percentage of the Current Principal Amount that is tracking the Index on any given day. The Residual Factor is relevant only during an applicable Measurement Period but otherwise is not a component of the Closing Indicative Value or Current Indicative Value formulas. At the close of trading on each Index Business Day during a four-day Measurement Period, approximately 25% of the Current Principal Amount and the corresponding amount of financing will be deemed converted to cash. In case of a one-day Measurement Period, approximately 100% of the Current Principal Amount and the corresponding amount of financing will be deemed converted to cash.

The "Leverage Factor" on any calendar day until the occurrence of a Permanent Deleveraging Event and the close of trading on the Second Permanent Deleveraging Valuation Date, will equal 1.5. If a Permanent Deleveraging Event occurs, then on any calendar day following the Second Permanent Deleveraging Valuation Date, the Leverage Factor will equal 1.0.

The "Index Performance Ratio" on any Index Business Day will be equal to:

<u>Index Closing Level – Last Reset Index Closing Level</u>
Last Reset Index Closing Level

On any calendar day that is not an Index Business Day, the Index Closing Level will be equal to the Index Closing Level on the Index Business Day immediately preceding such calendar day.

The "Last Reset Index Closing Level" is the Index Closing Level on the most recent Reset Valuation Date prior to such day. The initial Last Reset Index Closing Level is 622.5081, the Index Closing Level on the Initial Trade Date, as reported by Bloomberg L.P. and Reuters.

The "Index Closing Level" on any date of determination is the closing level of the Index, as reported on Bloomberg L.P. and Reuters; provided, however, that if the closing level of the Index as reported on Bloomberg L.P. (or any successor) differs from the closing level of the Index as reported on Reuters (or any successor), then the Index Closing Level will be the closing level of the Index as calculated by the Index Calculation Agent. The initial Index Closing Level (which is also the first Last Reset Index Closing Level) is 622.5081, the Index Closing Level measured on the Initial Trade Date, as determined by the Security Calculation Agent.

On any calendar day that is not an Index Business Day, the Index Closing level will be equal to the Index Closing Level on the Index Business Day immediately preceding such calendar day.

"Measurement Period" means the Final Measurement Period or Call Measurement Period, as applicable.

The "Current Indicative Value" or "intraday indicative value", as determined by the Security Calculation Agent, is an amount per Security, on an intraday basis on any Index Business Day, equal to:

- a) On the Initial Trade Date, \$25.00.
- b) On any other calendar day prior to the first day of an applicable Measurement Period:

  (Current Principal Amount on the immediately preceding calendar day × Index Factor, calculated using the Intraday Index Value) Accrued Fees + Accrued Dividend.
- c) From and including the first day of an applicable Measurement Period, an amount per Security equal to: (Current Principal Amount, on the calendar day immediately preceding the first day of the Measurement Period × Index Factor, calculated using the Intraday Index Value × Residual Factor, from the immediately preceding calendar day) Accrued Fees + Accrued Dividend + Measurement Period Cash Amount, from the immediately preceding calendar day
- d) The minimum value of the Current Indicative Value on any calendar day will be zero.

The actual trading price of the Securities in the secondary market may vary significantly from their Current Indicative Value (or intraday indicative value). If a Zero Value Event occurs during any Index Business Day then the Current Indicative Value (or "intraday indicative value") will be equal to the Zero Value Settlement Amount, subsequent to the event on the date on which the Zero Value Event occurred, and on all future calendar days. Upon the occurrence of a Zero Value Event, investors will likely lose all or substantially all of their investment. You will not benefit from any future exposure to the Index after the occurrence of a Zero Value Event. See "Specific Terms of the Securities — Automatic Acceleration Upon Zero Value Event".

If the Securities undergo a split or reverse split, the Current Indicative Value (or intraday indicative value) will be adjusted accordingly.

The "Accrued Fees" as of any date of determination means the Accrued Tracking Fee + the Accrued Financing Fee.

If the Securities undergo a split or reverse split, the Accrued Fees will be adjusted accordingly.

The Securities are subject to an "Accrued Tracking Fee" per Security, calculated as follows:

- a) On the Initial Trade Date, the Accrued Tracking Fee is equal to zero.
- b) On any subsequent calendar day, the Accrued Tracking Fee is equal to: (a) the Accrued Tracking Fee as of the immediately preceding calendar day, *plus* the Daily Tracking Fee on such calendar day.
- c) On the calendar day after each Reset Valuation Date, the Accrued Tracking Fee is reset to be equal to the Daily Tracking Fee on such calendar day.

The "Daily Tracking Fee" is an amount per Security calculated as follows:

- a) On the Initial Trade Date, the Daily Tracking Fee is zero.
- b) On any subsequent calendar day, the Daily Tracking Fee is equal to: (a) (i) 0.95%, *times* (ii) the Current Principal Amount on the immediately preceding calendar day, *times* (iii) the Index Factor, on such calendar day, *times* (iv) the Residual Factor, on the immediately preceding calendar day, *divided by* (b) 365.
- c) The minimum value of the Daily Tracking Fee on any calendar day will be zero.

The Daily Tracking Fee represents the investor fees calculated each day on the current value of the unleveraged notional amount invested in the Index per Security. These charges accrue and compound during the applicable period, and will reduce any amount you are entitled to receive at maturity, early redemption, call or acceleration upon the occurrence of a Zero Value Event.

If the Securities undergo a split or reverse split, the Daily Tracking Fee will be adjusted accordingly.

The Securities are subject to an "Accrued Financing Fee" per Security calculated as follows:

- a) On the Initial Trade Date, the Accrued Financing Fee is equal to zero.
- b) On any subsequent calendar day, the Accrued Financing Fee is equal to: (a) the Accrued Financing Fee as of the immediately preceding calendar day, *plus* (b) the Daily Financing Fee on such calendar day.
- c) On the calendar day after each Reset Valuation Date, the Accrued Financing Fee is reset to be equal to the Daily Financing Fee on such calendar day.
- d) If a Permanent Deleveraging Event occurs, then on any calendar day following the Second Permanent Deleveraging Valuation Date, the Accrued Financing Fee will be equal to zero.

"CME Term SOFR" means the CME Term SOFR Reference Rates published for one-, three-, six-, and 12-month tenors as administered by CME Group Benchmark Administration, Ltd. (or any successor administrator thereof).

The "Daily Financing Fee" is an amount per Security calculated as follows:

- a) On the Initial Trade Date, the Daily Financing Fee is equal to zero.
- b) On any subsequent calendar day, the Daily Financing Fee is equal to: (a) (i) 0.5, *times* (ii) the Financing Rate, on such calendar day, *times* (iii) the Current Principal Amount, on the immediately preceding calendar day, *times* (iv) the Residual Factor, on the immediately preceding calendar day, *divided by* (b) 360.
- c) If a Permanent Deleveraging Event occurs, then on any calendar day following the Second Permanent Deleveraging Valuation Date, the Daily Financing Fee will be equal to zero.
- d) The minimum value of the Daily Financing Fee on any calendar day will be zero.

The Daily Financing Fee seeks to compensate UBS for providing investors with a leveraged participation in movements of the Index and is intended to approximate the financing costs that investors may have otherwise incurred had they sought to borrow funds at a similar rate from a third party to invest in the Securities. These charges accrue and compound during the applicable period, and will reduce any amount that you will be entitled to receive at maturity, early redemption, call or acceleration upon the occurrence of a Zero Value Event.

If the Securities undergo a split or reverse split, the Daily Financing Fee will be adjusted accordingly.

The "Financing Rate" will equal the sum of (a) 0.95% and (b) three-month CME Term SOFR rate plus a 0.2616% adjustment on the immediately preceding U.S. Government Securities Business Day. The minimum Financing Rate at any time will be 0.95%

For example, 5.24665% was the three-month CME Term SOFR rate on June 29, 2023. The Financing Rate (if it were based on the SOFR-Based Benchmark Replacement) on June 30, 2023 would have therefore been equal to: 0.95% + 5.24665% + 0.2616%, or 6.45825%.

#### The "Measurement Period Cash Amount" is an amount per Security equal to:

- a) \$0.00 on any calendar day, to but excluding the first day of an applicable Measurement Period.
- b) On the first day of an applicable one-day Measurement Period:

At the close of trading on such Index Business Day, (the Current Principal Amount on the immediately preceding calendar day × Index Factor on such Index Business Day)

- c) From and including the first day of an applicable four-day Measurement Period:
  - i. At the close of trading on each Index Business Day during the applicable four-day Measurement Period, the Measurement Period Cash Amount on the immediately preceding calendar day + (Current Principal Amount, on the calendar day immediately preceding the first day of such Measurement Period × 0.25 × Index Factor, on such Index Business Day).
  - ii. On any calendar day during an applicable four-day Measurement Period that is not an Index Business Day, the Measurement Period Cash Amount on the immediately preceding Index Business Day.
- d) On any calendar day after the last Index Business Day of an applicable Measurement Period, the Measurement Period Cash Amount on the last Index Business Day of such Measurement Period.

The Measurement Period Cash Amount represents the portion of the Current Principal Amount that has been converted to cash on any given day of an applicable Measurement Period and is no longer tracking the Index.

At the close of trading of each Index Business day during a four-day Measurement Period, approximately 25% of the Current Principal Amount, on the calendar day immediately preceding the first day of the Measurement Period, will be deemed converted to cash and an applicable amount of financing will separately be deemed converted to cash as well. After the close of trading on the final Index Business Day of an applicable four-day Measurement Period, the Measurement Period Cash Amount will represent the averaged value of the Current Principal Amount that was deemed converted to cash across the four-days of such Measurement Period. In case of a one-day Measurement Period, approximately 100% of the Current Principal Amount will be deemed converted to cash and an applicable amount of financing will separately be deemed converted to cash, at the close of trading of the first day of such Measurement Period.

If the Securities undergo a split or reverse split, the Measurement Period Cash Amount will be adjusted accordingly.

# The "Final Measurement Period" means:

- a) if the Market Value of Securities outstanding as at the close of trading on the Index Business Day immediately preceding the Calculation Date is less than \$50,000,000, the Calculation Date, subject to adjustments as described under "— Market Disruption Event";
- b) if the Market Value of Securities outstanding as at the close of trading on the Index Business Day immediately preceding the Calculation Date is equal to or greater than \$50,000,000, the four (4) Index Business Days from and including the Calculation Date, subject to adjustments as described under "— Market Disruption Event."

For the purpose of determining the Final Measurement Period, the "Market Value" of the Securities outstanding as of the close of trading on the Index Business Day immediately preceding the Calculation Date, will equal:

(i) the Closing Indicative Value as of such Index Business Day, *times* (ii) the number of Securities outstanding as reported by CEFDSO <Index> on Bloomberg L.P.

The "Index Calculation Agent" means the entity that calculates and publishes the level of the Index, which is currently ICE Data Services.

The "Calculation Date" means June 2, 2050, unless such day is not an Index Business Day, in which case the Calculation Date will be the next Index Business Day, subject to adjustments.

The Calculation Date represents the first Index Business Day of the Final Measurement Period.

"Index Business Day" means any day on which the Primary Exchange or market for trading of the Securities is scheduled to be open for trading.

"Primary Exchange" means, with respect to each Index Constituent Security or each constituent underlying a successor index, the primary exchange or market of trading such Index Constituent Security or such constituent underlying a successor index.

"U.S. Government Securities Business Day" means any day except for a Saturday, a Sunday or a day on which the Securities Industry and Financial Markets Association recommends that the fixed income departments of its members be closed for the entire day for purposes of trading in U.S. government securities.

# **Underlying Index**

The return on the Securities is based upon the performance of the S-Network Composite Closed-End Fund Index (Bloomberg: "CEFX"). The Index is a mutual fund index designed to serve as a benchmark for closed-end funds listed in the U.S. that are principally engaged in asset management processes designed to produce taxable annual yield.

# Early Redemption at the Option of the Holders

Subject to your compliance with the procedures described below and the potential postponements and adjustments as described under "— Market Disruption Event," you may submit a request to have us redeem your Securities on any Index Business Day no later than 12:00 noon, New York City time, and a confirmation of redemption by no later than 5:00 p.m., New York City time, on the same Index Business Day, provided that you request that we redeem a minimum of 50,000 Securities. We reserve the right from time to time to waive this minimum redemption amount in our sole discretion on a case-by-case basis. You should not assume you will be entitled to the benefit of any such waiver. For any applicable redemption request, the "Redemption Confirmation are delivered, except that we reserve the right from time to time to accelerate, in our sole discretion on a case-by-case basis, the Redemption Valuation Date to the date on which the notice of redemption is received by UBS rather than the following Index Business Day. You should not assume you will be entitled to any such acceleration. To satisfy the minimum redemption amount, your broker or other financial intermediary may bundle your Securities for redemption with those of other investors to reach this minimum amount of 50,000 Securities.

The Securities will be redeemed and the holders will receive payment for their Securities on the second Index Business Day following the applicable Redemption Valuation Date (the "Redemption Date"). The first Redemption Date will be the fourth Index Business Day immediately following the Initial Trade Date and the Final Redemption Date will be the fourth Index Business Day immediately preceding the Maturity date, subject to adjustments. In addition, if a call notice has been issued, the last Redemption Valuation Date will be the fourth Index Business Day prior to the Call Settlement Date, as applicable. If a Zero Value Event occurs, the last Redemption Date will be the date on which the Zero Value Event occurred.

If a Market Disruption Event is continuing or occurs on the applicable scheduled Redemption Valuation Date with respect to any of the Index Constituent Securities, such Redemption Valuation Date may be postponed as described under "— Market Disruption Event."

As of any Redemption Valuation Date, the "Redemption Fee Amount" means an amount per Security equal to:

(0.125% × Closing Indicative Value of the Security as of the Redemption Valuation Date).

If you exercise your right to have us redeem your Securities, subject to your compliance with the procedures described under "— Redemption Procedures," for each applicable Security you will receive a cash payment on the relevant Redemption Date equal to:

Closing Indicative Value as of the Redemption Valuation Date - Redemption Fee Amount.

We refer to this cash payment as the "**Redemption Amount**." If the amount calculated above is equal to or less than zero, the payment upon early redemption will be zero. We reserve the right from time to time to waive the Redemption Fee Amount in our sole discretion and on a case-by-case basis. There can be no assurance that we will elect to waive this fee and you should not assume you will be entitled to such fee waiver.

We will inform you of such Redemption Amount on the first Business Day following the applicable Redemption Valuation

The redemption feature is intended to induce arbitrageurs to counteract any trading of the Securities at a discount to their indicative value, though there can be no assurance that arbitrageurs will employ the redemption feature in this manner or that they will be successful in counteracting any divergence in the market price of the Securities and their indicative value.

The following graphic illustrates the formula to determine the Redemption Amount, which has been simplified for ease of presentation:

You may lose all or a substantial portion of your investment upon early redemption. The combined negative effect of the Accrued Fees and the Redemption Fee Amount will reduce your final payment. If the compounded leveraged quarterly return of the Index (or the unleveraged return of the Index, following a Permanent Deleveraging Event) is insufficient to offset the negative effect of the Accrued Fees and the Redemption Fee Amount, if applicable (less any Coupon Amounts you may be entitled to receive as of the Redemption Valuation Date), or if the compounded leveraged quarterly return of the Index (or the unleveraged return of the Index, following a Permanent Deleveraging Event) is negative, you may lose all or a substantial portion of your investment upon early redemption. The occurrence of Loss Rebalancing Events will result in more frequent than quarterly compounding.

The Securities may be called by UBS prior to the Maturity Date pursuant to UBS's Call Right and, upon the occurrence of a Zero Value Event, the Securities will be automatically accelerated and mandatorily redeemed by UBS. See "Specific Terms of the Securities — UBS's Call Right" and "Specific Terms of the Securities — Automatic Acceleration Upon Zero Value Event".

We discuss these matters in the accompanying prospectus under "Description of Debt Securities We May Offer — Redemption and Repayment."

The Redemption Amount is meant to induce arbitrageurs to counteract any trading of the Securities at a premium or discount to their indicative value, though there can be no assurance that arbitrageurs will employ the redemption feature in this manner.

# **Redemption Procedures**

To redeem your Securities, you must instruct your broker or other person through whom you hold your Securities to take the following steps through normal clearing system channels:

- deliver a notice of redemption, which we refer to as a "**Redemption Notice**" to UBS via email no later than 12:00 noon (New York City time) on the Index Business Day on which you elect to exercise your redemption right. If we receive your Redemption Notice by the time specified in the preceding sentence, we will respond by sending you a form of confirmation of redemption;
- deliver the signed confirmation of redemption, which we refer to as the "**Redemption Confirmation**", to us via email in the specified form by 5:00 p.m. (New York City time) on the same day. We or our affiliate must acknowledge receipt in order for your Redemption Confirmation to be effective;
- instruct your DTC custodian to book a delivery vs. payment trade with respect to your Securities on the applicable Redemption Date at a price equal to the Redemption Amount; and
- cause your DTC custodian to deliver the trade as booked for settlement via DTC at or prior to 12:00 noon (New York City time) on the applicable Redemption Date.

Different brokerage firms may have different deadlines for accepting instructions from their customers. Accordingly, as a beneficial owner of the Securities, you should consult the brokerage firm through which you own your interest for the relevant deadline. If your broker delivers your Redemption Notice after 12:00 noon (New York City time), or your Redemption Confirmation after 5:00 p.m. (New York City time), on the Business Day prior to the applicable Redemption Valuation Date, your Redemption Notice will not be effective, you will not be able to redeem your Securities until the following Redemption Date and your broker will need to complete all the required steps if you should wish to redeem your Securities on any subsequent Redemption Date. In addition, UBS may request a medallion signature guarantee or such assurances of delivery as it may deem necessary in its sole discretion. All instructions given to participants from beneficial owners of Securities relating to the right to redeem their Securities will be irrevocable. If your DTC custodian or your brokerage firm is not a current UBS customer, UBS will be required to on-board such DTC custodian or brokerage firm, in compliance with its internal policies and procedures, before it can accept your Redemption Notice, your Redemption Confirmation or otherwise process your redemption request. This on-boarding process may delay your Redemption Valuation Date and Redemption Date. Furthermore, in certain circumstances, UBS may be unable to on-board your DTC custodian or your brokerage firm.

We reserve the right from time to time to waive the minimum redemption amount or the Redemption Fee Amount in our sole discretion on a case-by-case basis. In addition, we reserve the right from time to time to accelerate, in our sole discretion on a case-by-case basis, the Redemption Valuation Date to the date on which the Redemption Notice is received by UBS rather than the following Index Business Day. You should not assume you will be entitled to any such waiver or election to accelerate the Redemption Valuation Date.

## **UBS's Call Right**

We have the right to redeem all, but not less than all, of the Securities upon not less than eighteen (18) calendar days' prior notice to the holders of the Securities (which may be provided via press release), such redemption to occur on any Business Day that we may specify through and including the Maturity Date. Upon early redemption in the event we exercise this call right, you will receive a cash payment equal to the Closing Indicative Value on the last Index Business Day in the Call Measurement Period. We refer to this cash payment as the "Call Settlement Amount."

If the amount calculated above is equal to or less than zero, the payment upon UBS's exercise of its Call Right will be zero.

We will inform you of such Call Settlement Amount on the first Business Day following the last Index Business Day in the Call Measurement Period.

The holders will receive payment for their Securities on the third Business Day following the last Index Business Day in the Call Measurement Period (the "Call Settlement Date"). If a Market Disruption Event is continuing or occurs on the scheduled Call Valuation Date with respect to any of the Index Constituent Securities, such Call Valuation Date may be postponed as described under "— Market Disruption Event."

#### The "Call Measurement Period" means:

- a) if the Market Value of Securities outstanding as at the close of trading on the Index Business Day immediately preceding the date of delivery by UBS of its notice to holders (which may be provided via press release) of its exercise of the UBS Call Right is less than \$50,000,000, the Call Valuation Date, subject to adjustments as described under "— Market Disruption Event";
- b) if the Market Value of Securities outstanding as at the close of trading on the Index Business Day immediately preceding the date of delivery by UBS of its notice to holders (which may be provided via press release) of its exercise of the UBS Call Right is equal to or greater than \$50,000,000, the four (4) Index Business Days from and including the Call Valuation Date, subject to adjustments as described under "— Market Disruption Event."

For the purpose of determining the Final Measurement Period, the "Market Value" of the Securities outstanding as of the close of trading on the Index Business Day immediately preceding the date of delivery by UBS of its notice to holders (which may be provided via press release) of its exercise of the UBS Call Right will equal:

(i) The Closing Indicative Value as of such Index Business Day, *times* (ii) the number of Securities outstanding as reported by CEFDSO <Index> on Bloomberg L.P.

The "Call Valuation Date" means the date disclosed as such by UBS in its notice to holders (which may be provided via press release) of its exercise of the UBS Call Right.

In any notice to holders exercising the UBS Call Right, we will specify how many days are included in the Call Measurement Period.

The following graphic illustrates the formula to determine the Call Settlement Amount, which has been simplified for ease of presentation:

Call Settlement Amount = Closing Indicative Value, on last Index
Business Day in Call Measurement Period

You may lose all or a substantial portion of your investment upon a call. The combined negative effect of the Accrued Fees will reduce your final payment. If the compounded leveraged quarterly return of the Index (or the unleveraged return of the Index, following a Permanent Deleveraging Event) is insufficient to offset the negative effect of the Accrued Fees (less any Coupon Amounts you may be entitled to receive), or if the compounded leveraged quarterly return of the Index (or the unleveraged return of the Index, following a Permanent Deleveraging Event) is negative, you may lose all or a substantial portion of your investment upon a call. The occurrence of Loss Rebalancing Events will result in more frequent than quarterly compounding.

In addition, upon the occurrence of a Zero Value Event, the Securities may be automatically accelerated and mandatorily redeemed by UBS. See "Specific Terms of the Securities — Automatic Acceleration Upon Zero Value Event" below.

# **Automatic Acceleration Upon Zero Value Event**

A "Zero Value Event" occurs if, on any Index Business Day (other than an Excluded Day), the Intraday Index Value decreases by 66.66667% or more in value from the Last Reset Index Closing Level. From immediately after the Zero Value Event and on all future calendar days, the Index Factor and the Current Principal Amount will be set equal to zero. The Accrued Dividend and Accrued Fees will be fixed at their respective values on the Zero Value Event date and will stay unchanged on all future calendar days.

When the Intraday Index Value decreases 66.66667% in value from the Last Reset Index Closing Level, the Index Factor will equal zero. A Zero Value Event represents the first instance when the effective unleveraged notional amount that is deemed invested in the Index per Security equals zero. It will have the effect of permanently resetting the value of your Securities to a fixed value (which may be zero) and accelerating the Securities. You will not benefit from any future exposure to the Index after the occurrence of a Zero Value Event. A Zero Value Event is expected to occur only in the narrow window of time between the occurrence of a Permanent Deleveraging Event and completion of the leverage reset to 1.0 at the end of the Second Permanent Deleveraging Valuation Date.

For the purposes of the "Zero Value Event" definition, an "Excluded Day" means (i) any calendar day after the Second Permanent Deleveraging Valuation Date (ii) any calendar day on which a Zero Value Event has already occurred, (iii) any calendar day after the occurrence of a Zero Value Event, and (iv) any calendar day after the last day of an applicable Measurement Period.

If a Zero Value Event occurs, all issued and outstanding Securities will be automatically terminated and mandatorily redeemed by UBS and you will receive the Zero Value Settlement Amount on the Zero Value Settlement Date. You will not benefit from any future exposure to the Index after the occurrence of a Zero Value Event.

In the event that a Zero Value Event has occurred, UBS will issue a press release shortly after the event and specify the relevant Zero Value Settlement Date and Zero Value Settlement Amount in respect of your investment in the Securities. The Securities will be suspended from trading intra-day shortly after the event occurs and will likely not be open for trading again on NYSE Area before the Zero Value Settlement Date.

If a Zero Value Event occurs on an Index Business Day that would otherwise be a Coupon Ex-Date, such day will not be a valid Coupon Ex-Date and all further Coupon Ex-Dates will be suspended.

The "Zero Value Settlement Amount" per Security will be calculated as follows:

- a) On any calendar day, to but excluding the first day of an applicable Measurement Period:
  - (i) the Accrued Dividend, minus (ii) the Accrued Fees, on the date on which the Zero Value Event occurred.
- b) From and including the first day of an applicable Measurement Period:
  - (i) the Measurement Period Cash Amount on the immediately preceding calendar day, *plus* (ii) the Accrued Dividend, *minus* (iii) the Accrued Fees, on the date on which the Zero Value Event occurred.
- c) The minimum value of the Zero Value Settlement Amount will be zero.

#### For example:

- a) If the Accrued Dividend was \$0.04, the Accrued Fees was \$0.01, and the Measurement Period Cash Amount was \$0, then the Zero Value Settlement Amount would be \$0.03.
- b) If the Accrued Dividend was \$0.01, the Accrued Fees was \$0.05, and the Measurement Period Cash Amount was \$0, then the Zero Value Settlement Amount would be \$0.
- c) If the Zero Value Event occurred during a four-day Measurement Period, and the Accrued Dividend was \$0.01, the Accrued Fees was \$0.03, and the Measurement Period Cash Amount on the immediately preceding calendar day was \$6.59, then the Zero Value Settlement Amount would be \$6.57.

The following graphics illustrate the formula to determine the Zero Value Settlement Amount, which has been simplified for ease of presentation:

On any calendar day, to but excluding the first day of an applicable four-day Measurement Period:

Zero Value Settlement
Amount = Accrued Dividend - Accrued Fees on date
Zero Value Event
occurred

From and including the first day of an applicable Measurement Period:

Zero Value Settlement
Amount

Measurement Period
Cash Amount on immediately
preceding calendar day

Cash Amount on immediately
preceding calendar day

Accrued
Dividend

Accrued
Cash Accrued
Cash Amount on immediately
preceding calendar day

The "Zero Value Settlement Date" will be the third Index Business Day following the date on which the Zero Value Event occurred. For a detailed description of how the Current Indicative Value (or intraday indicative value) of the Securities is calculated see "Valuation of the Index and the Securities".

You may lose all or a substantial portion of your investment upon the occurrence of a Zero Value Event. Upon the occurrence of a Zero Value Event you will receive on the Zero Value Settlement Date only the Zero Value Settlement Amount per Security.

In addition, the Securities may be called by UBS prior to the Maturity Date pursuant to UBS's Call Right. See "Specific Terms of the Securities — UBS's Call Right".

# **Loss Rebalancing Events**

A Loss Rebalancing Event will have the effect of deleveraging your Securities with the aim of resetting the then-current leverage to approximately 1.5. This means that after a Loss Rebalancing Event, a constant percentage increase in the Index Closing Level will have less of a positive effect on the value of your Securities relative to before the occurrence of the Loss Rebalancing Event.

A "Loss Rebalancing Event" occurs if, at any time, the Intraday Index Value on such Index Business Day (other than an Excluded Day) decreases by 15% or more in value from the previously Last Reset Index Closing Level.

Loss Rebalancing Events may occur multiple times over the term of the Securities and may occur multiple times during a single calendar quarter. This means both that (i) the Current Principal Amount may be reset more frequently than quarterly and (ii) the cumulative effect of compounding and fees will have increased as a result of the Loss Rebalancing Event(s). Because each Loss Rebalancing Event will have the effect of deleveraging your Securities, following a Loss Rebalancing Event your Securities will have less exposure to a potential positive gain in value relative to the exposure before the occurrence of such Loss Rebalancing Event.

For purposes of the "Loss Rebalancing Event" definition, an "**Excluded Day**" means (i) the Index Business Day immediately preceding any Quarterly Reset Valuation Date, if a Loss Rebalancing Event occurs after 3:15pm on such day, (ii) any Quarterly Reset Valuation Date, (iii) any Loss Rebalancing Valuation Date, (iv) the Index Business Day immediately preceding the first day of an applicable Measurement Period, if a Loss Rebalancing Event occurs after 3:15pm on such day (v) any calendar day from and including the first day of an applicable Measurement Period, (vi) the First or Second Permanent Deleveraging Valuation Dates, (vii) any calendar day after the Second Permanent Deleveraging Valuation Date, (viii) a Zero Value Event date, and (ix) any calendar day after the Zero Value Event date.

# "Loss Rebalancing Valuation Date" means:

- a) if a Loss Rebalancing Event occurs at or prior to 3:15 p.m. on an Index Business Day, the day that such Loss Rebalancing Event occurs, subject to adjustment as described under "— Market Disruption Event";
- b) if a Loss Rebalancing Event occurs after 3:15 p.m. on an Index Business Day, the first Index Business Day following the occurrence of such Loss Rebalancing Event, subject to adjustment as described under "— Market Disruption Event."

# **Permanent Deleveraging Event**

A Permanent Deleveraging Event will have the effect of deleveraging your Securities, with the aim of permanently resetting the then-current leverage to 1.0, over two Index Business Days. The leverage at the end of the First Permanent Deleveraging Valuation Date is reset to approximately 1.5 and the leverage at the end of the Second Permanent Deleveraging Valuation Date is reset to 1.0. This means that after a Permanent Deleveraging Event, a constant percentage increase in the Index Closing Level will have less of a positive effect on the value of your Securities relative to before the occurrence of the Permanent Deleveraging Event. A Permanent Deleveraging Event is expected to occur only in the narrow window of time between the occurrence of a Loss Rebalancing Event and completion of the leverage reset to 1.5 at the end of the Loss Rebalancing Valuation Date.

A "Permanent Deleveraging Event" occurs if, at any time, the Intraday Index Value on such Index Business Day (other than an Excluded Day) decreases by 50% or more in value from the Last Reset Index Closing Level.

For purposes of the "Permanent Deleveraging Event" definition, an "**Excluded Day**" means (i) the First or Second Permanent Deleveraging Valuation Dates, (ii) any calendar day after the Second Permanent Deleveraging Valuation Date, (iii) a day upon which a Zero Value Event occurs, (iv) any calendar day after the occurrence of a Zero Value Event, (v) the day which is two Index Business Days prior to the first day of an applicable Measurement Period, if a Permanent Deleveraging Event occurs after 3:15pm on such day and (vi) any calendar day from and including the Index Business Day immediately preceding the first day of an applicable Measurement Period.

In the event that a Permanent Deleveraging Event has occurred, UBS will issue a press release before 9:00 a.m. on the Index Business Day immediately following the date on which the Permanent Deleveraging Event occurred, announcing the Permanent Deleveraging Event and notifying you of the Permanent Deleveraging Valuation Dates.

"Permanent Deleveraging Valuation Dates" means the First Permanent Deleveraging Valuation Date and the Second Permanent Deleveraging Valuation Date, each as defined below:

- a) The "First Permanent Deleveraging Valuation Date" means:
  - i. Any Index Business Day, which otherwise would have been a Loss Rebalancing Valuation Date, but on which a Permanent Deleveraging Event has occurred, subject to adjustment as described under "- Market Disruption Event";
  - ii. If a Permanent Deleveraging Event occurs after 3:15pm on any Index Business Day which would not otherwise have been a Loss Rebalancing Valuation Date, then the first Index Business Day following the occurrence of such Permanent Deleveraging Event, subject to adjustment as described under "— Market Disruption Event".

The leverage of your Securities will be reset to approximately 1.5 at the close of trading on the First Permanent Deleveraging Valuation Date.

b) The "Second Permanent Deleveraging Valuation Date" means the Index Business Day immediately following the First Permanent Deleveraging Valuation Date, subject to adjustment as described under "— Market Disruption Event".

The leverage of your Securities will be reset to approximately 1.0 at the close of trading on the Second Permanent Deleveraging Valuation Date.

#### **Security Calculation Agent**

UBS Securities LLC will act as the Security Calculation Agent. The Security Calculation Agent will be solely responsible for all determinations and calculations regarding the value of the Securities, including, among other things, at maturity or upon early redemption or call, or at other times, the Current Principal Amount, Current Indicative Value (or the "intraday indicative value"), Closing Indicative Value, Market Disruption Events, Business Days, Index Business Days, the Leverage Factor, the Index Factor, the Index Performance Ratio, the Residual Factor, the Index Closing Level, the Financing Rate, the Accrued Fees (including determining any successor to the LIBOR base rate), the Coupon Amount, the Accrued Dividend, the Daily Dividend, if any, the Redemption Fee Amount, the Cash Settlement Amount, if any, that we will pay you at maturity, the Coupon Ex-Dates, the Coupon Record Dates, the Redemption Amount, if any, that we will pay you upon redemption, if applicable, the Zero Value Settlement Amount, if any, that we will pay you upon acceleration following the occurrence of a Zero Value Event, the Call Settlement Amount, if any, that we will pay you in the event that UBS calls the Securities, whether a Loss Rebalancing Event has occurred, whether a Permanent Deleveraging Event has occurred and whether any day is a Business Day or an Index Business Day and all such other matters as may be specified elsewhere herein as matters to be determined by the Security Calculation Agent. The Security Calculation Agent will also be responsible for determining whether the Index has been discontinued and whether there has been a material change in the Index. The Security Calculation Agent will make all such determinations and calculations in its sole discretion, and absent manifest error, all determinations of the Security Calculation Agent will be conclusive for all purposes and binding on us, you, and all other persons having an interest in the Security, without liability on the part of the Security Calculation Agent. You will not be entitled to any compensation from us for any loss suffered as a result of any determinations or calculations made by the Security Calculation Agent. We may appoint a different Security Calculation Agent from time to time after the date of this prospectus supplement without your consent and without notifying you.

The Security Calculation Agent will provide written notice to the trustee at its New York office, on which notice the trustee may conclusively rely, of the amount to be paid at maturity, call or acceleration upon the occurrence of a Zero Value Event, or upon early redemption, or on a Coupon Payment Date on or prior to 12:00 noon, New York City time, on the Business Day immediately preceding the Maturity Date, any Redemption Date, any Call Settlement Date, Zero Value Settlement Date or any Coupon Payment Date, as applicable.

All dollar amounts related to determination of the Coupon Amount, the Accrued Dividend, the Daily Dividend, if any, the Accrued Fees, the Redemption Amount and Redemption Fee Amount, if any, per Security, the Call Settlement Amount, if any, per Security, the Current Principal Amount, the Zero Value Settlement Amount, and the Cash Settlement Amount, if any, per Security, will be rounded to the nearest ten-thousandth, with five one hundred-thousandths rounded upward (*e.g.*, .76545 would be rounded up to .7655); and all dollar amounts paid on the Stated Principal Amount of the Securities per holder will be rounded to the nearest cent, with one-half cent rounded upward.

#### **Market Disruption Event**

To the extent a Market Disruption Event with respect to the Index has occurred or is continuing during a four-day Measurement Period, the Index Closing Level for such day will be determined by the Security Calculation Agent or one of its affiliates on the first succeeding Index Business Day on which a Market Disruption Event does not occur or is not continuing with respect to the Index. The remaining Index Business Days in the Measurement Period will be postponed accordingly, and the remaining Index Business Days in the Measurement Period will resume again following the suspension of the Market Disruption Event. For example, if the four-day Measurement Period for purposes of calculating the Call Settlement Amount, is scheduled for June 2, June 3, June 4 and June 5, and there is a Market Disruption Event with respect to the Index on June 2, but no other Market Disruption Event during such Call Measurement Period, then June 3 will become the first Index Business Day of the Measurement Period, June 4th the second Index Business Day, June 5th the third Index Business Day and the next Index Business Day after June 5th would be the final day of the Measurement Period. The same approach would be applied if there is a Market Disruption Event during a four-day Final Measurement Period.

To the extent a Market Disruption Event with respect to the Index has occurred or is continuing on the Redemption Valuation Date, Call Valuation Date (in the event that the Call Measurement Period is the Call Valuation Date), Calculation Date (in the event that the Final Measurement Period is the Calculation Date) or any Reset Valuation Date, the Index Closing Level for such Redemption Valuation Date, Call Valuation Date, Calculation Date or Reset Valuation Date will be determined by the Security Calculation Agent or one of its affiliates on the first succeeding Index Business Day on which a Market Disruption Event does not occur or is not continuing with respect to the Index. For example, if the Redemption Valuation Date, for purposes of calculating a Redemption Amount, is based on the Index Closing Level on June 2 and there is a Market Disruption Event with respect to the Index on June 2, then the Index Closing Level on June 3 will be used to calculate the Redemption Amount, assuming that no such Market Disruption Event has occurred or is continuing on June 3.

In no event, however, will any postponement pursuant to the two immediately preceding paragraphs result in the affected Index Business Day of the Measurement Period or any Redemption Valuation Date, Call Valuation Date (in the event that the Call Measurement Period is the Call Valuation Date), Calculation Date (in the event that the Final Measurement Period is the Calculation Date) or Reset Valuation Date occurring more than five Index Business Days following the day originally scheduled to be such Index Business Day of the Measurement Period or such Redemption Valuation Date, Call Valuation Date, Calculation Date or Reset Valuation Date. If a Market Disruption Event has occurred or is continuing with respect to the Index on the fifth Index Business Day following the date originally scheduled to be such Index Business Day of the Measurement Period or any Redemption Valuation Date, Call Valuation Date, Calculation Date or any Reset Valuation Date, the Security Calculation Agent or one of its affiliates will determine the Index Closing Level based on its good faith estimate of the Index Closing Level that would have prevailed on such fifth Index Business Day but for such Market Disruption Event.

Any of the following will be a Market Disruption Event with respect to the Index, in each case as determined by the Security Calculation Agent in its sole discretion:

- a) suspension, absence or material limitation of trading in a material number of Index Constituent Securities, whether by reason of movements in price exceeding limits permitted by the Primary Exchange or otherwise;
- b) suspension, absence or material limitation of trading in option or futures contracts relating to the Index or to a material number of Index Constituent Securities in the primary market or markets for those contracts;
- c) the Index is not published; or
- d) in any other event, if the Security Calculation Agent determines in its sole discretion that the event materially interferes with our ability or the ability of any of our affiliates to unwind all or a material portion of a hedge with respect to the Securities that we or our affiliates have effected or may effect as described in the section entitled "Use of Proceeds and Hedging".

The following events will not be Market Disruption Events with respect to the Index:

- a) a limitation on the hours or numbers of days of trading, but only if the limitation results from an announced change in the regular business hours of the relevant market; or
- b) a decision to permanently discontinue trading in the option or futures contracts relating to the Index or any Index Constituent Securities.

For this purpose, an "absence of trading" in the primary securities market on which option or futures contracts related to the Index or any Index Constituent Securities are traded will not include any time when that market is itself closed for trading under ordinary circumstances.

# **Redemption Price Upon Optional Tax Redemption**

We have the right to redeem the Securities in the circumstances described under "Description of Debt Securities We May Offer — Optional Tax Redemption" in the accompanying prospectus. If we exercise this right, the redemption price of the Securities will be determined by the Security Calculation Agent in a manner reasonably calculated to preserve your and our relative economic positions.

# **Default Amount on Acceleration**

If an event of default occurs and the maturity of the Securities is accelerated, we will pay the default amount in respect of the principal of the Securities at maturity. We describe the default amount below under "— Default Amount."

In addition to the default amount described below, we will also pay the Coupon Amount per Security, if any, with respect to the final Coupon Payment Date, as described above under "— Coupon Payment," calculated as if the date of acceleration was the last Index Business Day in the Final Measurement Period and the three Index Business Days immediately preceding the date of acceleration were the corresponding Index Business Days in the accelerated Final Measurement Period, with the third Index Business Day immediately preceding the date of accelerated Calculation Date and the accelerated final Coupon Valuation Date, and the Index Business Day immediately preceding the date of acceleration being the relevant final Coupon Valuation Date.

For the purpose of determining whether the holders of our Medium-Term Notes, Series B, of which the Securities are a part, are entitled to take any action under the indenture, we will treat the outstanding principal amount of the Medium-Term Notes, Series B, as constituting the outstanding principal amount of the Securities. Although the terms of the Securities may differ from those of the other Medium-Term Notes, Series B, holders of specified percentages in principal amount of all Medium-Term Notes, Series B, together in some cases with other series of our debt securities, will be able to take action affecting all the Medium-Term Notes, Series B, including the Securities. This action may involve changing some of the terms that apply to the Medium-Term Notes, Series B, accelerating the maturity of the Medium-Term Notes, Series B after a default or waiving some of our obligations under the indenture. We discuss these matters in the attached prospectus under "Description of Debt Securities We May Offer — Default, Remedies and Waiver of Default" and "Description of Debt Securities We May Offer — Modification and Waiver of Covenants."

#### **Default Amount**

The default amount for the Securities on any day will be an amount, in U.S. dollars as determined by the Security Calculation Agent in its sole discretion, for the aggregate Stated Principal Amount of the Securities, equal to the cost of having a qualified financial institution, of the kind and selected as described below, expressly assume all our payment and other obligations with respect to the Securities as of that day and as if no default or acceleration had occurred, or to undertake other obligations providing substantially equivalent economic value to you with respect to the Securities. That cost will equal:

the lowest amount that a qualified financial institution would charge to effect this assumption or undertaking,

plus

the reasonable expenses, including reasonable attorneys' fees, incurred by the holders of the Securities in preparing any documentation necessary for this assumption or undertaking.

During the default quotation period for the Securities, which we describe below, the holders of the Securities and/or we may request a qualified financial institution to provide a quotation of the amount it would charge to effect this assumption or undertaking. If either party obtains a quotation, it must notify

the other party in writing of the quotation. The amount referred to in the first bullet point above will equal the lowest — or, if there is only one, the only — quotation obtained, and as to which notice is so given, during the default quotation period. With respect to any quotation, however, the party not obtaining the quotation may object, on reasonable and significant grounds, to the assumption or undertaking by the qualified financial institution providing the quotation and notify the other party in writing of those grounds within two Business Days after the last day of the default quotation period, in which case that quotation will be disregarded in determining the default amount.

#### **Default Quotation Period**

The default quotation period is the period beginning on the day the default amount first becomes due and ending on the third Business Day after that day, unless:

- > no quotation of the kind referred to above is obtained, or
- > every quotation of that kind obtained is objected to within five (5) Business Days after the due date as described above.

If either of these two events occurs, the default quotation period will continue until the third Business Day after the first Business Day on which prompt notice of a quotation is given as described above. If that quotation is objected to as described above within five (5) Business Days after that first Business Day, however, the default quotation period will continue as described in the prior sentence and this sentence.

In any event, if the default quotation period and the subsequent two Business Day objection period have not ended before the Calculation Date, then the default amount will equal the Stated Principal Amount of the Securities.

#### **Qualified Financial Institutions**

For the purpose of determining the default amount at any time, a qualified financial institution must be a financial institution organized under the laws of any jurisdiction in the United States of America, Europe or Japan, which at that time has outstanding debt obligations with a stated maturity of one year or less from the date of issue and rated either:

- A-1 or higher by Standard & Poor's Financial Services LLC, a subsidiary of The McGraw-Hill Companies, Inc., or any successor, or any other comparable rating then used by that rating agency, or
- P-1 or higher by Moody's Investors Service or any successor, or any other comparable rating then used by that rating agency.

# Discontinuance of or Adjustments to the Index or Termination of Our License Agreement with the Index Sponsor; Alteration of Method of Calculation

If (i) the Index Sponsor or Index Calculation Agent discontinue publication of, or otherwise fails to publish, the Index, (ii) our license agreement with the Index Sponsor terminates or (iii) the Index Sponsor or Index Calculation Agent does not make the Index Constituent Securities and/or their unit weighting available to the Security Calculation Agent, and, in each case, any other person or entity publishes an index licensed to UBS that the Security Calculation Agent determines is comparable to the Index and for which the Index Constituent Securities and/or their unit weighting are available to the Security Calculation Agent (such index being referred to herein as a "successor index"), and the Security Calculation Agent approves such index as a successor index, then the Security Calculation Agent will determine the Index Closing Level on the applicable dates of determination, Coupon Amounts and the amount payable at maturity, call, acceleration upon the occurrence of a Zero Value Event or upon early redemption and all other related payments terms by reference to such successor index.

Upon any selection by the Security Calculation Agent of a successor index, the Security Calculation Agent will cause written notice thereof to be furnished to the trustee, to us and to the holders of the Securities.

If the Index Sponsor or Index Calculation Agent discontinue publication of the Index, our license agreement with the Index Sponsor terminates or the Index Sponsor or Index Calculation Agent do not make the Index Constituent Securities and/or their unit weighting available to the Security Calculation Agent, prior to, and such discontinuation, termination or unavailability is continuing on the Calculation Date or any Index Business Day during a Measurement Period, or on the Redemption Valuation Date or on any Reset Valuation Date, as applicable, or on any other relevant date on which the Index Closing Level is to be determined and the Security Calculation Agent determines that no successor index is available at such time, or the Security Calculation Agent has previously selected a successor index and publication of such successor index is discontinued prior to, and such discontinuation is continuing on the Calculation Date or any Index Business Day during a Measurement Period, or on the Redemption Valuation Date or on any Reset Valuation Date, or any other relevant date on which the Index Closing Level is to be determined, then the Security Calculation Agent will determine the Index Closing Level using the Index Closing Level on the last Index Business Day immediately prior to such discontinuation or unavailability, as adjusted for certain corporate actions. In such event, the Security Calculation Agent will cause notice thereof to be furnished to the trustee, to us and to the holders of the Securities.

Notwithstanding these alternative arrangements, discontinuation of the publication of the Index or successor index, as applicable, may adversely affect the value of the Securities.

In addition, if an Index Replacement Event (as defined below) occurs at any time and the Index Sponsor or anyone else publishes an index that the Security Calculation Agent determines is comparable to the Index (the "Substitute Index"), then the Security Calculation Agent may elect, in its sole discretion, to permanently replace the original Index with the Substitute Index for all purposes under the Securities, and all provisions described in this prospectus supplement as applying to the Index will thereafter apply to the Substitute Index instead. In such event, the Security Calculation Agent will make such adjustments, if any, to any level of the Index or Substitute Index that is used for purposes of the Securities as it determines are appropriate in the circumstances. If the Security Calculation Agent elects to replace the original Index with a Substitute Index, then the Security Calculation Agent will determine all amounts hereunder, including the Coupon Amounts, Current Principal Amount, Current Indicative Value or intraday indicative value, Closing Indicative Value, Index Factor, Index Performance Ratio, Residual Factor, Accrued Fees, Index Closing Levels on the applicable dates of determination, all other related payment terms and the amount payable at maturity, call, upon early redemption or upon acceleration upon the occurrence of a Zero Value Event by reference to such Substitute Index. If the Security Calculation Agent so elects to replace the original Index with a Substitute Index, the Security Calculation Agent will cause written notice thereof to be furnished to the trustee, to us and to the holders of the Securities of the Securities.

## An "Index Replacement Event" means:

- a) an amendment to or change (including any officially announced proposed change) in the laws, regulations or rules of the United States (or any political subdivision thereof), or any jurisdiction in which a Primary Exchange (as defined herein) is located that (i) makes it illegal for UBS AG or its affiliates to hold, acquire or dispose of the Index Constituent Securities included in the Index or options, futures, swaps or other derivatives on the Index or on the Index Constituent Securities included in the Index (including but not limited to exchange-imposed position limits), (ii) materially increases the cost to us, our affiliates, third parties with whom we transact or similarly situated third parties in performing our or their obligations in connection with the Securities, (iii) has a material adverse effect on any of these parties' ability to perform their obligations in connection with the Securities or (iv) materially affects our ability to issue or transact in exchange traded notes similar to the Securities, each as determined by the Security Calculation Agent;
- b) any official administrative decision, judicial decision, administrative action, regulatory interpretation or other official pronouncement interpreting or applying those laws, regulations or rules that is announced on or after June 2, 2020 that (i) makes it illegal for UBS AG or its affiliates to hold, acquire or dispose of the Index Constituent Securities included in the Index or options, futures, swaps or other derivatives on the Index or on the Index Constituent Securities (including but not limited to exchange-imposed position limits), (ii) materially increases the cost to us, our affiliates, third parties with whom we transact or similarly situated third parties in performing our or their obligations in connection with the Securities, (iii) has a material adverse effect on the ability of us, our affiliates, third parties with whom we transact or a similarly situated third party to perform our or their obligations in connection with the Securities or (iv) materially affects our ability to issue or transact in exchange traded notes similar to the Securities, each as determined by the Security Calculation Agent;
- c) any event that occurs on or after June 2, 2020 that makes it a violation of any law, regulation or rule of the United States (or any political subdivision thereof), or any jurisdiction in which a Primary Exchange (as defined herein) is located, or of any official administrative decision, judicial decision, administrative action, regulatory interpretation or other official pronouncement interpreting or applying those laws, regulations or rules, (i) for UBS AG or its affiliates to hold, acquire or dispose of the Index Constituent Securities or options, futures, swaps or other derivatives on the Index or on the Index Constituent Securities (including but not limited to exchange-imposed position limits), (ii) for us, our affiliates, third parties with whom we transact or similarly situated third parties to perform our or their obligations in connection with the Securities or (iii) for us to issue or transact in exchange traded notes similar to the Securities, each as determined by the Security Calculation Agent;

- d) any event, as determined by the Security Calculation Agent, as a result of which we or any of our affiliates or a similarly situated party would, after using commercially reasonable efforts, be unable to, or would incur a materially increased amount of tax, duty, expense or fee (other than brokerage commissions) to, acquire, establish, re-establish, substitute, maintain, unwind or dispose of any transaction or asset it deems necessary to hedge the risk of the Securities, or realize, recover or remit the proceeds of any such transaction or asset; or
- e) as determined by the Security Calculation Agent, the primary exchange or market for trading for the Securities, if any, announces that pursuant to the rules of such exchange or market, as applicable, the Securities cease (or will cease) to be listed, traded or publicly quoted on such exchange or market, as applicable, for any reason and are not immediately re-listed, re-traded or re-quoted on an exchange or quotation system located in the same country as such exchange or market, as applicable.

Notwithstanding these alternative arrangements, discontinuation of the publication of the Index or successor index, as applicable, may adversely affect the value of the Securities.

If at any time the method of calculating the Index, a successor index or a substitute index, or the value thereof, is changed in a material respect, or if the Index or a successor index is in any other way modified so that the Index Closing Level of the Index or such successor index does not, in the opinion of the Security Calculation Agent, fairly represent the Index Closing Level of the Index or such successor index had such changes or modifications not been made, then the Security Calculation Agent will make such calculations and adjustments as, in the good faith judgment of the Security Calculation Agent, may be necessary in order to arrive at an Index Closing Level of an index comparable to the Index or such successor index, as the case may be, as if such changes or modifications had not been made, and the Security Calculation Agent will calculate the Index Closing Level for the Index or such successor index with reference to the Index or such successor index, as adjusted. The Security Calculation Agent will accordingly calculate the Index Closing Level, the Index Performance Ratio, the Coupon Amount, the Accrued Dividend, the Daily Dividend, if any, the Accrued Fees, the Redemption Fee Amount, if any, the Cash Settlement Amount, if any, that we will pay you at maturity, the Redemption Amount, if any, upon early redemption, if applicable, the Call Settlement Amount, if any, that we will pay you in the event UBS calls the Securities, the Zero Value Settlement Amount, if any, that we will pay you in the event of acceleration upon the occurrence of a Zero Value Event, if applicable, the Last Reset Index Closing Level and all related payment terms based on the Index Closing Level calculated by the Security Calculation Agent, as adjusted. Accordingly, if the method of calculating the Index or a successor index is modified so that the level of the Index or such successor index is a fraction of what it would have been if there had been no such modification (e.g., due to a split in the Index), which, in turn, causes the Index Closing Level of the Index or such successor index to be a fraction of what it would have been if there had been no such modification, then the Security Calculation Agent will make such calculations and adjustments in order to arrive at an Index Closing Level for the Index or such successor index as if it had not been modified (e.g., as if such split had not occurred).

In the event that the Security Calculation Agent elects to replace the Index with a successor index or a Substitute Index, UBS may, in its sole discretion, amend the title of the Securities in order to remove reference the former Index and to make such other changes to the title of the Securities as it considers necessary or desirable to reflect the name and/or characteristics of the relevant successor index or Substitute Index, as applicable.

All determinations and adjustments to be made by the Security Calculation Agent may be made in the Security Calculation Agent's sole discretion. See "Risk Factors — There are potential conflicts of interest between you and the Security Calculation Agent" in this prospectus supplement for a discussion of certain conflicts of interest which may arise with respect to the Security Calculation Agent.

# **Manner of Payment and Delivery**

Any payment on or delivery of the Securities at maturity, call or acceleration upon the occurrence of a Zero Value Event, or upon early redemption, will be made to accounts designated by you and approved by us, or at the corporate trust office of the trustee in New York City, but only when the Securities are surrendered to the trustee at that office. We also may make any payment or delivery in accordance with the applicable procedures of the depositary.

#### **Business Day**

When we refer to a Business Day or a New York Business Day with respect to the Securities, we mean a day that is a Business Day of the kind described in "Description of Debt Securities We May Offer — Payment Mechanics for Debt Securities" in the accompanying prospectus.

# **Modified Business Day**

As described in "Description of Debt Securities We May Offer — Payment Mechanics for Debt Securities" in the attached prospectus, any payment on the Securities that would otherwise be due on a day that is not a Business Day may instead be paid on the next day that is a Business Day, with the same effect as if paid on the original due date, except as described under "— Cash Settlement Amount at Maturity," "— UBS's Call Right" and "— Early Redemption at the Option of the Holders" above.

#### **Reissuances or Reopened Issues**

We may, at our sole discretion, "reopen" or reissue the Securities. We issued the Securities initially in an amount having the aggregate Stated Principal Amount specified on the cover of this prospectus supplement. We may issue additional Securities in amounts that exceed the amount on the cover at any time, without your consent and without notifying you. The Securities do not limit our ability to incur other indebtedness or to issue other securities. Also, we are not subject to financial or similar restrictions by the terms of the Securities. For more information, please refer to "Description of Debt Securities We May Offer — Amounts That We May Issue" in the accompanying prospectus.

These further issuances, if any, will be consolidated to form a single class with the originally issued Securities and will have the same CUSIP number and will trade interchangeably with the Securities immediately upon settlement. Any additional issuances will increase the aggregate Stated Principal Amount of the outstanding Securities of the class. The price of any additional offering will be determined at the time of pricing of that offering.

#### **Booking Branch**

The Securities will be booked through UBS AG, London Branch.

#### **Clearance and Settlement**

The DTC participants that hold the Securities through DTC on behalf of investors will follow the settlement practices applicable to equity securities in DTC's settlement system with respect to the primary distribution of the Securities and secondary market trading between DTC participants.

#### 13. ETRACS Alerian Midstream Energy Index due June 21, 2050

#### **Specific Terms of the Securities**

In this section, references to "holders" mean those who own the Securities registered in their own names, on the books that we or the trustee maintains for this purpose, and not those who own beneficial interests in the Securities registered in street name or in the Securities issued in book-entry form through The Depository Trust Company ("DTC") or another depositary. Owners of beneficial interests in the Securities should read the section entitled "Legal Ownership and Book-Entry Issuance" under "Medium-Term Notes, Series B" above.

The Securities are part of a series of debt securities entitled "Medium-Term Notes, Series B" that we may issue, from time to time, under the indenture more particularly described in the accompanying prospectus. This prospectus supplement summarizes specific financial and other terms that apply to the Securities. Terms that apply generally to all Medium-Term Notes, Series B are described in "Description of Debt Securities We May Offer" in the accompanying prospectus. The terms described here (i.e., in this prospectus supplement) supplement those described in the accompanying prospectus and, if the terms described here are inconsistent with those described there, the terms described here are controlling.

The Securities are part of a single series of senior debt securities issued under our indenture, dated as of June 12, 2015 between us and U.S. Bank Trust National Association, as trustee.

We describe the terms of the Securities in more detail below.

The Stated Principal Amount of each Security is \$25.00.

The Securities do not guarantee any return of principal at, or prior to, maturity or call, or upon early redemption. Instead, at maturity, you will receive a cash payment the amount of which will vary depending on the performance and path of the Index calculated in accordance with the formula set forth below and will be reduced by the Daily Tracking Fee as of the last Index Business Day in the applicable Measurement Period or Redemption Valuation Date.

If you exercise your right to have us redeem your Securities, subject to compliance with the redemption procedures, for each Security you will receive a cash payment on the Redemption Date equal to the Redemption Amount as described below under "— Early Redemption at the Option of the Holders." If the amount so calculated is equal to or less than zero, the Redemption Amount will be zero and you will not receive a cash payment.

If we elect to exercise our call right to redeem all of the Securities, subject to compliance with the procedures set forth below, for each Security you will receive a cash payment on the Call Settlement Date equal to the Call Settlement Amount, as described below under "— UBS's Call Right." If the amount so calculated is equal to or less than zero, the Call Settlement Amount will be zero and you will not receive a cash payment.

The Securities may pay a cash coupon during their term.

# **Coupon Payment**

For each Security you hold on the applicable Coupon Record Date, on each Coupon Payment Date you will receive an amount in cash equal to the Coupon Amount, if any. The Coupon Amount will equal the sum of the cash distributions that a hypothetical holder of Index Constituent Securities would have been entitled to receive in respect of the Index Constituent Securities during the relevant period. The Coupon Amount may be equal to zero.

The "Coupon Amount" means (i) on any calendar day that is not a Coupon Ex-Date, an amount per Security equal to zero; and (ii) on any calendar day that is a Coupon Ex-Date, an amount per Security equal to the Accrued Dividend on the Coupon Valuation Date immediately preceding such Coupon Ex-Date. The minimum value of the Coupon Amount will be zero.

The following graphic illustrates the formula to determine the Coupon Amount on a Coupon Ex-Date, which has been simplified for ease of presentation:

Coupon Amount = Accrued Dividend, on the immediately preceding Coupon Valuation Date

If the Securities undergo a split or reverse split, the Coupon Amount will be adjusted accordingly.

Notwithstanding the foregoing, with respect to cash distributions or dividends on an Index Constituent Security which is scheduled to be paid prior to the applicable Coupon Ex-Date, if, and only if, the issuer of such Index Constituent Security fails to pay the dividend or cash distribution to holders of such Index Constituent Security by the scheduled payment date for such dividend or cash distribution, such dividend or distribution will be assumed to be zero for the purposes of calculating the applicable Coupon Amount. Any such delayed dividend or cash distribution payments from the issuer of an Index Constituent Security will be attributed back to the Accrued Dividend and included in the next Coupon Amount.

The "Accrued Dividend" means, as of any date of determination, an amount per Security equal to: (i) on the Initial Trade Date, \$0.00 per Security; and (ii) on any subsequent calendar day (a) the Accrued Dividend as of the immediately preceding calendar day, *plus* (b) the Daily Dividend on such calendar day, *minus* (c) the Coupon Amount on such calendar day.

If the Securities undergo a split or reverse split, the Accrued Dividend will be adjusted accordingly.

The "Daily Dividend" means on any calendar day, an amount per Security equal to:

(a)(i) the Index Dividend Point, *times* (ii) the Current Principal Amount on the immediately preceding calendar day, *divided by* (b) the Index Closing Level on the immediately preceding calendar day.

The Daily Dividend will be rounded to four decimal places.

The Daily Dividend is intended to approximate the amount of distributions in US Dollars that a holder of the Securities would receive if such holder held an unleveraged investment in the Index Constituent Securities directly.

The "Index Dividend Point" on any calendar day, means an amount per Security equal to (a) (the *sum of the products of* (i) the cash value of distributions, that a hypothetical holder of one share of an Index Constituent Security, whose "ex-dividend date" occurs on such calendar day, would have been entitled to receive (adjustments relating to foreign exchange rate fixings or dividend withholding taxes, described below), and (ii) the number of index shares of that Index Constituent Security included in the Index as of such date), *divided by* (b) the Divisor as of such date.

In respect of distributions on any Canadian Index Constituent Securities, on their respective "ex-dividend date", the cash value of distributions will be deemed to be converted from Canadian Dollars to U.S. Dollars at the WM / Reuters USD/CAD foreign exchange rate as of 4:00 p.m. Eastern Time on such ex-dividend date (the "WM / Reuters FX Rate"). These mid-market fixings are calculated by the WM Company based on Reuters data and appear on the Reuters pages WMRA.

Notwithstanding the foregoing, if the Security Calculation Agent determines on the relevant determination date that:

- (a) the WM/ Reuters FX Rate has been discontinued (or otherwise ceases to be published), materially disrupted or is no longer representative of the underlying market or economic reality; or
- (b) 4:00 p.m. Eastern Time is no longer the appropriate time for fixing the WM/Reuters FX Rate for any of the reasons set forth in (a) above,

then the Security Calculation Agent will, in the case of (a) use a substitute or successor provider of foreign exchange rates that it has determined in its sole discretion is most comparable to the WM / Reuters FX Rate, provided that if the Security Calculation Agent determines that there is an industry- accepted successor provider of foreign exchange rates, then the Security Calculation Agent shall use such successor provider of foreign exchange rates; or in the case of (b) use such other time for fixing of the foreign exchange rate as it has determined in its sole discretion is appropriate based on the WM / Reuters FX Rate, or such substitute or successor provider of foreign exchange rates, as it has determined in its sole discretion is most comparable to the WM / Reuters FX Rate, as set forth above.

As of the date of this prospectus supplement, the applicable dividend withholding tax would reduce the cash value of distributions in respect of any Canadian Index Constituent Security by 15% for purposes of calculating the Index Dividend Point. The 15% rate is subject to adjustment if there is a change under Canadian law or the tax treaty between the United States and Canada or to the Canadian dividend withholding tax rate applicable to a U.S. holder of a Canadian Index Constituent Security that is eligible for the benefits of the tax treaty between the United States and Canada.

In the event that an adjustment relating to foreign exchange rate fixings or dividend withholding taxes is made, we will issue a press release announcing such adjustment and the effective date for such adjustment.

The Index Dividend Point, on any calendar day, represents the total cash value of distributions that a hypothetical holder of the Index Constituent Securities, in proportion to the weights of the Index Constituent Securities, would have been entitled to receive with respect to any Index Constituent Security for those cash distributions whose "ex-dividend date" occurs on such calendar day.

The Index Dividend Point may not be publicly disseminated by the Index Calculation Agent. The data used to calculate the Index Dividend Point is the property of the Index Calculation Agent and investors may be required to pay a fee and meet any other requirements of the Index Calculation Agent in order to access such information. See "Risk Factors — The value of the Index Dividend Point may not be publicly disseminated or otherwise freely accessible to investors".

The "Divisor" means, as of any date of determination, the divisor used by the Index Calculation Agent to calculate the Index Closing Level.

The "Coupon Payment Date" means the 15th Index Business Day following each Coupon Valuation Date. The first Coupon Payment Date will be October 21, 2020, subject to adjustment. If such day is not a Coupon Business Day, the Coupon Payment Date shall be the following Coupon Business Day.

If the final Coupon Ex-Date occurs prior to the Maturity Date, but the final Coupon Payment Date otherwise occurs after the Maturity Date, in such case, the final Coupon Payment Date will be the Maturity Date, subject to adjustment.

The "Coupon Record Date" means the ninth Index Business Day following each Coupon Valuation Date. If such day is not a Coupon Business day, the Coupon Record Date shall be the immediately preceding Coupon Business Day.

The "Coupon Ex-Date," with respect to a Coupon Amount, means the first Coupon Business Day on which the Securities trade without the right to receive such Coupon Amount. Under current NYSE Area practice, the Coupon Ex-Date will generally be the Coupon Business Day immediately preceding the applicable Coupon Record Date.

If a day that would otherwise be a Coupon Ex-Date occurs on or after the first day of an applicable Measurement Period, such day will not be a valid Coupon Ex-Date and all further Coupon Ex-Dates will be suspended. In this case, the Coupon Amount corresponding to such Coupon Ex-Date will be included in the Cash Settlement Amount or Call Settlement Amount payable at maturity or call, respectively.

The "Coupon Valuation Date" means the 30th day of each March, June, September and December, of each calendar year during the term of the Securities or if such date is not an Index Business Day, then the first Index Business Day following such date, provided that the final Coupon Valuation Date will be the Calculation Date. The first Coupon Valuation Date will be September 30, 2020.

"Coupon Business Day" means any Index Business Day other than an Index Business Day on which banking institutions in New York are not authorized or obligated by law, regulation or executive order to be open.

"record date" means, (i) with respect to a distribution on an Index Constituent Security, the date on which a holder of the Index Constituent Security must be registered as a stockholder/unitholder of such Index Constituent Security in order to be entitled to receive such distribution, and (ii) with respect to any split or reverse split, the tenth Business Day after the announcement date.

"ex-dividend date" means, with respect to a distribution on an Index Constituent Security, the first Business Day on which transactions in such Index Constituent Security trade on the Primary Exchange without the right to receive such distribution.

## **Cash Settlement Amount at Maturity**

The "Maturity Date" is June 21, 2050, which will be the third Business Day following the last Index Business Day in the Final Measurement Period, subject to adjustment as described below under

"— Market Disruption Event."

For each Security, unless earlier called or redeemed, you will receive at maturity a cash payment equal to the Closing Indicative Value on the last day of the Final Measurement Period. We refer to this payment as the "Cash Settlement Amount". If the amount so calculated is equal to or less than zero, the payment at maturity will be zero.

The following graphic illustrates the formula to determine the Cash Settlement Amount, which has been simplified for ease of presentation:

Cash Settlement Amount

Closing Indicative Value, on last Index Business Day in Final Measurement Period

You may lose all or a substantial portion of your investment at maturity. The Securities are fully exposed to any decline in the level of the Index. The negative effect of the Daily Tracking Fee will reduce your final payment. If the level of the Index (as measured by the Index Closing Level at the end of the Final Measurement Period, as compared to the initial Index Closing Level or the Index level at the time you purchase the Securities, as applicable) does not increase by an amount sufficient to offset the negative effect of the Daily Tracking Fee (less any Coupon Amounts you may be entitled to receive), or if the final Index level is less than the initial Index Closing Level (or the Index level at the time you purchase the Securities, as applicable), you may lose all or a substantial portion of your investment at maturity. The Daily Tracking Fee also takes into account the performance of the Index, as measured by the Current Principal Amount.

The Securities may be called by UBS prior to the Maturity Date pursuant to UBS's Call Right. If the Securities are called by UBS, the Call Settlement Amount may be zero and you may lose all or a substantial portion of your investment. See "— UBS's Call Right".

The "Stated Principal Amount" of each Security is \$25.00. The Securities may be issued and sold over time at then-current market prices which may be significantly higher or lower than the Stated Principal Amount. If the Securities undergo a split or reverse split, the Stated Principal Amount will be adjusted accordingly.

The "Closing Indicative Value" represents the dollar value per Security that an investor would receive on any day if it redeemed the Security on such day (excluding any Redemption Fee Amount). The Closing Indicative Value per Security will be calculated as follows:

- a) On the Initial Trade Date, \$25.00 per Security
- b) On any subsequent calendar day, prior to but excluding the first day of an applicable Measurement Period, an amount per Security equal to:
  - Current Principal Amount + Accrued Dividend
- c) From and including the first day of an applicable Measurement Period, an amount per Security equal to:

Current Principal Amount + Accrued Dividend + Measurement Period Cash Amount

The minimum value of the Closing Indicative Value on any calendar day will be zero.

The actual trading price of the Securities in the secondary market may vary significantly from their Closing Indicative Value.

If the Securities undergo a split or reverse split, the Closing Indicative Value will be adjusted accordingly.

The Current Principal Amount represents the notional investment in the Index Constituent Securities per Security at the close of trading on any calendar day.

The "Current Principal Amount" per Security, will be calculated as follows:

- a) On the Initial Trade Date, \$25.00 per Security;
- b) On any subsequent calendar day, prior to but excluding the first day of an applicable Measurement Period
  - (Current Principal Amount on the previous calendar day × Index Factor)—Daily Tracking Fee
- c) From and including the first day of an applicable Measurement Period, an amount per Security equal to:

(Current Principal Amount, on the calendar day immediately preceding the first day of the Measurement Period  $\times$  Index Factor  $\times$  Residual Factor)

On any calendar day during the Measurement Period that is not an Index Business Day, the Current Principal Amount will be equal to the Current Principal Amount on the previous calendar day.

The minimum value of the Current Principal Amount on any calendar day will be zero.

If the Securities undergo a split or reverse split, the Current Principal Amount will be adjusted accordingly.

The "Index Factor" on any Index Business Day prior to but excluding the first day of an applicable Measurement Period, will equal:

(i) the Index Closing Level, on such Index Business Day, *divided by*, (ii) the Index Closing Level, on the immediately preceding Index Business Day.

From and including the first day of an applicable Measurement Period, the Index Factor will equal:

(i) the Index Closing Level, on such calendar day, *divided by*, (ii) the Index Closing Level on the calendar day immediately preceding the first day of such Measurement Period.

On any calendar day that is not an Index Business Day, the Index Closing Level will be equal to the Index Closing Level on the immediately preceding Index Business Day. The Index Factor will therefore equal one (1) on any calendar day that is not an Index Business Day and is prior to the first Index Business Day of a five-day Measurement Period.

The "Residual Factor" will be calculated as follows:

- a) 1.0 on any calendar day, prior to but excluding the first day of an applicable Measurement Period
- b) From and including the first day of an applicable five-day Measurement Period, (a) the number of Index Business Days from, but excluding, the date of determination to, and including, the last Index Business Day in such five-day Measurement Period, *divided by* (b) five.

The Residual Factor is intended to approximate the percentage of the Current Principal Amount that is tracking the Index on any given day. The Residual Factor is relevant only during an applicable Measurement Period but otherwise is not a component of the Closing Indicative Value or Current Indicative Value formulas.

For example, on the first Index Business Day in an applicable five-day Measurement Period, the Residual Factor will equal (4/5), on the second Index Business Day in an applicable five-day Measurement Period, the Residual Factor will equal (3/5), on the third Index Business Day in an applicable five-day Measurement Period, the Residual Factor will equal (2/5), on the fourth Index Business Day in an applicable five-day Measurement Period, the Residual Factor will equal (1/5) and on the last Index Business Day in an applicable five-day Measurement Period, the Residual Factor will equal zero.

On any calendar day from and including the last Index Business Day of an applicable Measurement Period, the Residual Factor will be equal to zero.

The "Index Closing Level" on any date of determination is the closing level of the Index as reported on the NYSE and Bloomberg; provided, however, that if the closing level of the Index as reported on the NYSE (or any successor) differs from the closing level of the Index as reported on Bloomberg (or any successor), then the Index Closing Level will be the closing level of the Index as calculated by the Index Calculation Agent. 335.0383 is the initial Index Closing Level measured on June 19, 2020 (the Initial Trade Date), as determined by the Security Calculation Agent.

On any calendar day that is not an Index Business Day, the Index Closing Level will be equal to the Index Closing Level from the last Index Business Day prior to such calendar day.

"Measurement Period" means the Final Measurement Period or Call Measurement Period, as applicable.

The "Current Indicative Value" or "intraday indicative value", as determined by the Security Calculation Agent, means the Closing Indicative Value per Security calculated on an intraday basis on any Index Business Day.

For the purposes of calculating the Current Indicative Value, the Index Factor (which is a component of the Current Principal Amount definition) will be determined using the Intraday Index Value.

Additionally, from and including the first day of an applicable Measurement Period, the Current Indicative Value will be calculated using (i) the Measurement Period Cash Amount from the immediately preceding calendar day, and (ii) the Residual Factor from the immediately preceding calendar day.

The minimum value of the Current Indicative Value (or intraday indicative value) on any calendar day will be zero.

The actual trading price of the Securities in the secondary market may vary significantly from their Current Indicative Value (or intraday indicative value).

If the Securities undergo a split or reverse split, the Current Indicative Value (or intraday indicative value) will be adjusted accordingly.

The "Daily Tracking Fee" means, as of any date of determination, an amount per Security equal to 0.75% per annum, calculated as follows:

- a) On the Initial Trade Date, \$0.00 per Security;
- b) On any subsequent calendar day:

(0.75% / 365) × Current Principal Amount on the immediately preceding calendar day × Index Factor

The minimum value of the Daily Tracking Fee on any calendar day will be zero.

If the Securities undergo a split or reverse split, the Daily Tracking Fee will be adjusted accordingly.

The "Measurement Period Cash Amount" is an amount per Security equal to:

- a) \$0.00, on any calendar day prior to but excluding the first day of an applicable Measurement Period.
- b) On the first day of an applicable one-day Measurement Period:
  - a. At the close of trading on such Index Business Day, the (Current Principal Amount, on the immediately preceding calendar day, *times* Index Factor, on such Index Business Day), *minus* Daily Tracking Fee.
- c) From and including the first day of an applicable five-day Measurement Period:
  - a. At the close of trading on each Index Business Day, will equal:
    - (a) Measurement Period Cash Amount on the immediately preceding calendar day, *plus* (b) ( (i) Current Principal Amount, on the calendar day immediately preceding the first day of such Measurement Period, *times* (ii) Index Factor, *divided by* (iii) five), *minus* (c) Daily Tracking Fee
  - b. On any calendar day that is not an Index Business Day, will equal the Measurement Period Cash Amount on the immediately preceding Index Business Day, *minus* Daily Tracking Fee
- d) On any calendar day after the last Index Business Day of an applicable Measurement Period, the Measurement Period Cash Amount on the last Index Business Day of such Measurement Period.

The minimum value of the Measurement Period Cash Amount on any calendar day will be zero.

The Measurement Period Cash Amount represents the portion of the Current Principal Amount that has been converted to cash on any given day of an applicable Measurement Period and is no longer tracking the Index.

At the close of trading of each Index Business day during a five-day Measurement Period, approximately 20% of the Current Principal Amount, on the calendar day immediately preceding the first day of the Measurement Period, will be deemed converted to cash. After the close of trading on the final Index Business Day of an applicable five-day Measurement Period, the Measurement Period Cash Amount will represent the averaged value of the Current Principal Amount that was deemed converted to cash across the five-days of such Measurement Period. In case of a one-day Measurement Period, approximately 100% of the Current Principal Amount will be deemed converted to cash, at the close of trading of the first day of such Measurement Period.

If the Securities undergo a split or reverse split, the Measurement Period Cash Amount will be adjusted accordingly.

#### The "Final Measurement Period" means:

- a) if the Market Value of Securities outstanding at the close of trading on the Index Business Day immediately preceding the Calculation Date is less than \$250,000,000, the Calculation Date, subject to adjustments as described under "Specific Terms of the Securities Market Disruption Event";
- b) if the Market Value of Securities outstanding at the close of trading on the Index Business Day immediately preceding the Calculation Date is equal to or greater than \$250,000,000, the five (5) Index Business Days from, and including, the Calculation Date, subject to adjustment as described under "Specific Terms of the Securities Market Disruption Event."

For the purpose of determining the Final Measurement Period, the "Market Value" of the Securities as of the close of trading on the Index Business Day immediately preceding the Calculation Date, will equal:

(i) the Closing Indicative Value as of such Index Business Day, *times* (ii) the number of Securities outstanding as reported by AMNASO <Index> on Bloomberg L.P.

The "Index Calculation Agent" means the entity that calculates and publishes the level of the Index, which is currently S&P Dow Jones Indices.

The "Calculation Date" means June 10, 2050 unless such day is not an Index Business Day, in which case the Calculation Date will be the next Index Business Day, subject to adjustments.

The Calculation Date represents the first Index Business Day of the Final Measurement Period.

"Index Business Day" means any day on which the Primary Exchange or market for trading of the Securities is scheduled to be open for trading.

"Business Day" means any day that is not a Saturday, a Sunday or a day on which banking institutions in The City of New York, generally, are authorized or obligated by law, regulation or executive order to close.

"Primary Exchange" means, with respect to each Index Constituent Security or each constituent underlying a successor index, the primary exchange or market of trading such Index Constituent Security or such constituent underlying a successor index.

# **Underlying Index**

The Alerian Midstream Energy Index (Bloomberg: "AMNA Index") is a broad-based composite of North American energy infrastructure companies who earn the majority of their cash flow from midstream activities involving energy commodities, such as gathering & processing, liquefaction, pipeline transportation, rail terminating, and storage of energy commodities. The Index is calculated by S&P Dow Jones Indices using a capped, float-adjusted, capitalization weighted methodology. We refer to the companies included in the Index as the "Index Constituent Securities").

#### Early Redemption at the Option of the Holders

Subject to your compliance with the procedures described below and the potential postponements and adjustments as described under "— Market Disruption Event," you may submit a request to have us redeem your Securities on any Index Business Day no later than 12:00 noon, New York City time, and a confirmation of redemption by no later than 5:00 p.m., New York City time, on the same Index Business Day, provided that you request that we redeem a minimum of 50,000 Securities. To satisfy the minimum redemption amount, your broker or other financial intermediary may bundle your Securities for redemption with those of other investors to reach this minimum amount of 50,000 Securities. We reserve the right from time-to-time to waive this minimum redemption amount in our sole discretion on a case-by-case basis. You should not assume that you will be entitled to the benefit of any such waiver. For any applicable redemption request, the "Redemption Valuation Date" will be the first Index Business Day following the date that the applicable redemption notice and redemption confirmation are delivered, except that we reserve the right from time to time to accelerate, in our sole discretion on a case-by-case basis, the Redemption Date to the date on which the notice of redemption is received by UBS rather than the following Index Business Day. You should not assume that you will be entitled to any such acceleration.

The Securities will be redeemed and the holders will receive payment for their Securities on the second Index Business Day following the applicable Redemption Valuation Date (the "Redemption Date"). The First Redemption Date will be the fourth Index Business Day immediately following the Initial Trade Date and the Final Redemption Date will be the fourth Index Business Day immediately preceding the Maturity Date, subject to adjustments. In addition, if a call notice has been issued, the last Redemption Valuation Date will be the fourth Index Business Day prior to the Call Settlement Date, as applicable.

If a Market Disruption Event is continuing or occurs on the applicable scheduled Redemption Valuation Date with respect to any of the Index Constituent Securities, such Redemption Valuation Date may be postponed as described under "— Market Disruption Event."

If you exercise your right to have us redeem your Securities, subject to your compliance with the procedures described under "— Redemption Procedures," for each applicable Security you will receive a cash payment on the relevant Redemption Date equal to:

Closing Indicative Value as of the Redemption Valuation Date —Redemption Fee Amount.

We refer to this cash payment as the "Redemption Amount."

If the amount calculated above is less than or equal to zero, the payment upon early redemption will be zero.

As of any Redemption Valuation Date, the "Redemption Fee Amount" means an amount per Security equal to:

(0.125% × Closing Indicative Value of the Security as of such Redemption Valuation Date).

We reserve the right from time to time to reduce or waive the Redemption Fee Amount in our sole discretion on a case-by-case basis. You should not assume you will be entitled to the benefit of any such waiver.

The redemption feature is intended to induce arbitrageurs to counteract any trading of the Securities at a discount to their indicative value, though there can be no assurance that arbitrageurs will employ the redemption feature in this manner or that they will be successful in counteracting any divergence in the market price of the Securities and their indicative value.

The following graphic illustrates the formula to determine the Redemption Amount, which has been simplified for ease of presentation:

Redemption Amount = Closing Indicative Value — Redemption Fee Amount

You may lose all or a substantial portion of your investment upon early redemption. The combined negative effect of the Daily Tracking Fee and the Redemption Fee Amount will reduce your Redemption Amount. If the level of the Index does not increase by an amount sufficient to offset the combined negative effect of the Daily Tracking Fee and the Redemption Fee Amount (less any Coupon Amounts you may be entitled to receive), or if the final Index level is less than the initial Index Closing Level (or the Index level at the time you purchase the Securities, as applicable), you may lose some or all of your investment upon early redemption.

The Securities may be called by UBS prior to the Maturity Date pursuant to UBS's Call Right. See — UBS's Call Right".

We discuss these matters in the accompanying prospectus under "Description of Debt Securities We May Offer — Redemption and Repayment."

#### **Redemption Procedures**

To redeem your Securities, you must instruct your broker or other person through whom you hold your Securities to take the following steps through normal clearing system channels:

- deliver a notice of redemption, which we refer to as a "**Redemption Notice**" to UBS via email no later than 12:00 noon (New York City time) on the Index Business Day on which you elect to exercise your redemption right. If we receive your Redemption Notice by the time specified in the preceding sentence, we will respond by sending you a form of confirmation of redemption;
- deliver the signed confirmation of redemption, which we refer to as the "**Redemption Confirmation**," to us via e-mail in the specified form by 5:00 p.m. (New York City time) on the same day. We or our affiliate must acknowledge receipt in order for your confirmation to be effective;
- instruct your DTC custodian to book a delivery vs. payment trade with respect to your Securities on the applicable Redemption Valuation Date at a price equal to the Redemption Amount; and
- cause your DTC custodian to deliver the trade as booked for settlement via DTC at or prior to 12:00 noon (New York City time) on the applicable Redemption Date.

Different brokerage firms may have different deadlines for accepting instructions from their customers. Accordingly, as a beneficial owner of the Securities, you should consult the brokerage firm through which you own your interest for the relevant deadline. If your broker delivers your notice of redemption after 12:00 noon (New York City time), or your confirmation of redemption after 5:00 p.m. (New York City time), on the Business Day prior to the applicable Redemption Valuation Date, your notice will not be effective, you will not be able to redeem your Securities until another date and your broker will need to complete all the required steps if you should wish to redeem your Securities on any subsequent date. In addition, UBS may request a medallion signature guarantee or such assurances of delivery as it may deem necessary in its sole discretion. All instructions given to participants from beneficial owners of Securities relating to the right to redeem their Securities will be irrevocable. If your DTC custodian or your brokerage firm is not a current UBS customer, UBS will be required to on-board such DTC custodian or brokerage firm, in compliance with its internal policies and procedures, before it can accept your Redemption Notice, your Redemption Confirmation or otherwise process your redemption request. This on-boarding process may delay your Redemption Valuation Date and Redemption Date. Furthermore, in certain circumstances, UBS may be unable to on-board your DTC custodian or your brokerage firm.

We reserve the right from time to time to reduce or waive the minimum redemption amount or the Redemption Fee Amount in our sole discretion on a case-by-case basis. In addition, we reserve the right from time to time to accelerate, in our sole discretion on a case-by-case basis, the Redemption Valuation Date to the date on which the notice of redemption is received by UBS rather than the following Index Business Day. You should not assume you will be entitled to any such waiver or election to accelerate the Redemption Valuation Date.

#### **UBS's Call Right**

We have the right to redeem all, but not less than all, of the Securities upon not less than eighteen (18) calendar days' prior notice to the holders of the Securities (which notice may be provided via press release), such redemption to occur on any Business Day that we may specify through and including the Maturity Date. Upon early redemption in the event we exercise this right, you will receive a cash payment equal to the Closing Indicative Value on the last Index Business Day in the Call Measurement Period. We refer to this cash payment as the "Call Settlement Amount."

If the amount so calculated is equal to or less than zero, the payment upon exercise of the UBS Call Right will be zero.

We will inform you of such Call Settlement Amount on the first Business Day following the last Index Business Day in the Call Measurement Period.

The holders will receive payment for their Securities on the third Business Day following the last Index Business Day in the Call Measurement Period (the "Call Settlement Date"). If a Market Disruption Event is continuing or occurs on the scheduled Call Valuation Date with respect to any of the Index Constituent Securities, such Call Valuation Date may be postponed as described under "— Market Disruption Event."

#### The "Call Measurement Period" means:

- a) if the Market Value of Securities outstanding at the close of trading on the Index Business Day immediately preceding the date of delivery by UBS of its notice to holders of its exercise of the UBS Call Right is less than \$250,000,000, the Call Valuation Date, subject to adjustments as described under "— Market Disruption Event."; or
- b) if the Market Value of Securities outstanding at the close of trading on the Index Business Day immediately preceding the date of delivery by UBS of its notice to holders of its exercise of the UBS Call Right is equal to or greater than \$250,000,000, the five (5) Index Business Days from and including the Call Valuation Date, subject to adjustments as described under "Specific Terms of the Securities Market Disruption Event."

For the purpose of determining the Call Measurement Period, the "Market Value" of the Securities as of the close of trading on the Index Business Day immediately preceding the date of delivery by UBS of its notice to holders (which may be provided via press release) of its exercise of the UBS Call Right, will equal:

(i) the Closing Indicative Value as of such Index Business Day, *times* (ii) the number of Securities outstanding as reported by AMNASO <Index> on Bloomberg L.P.

The "Call Valuation Date" means the date disclosed as such by UBS in its notice to holders (which may be provided via press release) of its exercise of the UBS Call Right.

In any notice to holders exercising the UBS Call Right, we will specify how many days are included in the Call Measurement Period.

The following graphic illustrates the formula to determine the Call Settlement Amount, which has been simplified for ease of presentation:

Call Settlement Amount = Closing Indicative Value, on last Index
Business Day in Call Measurement Period

You may lose all or a substantial portion of your investment upon a call. The negative effect of the Daily Tracking Fee will reduce your final payment. If the level of the Index does not increase by an amount sufficient to offset the negative effect of the Daily Tracking Fee (less any Coupon Amounts you may be entitled to receive), or if the final Index level is less than the initial Index Closing Level (or the Index level at the time you purchase the Securities, as applicable), you may lose some or all of your investment upon UBS's exercise of its call right.

# **Security Calculation Agent**

UBS Securities LLC will act as the "Security Calculation Agent." The Security Calculation Agent will be solely responsible for all determinations and calculations regarding the value of the Securities, including, among other things, at maturity or upon early redemption or call, or at other times, the Current Principal Amount, Current Indicative Value (or "intraday indicative value"), Closing Indicative Value, Market Disruption Events, Business Days, Index Business Days, the Index Factor, the Residual Factor, the Index Closing Level, the Daily Tracking Fee, the Coupon Amount, the Accrued Dividend, the Daily Dividend, if any, the Redemption Fee Amount, the Cash Settlement Amount, if any, that we will pay you at maturity, the Coupon Ex-Dates, the Coupon Record Dates, the Redemption Amount, if any, that we will pay you upon redemption, if applicable and the Call Settlement Amount, if any, that we will pay you in the event that UBS calls the Securities, and whether any day is a Business Day or Index Business Day and all such other matters as may be specified herein as matters to be determined by the Security Calculation Agent. The Security Calculation Agent will also be responsible for determining whether the Index has been discontinued and whether there has been a material change in the Index. The Security Calculation Agent will make all such determinations and calculations in its sole discretion, and absent manifest error, all determinations of the Security Calculation Agent will be conclusive for all purposes and binding on us, you and all other persons having an interest in the Security, without liability on the part of the Security Calculation Agent. You will not be entitled to any compensation from us for any loss suffered as a result of any determinations or calculations made by Security Calculation Agent. We may appoint a different Security Calculation Agent from time to time after the date of this prospectus supplement without your consent and without notifying you.

The Security Calculation Agent will provide written notice to the trustee at its New York office, on which notice the trustee may conclusively rely, of the amount to be paid at maturity or call, or upon early redemption, or on a Coupon Payment Date on or prior to 12:00 noon (New York City time) on the Business Day immediately preceding the Maturity Date, any Redemption Date, any Call Settlement Date or any Coupon Payment Date, as applicable.

All dollar amounts related to determination of the Coupon Amount, the Accrued Dividend, the Daily Dividend, if any, the Daily Tracking Fee, the Redemption Amount and Redemption Fee Amount, if any, per security, the Call Settlement Amount, if any, per security, the Current Principal Amount and the Cash Settlement Amount, if any, per security, will be rounded to the nearest ten-thousandth, with five one hundred-thousandths rounded upward (e.g., .76545 would be rounded up to .7655); and all dollar amounts paid on the Stated Principal Amount of Securities per holder will be rounded to the nearest cent, with one-half cent rounded upward.

# **Market Disruption Event**

To the extent a Market Disruption Event with respect to the Index has occurred or is continuing during a five-day Measurement Period, the Index Closing Level for such day will be determined by the Security Calculation Agent or one of its affiliates on the first succeeding Index Business Day on which a Market Disruption Event does not occur or is not continuing with respect to the Index. The remaining Index Business Days in the Measurement Period will be postponed accordingly, and the remaining Index Business Days in the Measurement Period will resume again following the suspension of the Market Disruption Event. For example, if the five-day Measurement Period for purposes of calculating the Call Settlement Amount, is scheduled for June 2, June 3, June 4, June 5 and June 6, and there is a Market Disruption Event with respect to the Index on June 2, but no other Market Disruption Event during such Call Measurement Period, then June 3 will become the first Index Business Day of the Measurement Period, June 4th the second Index Business Day, June 5th the third Index Business Day, June 6th the fourth Index Business Day and the next Index Business Day after June 6th would be the final day of the Measurement Period. The same approach would be applied if there is a Market Disruption Event during a five-day Final Measurement Period.

To the extent a Market Disruption Event with respect to the Index has occurred or is continuing on the Redemption Valuation Date, Call Valuation Date (in the event that the Call Measurement Period is the Call Valuation Date) or the Calculation Date (in the event that the Final Measurement Period is the Calculation Date), the Index Closing Level for such Redemption Valuation Date, Call Valuation Date or Calculation Date will be determined by the Security Calculation Agent or one of its affiliates on the first succeeding Index Business Day on which a Market Disruption Event does not occur or is not continuing with respect to the Index. For example, if the Redemption Valuation Date, for purposes of calculating a Redemption Amount, is based on the Index Closing Level on June 2 and there is a Market Disruption Event with respect to the Index on June 2, then the Index Closing Level on June 3 will be used to calculate the Redemption Amount, assuming that no such Market Disruption Event has occurred or is continuing on June 3.

In no event, however, will any postponement pursuant to the two immediately preceding paragraphs result in the affected Index Business Day of the Measurement Period or any Redemption Valuation Date, Call Valuation Date (in the event that the Call Measurement Period is the Call Valuation Date) or Calculation Date (in the event that the Final Measurement Period is the Calculation Date) occurring more than five Index Business Days following the day originally scheduled to be such Index Business Day of the Measurement Period or such Redemption Valuation Date, Call Valuation Date or Calculation Date. If a Market Disruption Event has occurred or is continuing with respect to the Index on the fifth Index Business Day following the date originally scheduled to be such Index Business Day of the Measurement Period or any Redemption Valuation Date, Call Valuation Date or Calculation Date, the Security Calculation Agent or one of its affiliates will determine the Index Closing Level based on its good faith estimate of the Index Closing Level that would have prevailed on such fifth Index Business Day but for such Market Disruption Event.

Any of the following will be a "Market Disruption Event" with respect to the Index, in each case as determined by the Security Calculation Agent in its sole discretion:

- a) suspension, absence or material limitation of trading in a material number of Index Constituent Securities, whether by reason of movements in price exceeding limits permitted by the Primary Exchange or otherwise;
- b) suspension, absence or material limitation of trading in option or futures contracts relating to the Index or to a material number of Index Constituent Securities in the primary market or markets for those contracts;
- c) the Index is not published; or
- d) in any other event, if the Security Calculation Agent determines in its sole discretion that the event materially interferes with our ability or the ability of any of our affiliates to unwind all or a material portion of a hedge with respect to the Securities that we or our affiliates have effected or may effect as described in the section entitled "Use of Proceeds and Hedging".

The following events will not be Market Disruption Events with respect to the Index:

- a) a limitation on the hours or numbers of days of trading, but only if the limitation results from an announced change in the regular business hours of the relevant market; or
- b) a decision to permanently discontinue trading in the option or futures contracts relating to the Index or any Index Constituent Securities.

For this purpose, an "absence of trading" in the primary securities market on which option or futures contracts related to the Index or any Index Constituent Securities are traded will not include any time when that market is itself closed for trading under ordinary circumstances.

#### **Redemption Price Upon Optional Tax Redemption**

We have the right to redeem the Securities in the circumstances described under "Description of Debt Securities We May Offer — Optional Tax Redemption" in the accompanying prospectus. If we exercise this right, the redemption price of the Securities will be determined by the Security Calculation Agent in a manner reasonably calculated to preserve your and our relative economic positions.

#### **Default Amount on Acceleration**

If an event of default occurs and the maturity of the Securities is accelerated, we will pay the default amount in respect of the principal of the Securities at maturity. We describe the default amount below under "— Default Amount." In addition to the default amount described below, we will also pay the Coupon Amount per Security, if any, with respect to the final Coupon Payment Date, as described above under "— Coupon Payment," calculated as if the date of acceleration was the last Index Business Day in the Final Measurement Period and the three Index Business Days immediately preceding the date of acceleration were the corresponding Index Business Days in the accelerated Final Measurement Period, with the third Index Business Day immediately preceding the date of accelerated final Coupon Valuation Date, and the Index Business Day immediately preceding the date of acceleration being the relevant final Coupon Valuation Date.

For the purpose of determining whether the holders of our Medium-Term Notes, Series B, of which the Securities are a part, are entitled to take any action under the indenture, we will treat the outstanding principal amount of the Medium-Term Notes, Series B, as constituting the outstanding principal amount of the Securities. Although the terms of the Securities may differ from those of the other Medium-Term Notes, Series B, holders of specified percentages in principal amount of all Medium-Term Notes, Series B, together in some cases with other series of our debt securities, will be able to take action affecting all the Medium-Term Notes, Series B, including the Securities. This action may involve changing some of the terms that apply to the Medium-Term Notes, Series B, accelerating the maturity of the Medium-Term Notes, Series B after a default or waiving some of our obligations under the indenture. We discuss these matters in the attached prospectus under "Description of Debt Securities We May Offer — Default, Remedies and Waiver of Default" and "Description of Debt Securities We May Offer — Modification and Waiver of Covenants."

#### **Default Amount**

The default amount for the Securities on any day will be an amount, in U.S. dollars as determined by the Security Calculation Agent, in its sole discretion, for the aggregate Stated Principal Amount of the Securities, equal to the cost of having a qualified financial institution, of the kind and selected as described below, expressly assume all our payment and other obligations with respect to the Securities as of that day and as if no default or acceleration had occurred, or to undertake other obligations providing substantially equivalent economic value to you with respect to the Securities. That cost will equal:

- the lowest amount that a qualified financial institution would charge to effect this assumption or undertaking, plus
- the reasonable expenses, including reasonable attorneys' fees, incurred by the holders of the Securities in preparing any documentation necessary for this assumption or undertaking.

During the default quotation period for the Securities, which we describe below, the holders of the Securities and/or we may request a qualified financial institution to provide a quotation of the amount it would charge to effect this assumption or undertaking. If either party obtains a quotation, it must notify the other party in writing of the quotation. The amount referred to in the first bullet point above will equal the lowest — or, if there is only one, the only — quotation obtained, and as to which notice is so given, during the default quotation period. With respect to any quotation, however, the party not obtaining the quotation may object, on reasonable and significant grounds, to the assumption or undertaking by the qualified financial institution providing the quotation and notify the other party in writing of those grounds within two Business Days after the last day of the default quotation period, in which case that quotation will be disregarded in determining the default amount.

### **Default Quotation Period**

The default quotation period is the period beginning on the day the default amount first becomes due and ending on the third Business Day after that day, unless:

- > no quotation of the kind referred to above is obtained, or
- every quotation of that kind obtained is objected to within five (5) Business Days after the due date as described above.

If either of these two events occurs, the default quotation period will continue until the third Business Day after the first Business Day on which prompt notice of a quotation is given as described above. If that quotation is objected to as described above within five (5) Business Days after that first Business Day, however, the default quotation period will continue as described in the prior sentence and this sentence.

In any event, if the default quotation period and the subsequent two Business Day objection period have not ended before the Calculation Date, then the default amount will equal the Stated Principal Amount of the Securities.

#### **Oualified Financial Institutions**

For the purpose of determining the default amount at any time, a qualified financial institution must be a financial institution organized under the laws of any jurisdiction in the United States of America, Europe or Japan, which at that time has outstanding debt obligations with a stated maturity of one year or less from the date of issue and rated either:

- A-1 or higher by Standard & Poor's Financial Services LLC, a subsidiary of The McGraw-Hill Companies, Inc. ,or any successor, or any other comparable rating then used by that rating agency, or
- > P-1 or higher by Moody's Investors Service or any successor, or any other comparable rating then used by that rating agency.

# Discontinuance of or Adjustments to the Index or Termination of Our License Agreement with the Index Sponsor; Alteration of Method of Calculation

If (i) the Index Sponsor or Index Calculation Agent discontinue publication of, or otherwise fails to publish, the Index, (ii) our license agreement with the Index Sponsor terminates or (iii) the Index Sponsor or Index Calculation Agent does not make the Index Constituent Securities and/or their unit weighting available to the Security Calculation Agent, and, in each case, any other person or entity publishes an index licensed to UBS that the Security Calculation Agent determines is comparable to the Index and for which the Index Constituent Securities and/or their unit weighting are available to the Security Calculation Agent (such index being referred to herein as a "successor index"), and the Security Calculation Agent approves such index as a successor index, then the Security Calculation Agent will determine the Index Closing Level on the applicable dates of determination, Coupon Amounts and the amount payable at maturity, call or upon early redemption and all other related payments terms by reference to such successor index.

Upon any selection by the Security Calculation Agent of a successor index, the Security Calculation Agent will cause written notice thereof to be furnished to the trustee, to us and to the holders of the Securities.

If the Index Sponsor or Index Calculation Agent discontinue publication of the Index, our license agreement with the Index Sponsor terminates or the Index Sponsor or Index Calculation Agent do not make the Index Constituent Securities and/or their unit weighting available to the Security Calculation Agent, prior to, and such discontinuation, termination or unavailability is continuing on the Calculation Date or any Index Business Day during a Measurement Period, or on the Redemption Valuation Date, as applicable, or on any other relevant date on which the Index Closing Level is to be determined and the Security Calculation Agent determines that no successor index is available at such time, or the Security Calculation Agent has previously selected a successor index and publication of such successor index is discontinued prior to, and such discontinuation is continuing on the Calculation Date or any Index Business Day during a Measurement Period, or on the Redemption Valuation Date or any other relevant date on which the Index Closing Level is to be determined, then the Security Calculation Agent will determine the Index Closing Level using the Index Closing Level on the last Index Business Day immediately prior to such discontinuation or unavailability, as adjusted for certain corporate actions. In such event, the Security Calculation Agent will cause notice thereof to be furnished to the trustee, to us and to the holders of the Securities.

Notwithstanding these alternative arrangements, discontinuation of the publication of the Index or successor index, as applicable, may adversely affect the value of the Securities.

In addition, if an Index Replacement Event (as defined below) occurs at any time and the Index Sponsor or anyone else publishes an index that the Security Calculation Agent determines is comparable to the Index (the "Substitute Index"), then the Security Calculation Agent may elect, in its sole discretion, to permanently replace the original Index with the Substitute Index for all purposes under the Securities, and all provisions described in this prospectus supplement as applying to the Index will thereafter apply to the Substitute Index instead. In such event, the Security Calculation Agent will make such adjustments, if any, to any level of the Index or Substitute Index that is used for purposes of the Securities as it determines are appropriate in the circumstances. If the Security Calculation Agent elects to replace the original Index with a Substitute Index, then the Security Calculation Agent will determine all amounts hereunder, including the Coupon Amounts, Current Principal Amount, Current Indicative Value (or "intraday indicative value"), Closing Indicative Value, Index Factor, Residual Factor, Daily Tracking Fee, Accrued Dividend, Daily Dividend, Index Closing Levels on the applicable dates of determination, all other related payment terms and the amount payable at maturity, call, upon early redemption by reference to such Substitute Index. If the Security Calculation Agent so elects to replace the original Index with a Substitute Index, the Security Calculation Agent will cause written notice thereof to be furnished to the trustee, to us and to the holders of the Securities of the Securities.

#### An "Index Replacement Event" means:

a) an amendment to or change (including any officially announced proposed change) in the laws, regulations or rules of the United States (or any political subdivision thereof), or any jurisdiction in which a Primary Exchange (as defined herein) is located that (i) makes it illegal for UBS AG or its affiliates to hold, acquire or dispose of the Index Constituent Securities included in the Index or options, futures, swaps or other derivatives on the Index or on the Index Constituent Securities included in the Index (including but not limited to exchange-imposed position limits), (ii) materially increases the cost to us, our affiliates, third parties with whom we transact or similarly situated third parties in performing our or their obligations in connection with the Securities, (iii) has a material adverse effect on any of these parties' ability to perform their obligations in connection with the Securities or (iv) materially affects our ability to issue or transact in exchange traded notes similar to the Securities, each as determined by the Security Calculation Agent;

- b) any official administrative decision, judicial decision, administrative action, regulatory interpretation or other official pronouncement interpreting or applying those laws, regulations or rules that is announced on or after June 19, 2020 that (i) makes it illegal for UBS AG or its affiliates to hold, acquire or dispose of the Index Constituent Securities included in the Index or options, futures, swaps or other derivatives on the Index or on the Index Constituent Securities (including but not limited to exchange-imposed position limits), (ii) materially increases the cost to us, our affiliates, third parties with whom we transact or similarly situated third parties in performing our or their obligations in connection with the Securities, (iii) has a material adverse effect on the ability of us, our affiliates, third parties with whom we transact or a similarly situated third party to perform our or their obligations in connection with the Securities or (iv) materially affects our ability to issue or transact in exchange traded notes similar to the Securities, each as determined by the Security Calculation Agent;
- c) any event that occurs on or after June 19, 2020 that makes it a violation of any law, regulation or rule of the United States (or any political subdivision thereof), or any jurisdiction in which a Primary Exchange (as defined herein) is located, or of any official administrative decision, judicial decision, administrative action, regulatory interpretation or other official pronouncement interpreting or applying those laws, regulations or rules, (i) for UBS AG or its affiliates to hold, acquire or dispose of the Index Constituent Securities or options, futures, swaps or other derivatives on the Index or on the Index Constituent Securities (including but not limited to exchange-imposed position limits), (ii) for us, our affiliates, third parties with whom we transact or similarly situated third parties to perform our or their obligations in connection with the Securities or (iii) for us to issue or transact in exchange traded notes similar to the Securities, each as determined by the Security Calculation Agent;
- d) any event, as determined by the Security Calculation Agent, as a result of which we or any of our affiliates or a similarly situated party would, after using commercially reasonable efforts, be unable to, or would incur a materially increased amount of tax, duty, expense or fee (other than brokerage commissions) to, acquire, establish, re-establish, substitute, maintain, unwind or dispose of any transaction or asset it deems necessary to hedge the risk of the Securities, or realize, recover or remit the proceeds of any such transaction or asset; or
- e) as determined by the Security Calculation Agent, the primary exchange or market for trading for the Securities, if any, announces that pursuant to the rules of such exchange or market, as applicable, the Securities cease (or will cease) to be listed, traded or publicly quoted on such exchange or market, as applicable, for any reason and are not immediately re-listed, re-traded or re-quoted on an exchange or quotation system located in the same country as such exchange or market, as applicable.

Notwithstanding these alternative arrangements, discontinuation of the publication of the Index or successor index, as applicable, may adversely affect the value of the Securities.

If at any time the method of calculating the Index, a successor index or a substitute index, or the value thereof, is changed in a material respect, or if the Index or a successor index is in any other way modified so that the Index Closing Level of the Index or such successor index does not, in the opinion of the Security Calculation Agent, fairly represent the Index Closing Level of the Index or such successor index had such changes or modifications not been made, then the Security Calculation Agent will make such calculations and adjustments as, in the good faith judgment of the Security Calculation Agent, may be necessary in order to arrive at an Index Closing Level of an index comparable to the Index or such successor index, as the case may be, as if such changes or modifications had not been made, and the Security Calculation Agent will calculate the Index Closing Level for the Index or such successor index with reference to the Index or such successor index, as adjusted. The Security Calculation Agent will accordingly calculate the Index Closing Level, the Coupon Amount, the Accrued Dividend, the Daily Dividend, if any, the Daily Tracking Fee, the Redemption Fee Amount, if any, the Cash Settlement Amount, if any, that we will pay you at maturity, the Redemption Amount, if any, upon early redemption, if applicable, the Call Settlement Amount, if any, that we will pay you in the event UBS calls the Securities, and all related payment terms based on the Index Closing Level calculated by the Security Calculation Agent, as adjusted. Accordingly, if the method of calculating the Index or a successor index is modified so that the level of the Index or such successor index is a fraction of what it would have been if there had been no such modification (e.g., due to a split in the Index), which, in turn, causes the Index Closing Level of the Index or such successor index to be a fraction of what it would have been if there had been no such modification, then the Security Calculation Agent will make such calculations and adjustments in order to arrive at an Index Closing Level for the Index or such successor index as if it had not been modified (e.g., as if such split had not occurred).

In the event that the Security Calculation Agent elects to replace the Index with a successor index or a Substitute Index, UBS may, in its sole discretion, amend the title of the Securities in order to remove reference the former Index and to make such other changes to the title of the Securities as it considers necessary or desirable to reflect the name and/or characteristics of the relevant successor index or Substitute Index, as applicable.

All determinations and adjustments to be made by the Security Calculation Agent may be made in the Security Calculation Agent's sole discretion. See "Risk Factors — There are potential conflicts of interest between you and the Security Calculation Agent" in this prospectus supplement for a discussion of certain conflicts of interest which may arise with respect to the Security Calculation Agent.

#### **Manner of Payment and Delivery**

Any payment on or delivery of the Securities at maturity or call, or upon early redemption will be made to accounts designated by you and approved by us, or at the corporate trust office of the trustee in New York City, but only when the Securities are surrendered to the trustee at that office. We also may make any payment or delivery in accordance with the applicable procedures of the depositary.

# **Business Day**

When we refer to a Business Day with respect to the Securities, we mean a day that is a Business Day of the kind described in "Description of Debt Securities We May Offer — Payment Mechanics for Debt Securities" in the accompanying prospectus.

#### **Modified Business Day**

As described in "Description of Debt Securities We May Offer — Payment Mechanics for Debt Securities" in the attached prospectus, any payment on the Securities that would otherwise be due on a day that is not a Business Day may instead be paid on the next day that is a Business Day, with the same effect as if paid on the original due date, except as described under "— Cash Settlement Amount at Maturity," "— UBS's Call Right" and "— Early Redemption at the Option of the Holders" above.

#### **Reissuances or Reopened Issues**

We may, at our sole discretion, "reopen" or reissue the Securities. We issued the Securities initially in an amount having the aggregate Stated Principal Amount specified on the cover of this prospectus supplement. We may issue additional Securities in amounts that exceed the amount on the cover any time, without your consent and without notifying you. The Securities do not limit our ability to incur other indebtedness or to issue other securities. Also, we are not subject to financial or similar restrictions by the terms of the Securities. For more information, please refer to "Description of Debt Securities We May Offer — Amounts That We May Issue" in the accompanying prospectus.

These further issuances, if any, will be consolidated to form a single class with the originally issued Securities and will have the same CUSIP number and will trade interchangeably with the Securities immediately upon settlement. Any additional issuances will increase the aggregate Stated Principal Amount of the outstanding Securities of the class. The price of any additional offering will be determined at the time of pricing of that offering.

# **Booking Branch**

The Securities will be booked through UBS AG, London Branch.

#### Clearance and Settlement

The DTC participants that hold the Securities through DTC on behalf of investors will follow the settlement practices applicable to equity securities in DTC's settlement system with respect to the primary distribution of the Securities and secondary market trading between DTC participants.

# 14. ETRACS Alerian Midstream Energy High Dividend Index ETN due July 19, 2050

# **Specific Terms of the Securities**

In this section, references to "holders" mean those who own the Securities registered in their own names, on the books that we or the trustee maintains for this purpose, and not those who own beneficial interests in the Securities registered in street name or in the Securities issued in book-entry form through The Depository Trust Company ("DTC") or another depositary. Owners of beneficial interests in the Securities should read the section entitled "Legal Ownership and Book-Entry Issuance" under "Medium-Term Notes, Series B" above.

The Securities are part of a series of debt securities entitled "Medium-Term Notes, Series B" that we may issue, from time to time, under the indenture more particularly described in the accompanying prospectus. This prospectus supplement summarizes specific financial and other terms that apply to the Securities. Terms that apply generally to all Medium-Term Notes, Series B are described in "Description of Debt Securities We May Offer" in the accompanying prospectus. The terms described here (i.e., in this prospectus supplement) supplement those described in the accompanying prospectus and, if the terms described here are inconsistent with those described there, the terms described here are controlling.

The Securities are part of a single series of senior debt securities issued under our indenture, dated as of June 12, 2015 between us and U.S. Bank Trust National Association, as trustee.

We describe the terms of the Securities in more detail below.

The Stated Principal Amount of each Security is \$25.00.

The Securities do not guarantee any return of principal at, or prior to, maturity or call, or upon early redemption. Instead, at maturity, you will receive a cash payment the amount of which will vary depending on the performance and path of the Index calculated in accordance with the formula set forth below and will be reduced by the Daily Tracking Fee as of the last Index Business Day in the applicable Measurement Period or Redemption Valuation Date.

If you exercise your right to have us redeem your Securities, subject to compliance with the redemption procedures, for each Security you will receive a cash payment on the Redemption Date equal to the Redemption Amount as described below under "— Early Redemption at the Option of the Holders." If the amount so calculated is equal to or less than zero, the Redemption Amount will be zero and you will not receive a cash payment.

If we elect to exercise our call right to redeem all of the Securities, subject to compliance with the procedures set forth below, for each Security you will receive a cash payment on the Call Settlement Date equal to the Call Settlement Amount, as described below under "— UBS's Call Right." If the amount so calculated is equal to or less than zero, the Call Settlement Amount will be zero and you will not receive a cash payment.

The Securities may pay a cash coupon during their term.

# **Coupon Payment**

For each Security you hold on the applicable Coupon Record Date, on each Coupon Payment Date you will receive an amount in cash equal to the Coupon Amount, if any. The Coupon Amount will equal the sum of the cash distributions that a hypothetical holder of Index Constituent Securities would have been entitled to receive in respect of the Index Constituent Securities during the relevant period. The Coupon Amount may be equal to zero.

The "Coupon Amount" means (i) on any calendar day that is not a Coupon Ex-Date, an amount per Security equal to zero; and (ii) on any calendar day that is a Coupon Ex-Date, an amount per Security equal to the Accrued Dividend on the Coupon Valuation Date immediately preceding such Coupon Ex-Date. The minimum value of the Coupon Amount will be zero.

The following graphic illustrates the formula to determine the Coupon Amount on a Coupon Ex-Date, which has been simplified for ease of presentation:

Coupon Amount = Accrued Dividend, on the immediately preceding Coupon Valuation Date

If the Securities undergo a split or reverse split, the Coupon Amount will be adjusted accordingly.

Notwithstanding the foregoing, with respect to cash distributions or dividends on an Index Constituent Security which is scheduled to be paid prior to the applicable Coupon Ex-Date, if, and only if, the issuer of such Index Constituent Security fails to pay the dividend or cash distribution to holders of such Index Constituent Security by the scheduled payment date for such dividend or cash distribution, such dividend or distribution will be assumed to be zero for the purposes of calculating the applicable Coupon Amount. Any such delayed dividend or cash distribution payments from the issuer of an Index Constituent Security will be attributed back to the Accrued Dividend and included in the next Coupon Amount.

The "Accrued Dividend" means, as of any date of determination, an amount per Security equal to: (i) on the Initial Trade Date, \$0.00 per Security; and (ii) on any subsequent calendar day (a) the Accrued Dividend as of the immediately preceding calendar day, *plus* (b) the Daily Dividend on such calendar day, *minus* (c) the Coupon Amount on such calendar day.

If the Securities undergo a split or reverse split, the Accrued Dividend will be adjusted accordingly.

The "Daily Dividend" means on any calendar day, an amount per Security equal to:

(a)(i) the Index Dividend Point, *times* (ii) the Current Principal Amount on the immediately preceding calendar day, *divided by* (b) the Index Closing Level on the immediately preceding calendar day.

The Daily Dividend will be rounded to four decimal places.

The Daily Dividend is intended to approximate the amount of distributions in US Dollars that a holder of the Securities would receive if such holder held an unleveraged investment in the Index Constituent Securities directly.

The "Index Dividend Point" on any calendar day, means an amount per Security equal to (a) (the *sum of the products of* (i) the cash value of distributions, that a hypothetical holder of one share of an Index Constituent Security, whose "ex-dividend date" occurs on such calendar day, would have been entitled to receive (adjustments relating to foreign exchange rate fixings or dividend withholding taxes, described below), and (ii) the number of index shares of that Index Constituent Security included in the Index as of such date), *divided by* (b) the Divisor as of such date.

In respect of distributions on any Canadian Index Constituent Securities, on their respective "ex-dividend date", the cash value of distributions will be deemed to be converted from Canadian Dollars to U.S. Dollars (i) prior to August 3, 2020, at the WM / Reuters USD/CAD foreign exchange rate as of 4:00 p.m. London Time on such ex-dividend date, and (ii) on and after August 3, 2020, at the WM / Reuters USD/CAD foreign exchange rate as of 4:00 p.m. Eastern Time on such ex-dividend date (the "WM / Reuters FX Rate"), provided, however, that if, for purpose of determining the Index Closing Level, the Index Sponsor converts the values of the Canadian Index Constituent Securities from Canadian Dollars to U.S. Dollars using a different USD/CAD foreign exchange rate or using the WM/Reuters USD/CAD exchange rate as of a different time, then such foreign exchange rate selected by the Index Sponsor for purposes of determining the Index Closing Level (and the time selected by the Index Sponsor for such exchange) shall also apply for purposes of determining the cash value of distributions on the Canadian Index Constituent Securities.

The WM/Reuters FX Rate mid-market fixings are calculated by the WM Company based on Reuters data and appear on the Reuters pages WMRA.

Notwithstanding the foregoing, if the Security Calculation Agent determines on the relevant determination date that:

- (a) the WM/ Reuters FX Rate, or the applicable replacement foreign exchange rate determined by the Index Sponsor, has been discontinued (or otherwise ceases to be published), materially disrupted or is no longer representative of the underlying market or economic reality; or
- (b) 4:00 p.m. London Time (or, on and after August 3, 2020, 4:00 p.m. Eastern Time) (or such other time selected by the Index Sponsor for purposes of converting the values of the Canadian Index Constituent Securities to determine the Index Closing Level) is no longer the appropriate time for fixing the applicable exchange rate for any of the reasons set forth in (a) above,

then the Security Calculation Agent will, in the case of (a) use a substitute or successor provider of foreign exchange rates that it has determined in its sole discretion is most comparable to the prior exchange rate, provided that if the Security Calculation Agent determines that there is an industry- accepted successor provider of foreign exchange rates, then the Security Calculation Agent shall use such successor provider of foreign exchange rates; or in the case of (b) use such other time for fixing of the foreign exchange rate as it has determined in its sole discretion is appropriate based on the WM / Reuters FX Rate, or such substitute or successor provider of foreign exchange rates, as it has determined in its sole discretion is most comparable to the prior exchange rate, as set forth above.

As of the date of this prospectus supplement, the applicable dividend withholding tax would reduce the cash value of distributions in respect of any Canadian Index Constituent Security by 15% for purposes of calculating the Index Dividend Point. The 15% rate is subject to adjustment if there is a change under Canadian law or the tax treaty between the United States and Canada or to the Canadian dividend withholding tax rate applicable to a U.S. holder of a Canadian Index Constituent Security that is eligible for the benefits of the tax treaty between the United States and Canada.

In the event that an adjustment relating to foreign exchange rate fixings (other than the change specified above, effective as of August 3, 2020) or dividend withholding taxes is made, we will issue a press release announcing such adjustment and the effective date for such adjustment.

The Index Dividend Point, on any calendar day, represents the total cash value of distributions that a hypothetical holder of the Index Constituent Securities, in proportion to the weights of the Index Constituent Securities, would have been entitled to receive with respect to any Index Constituent Security for those cash distributions whose "ex-dividend date" occurs on such calendar day.

The Index Dividend Point may not be publicly disseminated by the Index Calculation Agent. The data used to calculate the Index Dividend Point is the property of the Index Calculation Agent and investors may be required to pay a fee and meet any other requirements of the Index Calculation Agent in order to access such information. See "Risk Factors – The value of the Index Dividend Point may not be publicly disseminated or otherwise freely accessible to investors".

The "Divisor" means, as of any date of determination, the divisor used by the Index Calculation Agent to calculate the Index Closing Level.

The "Coupon Payment Date" means the 15th Index Business Day following each Coupon Valuation Date. The first Coupon Payment Date will be October 21, 2020, subject to adjustment. If such day is not a Coupon Business Day, the Coupon Payment Date shall be the following Coupon Business Day.

If the final Coupon Ex-Date occurs prior to the Maturity Date, but the final Coupon Payment Date otherwise occurs after the Maturity Date, in such case, the final Coupon Payment Date will be the Maturity Date, subject to adjustment.

The "Coupon Record Date" means the ninth Index Business Day following each Coupon Valuation Date. If such day is not a Coupon Business day, the Coupon Record Date shall be the immediately preceding Coupon Business Day.

The "Coupon Ex-Date," with respect to a Coupon Amount, means the first Coupon Business Day on which the Securities trade without the right to receive such Coupon Amount. Under current NYSE Area practice, the Coupon Ex-Date will generally be the Coupon Business Day immediately preceding the applicable Coupon Record Date.

If a day that would otherwise be a Coupon Ex-Date occurs on or after the first day of an applicable Measurement Period, such day will not be a valid Coupon Ex-Date and all further Coupon Ex-Dates will be suspended. In this case, the Coupon Amount corresponding to such Coupon Ex-Date will be included in the Cash Settlement Amount or Call Settlement Amount payable at maturity or call, respectively.

The "Coupon Valuation Date" means the 30th day of each March, June, September and December, of each calendar year during the term of the Securities or if such date is not an Index Business Day, then the first Index Business Day following such date, provided that the final Coupon Valuation Date will be the Calculation Date. The first Coupon Valuation Date will be September 30, 2020.

"Coupon Business Day" means any Index Business Day other than an Index Business Day on which banking institutions in New York are not authorized or obligated by law, regulation or executive order to be open.

"record date" means, (i) with respect to a distribution on an Index Constituent Security, the date on which a holder of the Index Constituent Security must be registered as a stockholder/unitholder of such Index Constituent Security in order to be entitled to receive such distribution, and (ii) with respect to any split or reverse split, the tenth Business Day after the announcement date.

"ex-dividend date" means, with respect to a distribution on an Index Constituent Security, the first Business Day on which transactions in such Index Constituent Security trade on the Primary Exchange without the right to receive such distribution.

#### **Cash Settlement Amount at Maturity**

The "Maturity Date" is July 19, 2050, which will be the third Business Day following the last Index Business Day in the Final Measurement Period, subject to adjustment as described below under "— Market Disruption Event."

For each Security, unless earlier called or redeemed, you will receive at maturity a cash payment equal to the Closing Indicative Value on the last day of the Final Measurement Period. We refer to this payment as the "Cash Settlement Amount". If the amount so calculated is equal to or less than zero, the payment at maturity will be zero.

The following graphic illustrates the formula to determine the Cash Settlement Amount, which has been simplified for ease of presentation:

Cash Settlement Amount = Closing Indicative Value, on last Index Business Day in Final Measurement Period

You may lose all or a substantial portion of your investment at maturity. The Securities are fully exposed to any decline in the level of the Index. The negative effect of the Daily Tracking Fee will reduce your final payment. If the level of the Index (as measured by the Index Closing Level at the end of the Final Measurement Period, as compared to the initial Index Closing Level or the Index level at the time you purchase the Securities, as applicable) does not increase by an amount sufficient to offset the negative effect of the Daily Tracking Fee (less any Coupon Amounts you may be entitled to receive), or if the final Index level is less than the initial Index Closing Level (or the Index level at the time you purchase the Securities, as applicable), you may lose all or a substantial portion of your investment at maturity. The Daily Tracking Fee also takes into account the performance of the Index, as measured by the Current Principal Amount.

The Securities may be called by UBS prior to the Maturity Date pursuant to UBS's Call Right. If the Securities are called by UBS, the Call Settlement Amount may be zero and you may lose all or a substantial portion of your investment. See "—UBS's Call Right".

The "Stated Principal Amount" of each Security is \$25.00. The Securities may be issued and sold over time at then-current market prices which may be significantly higher or lower than the Stated Principal Amount. If the Securities undergo a split or reverse split, the Stated Principal Amount will be adjusted accordingly.

The "Closing Indicative Value" represents the dollar value per Security that an investor would receive on any day if it redeemed the Security on such day (excluding any Redemption Fee Amount). The Closing Indicative Value per Security will be calculated as follows:

- a) On the Initial Trade Date, \$25.00 per Security
- b) On any subsequent calendar day, prior to but excluding the first day of an applicable Measurement Period, an amount per Security equal to:

Current Principal Amount + Accrued Dividend

c) From and including the first day of an applicable Measurement Period, an amount per Security equal to:

Current Principal Amount + Accrued Dividend + Measurement Period Cash Amount

The minimum value of the Closing Indicative Value on any calendar day will be zero.

The actual trading price of the Securities in the secondary market may vary significantly from their Closing Indicative Value.

If the Securities undergo a split or reverse split, the Closing Indicative Value will be adjusted accordingly.

The Current Principal Amount represents the notional investment in the Index Constituent Securities per Security at the close of trading on any calendar day.

The "Current Principal Amount" per Security, will be calculated as follows:

- a) On the Initial Trade Date, \$25.00 per Security;
- b) On any subsequent calendar day, prior to but excluding the first day of an applicable Measurement Period

(Current Principal Amount on the previous calendar day × Index Factor)—Daily Tracking Fee

 c) From and including the first day of an applicable Measurement Period, an amount per Security equal to: (Current Principal Amount, on the calendar day immediately preceding the first day of the Measurement Period × Index Factor × Residual Factor)

On any calendar day during the Measurement Period that is not an Index Business Day, the Current Principal Amount will be equal to the Current Principal Amount on the previous calendar day.

The minimum value of the Current Principal Amount on any calendar day will be zero.

If the Securities undergo a split or reverse split, the Current Principal Amount will be adjusted accordingly.

The "Index Factor" on any Index Business Day prior to but excluding the first day of an applicable Measurement Period, will equal:

(i) the Index Closing Level, on such Index Business Day, *divided by*, (ii) the Index Closing Level, on the immediately preceding Index Business Day.

From and including the first day of an applicable Measurement Period, the Index Factor will equal:

(i) the Index Closing Level, on such calendar day, *divided by*, (ii) the Index Closing Level on the calendar day immediately preceding the first day of such Measurement Period.

On any calendar day that is not an Index Business Day, the Index Closing Level will be equal to the Index Closing Level on the immediately preceding Index Business Day. The Index Factor will therefore equal one (1) on any calendar day that is not an Index Business Day and is prior to the first Index Business Day of a five-day Measurement Period.

The "Residual Factor" will be calculated as follows:

- a) 1.0 on any calendar day, prior to but excluding the first day of an applicable Measurement Period
- b) From and including the first day of an applicable five-day Measurement Period, (a) the number of Index Business Days from, but excluding, the date of determination to, and including, the last Index Business Day in such five-day Measurement Period, *divided by* (b) five.

The Residual Factor is intended to approximate the percentage of the Current Principal Amount that is tracking the Index on any given day. The Residual Factor is relevant only during an applicable Measurement Period but otherwise is not a component of the Closing Indicative Value or Current Indicative Value formulas.

For example, on the first Index Business Day in an applicable five-day Measurement Period, the Residual Factor will equal (4/5), on the second Index Business Day in an applicable five-day Measurement Period, the Residual Factor will equal (3/5), on the third Index Business Day in an applicable five-day Measurement Period, the Residual Factor will equal (2/5), on the fourth Index Business Day in an applicable five-day Measurement Period, the Residual Factor will equal (1/5) and on the last Index Business Day in an applicable five-day Measurement Period, the Residual Factor will equal zero.

On any calendar day from and including the last Index Business Day of an applicable Measurement Period, the Residual Factor will be equal to zero.

The "Index Closing Level" on any date of determination is the closing level of the Index as reported on the NYSE and Bloomberg; provided, however, that if the closing level of the Index as reported on the NYSE (or any successor) differs from the closing level of the Index as reported on Bloomberg (or any successor), then the Index Closing Level will be the closing level of the Index as calculated by the Index Calculation Agent. 41.8766 is the initial Index Closing Level measured on July 15, 2020 (the Initial Trade Date), as determined by the Security Calculation Agent.

On any calendar day that is not an Index Business Day, the Index Closing Level will be equal to the Index Closing Level from the last Index Business Day prior to such calendar day.

"Measurement Period" means the Final Measurement Period or Call Measurement Period, as applicable.

The "Current Indicative Value" or "intraday indicative value", as determined by the Security Calculation Agent, means the Closing Indicative Value per Security calculated on an intraday basis on any Index Business Day.

For the purposes of calculating the Current Indicative Value, the Index Factor (which is a component of the Current Principal Amount definition) will be determined using the Intraday Index Value.

Additionally, from and including the first day of an applicable Measurement Period, the Current Indicative Value will be calculated using (i) the Measurement Period Cash Amount from the immediately preceding calendar day, and (ii) the Residual Factor from the immediately preceding calendar day.

The minimum value of the Current Indicative Value (or intraday indicative value) on any calendar day will be zero.

The actual trading price of the Securities in the secondary market may vary significantly from their Current Indicative Value (or intraday indicative value).

If the Securities undergo a split or reverse split, the Current Indicative Value (or intraday indicative value) will be adjusted accordingly.

The "Daily Tracking Fee" means, as of any date of determination, an amount per Security equal to 0.75% per annum, calculated as follows:

- a) On the Initial Trade Date, \$0.00 per Security;
- b) On any subsequent calendar day:

(0.75% / 365) × Current Principal Amount on the immediately preceding calendar day × Index Factor

The minimum value of the Daily Tracking Fee on any calendar day will be zero.

If the Securities undergo a split or reverse split, the Daily Tracking Fee will be adjusted accordingly. The "Measurement Period Cash Amount" is an amount per Security equal to:

- a) \$0.00, on any calendar day prior to but excluding the first day of an applicable Measurement Period
- b) On the first day of an applicable one-day Measurement Period:
  - a. At the close of trading on such Index Business Day, the (Current Principal Amount, on the immediately preceding calendar day, *times* Index Factor, on such Index Business Day), *minus* Daily Tracking Fee.
- c) From and including the first day of an applicable five-day Measurement Period:
  - a. At the close of trading on each Index Business Day, will equal:
    - i. Measurement Period Cash Amount on the immediately preceding calendar day, *plus* (b) ((i) Current Principal Amount, on the calendar day immediately preceding the first day of such Measurement Period, *times* (ii) Index Factor, *divided by* (iii) five), *minus* (c) Daily Tracking Fee
    - ii. On any calendar day that is not an Index Business Day, will equal the Measurement Period Cash Amount on the immediately preceding Index Business Day, *minus* Daily Tracking Fee
- d) On any calendar day after the last Index Business Day of an applicable Measurement Period, the Measurement Period Cash Amount on the last Index Business Day of such Measurement Period.

The minimum value of the Measurement Period Cash Amount on any calendar day will be zero.

The Measurement Period Cash Amount represents the portion of the Current Principal Amount that has been converted to cash on any given day of an applicable Measurement Period and is no longer tracking the Index.

At the close of trading of each Index Business day during a five-day Measurement Period, approximately 20% of the Current Principal Amount, on the calendar day immediately preceding the first day of the Measurement Period, will be deemed converted to cash. After the close of trading on the final Index Business Day of an applicable five-day Measurement Period, the Measurement Period Cash Amount will represent the averaged value of the Current Principal Amount that was deemed converted to cash across the five-days of such Measurement Period. In case of a one-day Measurement Period, approximately 100% of the Current Principal Amount will be deemed converted to cash, at the close of trading of the first day of such Measurement Period.

If the Securities undergo a split or reverse split, the Measurement Period Cash Amount will be adjusted accordingly.

The "Final Measurement Period" means:

- a) if the Market Value of Securities outstanding at the close of trading on the Index Business Day immediately preceding the Calculation Date is less than \$150,000,000, the Calculation Date, subject to adjustments as described under "— Market Disruption Event";
- b) if the Market Value of Securities outstanding at the close of trading on the Index Business Day immediately preceding the Calculation Date is equal to or greater than \$150,000,000, the five (5) Index Business Days from, and including, the Calculation Date, subject to adjustment as described under "— Market Disruption Event."

For the purpose of determining the Final Measurement Period, the "Market Value" of the Securities as of the close of trading on the Index Business Day immediately preceding the Calculation Date, will equal:

(i) the Closing Indicative Value as of such Index Business Day, *times* (ii) the number of Securities outstanding as reported by AMNDSO <Index> on Bloomberg L.P.

The "Index Calculation Agent" means the entity that calculates and publishes the level of the Index, which is currently S&P DJI Netherlands B.V.

The "Calculation Date" means July 8, 2050 unless such day is not an Index Business Day, in which case the Calculation Date will be the next Index Business Day, subject to adjustments.

The Calculation Date represents the first Index Business Day of the Final Measurement Period.

"Index Business Day" means any day on which the Primary Exchange or market for trading of the Securities is scheduled to be open for trading.

"Business Day" means any day that is not a Saturday, a Sunday or a day on which banking institutions in The City of New York, generally, are authorized or obligated by law, regulation or executive order to close.

"Primary Exchange" means, with respect to each Index Constituent Security or each constituent underlying a successor index, the primary exchange or market of trading such Index Constituent Security or such constituent underlying a successor index.

## **Underlying Index**

The Alerian Midstream Energy Dividend Index (Bloomberg: "AEDW") is a fundamentally-weighted index based on the liquid, dividend-paying portion of the North American energy infrastructure market. The Index measures the performance of companies domiciled in the U.S. or Canada, listed on major U.S. or Canadian stock exchanges, that pay regular cash dividends and meet specific liquidity requirements, as described elsewhere in the prospectus supplement. The Index is calculated by S&P DJI Netherlands B.V. using a modified market capitalization weighted methodology. We refer to the companies included in the Index as the "Index Constituent Securities").

# Early Redemption at the Option of the Holders

Subject to your compliance with the procedures described below and the potential postponements and adjustments as described under "— Market Disruption Event," you may submit a request to have us redeem your Securities on any Index Business Day no later than 12:00 noon, New York City time, and a confirmation of redemption by no later than 5:00 p.m., New York City time, on the same Index Business Day, provided that you request that we redeem a minimum of 50,000 Securities. To satisfy the minimum redemption amount, your broker or other financial intermediary may bundle your Securities for redemption with those of other investors to reach this minimum amount of 50,000 Securities. We reserve the right from time-to-time to waive this minimum redemption amount in our sole discretion on a case- by-case basis. You should not assume that you will be entitled to the benefit of any such waiver. For any applicable redemption request, the "Redemption Valuation Date" will be the first Index Business Day following the date that the applicable redemption notice and redemption confirmation are delivered, except that we reserve the right from time to time to accelerate, in our sole discretion on a case-by-case basis, the Redemption Date to the date on which the notice of redemption is received by UBS rather than the following Index Business Day. You should not assume that you will be entitled to any such acceleration.

The Securities will be redeemed and the holders will receive payment for their Securities on the second Index Business Day following the applicable Redemption Valuation Date (the "Redemption Date"). The First Redemption Date will be the fourth Index Business Day immediately following the Initial Trade Date and the Final Redemption Date will be the fourth Index Business Day immediately preceding the Maturity Date, subject to adjustments. In addition, if a call notice has been issued, the last Redemption Valuation Date will be the fourth Index Business Day prior to the Call Settlement Date, as applicable.

If a Market Disruption Event is continuing or occurs on the applicable scheduled Redemption Valuation Date with respect to any of the Index Constituent Securities, such Redemption Valuation Date may be postponed as described under "— Market Disruption Event."

If you exercise your right to have us redeem your Securities, subject to your compliance with the procedures described under "— Redemption Procedures," for each applicable Security you will receive a cash payment on the relevant Redemption Date equal to:

Closing Indicative Value as of the Redemption Valuation Date – Redemption Fee Amount.

We refer to this cash payment as the "Redemption Amount."

If the amount calculated above is less than or equal to zero, the payment upon early redemption will be zero.

As of any Redemption Valuation Date, the "Redemption Fee Amount" means an amount per Security equal to:

(0.125% × Closing Indicative Value of the Security as of such Redemption Valuation Date).

We reserve the right from time to time to reduce or waive the Redemption Fee Amount in our sole discretion on a case-by-case basis. You should not assume you will be entitled to the benefit of any such waiver.

The redemption feature is intended to induce arbitrageurs to counteract any trading of the Securities at a discount to their indicative value, though there can be no assurance that arbitrageurs will employ the redemption feature in this manner or that they will be successful in counteracting any divergence in the market price of the Securities and their indicative value.

The following graphic illustrates the formula to determine the Redemption Amount, which has been simplified for ease of presentation:

Redemption Amount	=	Closing Indicative Value —	Redemption Fee Amount
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You may lose all or a substantial portion of your investment upon early redemption. The combined negative effect of the Daily Tracking Fee and the Redemption Fee Amount will reduce your Redemption Amount. If the level of the Index does not increase by an amount sufficient to offset the combined negative effect of the Daily Tracking Fee and the Redemption Fee Amount (less any Coupon Amounts you may be entitled to receive), or if the final Index level is less than the initial Index Closing Level (or the Index level at the time you purchase the Securities, as applicable), you may lose some or all of your investment upon early redemption.

The Securities may be called by UBS prior to the Maturity Date pursuant to UBS's Call Right. See "— UBS's Call Right".

We discuss these matters in the accompanying prospectus under "Description of Debt Securities We May Offer — Redemption and Repayment."

## **Redemption Procedures**

To redeem your Securities, you must instruct your broker or other person through whom you hold your Securities to take the following steps through normal clearing system channels:

- deliver a notice of redemption, which we refer to as a "**Redemption Notice**" to UBS via email no later than 12:00 noon (New York City time) on the Index Business Day on which you elect to exercise your redemption right. If we receive your Redemption Notice by the time specified in the preceding sentence, we will respond by sending you a form of confirmation of redemption;
- deliver the signed confirmation of redemption, which we refer to as the "**Redemption Confirmation**," to us via e-mail in the specified form by 5:00 p.m. (New York City time) on the same day. We or our affiliate must acknowledge receipt in order for your confirmation to be effective;
- instruct your DTC custodian to book a delivery vs. payment trade with respect to your Securities on the applicable Redemption Valuation Date at a price equal to the Redemption Amount; and
- cause your DTC custodian to deliver the trade as booked for settlement via DTC at or prior to 12:00 noon (New York City time) on the applicable Redemption Date.

Different brokerage firms may have different deadlines for accepting instructions from their customers. Accordingly, as a beneficial owner of the Securities, you should consult the brokerage firm through which you own your interest for the relevant deadline. If your broker delivers your notice of redemption after 12:00 noon (New York City time), or your confirmation of redemption after 5:00 p.m. (New York City time), on the Business Day prior to the applicable Redemption Valuation Date, your notice will not be effective, you will not be able to redeem your Securities until another date and your broker will need to complete all the required steps if you should wish to redeem your Securities on any subsequent date. In addition, UBS may request a medallion signature guarantee or such assurances of delivery as it may deem necessary in its sole discretion. All instructions given to participants from beneficial owners of Securities relating to the right to redeem their Securities will be irrevocable. If your DTC custodian or your brokerage firm is not a current UBS customer, UBS will be required to on-board such DTC custodian or brokerage firm, in compliance with its internal policies and procedures, before it can accept your Redemption Notice, your Redemption Confirmation or otherwise process your redemption request. This on-boarding process may delay your Redemption Valuation Date and Redemption Date. Furthermore, in certain circumstances, UBS may be unable to on-board your DTC custodian or your brokerage firm.

We reserve the right from time to time to reduce or waive the minimum redemption amount or the Redemption Fee Amount in our sole discretion on a case-by-case basis. In addition, we reserve the right from time to time to accelerate, in our sole discretion on a case-by-case basis, the Redemption Valuation Date to the date on which the notice of redemption is received by UBS rather than the following Index Business Day. You should not assume you will be entitled to any such waiver or election to accelerate the Redemption Valuation Date.

## **UBS's Call Right**

We have the right to redeem all, but not less than all, of the Securities upon not less than eighteen (18) calendar days' prior notice to the holders of the Securities (which notice may be provided via press release), such redemption to occur on any Business Day that we may specify through and including the Maturity Date. Upon early redemption in the event we exercise this right, you will receive a cash payment equal to the Closing Indicative Value on the last Index Business Day in the Call Measurement Period. We refer to this cash payment as the "Call Settlement Amount."

If the amount so calculated is equal to or less than zero, the payment upon exercise of the UBS Call Right will be zero.

We will inform you of such Call Settlement Amount on the first Business Day following the last Index Business Day in the Call Measurement Period.

The holders will receive payment for their Securities on the third Business Day following the last Index Business Day in the Call Measurement Period (the "Call Settlement Date"). If a Market Disruption Event is continuing or occurs on the scheduled Call Valuation Date with respect to any of the Index Constituent Securities, such Call Valuation Date may be postponed as described under "— Market Disruption Event."

## The "Call Measurement Period" means:

- a) if the Market Value of Securities outstanding at the close of trading on the Index Business Day immediately preceding the date of delivery by UBS of its notice to holders of its exercise of the UBS Call Right is less than \$150,000,000, the Call Valuation Date, subject to adjustments as described under "— Market Disruption Event."; or
- b) if the Market Value of Securities outstanding at the close of trading on the Index Business Day immediately preceding the date of delivery by UBS of its notice to holders of its exercise of the UBS Call Right is equal to or greater than \$150,000,000, the five (5) Index Business Days from and including the Call Valuation Date, subject to adjustments as described under "— Market Disruption Event."

For the purpose of determining the Call Measurement Period, the "Market Value" of the Securities as of the close of trading on the Index Business Day immediately preceding the date of delivery by UBS of its notice to holders (which may be provided via press release) of its exercise of the UBS Call Right, will equal:

(i) the Closing Indicative Value as of such Index Business Day, *times* (ii) the number of Securities outstanding as reported by AMNDSO <Index> on Bloomberg L.P.

The "Call Valuation Date" means the date disclosed as such by UBS in its notice to holders (which may be provided via press release) of its exercise of the UBS Call Right.

In any notice to holders exercising the UBS Call Right, we will specify how many days are included in the Call Measurement Period.

The following graphic illustrates the formula to determine the Call Settlement Amount, which has been simplified for ease of presentation:

Call Settlement Amount = Closing Indicative Value, on last Index
Business Day in Call Measurement Period

You may lose all or a substantial portion of your investment upon a call. The negative effect of the Daily Tracking Fee will reduce your final payment. If the level of the Index does not increase by an amount sufficient to offset the negative effect of the Daily Tracking Fee (less any Coupon Amounts you may be entitled to receive), or if the final Index level is less than the initial Index Closing Level (or the Index level at the time you purchase the Securities, as applicable), you may lose some or all of your investment upon UBS's exercise of its call right.

## **Security Calculation Agent**

UBS Securities LLC will act as the "Security Calculation Agent." The Security Calculation Agent will be solely responsible for all determinations and calculations regarding the value of the Securities, including, among other things, at maturity or upon early redemption or call, or at other times, the Current Principal Amount, Current Indicative Value (or "intraday indicative value"), Closing Indicative Value, Market Disruption Events, Business Days, Index Business Days, the Index Factor, the Residual Factor, the Index Closing Level, the Daily Tracking Fee, the Coupon Amount, the Accrued Dividend, the Daily Dividend, if any, the Redemption Fee Amount, the Cash Settlement Amount, if any, that we will pay you at maturity, the Coupon Ex-Dates, the Coupon Record Dates, the Redemption Amount, if any, that we will pay you upon redemption, if applicable and the Call Settlement Amount, if any, that we will pay you in the event that UBS calls the Securities, and whether any day is a Business Day or Index Business Day and all such other matters as may be specified herein as matters to be determined by the Security Calculation Agent. The Security Calculation Agent will also be responsible for determining whether the Index has been discontinued and whether there has been a material change in the Index. The Security Calculation Agent will make all such determinations and calculations in its sole discretion, and absent manifest error, all determinations of the Security Calculation Agent will be conclusive for all purposes and binding on us, you and all other persons having an interest in the Security, without liability on the part of the Security Calculation Agent. You will not be entitled to any compensation from us for any loss suffered as a result of any determinations or calculations made by Security Calculation Agent. We may appoint a different Security Calculation Agent from time to time after the date of this prospectus supplement without your consent and without notifying you.

The Security Calculation Agent will provide written notice to the trustee at its New York office, on which notice the trustee may conclusively rely, of the amount to be paid at maturity or call, or upon early redemption, or on a Coupon Payment Date on or prior to 12:00 noon (New York City time) on the Business Day immediately preceding the Maturity Date, any Redemption Date, any Call Settlement Date or any Coupon Payment Date, as applicable.

All dollar amounts related to determination of the Coupon Amount, the Accrued Dividend, the Daily Dividend, if any, the Daily Tracking Fee, the Redemption Amount and Redemption Fee Amount, if any, per security, the Call Settlement Amount, if any, per security, the Current Principal Amount and the Cash Settlement Amount, if any, per security, will be rounded to the nearest ten-thousandth, with five one hundred-thousandths rounded upward (e.g., .76545 would be rounded up to .7655); and all dollar amounts paid on the Stated Principal Amount of Securities per holder will be rounded to the nearest cent, with one-half cent rounded upward.

## **Market Disruption Event**

To the extent a Market Disruption Event with respect to the Index has occurred or is continuing during a five-day Measurement Period, the Index Closing Level for such day will be determined by the Security Calculation Agent or one of its affiliates on the first succeeding Index Business Day on which a Market Disruption Event does not occur or is not continuing with respect to the Index. The remaining Index Business Days in the Measurement Period will be postponed accordingly, and the remaining Index Business Days in the Measurement Period will resume again following the suspension of the Market Disruption Event. For example, if the five-day Measurement Period for purposes of calculating the Call Settlement Amount, is scheduled for June 2, June 3, June 4, June 5 and June 6, and there is a Market Disruption Event with respect to the Index on June 2, but no other Market Disruption Event during such Call Measurement Period, then June 3 will become the first Index Business Day of the Measurement Period, June 4th the second Index Business Day, June 5th the third Index Business Day, June 6th the fourth Index Business Day and the next Index Business Day after June 6th would be the final day of the Measurement Period. The same approach would be applied if there is a Market Disruption Event during a five-day Final Measurement Period.

To the extent a Market Disruption Event with respect to the Index has occurred or is continuing on the Redemption Valuation Date, Call Valuation Date (in the event that the Call Measurement Period is the Call Valuation Date) or the Calculation Date (in the event that the Final Measurement Period is the Calculation Date), the Index Closing Level for such Redemption Valuation Date, Call Valuation Date or Calculation Date will be determined by the Security Calculation Agent or one of its affiliates on the first succeeding Index Business Day on which a Market Disruption Event does not occur or is not continuing with respect to the Index. For example, if the Redemption Valuation Date, for purposes of calculating a Redemption Amount, is based on the Index Closing Level on June 2 and there is a Market Disruption Event with respect to the Index on June 2, then the Index Closing Level on June 3 will be used to calculate the Redemption Amount, assuming that no such Market Disruption Event has occurred or is continuing on June 3.

In no event, however, will any postponement pursuant to the two immediately preceding paragraphs result in the affected Index Business Day of the Measurement Period or any Redemption Valuation Date, Call Valuation Date (in the event that the Call Measurement Period is the Call Valuation Date) or Calculation Date (in the event that the Final Measurement Period is the Calculation Date) occurring more than five Index Business Days following the day originally scheduled to be such Index Business Day of the Measurement Period or such Redemption Valuation Date, Call Valuation Date or Calculation Date. If a Market Disruption Event has occurred or is continuing with respect to the Index on the fifth Index Business Day following the date originally scheduled to be such Index Business Day of the Measurement Period or any Redemption Valuation Date, Call Valuation Date or Calculation Date, the Security Calculation Agent or one of its affiliates will determine the Index Closing Level based on its good faith estimate of the Index Closing Level that would have prevailed on such fifth Index Business Day but for such Market Disruption Event.

Any of the following will be a "Market Disruption Event" with respect to the Index, in each case as determined by the Security Calculation Agent in its sole discretion:

- a) suspension, absence or material limitation of trading in a material number of Index Constituent Securities, whether by reason of movements in price exceeding limits permitted by the Primary Exchange or otherwise;
- b) suspension, absence or material limitation of trading in option or futures contracts relating to the Index or to a material number of Index Constituent Securities in the primary market or markets for those contracts;
- c) the Index is not published; or
- d) in any other event, if the Security Calculation Agent determines in its sole discretion that the event materially interferes with our ability or the ability of any of our affiliates to unwind all or a material portion of a hedge with respect to the Securities that we or our affiliates have effected or may effect as described in the section entitled "Use of Proceeds and Hedging".

The following events will not be Market Disruption Events with respect to the Index:

- a) a limitation on the hours or numbers of days of trading, but only if the limitation results from an announced change in the regular business hours of the relevant market; or
- b) a decision to permanently discontinue trading in the option or futures contracts relating to the Index or any Index Constituent Securities.

For this purpose, an "absence of trading" in the primary securities market on which option or futures contracts related to the Index or any Index Constituent Securities are traded will not include any time when that market is itself closed for trading under ordinary circumstances.

## **Redemption Price Upon Optional Tax Redemption**

We have the right to redeem the Securities in the circumstances described under "Description of Debt Securities We May Offer — Optional Tax Redemption" in the accompanying prospectus. If we exercise this right, the redemption price of the Securities will be determined by the Security Calculation Agent in a manner reasonably calculated to preserve your and our relative economic positions.

#### **Default Amount on Acceleration**

If an event of default occurs and the maturity of the Securities is accelerated, we will pay the default amount in respect of the principal of the Securities at maturity. We describe the default amount below under "— Default Amount." In addition to the default amount described below, we will also pay the Coupon Amount per Security, if any, with respect to the final Coupon Payment Date, as described above under "— Coupon Payment," calculated as if the date of acceleration was the last Index Business Day in the Final Measurement Period and the three Index Business Days immediately preceding the date of acceleration were the corresponding Index Business Days in the accelerated Final Measurement Period, with the third Index Business Day immediately preceding the date of accelerated final Coupon Valuation Date, and the Index Business Day immediately preceding the date of acceleration being the relevant final Coupon Valuation Date.

For the purpose of determining whether the holders of our Medium-Term Notes, Series B, of which the Securities are a part, are entitled to take any action under the indenture, we will treat the outstanding principal amount of the Medium-Term Notes, Series B, as constituting the outstanding principal amount of the Securities. Although the terms of the Securities may differ from those of the other Medium-Term Notes, Series B, holders of specified percentages in principal amount of all Medium-Term Notes, Series B, together in some cases with other series of our debt securities, will be able to take action affecting all the Medium-Term Notes, Series B, including the Securities. This action may involve changing some of the terms that apply to the Medium-Term Notes, Series B, accelerating the maturity of the Medium-Term Notes, Series B after a default or waiving some of our obligations under the indenture. We discuss these matters in the attached prospectus under "Description of Debt Securities We May Offer — Default, Remedies and Waiver of Default" and "Description of Debt Securities We May Offer — Modification and Waiver of Covenants."

## **Default Amount**

The default amount for the Securities on any day will be an amount, in U.S. dollars as determined by the Security Calculation Agent, in its sole discretion, for the aggregate Stated Principal Amount of the Securities, equal to the cost of having a qualified financial institution, of the kind and selected as described below, expressly assume all our payment and other obligations with respect to the Securities as of that day and as if no default or acceleration had occurred, or to undertake other obligations providing substantially equivalent economic value to you with respect to the Securities. That cost will equal:

- > the lowest amount that a qualified financial institution would charge to effect this assumption or undertaking, plus
- the reasonable expenses, including reasonable attorneys' fees, incurred by the holders of the Securities in preparing any documentation necessary for this assumption or undertaking.

During the default quotation period for the Securities, which we describe below, the holders of the Securities and/or we may request a qualified financial institution to provide a quotation of the amount it would charge to effect this assumption or undertaking. If either party obtains a quotation, it must notify the other party in writing of the quotation. The amount referred to in the first bullet point above will equal the lowest — or, if there is only one, the only — quotation obtained, and as to which notice is so given, during the default quotation period. With respect to any quotation, however, the party not obtaining the quotation may object, on reasonable and significant grounds, to the assumption or undertaking by the qualified financial institution providing the quotation and notify the other party in writing of those grounds within two Business Days after the last day of the default quotation period, in which case that quotation will be disregarded in determining the default amount.

## **Default Quotation Period**

The default quotation period is the period beginning on the day the default amount first becomes due and ending on the third Business Day after that day, unless:

- > no quotation of the kind referred to above is obtained, or
- every quotation of that kind obtained is objected to within five (5) Business Days after the due date as described above.

If either of these two events occurs, the default quotation period will continue until the third Business Day after the first Business Day on which prompt notice of a quotation is given as described above. If that quotation is objected to as described above within five (5) Business Days after that first Business Day, however, the default quotation period will continue as described in the prior sentence and this sentence.

In any event, if the default quotation period and the subsequent two Business Day objection period have not ended before the Calculation Date, then the default amount will equal the Stated Principal Amount of the Securities.

#### **Qualified Financial Institutions**

For the purpose of determining the default amount at any time, a qualified financial institution must be a financial institution organized under the laws of any jurisdiction in the United States of America, Europe or Japan, which at that time has outstanding debt obligations with a stated maturity of one year or less from the date of issue and rated either:

- A-1 or higher by Standard & Poor's Financial Services LLC, a subsidiary of The McGraw-Hill Companies, Inc. ,or any successor, or any other comparable rating then used by that rating agency, or
- P-1 or higher by Moody's Investors Service or any successor, or any other comparable rating then used by that rating agency.

# Discontinuance of, Adjustments to or Benchmark Event Affecting the Index or Termination of Our License Agreement with the Index Sponsor; Alteration of Method of Calculation

If (i) the Index Sponsor or Index Calculation Agent discontinue publication of, or otherwise fails to publish, the Index, (ii) a Benchmark Event (as described below) under the EU Benchmarks Regulation (as described under "Risk Factors – The Securities are linked to the Index and are subject to certain regulatory risks") occurs with respect to the Index or the Index Sponsor, (iii) our license agreement with the Index Sponsor terminates or (iv) the Index Sponsor or Index Calculation Agent does not make the Index Constituent Securities and/or their unit weighting available to the Security Calculation Agent, and, in each case, any other person or entity publishes an EU Benchmarks Regulation-compliant index licensed to UBS that the Security Calculation Agent both approves of and determines is comparable to the Index and for which the Index Constituent Securities and/or their unit weighting are available to the Security Calculation Agent (such index being referred to herein as a "successor index"), then the Security Calculation Agent will determine the Index Closing Level on the applicable dates of determination, Coupon Amounts and the amount payable, if any, at maturity, call or upon early redemption and all other related payments terms by reference to such successor index.

Upon any selection by the Security Calculation Agent of a successor index, the Security Calculation Agent will cause written notice thereof to be furnished to the trustee, to us and to the holders of the Securities.

If the Security Calculation Agent determines that the conditions described above are met on the Calculation Date or any Index Business Day during a Measurement Period, or on the Redemption Valuation Date, as applicable, or on any other relevant date on which the Index Closing Level is to be determined and the Security Calculation Agent determines that no successor index is available at such time, or the Security Calculation Agent has previously selected a successor index and publication of such successor index is discontinued prior to, and such discontinuation is continuing on the Calculation Date or any Index Business Day during a Measurement Period, or on the Redemption Valuation Date or any other relevant date on which the Index Closing Level is to be determined, then the Security Calculation Agent will determine the Index Closing Level using the Index Closing Level on the last Index Business Day immediately prior to such discontinuation or unavailability, as adjusted for certain corporate actions. In such event, the Security Calculation Agent will cause notice thereof to be furnished to the trustee, to us and to the holders of the Securities.

Notwithstanding these alternative arrangements, discontinuation of the publication of the Index or successor index, as applicable, may adversely affect the value of the Securities.

For purposes of the above, a "**Benchmark Event**" will occur if the applicable registration for the Index or Index Sponsor is not effective or has been suspended or withdrawn by the relevant authority with the effect that the use of the Index or the Index Sponsor is not permitted under the EU Benchmarks Regulation.

In addition, if an Index Replacement Event (as defined below) occurs at any time and the Index Sponsor or anyone else publishes an index that the Security Calculation Agent determines is comparable to the Index (the "Substitute Index"), then the Security Calculation Agent may elect, in its sole discretion, to permanently replace the original Index with the Substitute Index for all purposes under the Securities, and all provisions described in this prospectus supplement as applying to the Index will thereafter apply to the Substitute Index instead. In such event, the Security Calculation Agent will make such adjustments, if any, to any level of the Index or Substitute Index that is used for purposes of the Securities as it determines are appropriate in the circumstances. If the Security Calculation Agent elects to replace the original Index with a Substitute Index, then the Security Calculation Agent will determine all amounts hereunder, including the Coupon Amounts, Current Principal Amount, Current Indicative Value (or "intraday indicative value"), Closing Indicative Value, Index Factor, Residual Factor, Daily Tracking Fee, Accrued Dividend, Daily Dividend, Index Closing Levels on the applicable dates of determination, all other related payment terms and the amount payable at maturity, call, upon early redemption by reference to such Substitute Index. If the Security Calculation Agent so elects to replace the original Index with a Substitute Index, the Security Calculation Agent will cause written notice thereof to be furnished to the trustee, to us and to the holders of the Securities of the Securities.

## An "Index Replacement Event" means:

- a) an amendment to or change (including any officially announced proposed change) in the laws, regulations or rules of the United States (or any political subdivision thereof), or any jurisdiction in which a Primary Exchange (as defined herein) is located that (i) makes it illegal for UBS AG or its affiliates to hold, acquire or dispose of the Index Constituent Securities included in the Index or options, futures, swaps or other derivatives on the Index or on the Index Constituent Securities included in the Index (including but not limited to exchange-imposed position limits), (ii) materially increases the cost to us, our affiliates, third parties with whom we transact or similarly situated third parties in performing our or their obligations in connection with the Securities, (iii) has a material adverse effect on any of these parties' ability to perform their obligations in connection with the Securities or (iv) materially affects our ability to issue or transact in exchange traded notes similar to the Securities, each as determined by the Security Calculation Agent;
- b) any official administrative decision, judicial decision, administrative action, regulatory interpretation or other official pronouncement interpreting or applying those laws, regulations or rules that is announced on or after July 15, 2020 that (i) makes it illegal for UBS AG or its affiliates to hold, acquire or dispose of the Index Constituent Securities included in the Index or options, futures, swaps or other derivatives on the Index or on the Index Constituent Securities (including but not limited to exchange-imposed position limits), (ii) materially increases the cost to us, our affiliates, third parties with whom we transact or similarly situated third parties in performing our or their obligations in connection with the Securities, (iii) has a material adverse effect on the ability of us, our affiliates, third parties with whom we transact or a similarly situated third party to perform our or their obligations in connection with the Securities or (iv) materially affects our ability to issue or transact in exchange traded notes similar to the Securities, each as determined by the Security Calculation Agent;
- c) any event that occurs on or after July 15, 2020 that makes it a violation of any law, regulation or rule of the United States (or any political subdivision thereof), or any jurisdiction in which a Primary Exchange (as defined herein) is located, or of any official administrative decision, judicial decision, administrative action, regulatory interpretation or other official pronouncement interpreting or applying those laws, regulations or rules, (i) for UBS AG or its affiliates to hold, acquire or dispose of the Index Constituent Securities or options, futures, swaps or other derivatives on the Index or on the Index Constituent Securities (including but not limited to exchange-imposed position limits), (ii) for us, our affiliates, third parties with whom we transact or similarly situated third parties to perform our or their obligations in connection with the Securities or (iii) for us to issue or transact in exchange traded notes similar to the Securities, each as determined by the Security Calculation Agent;
- d) any event, as determined by the Security Calculation Agent, as a result of which we or any of our affiliates or a similarly situated party would, after using commercially reasonable efforts, be unable to, or would incur a materially increased amount of tax, duty, expense or fee (other than brokerage commissions) to, acquire, establish, re-establish, substitute, maintain, unwind or dispose of any transaction or asset it deems necessary to hedge the risk of the Securities, or realize, recover or remit the proceeds of any such transaction or asset; or
- e) as determined by the Security Calculation Agent, the primary exchange or market for trading for the Securities, if any, announces that pursuant to the rules of such exchange or market, as applicable, the Securities cease (or will cease) to be listed, traded or publicly quoted on such exchange or market, as applicable, for any reason and are not immediately re-listed, re-traded or re-quoted on an exchange or quotation system located in the same country as such exchange or market, as applicable.

Notwithstanding these alternative arrangements, discontinuation of the publication of the Index or successor index, as applicable, may adversely affect the value of the Securities.

If at any time the method of calculating the Index, a successor index or a substitute index, or the value thereof, is changed in a material respect, or if the Index or a successor index is in any other way modified so that the Index Closing Level of the Index or such successor index does not, in the opinion of the Security Calculation Agent, fairly represent the Index Closing Level of the Index or such successor index had such changes or modifications not been made, then the Security Calculation Agent will make such calculations and adjustments as, in the good faith judgment of the Security Calculation Agent, may be necessary in order to arrive at an Index Closing Level of an index comparable to the Index or such successor index, as the case may be, as if such changes or modifications had not been made, and the Security Calculation Agent will calculate the Index Closing Level for the Index or such successor index with reference to the Index or such successor index, as adjusted. The Security Calculation Agent will accordingly calculate the Index Closing Level, the Coupon Amount, the Accrued Dividend, the Daily Dividend, if any, the Daily Tracking Fee, the Redemption Fee Amount, if any, the Cash Settlement Amount, if any, that we will pay you at maturity, the Redemption Amount, if any, upon early redemption, if applicable, the Call Settlement Amount, if any, that we will pay you in the event UBS calls the Securities, and all related payment terms based on the Index Closing Level calculated by the Security Calculation Agent, as adjusted. Accordingly, if the method of calculating the Index or a successor index is modified so that the level of the Index or such successor index is a fraction of what it would have been if there had been no such modification (e.g., due to a split in the Index), which, in turn, causes the Index Closing Level of the Index or such successor index to be a fraction of what it would have been if there had been no such modification, then the Security Calculation Agent will make such calculations and adjustments in order to arrive at an Index Closing Level for the Index or such successor index as if it had not been modified (e.g., as if such split had not occurred).

In the event that the Security Calculation Agent elects to replace the Index with a successor index or a Substitute Index, UBS may, in its sole discretion, amend the title of the Securities in order to remove reference the former Index and to make such other changes to the title of the Securities as it considers necessary or desirable to reflect the name and/or characteristics of the relevant successor index or Substitute Index, as applicable.

All determinations and adjustments to be made by the Security Calculation Agent may be made in the Security Calculation Agent's sole discretion. See "Risk Factors — There are potential conflicts of interest between you and the Security Calculation Agent" in this prospectus supplement for a discussion of certain conflicts of interest which may arise with respect to the Security Calculation Agent.

## Manner of Payment and Delivery

Any payment on or delivery of the Securities at maturity or call, or upon early redemption will be made to accounts designated by you and approved by us, or at the corporate trust office of the trustee in New York City, but only when the Securities are surrendered to the trustee at that office. We also may make any payment or delivery in accordance with the applicable procedures of the depositary.

#### **Business Day**

When we refer to a Business Day with respect to the Securities, we mean a day that is a Business Day of the kind described in "Description of Debt Securities We May Offer — Payment Mechanics for Debt Securities" in the accompanying prospectus.

## **Modified Business Day**

As described in "Description of Debt Securities We May Offer — Payment Mechanics for Debt Securities" in the attached prospectus, any payment on the Securities that would otherwise be due on a day that is not a Business Day may instead be paid on the next day that is a Business Day, with the same effect as if paid on the original due date, except as described under "— Cash Settlement Amount at Maturity," "— UBS's Call Right" and "— Early Redemption at the Option of the Holders" above.

#### Reissuances or Reopened Issues

We may, at our sole discretion, "reopen" or reissue the Securities. We issued the Securities initially in an amount having the aggregate Stated Principal Amount specified on the cover of this prospectus supplement. We may issue additional Securities in amounts that exceed the amount on the cover any time, without your consent and without notifying you. The Securities do not limit our ability to incur other indebtedness or to issue other securities. Also, we are not subject to financial or similar restrictions by the terms of the Securities. For more information, please refer to "Description of Debt Securities We May Offer — Amounts That We May Issue" in the accompanying prospectus.

These further issuances, if any, will be consolidated to form a single class with the originally issued Securities and will have the same CUSIP number and will trade interchangeably with the Securities immediately upon settlement. Any additional issuances will increase the aggregate Stated Principal Amount of the outstanding Securities of the class. The price of any additional offering will be determined at the time of pricing of that offering.

## **Booking Branch**

The Securities will be booked through UBS AG, London Branch.

## **Clearance and Settlement**

The DTC participants that hold the Securities through DTC on behalf of investors will follow the settlement practices applicable to equity securities in DTC's settlement system with respect to the primary distribution of the Securities and secondary market trading between DTC participants.

## 15. ETRACS Alerian Midstream Energy Total Return Index ETN due October 20, 2050

## **Specific Terms of the Securities**

In this section, references to "holders" mean those who own the Securities registered in their own names, on the books that we or the trustee maintains for this purpose, and not those who own beneficial interests in the Securities registered in street name or in the Securities issued in book-entry form through The Depository Trust Company ("DTC") or another depositary. Owners of beneficial interests in the Securities should read the section entitled "Legal Ownership and Book-Entry Issuance" under "Medium-Term Notes, Series B" above.

The Securities are part of a series of debt securities entitled "Medium-Term Notes, Series B" that we may issue, from time to time, under the indenture more particularly described in the accompanying prospectus. This prospectus supplement summarizes specific financial and other terms that apply to the Securities. Terms that apply generally to all Medium-Term Notes, Series B are described in "Description of Debt Securities We May Offer" in the accompanying prospectus. The terms described here (i.e., in this prospectus supplement) supplement those described in the accompanying prospectus and, if the terms described here are inconsistent with those described there, the terms described here are controlling.

The Securities are part of a single series of senior debt securities issued under our indenture, dated as of June 12, 2015 between us and U.S. Bank Trust National Association, as trustee.

We describe the terms of the Securities in more detail below.

The Stated Principal Amount of each Security is \$25.00.

The Securities do not guarantee any return of principal at, or prior to, maturity or call, or upon early redemption. Instead, at maturity, you will receive a cash payment the amount of which will vary depending on the performance and path of the Index calculated in accordance with the formula set forth below and will be reduced by the Daily Tracking Fee as of the last Index Business Day in the applicable Measurement Period or Redemption Valuation Date.

If you exercise your right to have us redeem your Securities, subject to compliance with the redemption procedures, for each Security you will receive a cash payment on the Redemption Date equal to the Redemption Amount as described below under "— Early Redemption at the Option of the Holders." If the amount so calculated is equal to or less than zero, the Redemption Amount will be zero and you will not receive a cash payment.

If we elect to exercise our call right to redeem all of the Securities, subject to compliance with the procedures set forth below, for each Security you will receive a cash payment on the Call Settlement Date equal to the Call Settlement Amount, as described below under "— UBS's Call Right." If the amount so calculated is equal to or less than zero, the Call Settlement Amount will be zero and you will not receive a cash payment.

The Securities will not pay any cash coupon during their term.

## **Cash Settlement Amount at Maturity**

The "Maturity Date" is October 20, 2050, which will be the third Business Day following the last Index Business Day in the Final Measurement Period, subject to adjustment as described below under "— Market Disruption Event."

For each Security, unless earlier called or redeemed, you will receive at maturity a cash payment equal to the Closing Indicative Value on the last day of the Final Measurement Period. We refer to this payment as the "Cash Settlement Amount". If the amount so calculated is equal to or less than zero, the payment at maturity will be zero.

The following graphic illustrates the formula to determine the Cash Settlement Amount, which has been simplified for ease of presentation:

Cash Settlement Amount = Closing Indicative Value, on last Index Business Day in Final Measurement Period

You may lose all or a substantial portion of your investment at maturity. The Securities are fully exposed to any decline in the level of the Index. The negative effect of the Daily Tracking Fee will reduce your final payment. If the level of the Index (as measured by the Index Closing Level at the end of the Final Measurement Period, as compared to the initial Index Closing Level or the Index level at the time you purchase the Securities, as applicable) does not increase by an amount sufficient to offset the negative effect of the Daily Tracking Fee, or if the final Index level is less than the initial Index Closing Level (or the Index level at the time you purchase the Securities, as applicable), you may lose all or a substantial portion of your investment at maturity. The Daily Tracking Fee also takes into account the performance of the Index, as measured by the Closing Indicative Value.

The Securities may be called by UBS prior to the Maturity Date pursuant to UBS's Call Right. If the Securities are called by UBS, the Call Settlement Amount may be zero and you may lose all or a substantial portion of your investment. See "—UBS's Call Right".

The "Stated Principal Amount" of each Security is \$25.00. The Securities may be issued and sold over time at then-current market prices which may be significantly higher or lower than the Stated Principal Amount. If the Securities undergo a split or reverse split, the Stated Principal Amount will be adjusted accordingly.

The "Closing Indicative Value" represents the dollar value per Security that an investor would receive on any day if it redeemed the Security on such day (excluding any Redemption Fee Amount). The Closing Indicative Value per Security will be calculated as follows:

- a) On the Initial Trade Date, \$25.00 per Security
- b) On any subsequent calendar day, prior to but excluding the first day of an applicable Measurement Period, an amount per Security equal to:
  - (Closing Indicative Value on the previous calendar day \* Index Factor)—Daily Tracking Fee
- c) From and including the first day of an applicable Measurement Period, an amount per Security equal to:

(Closing Indicative Value on the calendar day immediately preceding the first day of the Measurement Period  $\times$  Index Factor  $\times$  Residual Factor) + Measurement Period Cash Amount

The minimum value of the Closing Indicative Value on any calendar day will be zero.

The actual trading price of the Securities in the secondary market may vary significantly from their Closing Indicative Value.

If the Securities undergo a split or reverse split, the Closing Indicative Value will be adjusted accordingly.

The "Index Factor" on any Index Business Day prior to but excluding the first day of an applicable Measurement Period, will equal:

(i) the Index Closing Level, on such Index Business Day, *divided by*, (ii) the Index Closing Level, on the immediately preceding Index Business Day.

From and including the first day of an applicable Measurement Period, the Index Factor will equal:

(i) the Index Closing Level, on such calendar day, *divided by*, (ii) the Index Closing Level on the calendar day immediately preceding the first day of such Measurement Period.

On any calendar day that is not an Index Business Day, the Index Closing Level will be equal to the Index Closing Level on the immediately preceding Index Business Day. The Index Factor will therefore equal one (1) on any calendar day that is not an Index Business Day and is prior to the first Index Business Day of a five-day Measurement Period.

The "Residual Factor" will be calculated as follows:

- a) 1.0 on any calendar day, prior to but excluding the first day of an applicable Measurement Period
- b) From and including the first day of an applicable five-day Measurement Period, (a) the number of Index Business Days from, but excluding, the date of determination to, and including, the last Index Business Day in such five-day Measurement Period, *divided by* (b) five.

The Residual Factor is intended to approximate the percentage of the Closing Indicative Value that is tracking the Index on any given day. The Residual Factor is relevant only during an applicable Measurement Period but otherwise is not a component of the Closing Indicative Value or Current Indicative Value formulas.

For example, on the first Index Business Day in an applicable five-day Measurement Period, the Residual Factor will equal (4/5), on the second Index Business Day in an applicable five-day Measurement Period, the Residual Factor will equal (3/5), on the third Index Business Day in an applicable five-day Measurement Period, the Residual Factor will equal (2/5), on the fourth Index Business Day in an applicable five-day Measurement Period, the Residual Factor will equal (1/5) and on the last Index Business Day in an applicable five-day Measurement Period, the Residual Factor will equal zero.

On any calendar day from and including the last Index Business Day of an applicable Measurement Period, the Residual Factor will be equal to zero.

The "Index Closing Level" on any date of determination is the closing level of the Index as reported on the NYSE and Bloomberg; provided, however, that if the closing level of the Index as reported on the NYSE (or any successor) differs from the closing level of the Index as reported on Bloomberg (or any successor), then the Index Closing Level will be the closing level of the Index as calculated by the Index Calculation Agent. 358.2653 is the initial Index Closing Level measured on October 20, 2020 (the Initial Trade Date), as determined by the Security Calculation Agent.

On any calendar day that is not an Index Business Day, the Index Closing Level will be equal to the Index Closing Level from the last Index Business Day prior to such calendar day.

"Measurement Period" means the Final Measurement Period or Call Measurement Period, as applicable.

The "Current Indicative Value" or "intraday indicative value", as determined by the Security Calculation Agent, means the Closing Indicative Value per Security calculated on an intraday basis on any Index Business Day.

For the purposes of calculating the Current Indicative Value, the Index Factor will be determined using the Intraday Index Value. Additionally, from and including the first day of an applicable Measurement Period, the Current Indicative Value will be calculated using (i) the Measurement Period Cash Amount from the immediately preceding calendar day, and (ii) the Residual Factor from the immediately preceding calendar day.

The minimum value of the Current Indicative Value (or intraday indicative value) on any calendar day will be zero.

The actual trading price of the Securities in the secondary market may vary significantly from their Current Indicative Value (or intraday indicative value).

If the Securities undergo a split or reverse split, the Current Indicative Value (or intraday indicative value) will be adjusted accordingly.

The "Daily Tracking Fee" means, as of any date of determination, an amount per Security equal to 0.75% per annum, calculated as follows:

- a) On the Initial Trade Date, \$0.00 per Security;
- b) On any subsequent calendar day, prior to but excluding the first day of an applicable Measurement Period, an amount per Security equal to:
  - (0.75% / 365) × Closing Indicative Value on the immediately preceding calendar day × Index Factor
- c) From and including the first day of an applicable Measurement Period, an amount per Security equal to:

(0.75% / 365) × Closing Indicative Value on the calendar day immediately preceding the first day of the Measurement Period × Index Factor × Residual Factor on the immediately preceding calendar day

The minimum value of the Daily Tracking Fee on any calendar day will be zero.

If the Securities undergo a split or reverse split, the Daily Tracking Fee will be adjusted accordingly. The "Measurement Period Cash Amount" is an amount per Security equal to:

- a) \$0.00, on any calendar day prior to but excluding the first day of an applicable Measurement Period
- b) On the first day of an applicable one-day Measurement Period:
  - a. At the close of trading on such Index Business Day, the (Closing Indicative Value, on the immediately preceding calendar day, *times* Index Factor, on such Index Business Day), *minus* Daily Tracking Fee.
- c) From and including the first day of an applicable five-day Measurement Period:
  - a. At the close of trading on each Index Business Day, will equal:
    - i. Measurement Period Cash Amount on the immediately preceding calendar day, plus (b) ( (i)
       Closing Indicative Value, on the calendar day immediately preceding the first day of such
       Measurement Period, times (ii) Index Factor, divided by (iii) five), minus (c) Daily Tracking Fee
    - ii. On any calendar day that is not an Index Business Day, will equal the Measurement Period Cash Amount on the immediately preceding Index Business Day, *minus* Daily Tracking Fee
- d) On any calendar day after the last Index Business Day of an applicable Measurement Period, the Measurement Period Cash Amount on the last Index Business Day of such Measurement Period.

The minimum value of the Measurement Period Cash Amount on any calendar day will be zero.

The Measurement Period Cash Amount represents the portion of the Closing Indicative Value that has been converted to cash on any given day of an applicable Measurement Period and is no longer tracking the Index.

At the close of trading of each Index Business day during a five-day Measurement Period, approximately 20% of the Closing Indicative Value, on the calendar day immediately preceding the first day of the Measurement Period, will be deemed converted to cash. After the close of trading on the final Index Business Day of an applicable five-day Measurement Period, the Measurement Period Cash Amount will represent the averaged value of the Closing Indicative Value that was deemed converted to cash across the five-days of such Measurement Period. In case of a one-day Measurement Period, approximately 100% of the Closing Indicative Value will be deemed converted to cash, at the close of trading of the first day of such Measurement Period.

If the Securities undergo a split or reverse split, the Measurement Period Cash Amount will be adjusted accordingly.

# The "Final Measurement Period" means:

a) if the Market Value of Securities outstanding at the close of trading on the Index Business Day immediately preceding the Calculation Date is less than \$250,000,000, the Calculation Date, subject to adjustments as described under "Specific Terms of the Securities—Market Disruption Event";

b) if the Market Value of Securities outstanding at the close of trading on the Index Business Day immediately preceding the Calculation Date is equal to or greater than \$250,000,000, the five (5) Index Business Days from, and including, the Calculation Date, subject to adjustment as described under "Specific Terms of the Securities—Market Disruption Event."

For the purpose of determining the Final Measurement Period, the "Market Value" of the Securities as of the close of trading on the Index Business Day immediately preceding the Calculation Date, will equal:

(i) the Closing Indicative Value as of such Index Business Day, *times* (ii) the number of Securities outstanding as reported by AMTRSO <Index> on Bloomberg L.P.

The "Index Calculation Agent" means the entity that calculates and publishes the level of the Index, which is currently S&P Dow Jones Indices.

The "Calculation Date" means October 11, 2050 unless such day is not an Index Business Day, in which case the Calculation Date will be the next Index Business Day, subject to adjustments.

The Calculation Date represents the first Index Business Day of the Final Measurement Period.

"Index Business Day" means any day on which the Primary Exchange or market for trading of the Securities is scheduled to be open for trading.

"Business Day" means any day that is not a Saturday, a Sunday or a day on which banking institutions in The City of New York, generally, are authorized or obligated by law, regulation or executive order to close.

"Primary Exchange" means, with respect to each Index Constituent Security or each constituent underlying a successor index, the primary exchange or market of trading such Index Constituent Security or such constituent underlying a successor index.

# **Underlying Index**

The Alerian Midstream Energy Adjusted Net Total Return Index (Bloomberg: "AMNTR Index") is the adjusted net total return version of the Alerian Midstream Energy Index (Bloomberg: "AMNA Index"). The Index is a broad-based composite of North American energy infrastructure companies who earn the majority of their cash flow from midstream activities involving energy commodities, such as gathering & processing, liquefaction, pipeline transportation, rail terminaling, and storage of energy commodities. The Index is calculated by S&P Dow Jones Indices using a capped, float adjusted, capitalization weighted methodology. We refer to the companies included in the Index as the "Index Constituent Securities". The Index is an adjusted net total return index and the Index level reflects the notional reinvestment of the cash distributions from its constituent securities, subject to dividend withholding taxes on distributions made by applicable Canadian Index Constituent Securities. No dividend withholding taxes are applied to distributions made by applicable U.S. Index Constituent Securities.

#### Early Redemption at the Option of the Holders

Subject to your compliance with the procedures described below and the potential postponements and adjustments as described under "— Market Disruption Event," you may submit a request to have us redeem your Securities on any Index Business Day no later than 12:00 noon, New York City time, and a confirmation of redemption by no later than 5:00 p.m., New York City time, on the same Index Business Day, provided that you request that we redeem a minimum of 50,000 Securities. To satisfy the minimum redemption amount, your broker or other financial intermediary may bundle your Securities for redemption with those of other investors to reach this minimum amount of 50,000 Securities. We reserve the right from time-to-time to waive this minimum redemption amount in our sole discretion on a case-by-case basis. You should not assume that you will be entitled to the benefit of any such waiver. For any applicable redemption request, the "Redemption Valuation Date" will be the first Index Business Day following the date that the applicable redemption notice and redemption confirmation are delivered, except that we reserve the right from time to time to accelerate, in our sole discretion on a case-by-case basis, the Redemption Date to the date on which the notice of redemption is received by UBS rather than the following Index Business Day. You should not assume that you will be entitled to any such acceleration.

The Securities will be redeemed and the holders will receive payment for their Securities on the second Index Business Day following the applicable Redemption Valuation Date (the "**Redemption Date**"). The First Redemption Date will be the fourth Index Business Day immediately following the Initial Trade Date and the Final Redemption Date will be the fourth Index Business Day immediately preceding the Maturity Date, subject to adjustments. In addition, if a call notice has been issued, the last Redemption Valuation Date will be the fourth Index Business Day prior to the Call Settlement Date, as applicable.

If a Market Disruption Event is continuing or occurs on the applicable scheduled Redemption Valuation Date with respect to any of the Index Constituent Securities, such Redemption Valuation Date may be postponed as described under "— Market Disruption Event."

If you exercise your right to have us redeem your Securities, subject to your compliance with the procedures described under "— Redemption Procedures," for each applicable Security you will receive a cash payment on the relevant Redemption Date equal to:

Closing Indicative Value as of the Redemption Valuation Date – Redemption Fee Amount.

We refer to this cash payment as the "Redemption Amount."

If the amount calculated above is less than or equal to zero, the payment upon early redemption will be zero.

As of any Redemption Valuation Date, the "Redemption Fee Amount" means an amount per Security equal to:

(0.125% × Closing Indicative Value of the Security as of such Redemption Valuation Date).

We reserve the right from time to time to reduce or waive the Redemption Fee Amount in our sole discretion on a case-by-case basis. You should not assume you will be entitled to the benefit of any such waiver.

The redemption feature is intended to induce arbitrageurs to counteract any trading of the Securities at a discount to their indicative value, though there can be no assurance that arbitrageurs will employ the redemption feature in this manner or that they will be successful in counteracting any divergence in the market price of the Securities and their indicative value.

The following graphic illustrates the formula to determine the Redemption Amount, which has been simplified for ease of presentation:

Redemption Amount = Closing Indicative Value — Redemption Fee Amount

You may lose all or a substantial portion of your investment upon early redemption. The combined negative effect of the Daily Tracking Fee and the Redemption Fee Amount will reduce your Redemption Amount. If the level of the Index does not increase by an amount sufficient to offset the combined negative effect of the Daily Tracking Fee and the Redemption Fee Amount, or if the final Index level is less than the initial Index Closing Level (or the Index level at the time you purchase the Securities, as applicable), you may lose some or all of your investment upon early redemption.

The Securities may be called by UBS prior to the Maturity Date pursuant to UBS's Call Right. See – UBS's Call Right".

We discuss these matters in the accompanying prospectus under "Description of Debt Securities We May Offer — Redemption and Repayment."

## **Redemption Procedures**

To redeem your Securities, you must instruct your broker or other person through whom you hold your Securities to take the following steps through normal clearing system channels:

- deliver a notice of redemption, which we refer to as a "**Redemption Notice**" to UBS via email no later than 12:00 noon (New York City time) on the Index Business Day on which you elect to exercise your redemption right. If we receive your Redemption Notice by the time specified in the preceding sentence, we will respond by sending you a form of confirmation of redemption;
- deliver the signed confirmation of redemption, which we refer to as the "**Redemption Confirmation**," to us via e-mail in the specified form by 5:00 p.m. (New York City time) on the same day. We or our affiliate must acknowledge receipt in order for your confirmation to be effective;
- instruct your DTC custodian to book a delivery vs. payment trade with respect to your Securities on the applicable Redemption Valuation Date at a price equal to the Redemption Amount; and
- cause your DTC custodian to deliver the trade as booked for settlement via DTC at or prior to 12:00 noon (New York City time) on the applicable Redemption Date.

Different brokerage firms may have different deadlines for accepting instructions from their customers. Accordingly, as a beneficial owner of the Securities, you should consult the brokerage firm through which you own your interest for the relevant deadline. If your broker delivers your notice of redemption after 12:00 noon (New York City time), or your confirmation of redemption after 5:00 p.m. (New York City time), on the Business Day prior to the applicable Redemption Valuation Date, your notice will not be effective, you will not be able to redeem your Securities until another date and your broker will need to complete all the required steps if you should wish to redeem your Securities on any subsequent date. In addition, UBS may request a medallion signature guarantee or such assurances of delivery as it may deem necessary in its sole discretion. All instructions given to participants from beneficial owners of Securities relating to the right to redeem their Securities will be irrevocable. If your DTC custodian or your brokerage firm is not a current UBS customer, UBS will be required to on-board such DTC custodian or brokerage firm, in compliance with its internal policies and procedures, before it can accept your Redemption Notice, your Redemption Confirmation or otherwise process your redemption request. This on-boarding process may delay your Redemption Valuation Date and Redemption Date. Furthermore, in certain circumstances, UBS may be unable to on-board your DTC custodian or your brokerage firm.

We reserve the right from time to time to reduce or waive the minimum redemption amount or the Redemption Fee Amount in our sole discretion on a case-by-case basis. In addition, we reserve the right from time to time to accelerate, in our sole discretion on a case-by-case basis, the Redemption Valuation Date to the date on which the notice of redemption is received by UBS rather than the following Index Business Day. You should not assume you will be entitled to any such waiver or election to accelerate the Redemption Valuation Date.

## **UBS's Call Right**

We have the right to redeem all, but not less than all, of the Securities upon not less than eighteen

(18) calendar days' prior notice to the holders of the Securities (which notice may be provided via press release), such redemption to occur on any Business Day that we may specify through and including the Maturity Date. Upon early redemption in the event we exercise this right, you will receive a cash payment equal to the Closing Indicative Value on the last Index Business Day in the Call Measurement Period. We refer to this cash payment as the "Call Settlement Amount."

If the amount so calculated is equal to or less than zero, the payment upon exercise of the UBS Call Right will be zero.

We will inform you of such Call Settlement Amount on the first Business Day following the last Index Business Day in the Call Measurement Period.

The holders will receive payment for their Securities on the third Business Day following the last Index Business Day in the Call Measurement Period (the "Call Settlement Date"). If a Market Disruption Event is continuing or occurs on the scheduled Call Valuation Date with respect to any of the Index Constituent Securities, such Call Valuation Date may be postponed as described under "— Market Disruption Event."

## The "Call Measurement Period" means:

- a) if the Market Value of Securities outstanding at the close of trading on the Index Business Day immediately preceding the date of delivery by UBS of its notice to holders of its exercise of the UBS Call Right is less than \$250,000,000, the Call Valuation Date, subject to adjustments as described under "— Market Disruption Event."; or
- b) if the Market Value of Securities outstanding at the close of trading on the Index Business Day immediately preceding the date of delivery by UBS of its notice to holders of its exercise of the UBS Call Right is equal to or greater than \$250,000,000, the five (5) Index Business Days from and including the Call Valuation Date, subject to adjustments as described under "Specific Terms of the Securities—Market Disruption Event."

For the purpose of determining the Call Measurement Period, the "Market Value" of the Securities as of the close of trading on the Index Business Day immediately preceding the date of delivery by UBS of its notice to holders (which may be provided via press release) of its exercise of the UBS Call Right, will equal:

(i) the Closing Indicative Value as of such Index Business Day, *times* (ii) the number of Securities outstanding as reported by AMTRSO <Index> on Bloomberg L.P.

The "Call Valuation Date" means the date disclosed as such by UBS in its notice to holders (which may be provided via press release) of its exercise of the UBS Call Right.

In any notice to holders exercising the UBS Call Right, we will specify how many days are included in the Call Measurement Period.

The following graphic illustrates the formula to determine the Call Settlement Amount, which has been simplified for ease of presentation:

Call Settlement Amount = Closing Indicative Value, on last Index
Business Day in Call Measurement Period

You may lose all or a substantial portion of your investment upon a call. The negative effect of the Daily Tracking Fee will reduce your final payment. If the level of the Index does not increase by an amount sufficient to offset the negative effect of the Daily Tracking Fee, or if the final Index level is less than the initial Index Closing Level (or the Index level at the time you purchase the Securities, as applicable), you may lose some or all of your investment upon UBS's exercise of its call right.

## **Security Calculation Agent**

UBS Securities LLC will act as the "Security Calculation Agent." The Security Calculation Agent will be solely responsible for all determinations and calculations regarding the value of the Securities, including, among other things, at maturity or upon early redemption or call, or at other times, Current Indicative Value (or "intraday indicative value"), Closing Indicative Value, Market Disruption Events, Business Days, Index Business Days, the Index Factor, the Residual Factor, the Index Closing Level, the Daily Tracking Fee, the Redemption Fee Amount, the Cash Settlement Amount, if any, that we will pay you at maturity, the Redemption Amount, if any, that we will pay you upon redemption, if applicable and the Call Settlement Amount, if any, that we will pay you in the event that UBS calls the Securities, and whether any day is a Business Day or Index Business Day and all such other matters as may be specified herein as matters to be determined by the Security Calculation Agent. The Security Calculation Agent will also be responsible for determining whether the Index has been discontinued and whether there has been a material change in the Index. The Security Calculation Agent will make all such determinations and calculations in its sole discretion, and absent manifest error, all determinations of the Security Calculation Agent will be conclusive for all purposes and binding on us, you and all other persons having an interest in the Security, without liability on the part of the Security Calculation Agent. You will not be entitled to any compensation from us for any loss suffered as a result of any determinations or calculations made by Security Calculation Agent. We may appoint a different Security Calculation Agent from time to time after the date of the prospectus supplement without your consent and without notifying you.

The Security Calculation Agent will provide written notice to the trustee at its New York office, on which notice the trustee may conclusively rely, of the amount to be paid at maturity or call, or upon early redemption, on or prior to 12:00 noon (New York City time) on the Business Day immediately preceding the Maturity Date, any Redemption Date, or any Call Settlement Date, as applicable.

All dollar amounts related to determination of the Daily Tracking Fee, the Redemption Amount and Redemption Fee Amount, if any, per security, the Call Settlement Amount, if any, per security, and the Cash Settlement Amount, if any, per security, will be rounded to the nearest ten-thousandth, with five one hundred-thousandths rounded upward (e.g., .76545 would be rounded up to .7655); and all dollar amounts paid on the Stated Principal Amount of Securities per holder will be rounded to the nearest cent, with one-half cent rounded upward.

## **Market Disruption Event**

To the extent a Market Disruption Event with respect to the Index has occurred or is continuing during a five-day Measurement Period, the Index Closing Level for such day will be determined by the Security Calculation Agent or one of its affiliates on the first succeeding Index Business Day on which a Market Disruption Event does not occur or is not continuing with respect to the Index. The remaining Index Business Days in the Measurement Period will be postponed accordingly, and the remaining Index Business Days in the Measurement Period will resume again following the suspension of the Market Disruption Event. For example, if the five-day Measurement Period for purposes of calculating the Call Settlement Amount, is scheduled for June 2, June 3, June 4, June 5 and June 6, and there is a Market Disruption Event with respect to the Index on June 2, but no other Market Disruption Event during such Call Measurement Period, then June 3 will become the first Index Business Day of the Measurement Period, June 4th the second Index Business Day, June 5th the third Index Business Day, June 6th the fourth Index Business Day and the next Index Business Day after June 6th would be the final day of the Measurement Period. The same approach would be applied if there is a Market Disruption Event during a five-day Final Measurement Period.

To the extent a Market Disruption Event with respect to the Index has occurred or is continuing on the Redemption Valuation Date, Call Valuation Date (in the event that the Call Measurement Period is the Call Valuation Date) or the Calculation Date (in the event that the Final Measurement Period is the Calculation Date), the Index Closing Level for such Redemption Valuation Date, Call Valuation Date or Calculation Date will be determined by the Security Calculation Agent or one of its affiliates on the first succeeding Index Business Day on which a Market Disruption Event does not occur or is not continuing with respect to the Index. For example, if the Redemption Valuation Date, for purposes of calculating a Redemption Amount, is based on the Index Closing Level on June 2 and there is a Market Disruption Event with respect to the Index on June 2, then the Index Closing Level on June 3 will be used to calculate the Redemption Amount, assuming that no such Market Disruption Event has occurred or is continuing on June 3.

In no event, however, will any postponement pursuant to the two immediately preceding paragraphs result in the affected Index Business Day of the Measurement Period or any Redemption Valuation Date, Call Valuation Date (in the event that the Call Measurement Period is the Call Valuation Date) or Calculation Date (in the event that the Final Measurement Period is the Calculation Date) occurring more than five Index Business Days following the day originally scheduled to be such Index Business Day of the Measurement Period or such Redemption Valuation Date, Call Valuation Date or Calculation Date. If a Market Disruption Event has occurred or is continuing with respect to the Index on the fifth Index Business Day following the date originally scheduled to be such Index Business Day of the Measurement Period or any Redemption Valuation Date, Call Valuation Date or Calculation Date, the Security Calculation Agent or one of its affiliates will determine the Index Closing Level based on its good faith estimate of the Index Closing Level that would have prevailed on such fifth Index Business Day but for such Market Disruption Event.

Any of the following will be a "Market Disruption Event" with respect to the Index, in each case as determined by the Security Calculation Agent in its sole discretion:

- a) suspension, absence or material limitation of trading in a material number of Index Constituent Securities, whether by reason of movements in price exceeding limits permitted by the Primary Exchange or otherwise;
- b) suspension, absence or material limitation of trading in option or futures contracts relating to the Index or to a material number of Index Constituent Securities in the primary market or markets for those contracts;
- c) the Index is not published; or
- d) in any other event, if the Security Calculation Agent determines in its sole discretion that the event materially interferes with our ability or the ability of any of our affiliates to unwind all or a material portion of a hedge with respect to the Securities that we or our affiliates have effected or may effect as described in the section entitled "Use of Proceeds and Hedging".

The following events will not be Market Disruption Events with respect to the Index:

- a) a limitation on the hours or numbers of days of trading, but only if the limitation results from an announced change in the regular business hours of the relevant market; or
- b) a decision to permanently discontinue trading in the option or futures contracts relating to the Index or any Index Constituent Securities.

For this purpose, an "absence of trading" in the primary securities market on which option or futures contracts related to the Index or any Index Constituent Securities are traded will not include any time when that market is itself closed for trading under ordinary circumstances.

## **Redemption Price Upon Optional Tax Redemption**

We have the right to redeem the Securities in the circumstances described under "Description of Debt Securities We May Offer — Optional Tax Redemption" in the accompanying prospectus. If we exercise this right, the redemption price of the Securities will be determined by the Security Calculation Agent in a manner reasonably calculated to preserve your and our relative economic positions.

#### **Default Amount on Acceleration**

If an event of default occurs and the maturity of the Securities is accelerated, we will pay the default amount in respect of the principal of the Securities at maturity. We describe the default amount below under "— Default Amount."

For the purpose of determining whether the holders of our Medium-Term Notes, Series B, of which the Securities are a part, are entitled to take any action under the indenture, we will treat the outstanding principal amount of the Medium-Term Notes, Series B, as constituting the outstanding principal amount of the Securities. Although the terms of the Securities may differ from those of the other Medium-Term Notes, Series B, holders of specified percentages in principal amount of all Medium-Term Notes, Series B, together in some cases with other series of our debt securities, will be able to take action affecting all the Medium-Term Notes, Series B, including the Securities. This action may involve changing some of the terms that apply to the Medium-Term Notes, Series B, accelerating the maturity of the Medium-Term Notes, Series B after a default or waiving some of our obligations under the indenture. We discuss these matters in the attached prospectus under "Description of Debt Securities We May Offer — Default, Remedies and Waiver of Default" and "Description of Debt Securities We May Offer — Modification and Waiver of Covenants."

#### **Default Amount**

The default amount for the Securities on any day will be an amount, in U.S. dollars as determined by the Security Calculation Agent, in its sole discretion, for the aggregate Stated Principal Amount of the Securities, equal to the cost of having a qualified financial institution, of the kind and selected as described below, expressly assume all our payment and other obligations with respect to the Securities as of that day and as if no default or acceleration had occurred, or to undertake other obligations providing substantially equivalent economic value to you with respect to the Securities. That cost will equal:

- the lowest amount that a qualified financial institution would charge to effect this assumption or undertaking, plus
- the reasonable expenses, including reasonable attorneys' fees, incurred by the holders of the Securities in preparing any documentation necessary for this assumption or undertaking.

During the default quotation period for the Securities, which we describe below, the holders of the Securities and/or we may request a qualified financial institution to provide a quotation of the amount it would charge to effect this assumption or undertaking. If either party obtains a quotation, it must notify the other party in writing of the quotation. The amount referred to in the first bullet point above will equal the lowest — or, if there is only one, the only — quotation obtained, and as to which notice is so given, during the default quotation period. With respect to any quotation, however, the party not obtaining the quotation may object, on reasonable and significant grounds, to the assumption or undertaking by the qualified financial institution providing the quotation and notify the other party in writing of those grounds within two Business Days after the last day of the default quotation period, in which case that quotation will be disregarded in determining the default amount.

## **Default Quotation Period**

The default quotation period is the period beginning on the day the default amount first becomes due and ending on the third Business Day after that day, unless:

- > no quotation of the kind referred to above is obtained, or
- > every quotation of that kind obtained is objected to within five (5) Business Days after the due date as described above.

If either of these two events occurs, the default quotation period will continue until the third Business Day after the first Business Day on which prompt notice of a quotation is given as described above. If that quotation is objected to as described above within five (5) Business Days after that first Business Day, however, the default quotation period will continue as described in the prior sentence and this sentence.

In any event, if the default quotation period and the subsequent two Business Day objection period have not ended before the Calculation Date, then the default amount will equal the Stated Principal Amount of the Securities.

# **Qualified Financial Institutions**

For the purpose of determining the default amount at any time, a qualified financial institution must be a financial institution organized under the laws of any jurisdiction in the United States of America, Europe or Japan, which at that time has outstanding debt obligations with a stated maturity of one year or less from the date of issue and rated either:

A-1 or higher by Standard & Poor's Financial Services LLC, a subsidiary of The McGraw-Hill Companies, Inc., or any successor, or any other comparable rating then used by that rating agency, or

P-1 or higher by Moody's Investors Service or any successor, or any other comparable rating then used by that rating agency.

# Discontinuance of, Adjustments to or Benchmark Event Affecting the Index or Termination of Our License Agreement with the Index Sponsor; Alteration of Method of Calculation

If (i) the Index Sponsor or Index Calculation Agent discontinue publication of, or otherwise fails to publish, the Index, (ii) a Benchmark Event (as described below) under the EU Benchmarks Regulation (as described under "Risk Factors – The Securities are linked to the Index and are subject to certain regulatory risks") occurs with respect to the Index or the Index Sponsor, (iii) our license agreement with the Index Sponsor terminates or (iv) the Index Sponsor or Index Calculation Agent does not make the Index Constituent Securities and/or their unit weighting available to the Security Calculation Agent, and, in each case, any other person or entity publishes an EU Benchmarks Regulation-compliant index licensed to UBS that the Security Calculation Agent determines is comparable to the Index and for which the Index Constituent Securities and/or their unit weighting are available to the Security Calculation Agent (such index being referred to herein as a "successor index"), and the Security Calculation Agent approves such index as a successor index, then the Security Calculation Agent will determine the Index Closing Level on the applicable dates of determination, and the amount payable at maturity, call or upon early redemption and all other related payments terms by reference to such successor index.

Upon any selection by the Security Calculation Agent of a successor index, the Security Calculation Agent will cause written notice thereof to be furnished to the trustee, to us and to the holders of the Securities.

If the Index Sponsor or Index Calculation Agent discontinue publication of the Index, our license agreement with the Index Sponsor terminates or the Index Sponsor or Index Calculation Agent do not make the Index Constituent Securities and/or their unit weighting available to the Security Calculation Agent, prior to, and such discontinuation, termination or unavailability is continuing on the Calculation Date or any Index Business Day during a Measurement Period, or on the Redemption Valuation Date, as applicable, or on any other relevant date on which the Index Closing Level is to be determined and the Security Calculation Agent determines that no successor index is available at such time, or the Security Calculation Agent has previously selected a successor index and publication of such successor index is discontinued prior to, and such discontinuation is continuing on the Calculation Date or any Index Business Day during a Measurement Period, or on the Redemption Valuation Date or any other relevant date on which the Index Closing Level is to be determined, then the Security Calculation Agent will determine the Index Closing Level using the Index Closing Level on the last Index Business Day immediately prior to such discontinuation or unavailability, as adjusted for certain corporate actions. In such event, the Security Calculation Agent will cause notice thereof to be furnished to the trustee, to us and to the holders of the Securities.

Notwithstanding these alternative arrangements, discontinuation of the publication of the Index or successor index, as applicable, may adversely affect the value of the Securities.

For purposes of the above, a "**Benchmark Event**" will occur if the applicable registration for the Index or Index Sponsor is not effective or has been suspended or withdrawn by the relevant authority with the effect that the use of the Index or the Index Sponsor is not permitted under the EU Benchmarks Regulation.

In addition, if an Index Replacement Event (as defined below) occurs at any time and the Index Sponsor or anyone else publishes an index that the Security Calculation Agent determines is comparable to the Index (the "Substitute Index"), then the Security Calculation Agent may elect, in its sole discretion, to permanently replace the original Index with the Substitute Index for all purposes under the Securities, and all provisions described in the prospectus supplement as applying to the Index will thereafter apply to the Substitute Index instead. In such event, the Security Calculation Agent will make such adjustments, if any, to any level of the Index or Substitute Index that is used for purposes of the Securities as it determines are appropriate in the circumstances. If the Security Calculation Agent elects to replace the original Index with a Substitute Index, then the Security Calculation Agent will determine all amounts hereunder, including the Current Indicative Value (or "intraday indicative value"), Closing Indicative Value, Index Factor, Residual Factor, Daily Tracking Fee, Index Closing Levels on the applicable dates of determination, all other related payment terms and the amount payable at maturity, call, upon early redemption by reference to such Substitute Index. If the Security Calculation Agent so elects to replace the original Index with a Substitute Index, the Security Calculation Agent will cause written notice thereof to be furnished to the trustee, to us and to the holders of the Securities of the Securities.

## An "Index Replacement Event" means:

a) an amendment to or change (including any officially announced proposed change) in the laws, regulations or rules of the United States (or any political subdivision thereof), or any jurisdiction in which a Primary Exchange (as defined herein) is located that (i) makes it illegal for UBS AG or its affiliates to hold, acquire or dispose of the Index Constituent Securities included in the Index or options, futures, swaps or other derivatives on the Index or on the Index Constituent Securities included in the Index (including but not limited to exchange- imposed position limits), (ii) materially increases the cost to us, our affiliates, third parties with whom we transact or similarly situated third parties in performing our or their obligations in connection with the Securities, (iii) has a material adverse effect on any of these parties' ability to perform their obligations in connection with the Securities or (iv) materially affects our ability to issue or transact in exchange traded notes similar to the Securities, each as determined by the Security Calculation Agent;

- b) any official administrative decision, judicial decision, administrative action, regulatory interpretation or other official pronouncement interpreting or applying those laws, regulations or rules that is announced on or after October 20, 2020 that (i) makes it illegal for UBS AG or its affiliates to hold, acquire or dispose of the Index Constituent Securities included in the Index or options, futures, swaps or other derivatives on the Index or on the Index Constituent Securities (including but not limited to exchange-imposed position limits), (ii) materially increases the cost to us, our affiliates, third parties with whom we transact or similarly situated third parties in performing our or their obligations in connection with the Securities, (iii) has a material adverse effect on the ability of us, our affiliates, third parties with whom we transact or a similarly situated third party to perform our or their obligations in connection with the Securities or (iv) materially affects our ability to issue or transact in exchange traded notes similar to the Securities, each as determined by the Security Calculation Agent;
- c) any event that occurs on or after October 20, 2020 that makes it a violation of any law, regulation or rule of the United States (or any political subdivision thereof), or any jurisdiction in which a Primary Exchange (as defined herein) is located, or of any official administrative decision, judicial decision, administrative action, regulatory interpretation or other official pronouncement interpreting or applying those laws, regulations or rules, (i) for UBS AG or its affiliates to hold, acquire or dispose of the Index Constituent Securities or options, futures, swaps or other derivatives on the Index or on the Index Constituent Securities (including but not limited to exchange-imposed position limits), (ii) for us, our affiliates, third parties with whom we transact or similarly situated third parties to perform our or their obligations in connection with the Securities or (iii) for us to issue or transact in exchange traded notes similar to the Securities, each as determined by the Security Calculation Agent;
- d) any event, as determined by the Security Calculation Agent, as a result of which we or any of our affiliates or a similarly situated party would, after using commercially reasonable efforts, be unable to, or would incur a materially increased amount of tax, duty, expense or fee (other than brokerage commissions) to, acquire, establish, re-establish, substitute, maintain, unwind or dispose of any transaction or asset it deems necessary to hedge the risk of the Securities, or realize, recover or remit the proceeds of any such transaction or asset; or
- e) as determined by the Security Calculation Agent, the primary exchange or market for trading for the Securities, if any, announces that pursuant to the rules of such exchange or market, as applicable, the Securities cease (or will cease) to be listed, traded or publicly quoted on such exchange or market, as applicable, for any reason and are not immediately re-listed, re-traded or re-quoted on an exchange or quotation system located in the same country as such exchange or market, as applicable.

Notwithstanding these alternative arrangements, discontinuation of the publication of the Index or successor index, as applicable, may adversely affect the value of the Securities.

If at any time the method of calculating the Index, a successor index or a substitute index, or the value thereof, is changed in a material respect, or if the Index or a successor index is in any other way modified so that the Index Closing Level of the Index or such successor index does not, in the opinion of the Security Calculation Agent, fairly represent the Index Closing Level of the Index or such successor index had such changes or modifications not been made, then the Security Calculation Agent will make such calculations and adjustments as, in the good faith judgment of the Security Calculation Agent, may be necessary in order to arrive at an Index Closing Level of an index comparable to the Index or such successor index, as the case may be, as if such changes or modifications had not been made, and the Security Calculation Agent will calculate the Index Closing Level for the Index or such successor index with reference to the Index or such successor index, as adjusted. The Security Calculation Agent will accordingly calculate the Index Closing Level, the Daily Tracking Fee, the Redemption Fee Amount, if any, the Cash Settlement Amount, if any, that we will pay you at maturity, the Redemption Amount, if any, upon early redemption, if applicable, the Call Settlement Amount, if any, that we will pay you in the event UBS calls the Securities, and all related payment terms based on the Index Closing Level calculated by the Security Calculation Agent, as adjusted. Accordingly, if the method of calculating the Index or a successor index is modified so that the level of the Index or such successor index is a fraction of what it would have been if there had been no such modification (e.g., due to a split in the Index), which, in turn, causes the Index Closing Level of the Index or such successor index to be a fraction of what it would have been if there had been no such modification, then the Security Calculation Agent will make such calculations and adjustments in order to arrive at an Index Closing Level for the Index or such successor index as if it had not been modified (e.g., as if such split had not occurred).

In the event that the Security Calculation Agent elects to replace the Index with a successor index or a Substitute Index, UBS may, in its sole discretion, amend the title of the Securities in order to remove reference the former Index and to make such other changes to the title of the Securities as it considers necessary or desirable to reflect the name and/or characteristics of the relevant successor index or Substitute Index, as applicable.

All determinations and adjustments to be made by the Security Calculation Agent may be made in the Security Calculation Agent's sole discretion. See "Risk Factors — There are potential conflicts of interest between you and the Security Calculation Agent" in the prospectus supplement for a discussion of certain conflicts of interest which may arise with respect to the Security Calculation Agent.

## **Manner of Payment and Delivery**

Any payment on or delivery of the Securities at maturity or call, or upon early redemption will be made to accounts designated by you and approved by us, or at the corporate trust office of the trustee in New York City, but only when the Securities are surrendered to the trustee at that office. We also may make any payment or delivery in accordance with the applicable procedures of the depositary.

## **Business Day**

When we refer to a Business Day with respect to the Securities, we mean a day that is a Business Day of the kind described in "Description of Debt Securities We May Offer — Payment Mechanics for Debt Securities" in the accompanying prospectus.

## **Modified Business Day**

As described in "Description of Debt Securities We May Offer — Payment Mechanics for Debt Securities" in the attached prospectus, any payment on the Securities that would otherwise be due on a day that is not a Business Day may instead be paid on the next day that is a Business Day, with the same effect as if paid on the original due date, except as described under "— Cash Settlement Amount at Maturity," "— UBS's Call Right" and "— Early Redemption at the Option of the Holders" above.

## **Reissuances or Reopened Issues**

We may, at our sole discretion, "reopen" or reissue the Securities. We issued the Securities initially in an amount having the aggregate Stated Principal Amount specified on the cover of the prospectus supplement. We may issue additional Securities in amounts that exceed the amount on the cover any time, without your consent and without notifying you. The Securities do not limit our ability to incur other indebtedness or to issue other securities. Also, we are not subject to financial or similar restrictions by the terms of the Securities. For more information, please refer to "Description of Debt Securities We May Offer — Amounts That We May Issue" in the accompanying prospectus.

These further issuances, if any, will be consolidated to form a single class with the originally issued Securities and will have the same CUSIP number and will trade interchangeably with the Securities immediately upon settlement. Any additional issuances will increase the aggregate Stated Principal Amount of the outstanding Securities of the class. The price of any additional offering will be determined at the time of pricing of that offering.

# **Booking Branch**

The Securities will be booked through UBS AG, London Branch.

#### **Clearance and Settlement**

The DTC participants that hold the Securities through DTC on behalf of investors will follow the settlement practices applicable to equity securities in DTC's settlement system with respect to the primary distribution of the Securities and secondary market trading between DTC participants.

## 16. ETRACS 2x Leveraged MSCI USA ESG Focus TR ETN due September 15, 2061

# **Specific Terms of the Securities**

In this section, references to "holders" mean those who own the Securities registered in their own names, on the books that we or the trustee maintains for this purpose, and not those who own beneficial interests in the Securities registered in street name or in the Securities issued in book-entry form through The Depository Trust Company ("DTC") or another depositary. Owners of beneficial interests in the Securities should read the section entitled "Legal Ownership and Book-Entry Issuance" under "Medium-Term Notes, Series B" above.

These Securities are part of a series of debt securities entitled "Medium-Term Notes, Series B" that we may issue, from time to time, under the indenture more particularly described under "Medium-Term Notes, Series B" above. This section summarizes general financial and other terms that apply to the Securities. Terms that apply generally to all Medium-Term Notes, Series B are described in "Description of Debt Securities We May Offer" under "Medium-Term Notes, Series B" above. The terms described here supplement those described in "Medium-Term Notes, Series B" above and, if the terms described here are inconsistent with those described there, the terms described here are controlling.

The Securities are part of a single series of senior debt securities issued under our indenture, dated as of June 12, 2015 between us and U.S. Bank Trust National Association, as trustee.

We describe the terms of the Securities in more detail below.

The Stated Principal Amount of each Security is \$25.00.

The Securities do not guarantee any return of principal at, or prior to, maturity or upon early redemption or call. Instead, at maturity, you will receive a cash payment per Security the amount of which will vary depending on the performance and path of the Index and will be reduced by the Accrued Fees as of the last Index Business Day in the Final Measurement Period as described under "— Cash Settlement Amount at Maturity." If the amount as calculated is equal to or less than zero, the Cash Settlement Amount will be zero and you will not receive a cash payment.

If you exercise your right to have us redeem your Securities, subject to compliance with the redemption procedures, for each Security you will receive a cash payment per Security on the relevant Redemption Date equal to the Redemption Amount as described under "— Early Redemption at the Option of the Holders." If the amount as calculated is equal to or less than zero, the Redemption Amount will be zero and you will not receive a cash payment.

# **Cash Settlement Amount at Maturity**

The "Maturity Date" is September 15, 2061, which will be the third Index Business Day following the last Index Business Day in the Final Measurement Period, subject to adjustment as described below under "— Market Disruption Event."

For each Security, unless earlier called, redeemed or accelerated upon Zero Value Event, you will receive at maturity a cash payment equal to its Closing Indicative Value on the last Index Business Day in the applicable Measurement Period. We refer to this cash payment as the "Cash Settlement Amount." If the amount so calculated is equal to or less than zero, the payment will be zero.

The following graphic illustrates the formula to determine the Cash Settlement Amount, which has been simplified for ease of presentation:

Cash Settlement Amount = Closing Indicative Value, on last Index Business Day in Final Measurement Period

You may lose all or a substantial portion of your investment at maturity. The combined negative effect of the Accrued Fees will reduce your final payment. If the compounded leveraged quarterly return of the Index (or the unleveraged return of the Index, following a Permanent Deleveraging Event) is insufficient to offset the negative effect of the Accrued Fees, you may lose all or a substantial portion of your investment at maturity. The occurrence of Loss Rebalancing Events will result in more frequent than quarterly compounding.

UBS may call the Securities prior to the Maturity Date pursuant to its Call Right. If the Securities are called by UBS, the Call Settlement Amount may be zero and you may lose all or a substantial portion of your investment. See "— UBS Call Right."

The "Stated Principal Amount" of each Security is \$25.00. The Securities may be issued and sold over time at then-current market prices which may be significantly higher or lower than the Stated Principal Amount. If the Securities undergo a split or reverse split, the Stated Principal Amount will be adjusted accordingly.

The Closing Indicative Value represents the dollar value per Security that an investor would receive on any day if it redeemed the Security that day (without giving effect to any Redemption Fee Amount).

The "Closing Indicative Value" per Security, will be calculated as follows:

- (a) an the Initial Trade Date, \$25.00 per Security.
- (b) On any other calendar day, prior to the first day of an applicable Measurement Period, an amount per Security equal to:

(Current Principal Amount on the immediately preceding calendar day × Index Factor) - Accrued Fees

(c) From and including the first day of an applicable Measurement Period, an amount per Security equal to:

(Current Principal Amount on the calendar day immediately preceding the first day of the Measurement Period × Index Factor × Residual Factor) – Accrued Fees + Measurement Period Cash Amount

However, if, on any day during a Measurement Period, the Current Indicative Value or the Closing Indicative Value is *less than or equal to* the Measurement Period Cash Amount from the immediately preceding calendar day, the Closing Indicative Value for that day and all subsequent days will be fixed to be equal to the Measurement Period Cash Amount from the immediately preceding calendar day.

(d) The minimum value of the Closing Indicative Value on any calendar day will be zero.

If a Zero Value Event occurs, the Closing Indicative Value will be equal to zero on the day it occurs and on all future calendar days. Upon the occurrence of a Zero Value Event, investors will lose their entire investment. You will not benefit from any future exposure to the Index after the occurrence of a Zero Value Event. See "— Automatic Acceleration Upon Zero Value Event."

The actual trading price of the Securities in the secondary market may vary significantly from their Closing Indicative Value.

If the Securities undergo a split or reverse split, the Closing Indicative Value will be adjusted accordingly.

The "Current Principal Amount" represents the unleveraged notional investment in the Index Constituent Securities per Security at the close of trading on any Reset Valuation Date. The notional financing amount per Security in order to generate the leveraged returns would approximately equal the Current Principal Amount at the close of trading on any Reset Valuation Date. If a Permanent Deleveraging Event occurs, the leverage of your Securities will be permanently reset to 1.0 and the notional financing amount will be equal to zero for the remaining term of the Securities. If a Zero Value Event occurs prior to your Securities permanently resetting to 1.0 at the end of the Second Permanent Deleveraging Valuation Date, then your Securities will be automatically accelerated and mandatorily redeemed and you will lose your entire investment.

The Current Principal Amount per Security, will be calculated as follows:

- (a) From and including the Initial Trade Date to and excluding the first Reset Valuation Date, \$25.00 per Security.
- (b) At the close of trading on each Reset Valuation Date after the Initial Trade Date, the Current Principal Amount of the Securities will be reset as follows:

New Current Principal Amount = (Current Principal Amount on immediately preceding calendar day × Index Factor) – Accrued Fees

The Current Principal Amount will not change until the first Reset Valuation Date.

If a day that would otherwise be a Reset Valuation Date occurs on or after the first day of a Measurement Period, such day will not be a valid Reset Valuation Date.

If the Securities undergo a split or reverse split, the Current Principal Amount will be adjusted accordingly.

At the close of trading on each Reset Valuation Date, the Current Principal Amount is reset.

#### The "Reset Valuation Date" means:

- (a) Any calendar day up to and including the Second Permanent Deleveraging Valuation Date, that is either: (i) the Initial Trade Date, (ii) a Quarterly Reset Valuation Date, (iii) a Loss Rebalancing Valuation Date (iv) the First Permanent Deleveraging Valuation Date, or (v) the Second Permanent Deleveraging Valuation Date; and
- (b) Any calendar day following the Second Permanent Deleveraging Valuation Date.

The valuation dates are defined below.

If a day that would otherwise be a Reset Valuation Date occurs on or after the first day of a Measurement Period, it will not be a valid Reset Valuation Date and the Last Reset Index Closing Level will remain the same.

The "Quarterly Reset Valuation Date" is the second Wednesday of January, April, July and October of each calendar year during the term of the Securities (other than an Excluded Day, as defined below), subject to adjustment as described under "—Market Disruption Event."

As used above, an "Excluded Day" means (i) the Index Business Day immediately preceding the first day of an applicable Measurement Period, and any calendar day thereafter, and (ii) any calendar day after the Second Permanent Deleveraging Valuation Date.

The "Index Factor" is: 1 + (Leverage Factor × Index Performance Ratio).

The Index Factor represents the leveraged percentage change in the Index level since the Last Reset Index Closing Level. The Index Factor times the applicable Current Principal Amount on the preceding calendar day represents the current value of the unleveraged notional amount per Security that is deemed invested in the Index on any calendar day. This does not reflect the Redemption Amount that an investor would receive upon early redemption on such calendar day.

The "Residual Factor" will be calculated as follows:

- (a) 1.0 on any calendar day, to but excluding the first day of an applicable Measurement Period.
- (b) From and including the first day of an applicable four-day Measurement Period, (a) the number of Index Business Days from, but excluding, the date of determination to, and including, the last Index Business Day in such four-day Measurement Period, divided by (b) four.
  - For example, on the first Index Business Day in an applicable four-day Measurement Period, the Residual Factor will equal 3/4, on the second Index Business Day in an applicable four-day Measurement Period, the Residual Factor will equal 2/4, on the third Index Business Day in an applicable four-day Measurement Period, the Residual Factor will equal 1/4 and on the last Index Business Day in an applicable four-day Measurement Period, the Residual Factor will equal zero.
- (c) On any calendar day from and including the last Index Business Day of an applicable Measurement Period, the Residual Factor will be equal to zero.

The Residual Factor is intended to approximate the percentage of the Current Principal Amount that is tracking the Index on any given day. The Residual Factor is relevant only during an applicable Measurement Period but otherwise is not a component of the Closing Indicative Value or Current Indicative Value formulas. At the close of trading on each Index Business Day during a four-day Measurement Period, approximately 25% of the Current Principal Amount and the corresponding amount of financing will be deemed converted to cash. In case of a one-day Measurement Period, approximately 100% of the Current Principal Amount and the corresponding amount of financing will be deemed converted to cash.

The "Leverage Factor" on any calendar day until the occurrence of a Permanent Deleveraging Event and the close of trading on the Second Permanent Deleveraging Valuation Date, will equal 2.0. If a Permanent Deleveraging Event occurs, then on any calendar day following the Second Permanent Deleveraging Valuation Date, the Leverage Factor will equal 1.0.

The "Index Performance Ratio" on any Index Business Day will be equal to:

<u>Index Closing Level – Last Reset Index Closing Level</u>
Last Reset Index Closing Level

On any calendar day that is not an Index Business Day, the Index Closing Level will be equal to the Index Closing Level on the Index Business Day immediately preceding such calendar day.

The "Last Reset Index Closing Level" is the Index Closing Level on the most recent Reset Valuation Date prior to such day. The initial Last Reset Index Closing Level is the Index Closing Level on the Initial Trade Date, as reported by Bloomberg and Reuters.

The "Index Closing Level" on any date of determination is the closing level of the Index, as reported on Bloomberg and Reuters on such day; however, if the closing level of the Index as reported on Bloomberg (or any successor) differs from the closing level of the Index as reported on Reuters (or any successor), the Index Closing Level will be the closing level of the Index as calculated by the Index Calculation Agent. The initial Index Closing Level (which is also the first Last Reset Index Closing Level) was determined on September 14, 2021 by the Security Calculation Agent. If the closing level of the Index, as reported on Bloomberg and Reuters for any Index Business Day, is manifestly incorrect, the "Index Closing Level" for such Index Business Day shall be the closing level of the Index as determined by the Security Calculation Agent. In making such determination, the Security Calculation Agent may consider any relevant information, including, without limitation, relevant market data in the relevant market supplied by one or more third parties or from internal sources or affiliates.

On any calendar day that is not an Index Business Day, the Index Closing Level will be equal to the Index Closing Level on the Index Business Day immediately preceding such calendar day.

"Measurement Period" means the Final Measurement Period or, if UBS exercises its Call Right, the Call Measurement Period.

The "Current Indicative Value" or "intraday indicative value", as determined by the Security Calculation Agent, is an amount per Security, on an intraday basis on any Index Business Day, equal to:

- (a) On the Initial Trade Date, \$25.00.
- (b) On any other calendar day prior to the first day of a Measurement Period:

  (Current Principal Amount on the immediately preceding calendar day × Index Factor, calculated using the Intraday Index Value) Accrued Fees
- (c) From and including the first day of a Measurement Period, an amount per Security equal to:

  (Current Principal Amount on the calendar day immediately preceding the first day of the Measurement Period ×

  Index Factor, calculated using the Intraday Index Value × Residual Factor on the immediately preceding calendar day) Accrued Fees + Measurement Period Cash Amount, from the immediately preceding calendar day
  - However, if, on any day during a Measurement Period, the Current Indicative Value or the Closing Indicative Value is *less than or equal to* the Measurement Period Cash Amount from the immediately preceding calendar day, the Current Indicative Value for the remainder of that day and all subsequent days will be fixed to be equal to the Measurement Period Cash Amount from the immediately preceding calendar day.
- (d) The minimum value of the Current Indicative Value on any calendar day will be zero.

The actual trading price of the Securities in the secondary market may vary significantly from their Current Indicative Value (intraday indicative value).

If a Zero Value Event occurs, the Current Indicative Value (intraday indicative value) will be equal to zero for the remainder of the day it occurs and on all future calendar days. Upon the occurrence of a Zero Value Event, investors will lose their entire investment. You will not benefit from any future exposure to the Index after the occurrence of a Zero Value Event. See "— Automatic Acceleration Upon Zero Value Event."

If the Securities undergo a split or reverse split, the Current Indicative Value (intraday indicative value) will be adjusted accordingly.

The "Accrued Fees" as of any date of determination means the Accrued Tracking Fee + the Accrued Financing Fee.

If the Securities undergo a split or reverse split, the Accrued Fees will be adjusted accordingly.

The Securities are subject to an "Accrued Tracking Fee" per Security, calculated as follows:

- (a) On the Initial Trade Date, the Accrued Tracking Fee is equal to zero.
- (b) On any subsequent calendar day, the Accrued Tracking Fee is equal to: (a) the Accrued Tracking Fee as of the immediately preceding calendar day, *plus* (b) the Daily Tracking Fee on such calendar day.
- (c) On the calendar day after each Reset Valuation Date, the Accrued Tracking Fee is reset to be equal to the Daily Tracking Fee on such calendar day.

The "Daily Tracking Fee" is an amount per Security calculated as follows:

- (a) On the Initial Trade Date, the Daily Tracking Fee is zero.
- (b) On any subsequent calendar day, the Daily Tracking Fee is equal to:

   (1) (i) 0.95% times (ii) the Current Principal Amount on the immediately preceding calendar day times (iii) the Index Factor on such calendar day times (iv) the Residual Factor on the immediately preceding calendar day, divided by (2) 365.
- (c) The minimum value of the Daily Tracking Fee on any calendar day will be zero.

The Daily Tracking Fee represents the investor fees calculated each day on the current value of the unleveraged notional amount invested in the Index per Security. These charges accrue and compound during the applicable period, and will reduce any amount you are entitled to receive at maturity or upon early redemption or call.

If the Securities undergo a split or reverse split, the Daily Tracking Fee will be adjusted accordingly.

The Securities are subject to an "Accrued Financing Fee" per Security calculated as follows:

- (a) On the Initial Trade Date, the Accrued Financing Fee is equal to zero.
- (b) On any subsequent calendar day, the Accrued Financing Fee is equal to:(1) the Accrued Financing Fee as of the immediately preceding calendar day, plus (2) the Daily Financing Fee on such calendar day.
- (c) On the calendar day after each Reset Valuation Date, the Accrued Financing Fee is reset to be equal to the Daily Financing Fee on such calendar day.
- (d) If a Permanent Deleveraging Event occurs, then on any calendar day following the Second Permanent Deleveraging Valuation Date, the Accrued Financing Fee will be equal to zero.

The "Daily Financing Fee" is an amount per Security calculated as follows:

- (a) On the Initial Trade Date, the Daily Financing Fee is equal to zero.
- (b) On any subsequent calendar day, the Daily Financing Fee is equal to:
  - (1) (i) the Financing Rate on such calendar day times (ii) the Current Principal Amount on the immediately preceding calendar day times (iii) the Residual Factor on the immediately preceding calendar day, divided by (2) 360.
- (c) If a Permanent Deleveraging Event occurs, then on any calendar day following the Second Permanent Deleveraging Valuation Date, the Daily Financing Fee will be equal to zero.
- (d) The minimum value of the Daily Financing Fee on any calendar day will be zero.

The Daily Financing Fee seeks to compensate UBS for providing investors with a leveraged participation in movements of the Index and is intended to approximate the financing costs that investors may have otherwise incurred had they sought to borrow funds at a similar rate from a third party to invest in the Index. These charges accrue and compound during the applicable period, and will reduce any amount that you will be entitled to receive at maturity or upon early redemption or call.

If the Securities undergo a split or reverse split, the Daily Financing Fee will be adjusted accordingly.

The "Financing Rate" will equal the sum of (a) 1.55% and (b) SOFR on the immediately preceding U.S. Government Securities Business Day. The minimum value of SOFR (or any successor base rate, as described below) used on any calendar day will be zero. The minimum Financing Rate at any time will be 1.55%.

For example, 0.05% was the SOFR rate on September 10, 2021, which was a U.S. Government Securities

Business Day. The Financing Rate on September 13, 2021 would therefore have been equal to 1.55% + 0.05%, or 1.60%.

"SOFR" means, with respect to any U.S. Government Securities Business Day, the daily secured overnight financing rate for such U.S. Government Securities Business Day as provided by the SOFR Administrator on the SOFR Administrator's Website. If for any U.S. Government Securities Business Day, the SOFR in respect of that day has not been published on the SOFR Administrator's Website by the time the Security Calculation Agent determines the Financing Rate for the immediately succeeding day and the Security Calculation Agent has not determined that SOFR has been discontinued, then the SOFR for such day will be the secured overnight financing rate as published in respect of the first preceding U.S. Government Securities Business Day for which the secured overnight financing rate was published on the SOFR Administrator's Website.

"SOFR Administrator" means the Federal Reserve Bank of New York (or a successor administrator of SOFR).

"SOFR Administrator's Website" means the website of the SOFR Administrator, currently at http://www.newyorkfed.org, or any successor source.

"U.S. Government Securities Business Day" means any day except for a Saturday, a Sunday or a day on which the Securities Industry and Financial Markets Association recommends that the fixed income departments of its members be closed for the entire day for purposes of trading in U.S. government securities.

Information About the Secured Overnight Financing Rate

All disclosures contained herein regarding the secured overnight financing rate, including, without limitation, its make-up and method of calculation, have been derived from publicly available sources. The information reflects the policies of, and is subject to change by the Federal Reserve Bank of New York. The secured overnight financing rate is published by the Federal Reserve Bank of New York, but the Federal Reserve Bank of New York has no obligation to continue to publish, and may discontinue publication of, the secured overnight financing rate. Neither UBS nor any of its affiliates accepts any responsibility for the calculation, maintenance or publication of the secured overnight financing rate or any successor or replacement rate. Information from outside sources including, but not limited to any website referenced in this section, is not incorporated by reference in, and should not be considered part of, this document or any document incorporated herein by reference. UBS has not conducted any independent review or due diligence of any publicly available information with respect to the secured overnight financing rate.

The secured overnight financing rate is published by the Federal Reserve Bank of New York and is intended to be a broad measure of the cost of borrowing cash overnight collateralized by U.S. Treasury securities. The Federal Reserve Bank of New York reports that secured overnight financing rate includes all trades in the "Broad General Collateral Rate" (as defined on the Federal Reserve Bank of New York's Website), plus bilateral Treasury repurchase agreement transactions cleared through the delivery-versus-payment service offered by the Fixed Income Clearing Corporation (the "FICC"), a subsidiary of the Depository Trust and Clearing Corporation ("DTCC"). The secured overnight financing rate is filtered by the Federal Reserve Bank of New York to remove a portion of the foregoing transactions considered to be "Specials", which are repurchases for specific-issue collateral, which take place at cash-lending rates below those for general collateral repurchases because cash providers are willing to accept a lesser return on their cash in order to obtain a particular security.

The Federal Reserve Bank of New York reports that the secured overnight financing rate is calculated as a volume-weighted median of transaction-level tri-party repo data collected from The Bank of New York Mellon ("BNYM") as well as General Collateral Finance repurchase agreement transaction data and data on bilateral Treasury repurchase transactions cleared through the FICC's delivery-versus-payment service. The Federal Reserve Bank of New York notes that it obtains information from DTCC Solutions LLC, an affiliate of DTCC. The Federal Reserve Bank of New York notes on its publication page for the secured overnight financing rate that use of the secured overnight financing rate is subject to important limitations and disclaimers, including that the Federal Reserve Bank of New York may alter the methods of calculation, publication schedule, rate revision practices or availability of the secured overnight financing rate at any time without notice. The secured overnight financing rate is published at approximately 8:00 a.m. (New York time) on each U.S. Government Securities Business Day for trades made on the immediately preceding U.S. Government Securities Business Day. If the Federal Reserve Bank of New York discovers errors in the transaction data provided by either BNYM or DTCC, or in the calculation process, subsequent to the rate publication but on that same day, the secured overnight financing rate and accompanying summary statistics may be republished at approximately 2:30 p.m. (New York time). Similarly, if transaction data from BNYM or DTCC had previously not been available in time for publication, but became available later in the day, the secured overnight financing rate may be republished at approximately 2:30 p.m. (New York time). Rate revisions will only be effected on the same day as initial publication and will only be republished if the change in the rate exceeds one basis point (0.01%), though the Federal Reserve Bank of New York will review this revision threshold periodically and could modify it after any such review. The description of the secured overnight financing rate herein does not purport to be exhaustive.

Because the secured overnight financing rate is published by the Federal Reserve Bank of New York based on data received from other sources, neither UBS nor any of our affiliates has any control over its determination, calculation or publication. There can be no guarantee that the secured overnight financing rate will not be discontinued or fundamentally altered in a manner that is materially adverse to the interests of investors in the Securities. If the manner in which the secured overnight financing rate is calculated is changed, that change may result in an increase in the Financing Rate on the Securities.

The Federal Reserve Bank of New York began publishing the secured overnight financing rate in April 2018. The Federal Reserve Bank of New York has also published historical indicative secured overnight financing rates going back to August 2014. Investors should not rely on any historical changes or trends in the secured overnight financing rate as an indicator of future changes in the secured overnight financing rate. Also, since the secured overnight financing rate is relatively new, the Securities are not expected to have established trading market when issued, and an established trading market may never develop or may not be very liquid. In addition, if the secured overnight financing rate does not become widely used as a benchmark in securities that are similar or comparable to the Securities, the trading price of the Securities may be lower than those of other securities that are linked to rates that are more widely used. Similarly, market terms for exchange traded notes with financing rates linked to the secured overnight financing rate may evolve over time, and trading prices of the Securities may be lower than those of later-issued secured overnight financing rate-linked exchange traded notes as a result. Investors in the Securities may not be able to sell the Securities at all or may not be able to sell the Securities at prices comparable to similar investments that have a developed secondary market, and may consequently suffer from increased pricing volatility and market risk.

The secured overnight financing rate data is subject to the terms of use posted at newyorkfed.org. The Federal Reserve Bank of New York is not responsible for publication of the secured overnight financing rate rates by UBS, does not sanction or endorse any particular republication, and has no liability for your use. For a more complete discussion of the secured overnight financing rate, see the website of SOFR Administrator's Website.

Notwithstanding the foregoing:

- If the Security Calculation Agent determines on the relevant determination date that SOFR (or any successor base rate) has been discontinued, then the Security Calculation Agent will use a substitute or successor base rate that it has determined in its sole discretion is most comparable to the SOFR base rate (or such successor base rate), provided that if the Security Calculation Agent determines there is an industry-accepted successor base rate for exchange traded notes similar to the Securities, then the Security Calculation Agent shall use such successor base rate; and;
- If the Security Calculation Agent has determined a substitute or successor base rate in accordance with the foregoing, the Security Calculation Agent in its sole discretion may determine the business day convention, definition of business day and any other relevant methodology for calculating such substitute or successor base rate, including any adjustment factor needed to make such substitute or successor base rate comparable to the SOFR base rate (or such successor base rate), in a manner that is consistent with industry-accepted practices for such substitute or successor base rate.

The establishment of SOFR (or such successor base rate, as applicable) for each period by the Security Calculation Agent shall (in the absence of manifest error) be final and binding.

## The "Measurement Period Cash Amount" is an amount per Security equal to:

- (a) \$0.00 on any calendar day, to but excluding the first day of a Measurement Period.
- (b) On the first day of a one-day Measurement Period:
  - At the close of trading on such Index Business Day, (Current Principal Amount on the immediately preceding calendar day × Index Factor, on such Index Business Day).
- (c) From and including the first day of a four-day Measurement Period:
  - (i) At the close of trading on each Index Business Day during the four-day Measurement Period, the Measurement Period Cash Amount on the immediately preceding calendar day + (Current Principal Amount on the calendar day immediately preceding the first day of such Measurement Period  $\times$  0.25  $\times$  Index Factor, on such Index Business Day); and
  - (ii) On any calendar day during the Measurement Period that is not an Index Business Day, the Measurement Period Cash Amount on the immediately preceding Index Business Day.
- (d) On any calendar day after the last Index Business Day of a Measurement Period, the Measurement Period Cash Amount on the last Index Business Day of such Measurement Period.

Notwithstanding the foregoing, if, on any day during a Measurement Period, the Current Indicative Value or the Closing Indicative Value is less than or equal to the Measurement Period Cash Amount from the immediately preceding calendar day, then the Measurement Period Cash Amount for that day and all subsequent days will be fixed to be equal to the Measurement Period Cash Amount from the immediately preceding calendar day.

The Measurement Period Cash Amount represents the portion of the Current Principal Amount that has been converted to cash on any given day of an applicable Measurement Period and is no longer tracking the Index.

At the close of trading of each Index Business Day during a four-day Measurement Period, approximately 25% of the Current Principal Amount on the calendar day immediately preceding the first day of the Measurement Period, will be deemed converted to cash and an applicable portion of the notional financing amount will separately be deemed converted to cash as well. After the close of trading on the final Index Business Day of a four-day Measurement Period, the Measurement Period Cash Amount will represent the averaged value of the Current Principal Amount that was deemed converted to cash across the four-days of such Measurement Period. In case of a one-day Measurement Period, approximately 100% of the Current Principal Amount will be deemed converted to cash and an applicable amount of financing will separately be deemed converted to cash, at the close of trading of the first day of such Measurement Period.

If the Securities undergo a split or reverse split, the Measurement Period Cash Amount will be adjusted accordingly.

## The "Final Measurement Period" means:

- (a) if the Market Value of Securities outstanding at the close of trading on the Index Business Day immediately preceding the Calculation Date is less than \$500,000,000, the Calculation Date, subject to adjustments as described under "— Market Disruption Event";
- (b) if the Market Value of Securities outstanding at the close of trading on the Index Business Day immediately preceding the Calculation Date is equal to or greater than \$500,000,000, the four Index Business Days from and including the Calculation Date, subject to adjustments as described under "— Market Disruption Event."

For the purpose of determining the Final Measurement Period, the "Market Value" of the Securities outstanding as of the close of trading on the Index Business Day immediately preceding the Calculation Date, will equal:

(i) the Closing Indicative Value as of such Index Business Day times (ii) the number of Securities outstanding as reported by ESUSSO <Index> on Bloomberg.

The "Index Calculation Agent" means the entity that calculates and publishes the level of the Index, which is currently MSCI.

The "Calculation Date" means September 7, 2061, unless such day is not an Index Business Day, in which case the Calculation Date will be the next Index Business Day, subject to adjustment.

The Calculation Date represents the first Index Business Day of the Final Measurement Period.

"Index Business Day" means any day on which the Primary Exchange or market for trading of the Securities is scheduled to be open for trading.

"Business Day" means any day that is not a Saturday, Sunday or a day on which banking institutions in The City of New York, generally, are authorized or obligated by law, regulation or executive order to close.

"Primary Exchange" means, with respect to each Index Constituent Security or each constituent underlying a successor index, the primary exchange or market of trading such Index Constituent Security or such constituent underlying a successor index.

## **Underlying Index**

The return on the securities is linked to the performance of the MSCI USA ESG Focus Index Gross Total Return USD (Bloomberg: "M2USESG"). The Index is designed to maximize exposure to positive ESG factors while exhibiting risk and return characteristics similar to those of the MSCI USA Index. We refer to the companies included in the Index as the "Index Constituent Securities". The Index is developed and calculated by MSCI. The Index is a total return index and the Index level reflects the notional reinvestment of the cash distributions from its constituent securities.

## Early Redemption at the Option of the Holders

Subject to your compliance with the procedures described below and the potential postponements and adjustments as described under "— Market Disruption Event", you may submit a request to have us redeem your Securities on any Index Business Day no later than 12:00 noon and a confirmation of redemption by no later than 5:00 p.m. on the same Index Business Day. You must request that we redeem a minimum of 50,000 Securities, although we reserve the right from time to time to waive this minimum redemption amount in our sole discretion on a case-by-case basis. You should not assume you will be entitled to the benefit of any such waiver. For any applicable redemption request, the "Redemption Valuation Date" will be the first Index Business Day following the date that the applicable redemption notice and redemption confirmation are delivered, except that we reserve the right from time to time to accelerate, in our sole discretion on a case-by-case basis, the Redemption Valuation Date to the date on which we receive the notice of redemption rather than the following Index Business Day. You should not assume you will be entitled to any such acceleration. To satisfy the minimum redemption amount, your broker or other financial intermediary may bundle your Securities for redemption with those of other investors to reach this minimum amount of 50,000 Securities; however, there can be no assurance that they can or will do so.

The Securities will be redeemed and the holders will receive payment for their Securities on the second Index Business Day following the applicable Redemption Valuation Date (the "Redemption Date"). The First Redemption Date will be the fourth Index Business Day immediately following the Initial Trade Date and the Final Redemption Date will be the fourth Index Business Day immediately preceding the Maturity Date, subject to adjustments. In addition, if we have issued a call notice, the last Redemption Valuation Date will be the fourth Index Business Day prior to the Call Settlement Date, as applicable. If a Zero Value Event occurs, the last Redemption Date will be the date on which the Zero Value Event occurred.

If a Market Disruption Event is continuing or occurs on the applicable scheduled Redemption Valuation Date with respect to any of the Index Constituent Securities, such Redemption Valuation Date may be postponed as described under "— Market Disruption Event".

As of any Redemption Valuation Date, the "**Redemption Fee Amount**" means an amount per Security equal to:  $(0.125\% \times \text{Closing Indicative Value of the Security as of the Redemption Valuation Date)}$ .

If you exercise your right to have us redeem your Securities, subject to your compliance with the procedures described under "— Redemption Procedures", for each applicable Security you will receive a cash payment on the relevant Redemption Date equal to:

Closing Indicative Value as of the Redemption Valuation Date - Redemption Fee Amount.

We refer to this cash payment as the "**Redemption Amount**." If the amount calculated above is equal to or less than zero, the payment upon early redemption will be zero. We reserve the right from time to time to reduce or waive the Redemption Fee Amount in our sole discretion and on a case-by-case basis. There can be no assurance that we will elect to waive this fee and you should not assume you will be entitled to such fee waiver.

We will inform you of such Redemption Amount on the first Index Business Day following the applicable Redemption Valuation Date.

The redemption feature is intended to induce arbitrageurs to counteract any trading of the Securities at a discount to their indicative value, though there can be no assurance that arbitrageurs will employ the redemption feature in this manner or that they will be successful in counteracting any divergence in the market price of the Securities and their indicative value.

The following graphic illustrates the formula to determine the Redemption Amount, which has been simplified for ease of presentation:

Redemption Amount = Closing Indicative Value - Redemption Fee Amount

You may lose all or a substantial portion of your investment upon early redemption. The combined negative effect of the Accrued Fees and the Redemption Fee Amount will reduce your final payment. If the compounded leveraged quarterly return of the Index (or the unleveraged return of the Index, following a Permanent Deleveraging Event) is insufficient to offset the negative effect of the Accrued Fees and the Redemption Fee Amount, if applicable, or if the compounded leveraged quarterly return of the Index (or the unleveraged return of the Index, following a Permanent Deleveraging Event) is negative, you may lose all or a substantial portion of your investment upon early redemption. Loss Rebalancing Events will cause compounding to occur more frequently than quarterly.

The Securities may be called by UBS prior to the Maturity Date pursuant to its Call Right and, upon the occurrence of a Zero Value Event, the Securities will be automatically accelerated and mandatorily redeemed by UBS. See "— UBS Call Right" and "— Automatic Acceleration Upon Zero Value Event."

## **Redemption Procedures**

To redeem your Securities, you must instruct your broker or other person through whom you hold your Securities to take the following steps through normal clearing system channels:

- deliver a notice of redemption, which we refer to as a "**Redemption Notice**" to UBS via email no later than 12:00 noon on the Index Business Day on which you elect to exercise your redemption right. If we receive your Redemption Notice by the time specified in the preceding sentence, we will respond by sending you a form of confirmation of redemption;
- deliver the signed confirmation of redemption, which we refer to as the "**Redemption Confirmation**", to us via email in the specified form by 5:00 p.m. on the same day. We or our affiliate must acknowledge receipt in order for your Redemption Confirmation to be effective;
- instruct your DTC custodian to book a delivery vs. payment trade with respect to your Securities on the applicable Redemption Date at a price equal to the Redemption Amount; and
- > cause your DTC custodian to deliver the trade as booked for settlement via DTC at or prior to 12:00 noon on the applicable Redemption Date.

Different brokerage firms may have different deadlines for accepting instructions from their customers. Accordingly, as a beneficial owner of the Securities, you should consult the brokerage firm through which you own your interest for the relevant deadline. If your broker delivers your Redemption Notice after 12:00 noon, or your Redemption Confirmation after 5:00 p.m., on the Index Business Day prior to the applicable Redemption Valuation Date, your Redemption Notice will not be effective, you will not be able to redeem your Securities until the following Redemption Date and your broker will need to complete all the required steps if you should wish to redeem your Securities on any subsequent Redemption Date. In addition, UBS may request a medallion signature guarantee or such assurances of delivery as it may deem necessary in its sole discretion. All instructions given to participants from beneficial owners of Securities relating to the right to redeem their Securities will be irrevocable. If your DTC custodian or your brokerage firm is not a current UBS customer, UBS will be required to on-board such DTC custodian or brokerage firm, in compliance with its internal policies and procedures, before it can accept your Redemption Notice, your Redemption Confirmation or otherwise process your redemption request. This on-boarding process may delay your Redemption Valuation Date and Redemption Date. Furthermore, in certain circumstances, UBS may be unable to on-board your DTC custodian or your brokerage firm.

We reserve the right from time to time to reduce or waive the minimum redemption amount or the Redemption Fee Amount in our sole discretion on a case-by-case basis. In addition, we reserve the right from time to time to accelerate, in our sole discretion on a case-by-case basis, the Redemption Valuation Date to the date on which we receive the Redemption Notice rather than the following Index Business Day. You should not assume you will be entitled to any such waiver or election to accelerate the Redemption Valuation Date.

## **UBS Call Right**

UBS may at its option redeem all, but not less than all, of the issued and outstanding Securities. To exercise its Call Right, UBS must provide notice to the holders of such Securities (which may be provided via press release) not less than 18 calendar days prior to the Call Settlement Date specified by UBS in such notice. If we call the Securities, you will receive a cash payment equal to the Closing Indicative Value on the last Index Business Day in the Call Measurement Period. We refer to this cash payment as the "Call Settlement Amount."

If the amount calculated above is equal to or less than zero, the payment upon UBS's exercise of its Call Right will be zero.

We will inform you of such Call Settlement Amount on the first Index Business Day following the last Index Business Day in the Call Measurement Period.

The holders will receive payment for their Securities on the third Index Business Day following the last Index Business Day in the Call Measurement Period (the "Call Settlement Date"). If a Market Disruption Event is continuing or occurs on the scheduled Call Valuation Date with respect to any of the Index Constituent Securities, such Call Valuation Date may be postponed as described under "— Market Disruption Event".

#### The "Call Measurement Period" means:

- (a) if the Market Value of Securities outstanding at the close of trading on the Index Business Day immediately preceding the date we issue a notice of exercise of our Call Right is less than \$500,000,000, the Call Valuation Date, subject to adjustments as described under "— Market Disruption Event"; and
- (b) if the Market Value of Securities outstanding at the close of trading on the Index Business Day immediately preceding the date we issue a notice of exercise of our Call Right is equal to or greater than \$500,000,000, the four Index Business Days from and including the Call Valuation Date, subject to adjustment as described under "— Market Disruption Event."

For the purpose of determining the Final Measurement Period, the "Market Value" of the Securities outstanding as of the close of trading on the Index Business Day immediately preceding the date of delivery by UBS of its notice to holders (which may be provided via press release) of its exercise of its Call Right will equal:

(i) The Closing Indicative Value as of such Index Business Day times (ii) the number of Securities outstanding as reported by ESUSSO <Index> on Bloomberg.

The "Call Valuation Date" means the date we specify in our notice to holders (which may be provided via press release) of our exercise of our Call Right.

In any notice to holders exercising our Call Right, we will specify how many days are included in the Call Measurement Period.

The following graphic illustrates the formula to determine the Call Settlement Amount, which has been simplified for ease of presentation:

Closing Indicative Value, on last Index

## Cash Settlement Amount = Business Day in Call Measurement Period

You may lose all or a substantial portion of your investment if we exercise our Call Right. The combined negative effect of the Accrued Fees will reduce your final payment. If the compounded leveraged quarterly return of the Index (or the unleveraged return of the Index, following a Permanent Deleveraging Event) is insufficient to offset the negative effect of the Accrued Fees, or if the compounded leveraged quarterly return of the Index (or the unleveraged return of the Index, following a Permanent Deleveraging Event) is negative, you may lose all or a substantial portion of your investment upon a call. Loss Rebalancing Events will cause compounding to occur more frequently than quarterly.

In addition, upon the occurrence of a Zero Value Event, the Securities will be automatically accelerated and mandatorily redeemed by UBS. See "— Automatic Acceleration Upon Zero Value Event" below.

## **Automatic Acceleration Upon Zero Value Event**

A Zero Value Event represents the first instance when the Current Indicative Value (intraday indicative value) or the Closing Indicative Value is less than or equal to zero (other than on an Excluded Day, as defined below). It will have the effect of permanently resetting the value of your Securities to zero and accelerating the Securities. You will not benefit from any future exposure to the Index after the occurrence of a Zero Value Event.

A Zero Value Event can occur only if a Permanent Deleveraging Event occurs and the Current Indicative Value (intraday indicative value) or the Closing Indicative Value declines to zero before the leverage of your Securities is reset to 1.0 at the close of trading on the Index Business Day following such event (or if such event occurs after 3:15 p.m. on any Index Business Day which would not otherwise have been a Loss Rebalancing Valuation Date, the second Index Business Day following such event), as described under "Permanent Deleveraging Valuation Dates" above.

A "Zero Value Event" occurs if the Current Indicative Value (intraday indicative value) or the Closing Indicative Value on any Index Business Day (other than an Excluded Day, as defined below) is less than or equal to zero. From immediately after the Zero Value Event and on all future calendar days, the Current Indicative Value (intraday indicative value) and the Closing Indicative Value will be set equal to zero.

As used above, an "Excluded Day" means (i) any calendar day after the Second Permanent Deleveraging Valuation Date (ii) any calendar day on or after which a Zero Value Event has already occurred, and (iii) any calendar day after the last day of an applicable Measurement Period.

In the event that a Zero Value Event has occurred, UBS will issue a press release shortly after the event; provided that the failure to do so shall not affect the automatic acceleration and redemption of the Securities. The Securities will be suspended from trading intraday shortly after the event occurs and will likely not be open for trading again on NYSE Arca.

You will lose your entire investment upon the occurrence of a Zero Value Event.

In addition, we may call the Securities prior to the Maturity Date pursuant to our Call Right. See "— UBS Call Right."

## **Loss Rebalancing Events**

A Loss Rebalancing Event will have the effect of deleveraging your Securities with the aim of resetting the then-current leverage to approximately 2.0. This means that after a Loss Rebalancing Event, a constant percentage increase in the Index Closing Level will have less of a positive effect on the value of your Securities relative to before the occurrence of the Loss Rebalancing Event.

A "Loss Rebalancing Event" occurs if, at any time, the Intraday Index Value on such Index Business Day (other than an Excluded Day, as used below) decreases by 20% or more from the previous Last Reset Index Closing Level.

Loss Rebalancing Events may occur multiple times over the term of the Securities and may occur multiple times during a single calendar quarter. This means both that (i) the Current Principal Amount may be reset more frequently than quarterly and (ii) the cumulative effect of compounding and fees will have increased as a result of the Loss Rebalancing Event(s). Because each Loss Rebalancing Event will have the effect of deleveraging your Securities, following a Loss Rebalancing Event your Securities will have less exposure to a potential positive gain in value relative to the exposure before the occurrence of such Loss Rebalancing Event.

As used above, an "Excluded Day" means (i) the Index Business Day immediately preceding any Quarterly Reset Valuation Date, if a Loss Rebalancing Event occurs after 3:15 p.m. on such day, (ii) any Quarterly Reset Valuation Date, (iii) any Loss Rebalancing Valuation Date, (iv) the Index Business Day immediately preceding the first day of an applicable Measurement Period, if a Loss Rebalancing Event occurs after 3:15 p.m. on such day (v) any calendar day from and including the first day of an applicable Measurement Period, (vi) the First or Second Permanent Deleveraging Valuation Dates, (vii) any calendar day after the Second Permanent Deleveraging Valuation Date, and (viii) any calendar day on or after which a Zero Value Event has occurred

## "Loss Rebalancing Valuation Date" means:

- (a) if a Loss Rebalancing Event occurs at or prior to 3:15 p.m. on an Index Business Day, the day that such Loss Rebalancing Event occurs, subject to adjustment as described under "— Market Disruption Event"; and
- (b) if a Loss Rebalancing Event occurs after 3:15 p.m. on an Index Business Day, the first Index Business Day following the occurrence of such Loss Rebalancing Event, subject to adjustment as described under "— Market Disruption Event."

## **Permanent Deleveraging Event**

A Permanent Deleveraging Event will have the effect of deleveraging your Securities, with the aim of permanently resetting the then-current leverage to 1.0 over two Index Business Days. The leverage at the end of the First Permanent Deleveraging Valuation Date is reset to approximately 2.0 and the leverage at the end of the Second Permanent Deleveraging Valuation Date is reset to 1.0. This means that after a Permanent Deleveraging Event, a constant percentage increase in the Index Closing Level will have less of a positive effect on the value of your Securities than it would have had before the occurrence of the Permanent Deleveraging Event. If such an event were to occur, it most likely would occur only following a Loss Rebalancing Event and prior to the completion of the associated leverage reset to 2.0, which would generally occur at the end of the Index Business Day following the Index Business Day on which the Loss Rebalancing Event occurred or, if the Loss Rebalancing Event occurs 3:15 p.m. on an Index Business Day, at the end of the second Index Business Day following the Index Business Day on which the Loss Rebalancing Event occurred.

A "Permanent Deleveraging Event" occurs if, at any time on an Index Business Day (other than an Excluded Day, as defined below), the Intraday Index Value decreases by 40% or more from the Last Reset Index Closing Level. If a Permanent Deleveraging Event occurs, the Current Principal Amount of the Securities will be reset over two Index Business Days.

As used above, an "Excluded Day" means (i) the First or Second Permanent Deleveraging Valuation Dates, (ii) any calendar day after the Second Permanent Deleveraging Valuation Date, (iii) any day on or after which a Zero Value Event occurs, (iv) the day which is two Index Business Days prior to the first day of a Measurement Period, if a Permanent Deleveraging Event occurs after 3:15 p.m. on such day, and (v) any calendar day from and including the Index Business Day immediately preceding the first day of a Measurement Period.

"Permanent Deleveraging Valuation Dates" means the First Permanent Deleveraging Valuation Date and the Second Permanent Deleveraging Valuation Date, each as defined below:

- (a) The "First Permanent Deleveraging Valuation Date" means:
  - i. any Index Business Day, which otherwise would have been a Loss Rebalancing Valuation Date, but on which a Permanent Deleveraging Event has occurred, subject to adjustment as described under "— Market Disruption Event"; or
  - ii. if a Permanent Deleveraging Event occurs after 3:15 p.m. on any Index Business Day which would not otherwise have been a Loss Rebalancing Valuation Date, then the first Index Business Day following the occurrence of such Permanent Deleveraging Event, subject to adjustment as described under "— Market Disruption Event."

The leverage of your Securities will be reset to approximately 2.0 at the close of trading on the First Permanent Deleveraging Valuation Date.

(b) The "Second Permanent Deleveraging Valuation Date" means the Index Business Day immediately following the First Permanent Deleveraging Valuation Date, subject to adjustment as described under "— Market Disruption Event."

The leverage of your Securities will be reset to 1.0 at the close of trading on the Second Permanent Deleveraging Valuation Date.

## **Split or Reverse Split of the Securities**

We may, at any time in our sole discretion, initiate a split or reverse split of your Securities. If we decide to initiate a split or reverse split, as applicable, we will issue a press release announcing the split or reverse split and its effective date. The date of such press release shall be deemed to be the "announcement date" of the split or the reverse split, the record date for any split or reverse split will be the tenth Business Day after the announcement date, and the effective date will be the next Business Day after the record date.

If the Securities undergo a split or reverse split, we will adjust the Current Principal Amount, Closing Indicative Value, Current Indicative Value, Accrued Fees, Measurement Period Cash Amount and other relevant terms of the Securities accordingly. For example, if the Securities undergo a 4:1 split, every investor who holds a Security via The Depository Trust Company ("DTC") on the relevant record date will, after the split, hold four Securities, and adjustments will be made as described below. The Current Principal Amount on such record date will be divided by four to reflect the 4:1 split. The adjusted Current Principal Amount will be rounded to eight decimal places. The split or reverse split will become effective at the opening of trading of the Securities on the Index Business Day immediately following the record date. The split will not occur if we exercise our Call Right before it becomes effective.

In the case of a reverse split, the Current Principal Amount and other relevant terms of the Securities will be adjusted accordingly and we will determine in our sole discretion the manner in which we will address odd numbers of Securities (commonly referred to as "partials"). For example, if the Securities undergo a 1:4 reverse split, every investor who holds four Securities via DTC on the relevant record date will, after the reverse split, hold only one Security and the Current Principal Amount of the Securities on such record date will be multiplied by four to reflect the 1:4 reverse split. The adjusted Current Principal Amount will be rounded to eight decimal places. The reverse split will become effective at the opening of trading of the Securities on the Index Business Day immediately following the record date. The reverse split will not occur if we exercise our Call Right before it becomes effective.

Holders who own a number of Securities on the record date that is not evenly divisible by the reverse split divisor (which in the case of a 1:4 reverse split, for example, will be 4) will receive the same treatment as all other holders for the maximum number of Securities they hold that is evenly divisible by the reverse split divisor. We will determine in our sole discretion the manner in which we compensate holders for their remaining or "partial" Securities when we announce the reverse split, though our current intention is to provide holders with a cash payment for their partials on the 17th Business Day following the announcement date in an amount equal to the appropriate percentage of the Closing Indicative Value of the reverse split-adjusted Securities on the 15th Business Day following the announcement date. For example, in the case of a 1:4 reverse split, a holder who held 23 Securities via DTC on the record date would receive five post-reverse split Securities on the immediately following Business Day, and a cash payment on the 17th Business Day following the announcement date that is equal to 3/4 of the Current Principal Amount of the reverse split-adjusted Securities on the 15th Business Day following the announcement date.

## **Security Calculation Agent**

UBS Securities LLC will act as the "Security Calculation Agent." The Security Calculation Agent will be solely responsible for all determinations and calculations regarding the value of the Securities, including, among other things, at maturity or upon early redemption or call, or at other times, the Current Principal Amount, Current Indicative Value (which we also refer to as the intraday indicative value), Closing Indicative Value, Market Disruption Events, Business Days, Index Business Days, the Leverage Factor, the Index Factor, the Index Performance Ratio, the Residual Factor, the Index Closing Level, the Financing Rate, the Accrued Fees (including determining any successor to the SOFR base rate), the Redemption Fee Amount, the Cash Settlement Amount, if any, that we will pay you at maturity, the Redemption Amount, if any, that we will pay you upon redemption, the Call Settlement Amount, that we will pay you if we call the Securities, whether a Loss Rebalancing Event has occurred, whether a Permanent Deleveraging Event has occurred and whether any day is an Index Business Day and all such other matters as may be specified elsewhere herein as matters to be determined by the Security Calculation Agent. If any Intraday Index Value as published by Bloomberg on any Index Business Day is manifestly incorrect, the Security Calculation Agent may base its determination of whether a Loss Rebalancing Event, Permanent Deleveraging Event or Zero Value Event shall have occurred on such Index Business Day on its own determination of such Intraday Index Value. In making such determination, the Security Calculation Agent may consider any relevant information, including, without limitation, relevant market data in the relevant market supplied by one or more third parties or from internal sources or affiliates. The Security Calculation Agent will also be responsible for determining whether the Index has been discontinued and whether there has been a material change in the Index. The Security Calculation Agent will make all such determinations and calculations in its sole discretion, and absent manifest error, all determinations of the Security Calculation Agent will be conclusive for all purposes and binding on us, you, and all other persons having an interest in the Securities, without liability on the part of the Security Calculation Agent. You will not be entitled to any compensation from us for any loss suffered as a result of any determinations or calculations made by the Security Calculation Agent. We may appoint a different Security Calculation Agent from time to time after the date of the prospectus supplement without your consent and without notifying you.

The Security Calculation Agent will provide written notice to the trustee at its New York office, on which notice the trustee may conclusively rely, of the amount to be paid at maturity or upon early redemption or call, on or prior to 12:00 noon on the Index Business Day immediately preceding the Maturity Date, any Redemption Date or any Call Settlement Date.

All dollar amounts related to determination of the Accrued Fees, the Current Principal Amount, and any

Redemption Amount, Redemption Fee Amount, Call Settlement Amount or Cash Settlement Amount per Security will be rounded to the nearest ten-thousandth, with five one hundred-thousandths rounded upward (e.g., .76545 would be rounded up to .7655); and all dollar amounts paid to any holder of Securities will be rounded to the nearest cent, with one-half cent rounded upward.

## **Market Disruption Event**

To the extent a Market Disruption Event with respect to the Index has occurred or is continuing during a four-day Measurement Period, the Index Closing Level for such day will be determined by the Security Calculation Agent or one of its affiliates on the first succeeding Index Business Day on which a Market Disruption Event does not occur or is not continuing with respect to the Index. The remaining Index Business Days in the Measurement Period will be postponed accordingly, and the remaining Index Business Days in the Measurement Period will resume again following the suspension of the Market Disruption Event. For example, if the four-day Measurement Period for purposes of calculating the Call Settlement Amount, is scheduled for June 2, June 3, June 4 and June 5, and there is a Market Disruption Event with respect to the Index on June 2, but no other Market Disruption Event during such Call Measurement Period, then June 3 will become the first Index Business Day of the Measurement Period, June 4th the second Index Business Day, June 5th the third Index Business Day and the next Index Business Day after June 5th would be the final day of the Measurement Period. The same approach would be applied if there is a Market Disruption Event during a four-day Final Measurement Period.

To the extent a Market Disruption Event with respect to the Index has occurred or is continuing on the Redemption Valuation Date, Call Valuation Date (in the event that the Call Measurement Period is the Call Valuation Date), Calculation Date (in the event that the Final Measurement Period is the Calculation Date) or any Reset Valuation Date, the Index Closing Level for such Redemption Valuation Date, Call Valuation Date, Calculation Date or Reset Valuation Date will be determined by the Security Calculation Agent or one of its affiliates on the first succeeding Index Business Day on which a Market Disruption Event does not occur or is not continuing with respect to the Index. For example, if the Redemption Valuation Date, for purposes of calculating a Redemption Amount, is based on the Index Closing Level on June 2 and there is a Market Disruption Event with respect to the Index on June 2, then the Index Closing Level on June 3 will be used to calculate the Redemption Amount, assuming that no such Market Disruption Event has occurred or is continuing on June 3.

In no event, however, will any postponement pursuant to either of the two immediately preceding paragraphs result in the affected Index Business Day of the Measurement Period or any Redemption Valuation Date, Call Valuation Date (in the event that the Call Measurement Period is the Call Valuation Date), Calculation Date (in the event that the Final Measurement Period is the Calculation Date) or Reset Valuation Date occurring more than five Index Business Days following the day originally scheduled to be such Index Business Day of the Measurement Period or such Redemption Valuation Date, Call Valuation Date, Calculation Date or Reset Valuation Date. If a Market Disruption Event has occurred or is continuing with respect to the Index on the fifth Index Business Day following the date originally scheduled to be such Index Business Day of the Measurement Period or any Redemption Valuation Date, Call Valuation Date, Calculation Date or any Reset Valuation Date, the Security Calculation Agent or one of its affiliates will determine the Index Closing Level based on its good faith estimate of the Index Closing Level that would have prevailed on such fifth Index Business Day but for such Market Disruption Event.

Any of the following will be a "Market Disruption Event" with respect to the Index, in each case as determined by the Security Calculation Agent in its sole discretion:

- (a) suspension, absence or material limitation of trading in a material number of Index Constituent Securities, whether by reason of movements in price exceeding limits permitted by the Primary Exchange or otherwise;
- (b) suspension, absence or material limitation of trading in option or futures contracts relating to the Index or to a material number of Index Constituent Securities in the primary market or markets for those contracts;
- (c) the Index is not published; or
- (d) in any other event, if the Security Calculation Agent determines in its sole discretion that the event materially interferes with our ability or the ability of any of our affiliates to unwind all or a material portion of a hedge with respect to the Securities that we or our affiliates have effected or may effect as described in the section entitled "Use of Proceeds and Hedging."

The following events will not be Market Disruption Events with respect to the Index:

- (a) a limitation on the hours or numbers of days of trading, but only if the limitation results from an announced change in the regular business hours of the relevant market; and
- (b) a decision to permanently discontinue trading in the option or futures contracts relating to the Index or any Index Constituent Securities.

For this purpose, an "absence of trading" in the primary securities market on which option or futures contracts related to the Index or any Index Constituent Securities are traded will not include any time when that market is itself closed for trading under ordinary circumstances.

#### **Default Amount on Acceleration**

If an event of default occurs and the maturity of the Securities is accelerated, we will pay the default amount in respect of the principal of the Securities at maturity. We describe the default amount below under "— Default Amount."

For the purpose of determining whether the holders of our Medium-Term Notes, Series B, of which the Securities are a part, are entitled to take any action under the indenture, we will treat the outstanding principal amount of the Medium-Term Notes, Series B, as constituting the outstanding principal amount of the Securities. Although the terms of the Securities may differ from those of the other Medium-Term Notes, Series B, holders of specified percentages in principal amount of all Medium-Term Notes, Series B, together in some cases with other series of our debt securities, will be able to take action affecting all the Medium-Term Notes, Series B, including the Securities. This action may involve changing some of the terms that apply to the Medium-Term Notes, Series B, accelerating the maturity of the Medium-Term Notes, Series B after a default or waiving some of our obligations under the indenture. We discuss these matters in "Medium-Term Notes, Series B" above under "Description of Debt Securities We May Offer — Default, Remedies and Waiver of Default" and "Description of Debt Securities We May Offer — Modification and Waiver of Covenants."

## **Default Amount**

The default amount for the Securities on any day will be an amount, in U.S. dollars as determined by the Security Calculation Agent in its sole discretion, for the aggregate Stated Principal Amount of the Securities, equal to the cost of having a qualified financial institution, of the kind and selected as described below, expressly assume all our payment and other obligations with respect to the Securities as of that day and as if no default or acceleration had occurred, or to undertake other obligations providing substantially equivalent economic value to you with respect to the Securities. That cost will equal:

- > the lowest amount that a qualified financial institution would charge to effect this assumption or undertaking, plus
- the reasonable expenses, including reasonable attorneys' fees, incurred by the holders of the Securities in preparing any documentation necessary for this assumption or undertaking.

During the default quotation period for the Securities, which we describe below, the holders of the Securities and/or we may request a qualified financial institution to provide a quotation of the amount it would charge to effect this assumption or undertaking. If either party obtains a quotation, it must notify the other party in writing of the quotation. The amount referred to in the first bullet point above will equal the lowest — or, if there is only one, the only — quotation obtained, and as to which notice is so given, during the default quotation period. With respect to any quotation, however, the party not obtaining the quotation may object, on reasonable and significant grounds, to the assumption or undertaking by the qualified financial institution providing the quotation and notify the other party in writing of those grounds within two Business Days after the last day of the default quotation period, in which case that quotation will be disregarded in determining the default amount.

## **Default Quotation Period**

The default quotation period is the period beginning on the day the default amount first becomes due and ending on the third Index Business Day after that day, unless:

- > no quotation of the kind referred to above is obtained, or
- every quotation of that kind obtained is objected to within five Index Business Days after the due date as described above.

If either of these two events occurs, the default quotation period will continue until the third Index Business Day after the first Index Business Day on which prompt notice of a quotation is given as described above. If that quotation is objected to as described above within five Index Business Days after that first Index Business Day, however, the default quotation period will continue as described in the prior sentence and this sentence.

In any event, if the default quotation period and the subsequent two Index Business Day objection period have not ended before the Calculation Date, then the default amount will equal the Stated Principal Amount of the Securities.

## **Qualified Financial Institutions**

For the purpose of determining the default amount at any time, a qualified financial institution must be a financial institution organized under the laws of any jurisdiction in the United States of America, Europe or Japan, which at that time has outstanding debt obligations with a stated maturity of one year or less from the date of issue and rated either:

- A-1 or higher by Standard & Poor's Financial Services LLC, a subsidiary of The McGraw-Hill Companies, Inc., or any successor, or any other comparable rating then used by that rating agency, or
- P-1 or higher by Moody's Investors Service or any successor, or any other comparable rating then used by that rating agency.

# Discontinuance of, Adjustments to or Benchmark Event Affecting the Index or Termination of Our License Agreement with the Index Sponsor; Alteration of Method of Calculation

If (i) the Index Sponsor or the Index Calculation Agent announces that it intends to discontinue, or discontinues, publication of, or otherwise fails to publish, the Index, (ii) a Benchmark Event (as described below) under the EU Benchmarks Regulation or UK Benchmarks Regulation (each as described under "Risk Factors – The Securities are linked to the Index and are subject to certain regulatory risks") occurs with respect to the Index or the Index Sponsor, if applicable, (iii) our license agreement with the Index Sponsor terminates or (iv) the Index Sponsor or Index Calculation Agent does not make the Index Constituent Securities and/or their unit weighting available to the Security Calculation Agent, and, in each case, any other person or entity publishes an EU Benchmarks Regulation compliant index licensed to UBS that the Security Calculation Agent determines is comparable to the Index and for which the Index Constituent Securities and/or their unit weighting are available to the Security Calculation Agent (such index being referred to herein as a "successor index"), and the Security Calculation Agent approves such index as a successor index, then on and after the date determined by the Security Calculation Agent, the Security Calculation Agent will determine the Index Closing Level on the applicable dates of determination and the amount payable at maturity or upon early redemption or call and all other related payments terms by reference to such successor index.

Upon any selection by the Security Calculation Agent of a successor index, the Security Calculation Agent will cause written notice of the successor index and the date on and after which the Index Closing Level will be determined by reference thereto to be furnished to the trustee, to us and to the holders of the Securities.

If the Index Sponsor or Index Calculation Agent discontinues publication of the Index, our license agreement with the Index Sponsor terminates or the Index Sponsor or Index Calculation Agent do not make the Index Constituent Securities and/or their unit weighting available to the Security Calculation Agent, prior to, and such discontinuation, termination or unavailability is continuing on the Calculation Date or any Index Business Day during a Measurement Period, or on the Redemption Valuation Date or on any Reset Valuation Date, as applicable, or on any other relevant date on which the Index Closing Level is to be determined and the Security Calculation Agent determines that no successor index is available at such time, or the Security Calculation Agent has previously selected a successor index and publication of such successor index is discontinued prior to, and such discontinuation is continuing on the Calculation Date or any Index Business Day during a Measurement Period, or on the Redemption Valuation Date or on any Reset Valuation Date, or any other relevant date on which the Index Closing Level is to be determined, then the Security Calculation Agent will determine the Index Closing Level using the Index Closing Level on the last Index Business Day immediately prior to such discontinuation or unavailability, as adjusted for certain corporate actions. In such event, the Security Calculation Agent will cause notice thereof to be furnished to the trustee, to us and to the holders of the Securities.

Notwithstanding these alternative arrangements, discontinuation of the publication of the Index or successor index, as applicable, may adversely affect the value of the Securities.

For purposes of the above, a "Benchmark Event" may occur if the EU Benchmarks Regulation and/or UK Benchmarks Regulation, as applicable, applies to this issuance of Securities, and the applicable registration for the Index or Index Sponsor is not effective or has been suspended or withdrawn by the relevant authority with the effect that the use of the Index or the Index Sponsor is not permitted under the EU Benchmarks Regulation or UK Benchmarks Regulation, as applicable.

In addition, if an Index Replacement Event (as defined below) occurs at any time and the Index Sponsor or anyone else publishes an index that the Security Calculation Agent determines is comparable to the Index (the "Substitute Index"), then the Security Calculation Agent may elect, in its sole discretion, to permanently replace the original Index with the Substitute Index for all purposes under the Securities, and all provisions described in the prospectus supplement as applying to the Index will thereafter apply to the Substitute Index instead. In such event, the Security Calculation Agent will make such adjustments, if any, to any level of the Index or Substitute Index that is used for purposes of the Securities as it determines are appropriate in the circumstances. If the Security Calculation Agent elects to replace the original Index with a Substitute Index, then the Security Calculation Agent will determine all amounts hereunder, Current Principal Amount, Current Indicative Value (intraday indicative value), Closing Indicative Value, Index Factor, Index Performance Ratio, Residual Factor, Accrued Fees, Index Closing Levels on the applicable dates of determination, all other related payment terms and the amount payable at maturity or upon early redemption or call by reference to such Substitute Index. If the Security Calculation Agent so elects to replace the original Index with a Substitute Index, the Security Calculation Agent will cause written notice thereof to be furnished to the trustee, to us and to the holders of the Securities of the Securities.

# An "Index Replacement Event" means:

- (a) an amendment to or change (including any officially announced proposed change) in the laws, regulations or rules of the United States (or any political subdivision thereof), or any jurisdiction in which a Primary Exchange (as defined herein) is located that (i) makes it illegal for UBS AG or its affiliates to hold, acquire or dispose of the Index Constituent Securities included in the Index or options, futures, swaps or other derivatives on the Index or on the Index Constituent Securities included in the Index (including but not limited to exchange-imposed position limits), (ii) materially increases the cost to us, our affiliates, third parties with whom we transact or similarly situated third parties in performing our or their obligations in connection with the Securities, (iii) has a material adverse effect on any of these parties' ability to perform their obligations in connection with the Securities, or (iv) materially affects our ability to issue or transact in exchange traded notes similar to the Securities, each as determined by the Security Calculation Agent;
- (b) any official administrative decision, judicial decision, administrative action, regulatory interpretation or other official pronouncement interpreting or applying those laws, regulations or rules that is announced on or after September 14, 2021 that (i) makes it illegal for UBS AG or its affiliates to hold, acquire or dispose of the Index Constituent Securities included in the Index or options, futures, swaps or other derivatives on the Index or on the Index Constituent Securities (including but not limited to exchange-imposed position limits), (ii) materially increases the cost to us, our affiliates, third parties with whom we transact or similarly situated third parties in performing our or their obligations in connection with the Securities, (iii) has a material adverse effect on the ability of us, our affiliates, third parties with whom we transact or a similarly situated third party to perform our or their obligations in connection with the Securities, or (iv) materially affects our ability to issue or transact in exchange traded notes similar to the Securities, each as determined by the Security Calculation Agent;
- (c) any event that occurs on or after September 14, 2021 that makes it a violation of any law, regulation or rule of the United States (or any political subdivision thereof), or any jurisdiction in which a Primary Exchange (as defined herein) is located, or of any official administrative decision, judicial decision, administrative action, regulatory interpretation or other official pronouncement interpreting or applying those laws, regulations or rules, (i) for UBS AG or its affiliates to hold, acquire or dispose of the Index Constituent Securities or options, futures, swaps or other derivatives on the Index or on the Index Constituent Securities (including but not limited to exchange-imposed position limits), (ii) for us, our affiliates, third parties with whom we transact or similarly situated third parties to perform our or their obligations in connection with the Securities, or (iii) for us to issue or transact in exchange traded notes similar to the Securities, each as determined by the Security Calculation Agent;
- (d) any event, as determined by the Security Calculation Agent, as a result of which we or any of our affiliates or a similarly situated party would, after using commercially reasonable efforts, be unable to, or would incur a materially increased amount of tax, duty, expense or fee (other than brokerage commissions) to, acquire, establish, re-establish, substitute, maintain, unwind or dispose of any transaction or asset it deems necessary to hedge the risk of the Securities, or realize, recover or remit the proceeds of any such transaction or asset; or
- (e) as determined by the Security Calculation Agent, the primary exchange or market for trading for the Securities, if any, announces that pursuant to the rules of such exchange or market, as applicable, the Securities cease (or will cease) to be listed, traded or publicly quoted on such exchange or market, as applicable, for any reason and are not immediately re-listed, re-traded or re-quoted on an exchange or quotation system located in the same country as such exchange or market, as applicable.

Notwithstanding these alternative arrangements, discontinuation of the publication of the Index or successor index, as applicable, may adversely affect the value of the Securities.

If at any time the method of calculating the Index, a successor index or a Substitute Index, or the value thereof, is changed in a material respect, or if the Index or a successor or Substitute Index is in any other way modified so that the Index Closing Level of the Index or such successor or Substitute Index does not, in the opinion of the Security Calculation Agent, fairly represent the Index Closing Level of the Index or such successor or Substitute Index had such changes or modifications not been made, then the Security Calculation Agent will make such calculations and adjustments as, in the good faith judgment of the Security Calculation Agent, may be necessary in order to arrive at an Index Closing Level of an index comparable to the Index or such successor index, as the case may be, as if such changes or modifications had not been made, and the Security Calculation Agent will calculate the Index Closing Level for the Index or such successor or Substitute Index with reference to the Index or such successor or Substitute Index, as adjusted. The Security Calculation Agent will accordingly calculate the Index Closing Level, the Index Performance Ratio, the Last Reset Index Closing Level, the Accrued Fees, and any Redemption Amount, Redemption Fee Amount, Cash Settlement Amount or Call Settlement Amount, and all related payment terms based directly or indirectly on the Index Closing Level calculated by the Security Calculation Agent. Accordingly, if the method of calculating the Index or a successor or Substitute Index is modified so that the level of the Index or such successor or Substitute Index is a fraction or multiple of what it would have been if there had been no such modification (e.g., due to a rebasing of the Index), which, in turn, causes the Index Closing Level of the Index or such successor or Substitute Index to be a fraction of what it would have been if there had been no such modification, then the Security Calculation Agent will make such calculations and adjustments in order to arrive at an Index Closing Level for the Index or such successor or Substitute Index as if it had not been modified (e.g., as if such rebasing had not occurred).

In the event that the Security Calculation Agent elects to replace the Index with a successor index or a Substitute Index, UBS may, in its sole discretion, amend the title of the Securities in order to remove reference the former Index and to make such other changes to the title of the Securities as it considers necessary or desirable to reflect the name and/or characteristics of the relevant successor index or Substitute Index, as applicable.

All determinations and adjustments to be made by the Security Calculation Agent may be made in the Security Calculation Agent's sole discretion. See "Risk Factors — Risks Relating to Creditworthiness, Conflicts of Interest, Hedging Activities and Regulation of UBS — There are potential conflicts of interest between you and the Security Calculation Agent" in the prospectus supplement for a discussion of certain conflicts of interest which may arise with respect to the Security Calculation Agent.

#### Manner of Payment and Delivery

Any payment on or delivery of the Securities at maturity or upon early redemption or call will be made to accounts designated by you and approved by us, or at the corporate trust office of the trustee in New York City, but only when the Securities are surrendered to the trustee at that office. We also may make any payment or delivery in accordance with the applicable procedures of the depositary.

# Reissuances or Reopened Issues

We may, at our sole discretion, "reopen" or reissue the Securities. We issued the Securities initially in an amount having the aggregate Stated Principal Amount specified on the cover of the prospectus supplement. We may issue additional Securities in amounts that exceed the amount on the cover at any time, without your consent and without notifying you. The Securities do not limit our ability to incur other indebtedness or to issue other securities. Also, we are not subject to financial or similar restrictions by the terms of the Securities. For more information, please refer to "Description of Debt Securities We May Offer — Amounts That We May Issue" in "Medium-Term Notes, Series B" above.

These further issuances, if any, will be consolidated to form a single class with the originally issued Securities and will have the same CUSIP number and will trade interchangeably with the Securities immediately upon settlement. Any additional issuances will increase the aggregate Stated Principal Amount of the outstanding Securities of the class. The price of any additional offering will be determined at the time of pricing of that offering.

#### **Booking Branch**

The Securities will be booked through UBS AG, London Branch.

# **Clearance and Settlement**

The DTC participants that hold the Securities through DTC on behalf of investors will follow the settlement practices applicable to equity securities in DTC's settlement system with respect to the primary distribution of the Securities and secondary market trading between DTC participants.

## 17. ETRACS 2x Leveraged IFED Invest with the Fed TR Index ETN due September 15, 2061

# **Specific Terms of the Securities**

In this section, references to "holders" mean those who own the Securities registered in their own names, on the books that we or the trustee maintains for this purpose, and not those who own beneficial interests in the Securities registered in street name or in the Securities issued in book-entry form through The Depository Trust Company ("DTC") or another depositary. Owners of beneficial interests in the Securities should read the section entitled "Legal Ownership and Book-Entry Issuance" under "Medium-Term Notes, Series B" above.

These Securities are part of a series of debt securities entitled "Medium-Term Notes, Series B" that we may issue, from time to time, under the indenture more particularly described under "Medium-Term Notes, Series B" above. This section summarizes general financial and other terms that apply to the Securities. Terms that apply generally to all Medium-Term Notes, Series B are described in "Description of Debt Securities We May Offer" under "Medium-Term Notes, Series B" above. The terms described here supplement those described in "Medium-Term Notes, Series B" above and, if the terms described here are inconsistent with those described there, the terms described here are controlling.

The Securities are part of a single series of senior debt securities issued under our indenture, dated as of June 12, 2015 between us and U.S. Bank Trust National Association, as trustee.

We describe the terms of the Securities in more detail below. The Stated Principal Amount of each Security is \$25.00.

The Securities do not guarantee any return of principal at, or prior to, maturity or upon early redemption or call. Instead, at maturity, you will receive a cash payment per Security the amount of which will vary depending on the performance and path of the Index and will be reduced by the Accrued Fees as of the last Index Business Day in the Final Measurement Period as described under "— Cash Settlement Amount at Maturity." If the amount as calculated is equal to or less than zero, the Cash Settlement Amount will be zero and you will not receive a cash payment.

If you exercise your right to have us redeem your Securities, subject to compliance with the redemption procedures, for each Security you will receive a cash payment per Security on the relevant Redemption Date equal to the Redemption Amount as described under "— Early Redemption at the Option of the Holders." If the amount as calculated is equal to or less than zero, the Redemption Amount will be zero and you will not receive a cash payment.

# **Cash Settlement Amount at Maturity**

The "Maturity Date" is September 15, 2061, which will be the third Index Business Day following the last Index Business Day in the Final Measurement Period, subject to adjustment as described below under "— Market Disruption Event."

For each Security, unless earlier called, redeemed or accelerated upon Zero Value Event, you will receive at maturity a cash payment equal to its Closing Indicative Value on the last Index Business Day in the applicable Measurement Period. We refer to this cash payment as the "Cash Settlement Amount." If the amount so calculated is equal to or less than zero, the payment will be zero.

The following graphic illustrates the formula to determine the Cash Settlement Amount, which has been simplified for ease of presentation:

Cash Settlement Amount = Closing Indicative Value, on last Index Business Day in Final Measurement Period

You may lose all or a substantial portion of your investment at maturity. The combined negative effect of the Accrued Fees will reduce your final payment. If the compounded leveraged quarterly return of the Index (or the unleveraged return of the Index, following a Permanent Deleveraging Event) is insufficient to offset the negative effect of the Accrued Fees, you may lose all or a substantial portion of your investment at maturity. The occurrence of Loss Rebalancing Events will result in more frequent than quarterly compounding.

UBS may call the Securities prior to the Maturity Date pursuant to its Call Right. If the Securities are called by UBS, the Call Settlement Amount may be zero and you may lose all or a substantial portion of your investment. See "— UBS Call Right".

The "Stated Principal Amount" of each Security is \$25.00. The Securities may be issued and sold over time at then-current market prices which may be significantly higher or lower than the Stated Principal Amount. If the Securities undergo a split or reverse split, the Stated Principal Amount will be adjusted accordingly.

The Closing Indicative Value represents the dollar value per Security that an investor would receive on any day if it redeemed the Security that day (without giving effect to any Redemption Fee Amount).

The "Closing Indicative Value" per Security, will be calculated as follows:

- (a) On the Initial Trade Date, \$25.00 per Security.
- (b) On any other calendar day, prior to the first day of an applicable Measurement Period, an amount per Security equal to:
  - (Current Principal Amount on the immediately preceding calendar day × Index Factor) Accrued Fees
- (c) From and including the first day of an applicable Measurement Period, an amount per Security equal to:

(Current Principal Amount on the calendar day immediately preceding the first day of the Measurement Period × Index Factor × Residual Factor) – Accrued Fees + Measurement Period Cash Amount

However, if, on any day during a Measurement Period, the Current Indicative Value or the Closing Indicative Value is less than or equal to the Measurement Period Cash Amount from the immediately preceding calendar day, the Closing Indicative Value for that day and all subsequent days will be fixed to be equal to the Measurement Period Cash Amount from the immediately preceding calendar day.

(d) The minimum value of the Closing Indicative Value on any calendar day will be zero.

If a Zero Value Event occurs, the Closing Indicative Value will be equal to zero on the day it occurs and on all future calendar days. Upon the occurrence of a Zero Value Event, investors will lose their entire investment. You will not benefit from any future exposure to the Index after the occurrence of a Zero Value Event. See "— Automatic Acceleration Upon Zero Value Event".

The actual trading price of the Securities in the secondary market may vary significantly from their Closing Indicative Value.

If the Securities undergo a split or reverse split, the Closing Indicative Value will be adjusted accordingly.

The "Current Principal Amount" represents the unleveraged notional investment in the Index Constituent Securities per Security at the close of trading on any Reset Valuation Date. The notional financing amount per Security in order to generate the leveraged returns would approximately equal the Current Principal Amount at the close of trading on any Reset Valuation Date. If a Permanent Deleveraging Event occurs, the leverage of your Securities will be permanently reset to 1.0 and the notional financing amount will be equal to zero for the remaining term of the Securities. If a Zero Value Event occurs prior to your Securities permanently resetting to 1.0 at the end of the Second Permanent Deleveraging Valuation Date, then your Securities will be automatically accelerated and mandatorily redeemed and you will lose your entire investment.

The Current Principal Amount per Security, will be calculated as follows:

- (a) From and including the Initial Trade Date to and excluding the first Reset Valuation Date, \$25.00 per Security.
- (b) At the close of trading on each Reset Valuation Date after the Initial Trade Date, the Current Principal Amount of the Securities will be reset as follows:

New Current Principal Amount = (Current Principal Amount on immediately preceding calendar day × Index Factor)

– Accrued Fees

The Current Principal Amount will not change until the first Reset Valuation Date.

If a day that would otherwise be a Reset Valuation Date occurs on or after the first day of a Measurement Period, such day will not be a valid Reset Valuation Date.

If the Securities undergo a split or reverse split, the Current Principal Amount will be adjusted accordingly.

At the close of trading on each Reset Valuation Date, the Current Principal Amount is reset.

# The "Reset Valuation Date" means:

- (a) Any calendar day up to and including the Second Permanent Deleveraging Valuation Date, that is either: (i) the Initial Trade Date, (ii) a Quarterly Reset Valuation Date, (iii) a Loss Rebalancing Valuation Date (iv) the First Permanent Deleveraging Valuation Date, or (v) the Second Permanent Deleveraging Valuation Date; and
- (b) Any calendar day following the Second Permanent Deleveraging Valuation Date. The valuation dates are defined below.

If a day that would otherwise be a Reset Valuation Date occurs on or after the first day of a Measurement Period, it will not be a valid Reset Valuation Date and the Last Reset Index Closing Level will remain the same.

The "Quarterly Reset Valuation Date" is the second Wednesday of January, April, July and October of each calendar year during the term of the Securities (other than an Excluded Day, as defined below), subject to adjustment as described under "—Market Disruption Event".

As used above, an "Excluded Day" means (i) the Index Business Day immediately preceding the first day of an applicable Measurement Period, and any calendar day thereafter, and (ii) any calendar day after the Second Permanent Deleveraging Valuation Date.

The "Index Factor" is: 1 + (Leverage Factor × Index Performance Ratio).

The Index Factor represents the leveraged percentage change in the Index level since the Last Reset Index Closing Level. The Index Factor times the applicable Current Principal Amount on the preceding calendar day represents the current value of the unleveraged notional amount per Security that is deemed invested in the Index on any calendar day. This does not reflect the Redemption Amount that an investor would receive upon early redemption on such calendar day.

The "Residual Factor" will be calculated as follows:

- (a) 1.0 on any calendar day, to but excluding the first day of an applicable Measurement Period.
- (b) From and including the first day of an applicable four-day Measurement Period, (a) the number of Index Business Days from, but excluding, the date of determination to, and including, the last Index Business Day in such four-day Measurement Period, divided by (b) four.
  - For example, on the first Index Business Day in an applicable four-day Measurement Period, the Residual Factor will equal 3/4, on the second Index Business Day in an applicable four-day Measurement Period, the Residual Factor will equal 2/4, on the third Index Business Day in an applicable four-day Measurement Period, the Residual Factor will equal 1/4 and on the last Index Business Day in an applicable four-day Measurement Period, the Residual Factor will equal zero.
- (c) On any calendar day from and including the last Index Business Day of an applicable Measurement Period, the Residual Factor will be equal to zero.

The Residual Factor is intended to approximate the percentage of the Current Principal Amount that is tracking the Index on any given day. The Residual Factor is relevant only during an applicable Measurement Period but otherwise is not a component of the Closing Indicative Value or Current Indicative Value formulas. At the close of trading on each Index Business Day during a four-day Measurement Period, approximately 25% of the Current Principal Amount and the corresponding amount of financing will be deemed converted to cash. In case of a one-day Measurement Period, approximately 100% of the Current Principal Amount and the corresponding amount of financing will be deemed converted to cash.

The "Leverage Factor" on any calendar day until the occurrence of a Permanent Deleveraging Event and the close of trading on the Second Permanent Deleveraging Valuation Date, will equal 2.0. If a Permanent Deleveraging Event occurs, then on any calendar day following the Second Permanent Deleveraging Valuation Date, the Leverage Factor will equal 1.0.

The "Index Performance Ratio" on any Index Business Day will be equal to:

<u>Index Closing Level – Last Reset Index Closing Level</u>
Last Reset Index Closing Level

On any calendar day that is not an Index Business Day, the Index Closing Level will be equal to the Index Closing Level on the Index Business Day immediately preceding such calendar day.

The "Last Reset Index Closing Level" is the Index Closing Level on the most recent Reset Valuation Date prior to such day. The initial Last Reset Index Closing Level is the Index Closing Level on the Initial Trade Date, as reported by Bloomberg and Reuters.

The "Index Closing Level" on any date of determination is the closing level of the Index, as reported on Bloomberg and Reuters on such day; however, if the closing level of the Index as reported on Bloomberg (or any successor) differs from the closing level of the Index as reported on Reuters (or any successor), the Index Closing Level will be the closing level of the Index as calculated by the Index Calculation Agent. The initial Index Closing Level (which is also the first Last Reset Index Closing Level) was determined on September 14, 2021 by the Security Calculation Agent. If the closing level of the Index, as reported on Bloomberg and Reuters for any Index Business Day, is manifestly incorrect, the "Index Closing Level" for such Index Business Day shall be the closing level of the Index as determined by the Security Calculation Agent. In making such determination, the Security Calculation Agent may consider any relevant information, including, without limitation, relevant market data in the relevant market supplied by one or more third parties or from internal sources or affiliates.

On any calendar day that is not an Index Business Day, the Index Closing Level will be equal to the Index Closing Level on the Index Business Day immediately preceding such calendar day.

"Measurement Period" means the Final Measurement Period or, if UBS exercises its Call Right, the Call Measurement Period.

The "Current Indicative Value" or "intraday indicative value", as determined by the Security Calculation Agent, is an amount per Security, on an intraday basis on any Index Business Day, equal to:

- (a) On the Initial Trade Date, \$25.00.
- (b) On any other calendar day prior to the first day of a Measurement Period:

(Current Principal Amount on the immediately preceding calendar day × Index Factor, calculated using the Intraday Index Value) – Accrued Fees

(c) From and including the first day of a Measurement Period, an amount per Security equal to:

(Current Principal Amount on the calendar day immediately preceding the first day of the Measurement Period × Index Factor, calculated using the Intraday Index Value × Residual Factor on the immediately preceding calendar day) – Accrued Fees + Measurement Period Cash Amount, from the immediately preceding calendar day

However, if, on any day during a Measurement Period, the Current Indicative Value or the Closing Indicative Value is less than or equal to the Measurement Period Cash Amount from the immediately preceding calendar day, the Current Indicative Value for the remainder of that day and all subsequent days will be fixed to be equal to the Measurement Period Cash Amount from the immediately preceding calendar day.

(d) The minimum value of the Current Indicative Value on any calendar day will be zero.

The actual trading price of the Securities in the secondary market may vary significantly from their Current Indicative Value (intraday indicative value).

If a Zero Value Event occurs, the Current Indicative Value (intraday indicative value) will be equal to zero for the remainder of the day it occurs and on all future calendar days. Upon the occurrence of a Zero Value Event, investors will lose their entire investment. You will not benefit from any future exposure to the Index after the occurrence of a Zero Value Event. See "— Automatic Acceleration Upon Zero Value Event".

If the Securities undergo a split or reverse split, the Current Indicative Value (intraday indicative value) will be adjusted accordingly.

The "Accrued Fees" as of any date of determination means the Accrued Tracking Fee + the Accrued Financing Fee.

If the Securities undergo a split or reverse split, the Accrued Fees will be adjusted accordingly.

The Securities are subject to an "Accrued Tracking Fee" per Security, calculated as follows:

- (a) On the Initial Trade Date, the Accrued Tracking Fee is equal to zero.
- (b) On any subsequent calendar day, the Accrued Tracking Fee is equal to: (a) the Accrued Tracking Fee as of the immediately preceding calendar day, plus (b) the Daily Tracking Fee on such calendar day.
- (c) On the calendar day after each Reset Valuation Date, the Accrued Tracking Fee is reset to be equal to the Daily Tracking Fee on such calendar day.

The "Daily Tracking Fee" is an amount per Security calculated as follows:

- (a) On the Initial Trade Date, the Daily Tracking Fee is zero.
- (b) On any subsequent calendar day, the Daily Tracking Fee is equal to:
  - (1) (i) 0.95% times (ii) the Current Principal Amount on the immediately preceding calendar day times (iii) the Index Factor on such calendar day times (iv) the Residual Factor on the immediately preceding calendar day, divided by (2) 365.
- (c) The minimum value of the Daily Tracking Fee on any calendar day will be zero.

The Daily Tracking Fee represents the investor fees calculated each day on the current value of the unleveraged notional amount invested in the Index per Security. These charges accrue and compound during the applicable period, and will reduce any amount you are entitled to receive at maturity or upon early redemption or call.

If the Securities undergo a split or reverse split, the Daily Tracking Fee will be adjusted accordingly.

The Securities are subject to an "Accrued Financing Fee" per Security calculated as follows:

(a) On the Initial Trade Date, the Accrued Financing Fee is equal to zero.

- (b) On any subsequent calendar day, the Accrued Financing Fee is equal to:
  - (1) the Accrued Financing Fee as of the immediately preceding calendar day, plus (2) the Daily Financing Fee on such calendar day.
- (c) On the calendar day after each Reset Valuation Date, the Accrued Financing Fee is reset to be equal to the Daily Financing Fee on such calendar day.
- (d) If a Permanent Deleveraging Event occurs, then on any calendar day following the Second Permanent Deleveraging Valuation Date, the Accrued Financing Fee will be equal to zero.

The "Daily Financing Fee" is an amount per Security calculated as follows:

- (a) On the Initial Trade Date, the Daily Financing Fee is equal to zero.
- (b) On any subsequent calendar day, the Daily Financing Fee is equal to:
  - (1) (i) the Financing Rate on such calendar day *times* (ii) the Current Principal Amount on the immediately preceding calendar day *times* (iii) the Residual Factor on the immediately preceding calendar day, *divided by* (2) 360.
- (c) If a Permanent Deleveraging Event occurs, then on any calendar day following the Second Permanent Deleveraging Valuation Date, the Daily Financing Fee will be equal to zero.
- (d) The minimum value of the Daily Financing Fee on any calendar day will be zero.

The Daily Financing Fee seeks to compensate UBS for providing investors with a leveraged participation in movements of the Index and is intended to approximate the financing costs that investors may have otherwise incurred had they sought to borrow funds at a similar rate from a third party to invest in the Index. These charges accrue and compound during the applicable period, and will reduce any amount that you will be entitled to receive at maturity or upon early redemption or call.

If the Securities undergo a split or reverse split, the Daily Financing Fee will be adjusted accordingly.

The "Financing Rate" will equal the sum of (a) 1.55% and (b) SOFR on the immediately preceding U.S. Government Securities Business Day. The minimum value of SOFR (or any successor base rate, as described below) used on any calendar day will be zero. The minimum Financing Rate at any time will be 1.55%.

For example, 0.05% was the SOFR rate on September 10, 2021, which was a U.S. Government Securities Business Day. The Financing Rate on September 13, 2021 would therefore have been equal to 1.55% + 0.05%, or 1.60.

"SOFR" means, with respect to any U.S. Government Securities Business Day, the daily secured overnight financing rate for such U.S. Government Securities Business Day as provided by the SOFR Administrator on the SOFR Administrator's Website. If for any U.S. Government Securities Business Day, the SOFR in respect of that day has not been published on the SOFR Administrator's Website by the time the Security Calculation Agent determines the Financing Rate for the immediately succeeding day and the Security Calculation Agent has not determined that SOFR has been discontinued, then the SOFR for such day will be the secured overnight financing rate as published in respect of the first preceding U.S. Government Securities Business Day for which the secured overnight financing rate was published on the SOFR Administrator's Website.

"SOFR Administrator" means the Federal Reserve Bank of New York (or a successor administrator of SOFR).

"SOFR Administrator's Website" means the website of the SOFR Administrator, currently at http://www.newyorkfed.org, or any successor source.

"U.S. Government Securities Business Day" means any day except for a Saturday, a Sunday or a day on which the Securities Industry and Financial Markets Association recommends that the fixed income departments of its members be closed for the entire day for purposes of trading in U.S. government securities.

Information About the Secured Overnight Financing Rate

All disclosures contained herein regarding the secured overnight financing rate, including, without limitation, its make-up and method of calculation, have been derived from publicly available sources. The information reflects the policies of, and is subject to change by the Federal Reserve Bank of New York. The secured overnight financing rate is published by the Federal Reserve Bank of New York has no obligation to continue to publish, and may discontinue publication of, the secured overnight financing rate. Neither UBS nor any of its affiliates accepts any responsibility for the calculation, maintenance or publication of the secured overnight financing rate or any successor or replacement rate. Information from outside sources including, but not limited to any website referenced in this section, is not incorporated by reference in, and should not be considered part of, this document or any document incorporated herein by reference. UBS has not conducted any independent review or due diligence of any publicly available information with respect to the secured overnight financing rate.

The secured overnight financing rate is published by the Federal Reserve Bank of New York and is intended to be a broad measure of the cost of borrowing cash overnight collateralized by U.S. Treasury securities. The Federal Reserve Bank of New York reports that secured overnight financing rate includes all trades in the "Broad General Collateral Rate" (as defined on the Federal Reserve Bank of New York's Website), plus bilateral Treasury repurchase agreement transactions cleared through the delivery-versus-payment service offered by the Fixed Income Clearing Corporation (the "FICC"), a subsidiary of the Depository Trust and Clearing Corporation ("DTCC"). The secured overnight financing rate is filtered by the Federal Reserve Bank of New York to remove a portion of the foregoing transactions considered to be "Specials", which are repurchases for specific-issue collateral, which take place at cash-lending rates below those for general collateral repurchases because cash providers are willing to accept a lesser return on their cash in order to obtain a particular security.

The Federal Reserve Bank of New York reports that the secured overnight financing rate is calculated as a volume-weighted median of transaction-level tri-party repo data collected from The Bank of New York Mellon ("BNYM") as well as General Collateral Finance repurchase agreement transaction data and data on bilateral Treasury repurchase transactions cleared through the FICC's delivery-versus-payment service. The Federal Reserve Bank of New York notes that it obtains information from DTCC Solutions LLC, an affiliate of DTCC. The Federal Reserve Bank of New York notes on its publication page for the secured overnight financing rate that use of the secured overnight financing rate is subject to important limitations and disclaimers, including that the Federal Reserve Bank of New York may alter the methods of calculation, publication schedule, rate revision practices or availability of the secured overnight financing rate at any time without notice. The secured overnight financing rate is published at approximately 8:00 a.m. (New York time) on each U.S. Government Securities Business Day for trades made on the immediately preceding U.S. Government Securities Business Day. If the Federal Reserve Bank of New York discovers errors in the transaction data provided by either BNYM or DTCC, or in the calculation process, subsequent to the rate publication but on that same day, the secured overnight financing rate and accompanying summary statistics may be republished at approximately 2:30 p.m. (New York time). Similarly, if transaction data from BNYM or DTCC had previously not been available in time for publication, but became available later in the day, the secured overnight financing rate may be republished at approximately 2:30 p.m. (New York time). Rate revisions will only be effected on the same day as initial publication and will only be republished if the change in the rate exceeds one basis point (0.01%), though the Federal Reserve Bank of New York will review this revision threshold periodically and could modify it after any such review. The description of the secured overnight financing rate herein does not purport to be exhaustive.

Because the secured overnight financing rate is published by the Federal Reserve Bank of New York based on data received from other sources, neither UBS nor any of our affiliates has any control over its determination, calculation or publication. There can be no guarantee that the secured overnight financing rate will not be discontinued or fundamentally altered in a manner that is materially adverse to the interests of investors in the Securities. If the manner in which the secured overnight financing rate is calculated is changed, that change may result in an increase in the Financing Rate on the Securities.

The Federal Reserve Bank of New York began publishing the secured overnight financing rate in April 2018. The Federal Reserve Bank of New York has also published historical indicative secured overnight financing rates going back to August 2014. Investors should not rely on any historical changes or trends in the secured overnight financing rate as an indicator of future changes in the secured overnight financing rate. Also, since the secured overnight financing rate is relatively new, the Securities are not expected to have established trading market when issued, and an established trading market may never develop or may not be very liquid. In addition, if the secured overnight financing rate does not become widely used as a benchmark in securities that are similar or comparable to the Securities, the trading price of the Securities may be lower than those of other securities that are linked to rates that are more widely used. Similarly, market terms for exchange traded notes with financing rates linked to the secured overnight financing rate may evolve over time, and trading prices of the Securities may be lower than those of later-issued secured overnight financing rate-linked exchange traded notes as a result. Investors in the Securities may not be able to sell the Securities at all or may not be able to sell the Securities at prices comparable to similar investments that have a developed secondary market, and may consequently suffer from increased pricing volatility and market risk.

The Federal Reserve Bank of New York is not responsible for publication of the secured overnight financing rate rates by UBS, does not sanction or endorse any particular republication, and has no liability for your use. For a more complete discussion of the secured overnight financing rate, see the website of SOFR Administrator's Website.

Notwithstanding the foregoing:

- If the Security Calculation Agent determines on the relevant determination date that SOFR (or any successor base rate) has been discontinued, then the Security Calculation Agent will use a substitute or successor base rate that it has determined in its sole discretion is most comparable to the SOFR base rate (or such successor base rate), provided that if the Security Calculation Agent determines there is an industry-accepted successor base rate for exchange traded notes similar to the Securities, then the Security Calculation Agent shall use such successor base rate; and
- If the Security Calculation Agent has determined a substitute or successor base rate in accordance with the foregoing, the Security Calculation Agent in its sole discretion may determine the business day convention, definition of business day and any other relevant methodology for calculating such substitute or successor base rate, including any adjustment factor needed to make such substitute or successor base rate comparable to the SOFR base rate (or such successor base rate), in a manner that is consistent with industry-accepted practices for such substitute or successor base rate.

The establishment of SOFR (or such successor base rate, as applicable) for each period by the Security Calculation Agent shall (in the absence of manifest error) be final and binding.

#### The "Measurement Period Cash Amount" is an amount per Security equal to:

- (a) \$0.00 on any calendar day, to but excluding the first day of a Measurement Period.
- (b) On the first day of a one-day Measurement Period:
  - At the close of trading on such Index Business Day, (Current Principal Amount on the immediately preceding calendar day × Index Factor, on such Index Business Day).
- (c) From and including the first day of a four-day Measurement Period:
  - (i) At the close of trading on each Index Business Day during the four-day Measurement Period, the Measurement Period Cash Amount on the immediately preceding calendar day + (Current Principal Amount on the calendar day immediately preceding the first day of such Measurement Period × 0.25 × Index Factor, on such Index Business Day); and
  - (ii) On any calendar day during the Measurement Period that is not an Index Business Day, the Measurement Period Cash Amount on the immediately preceding Index Business Day.
- (d) On any calendar day after the last Index Business Day of a Measurement Period, the Measurement Period Cash Amount on the last Index Business Day of such Measurement Period.

Notwithstanding the foregoing, if, on any day during a Measurement Period, the Current Indicative Value or the Closing Indicative Value is *less than or equal to* the Measurement Period Cash Amount from the immediately preceding calendar day, then the Measurement Period Cash Amount for that day and all subsequent days will be fixed to be equal to the Measurement Period Cash Amount from the immediately preceding calendar day.

The Measurement Period Cash Amount represents the portion of the Current Principal Amount that has been converted to cash on any given day of an applicable Measurement Period and is no longer tracking the Index.

At the close of trading of each Index Business Day during a four-day Measurement Period, approximately 25% of the Current Principal Amount on the calendar day immediately preceding the first day of the Measurement Period, will be deemed converted to cash and an applicable portion of the notional financing amount will separately be deemed converted to cash as well. After the close of trading on the final Index Business Day of a four-day Measurement Period, the Measurement Period Cash Amount will represent the averaged value of the Current Principal Amount that was deemed converted to cash across the four-days of such Measurement Period. In case of a one-day Measurement Period, approximately 100% of the Current Principal Amount will be deemed converted to cash and an applicable amount of financing will separately be deemed converted to cash, at the close of trading of the first day of such Measurement Period.

If the Securities undergo a split or reverse split, the Measurement Period Cash Amount will be adjusted accordingly.

## The "Final Measurement Period" means:

- (a) if the Market Value of Securities outstanding at the close of trading on the Index Business Day immediately preceding the Calculation Date is less than \$500,000,000, the Calculation Date, subject to adjustments as described under "— Market Disruption Event";
- (b) if the Market Value of Securities outstanding at the close of trading on the Index Business Day immediately preceding the Calculation Date is equal to or greater than \$500,000,000, the four Index Business Days from and including the Calculation Date, subject to adjustments as described under "— Market Disruption Event."

For the purpose of determining the Final Measurement Period, the "Market Value" of the Securities outstanding as of the close of trading on the Index Business Day immediately preceding the Calculation Date, will equal:

(i) the Closing Indicative Value as of such Index Business Day times (ii) the number of Securities outstanding as reported by FEDLSO <Index> on Bloomberg.

The "Index Calculation Agent" means the entity that calculates and publishes the level of the Index, which is currently Indxx LLC.

The "Calculation Date" means September 7, 2061, unless such day is not an Index Business Day, in which case the Calculation Date will be the next Index Business Day, subject to adjustment.

The Calculation Date represents the first Index Business Day of the Final Measurement Period.

"Index Business Day" means any day on which the Primary Exchange or market for trading of the Securities is scheduled to be open for trading.

"Business Day" means any day that is not a Saturday, Sunday or a day on which banking institutions in The City of New York, generally, are authorized or obligated by law, regulation or executive order to close.

"Primary Exchange" means, with respect to each Index Constituent Security or each constituent underlying a successor index, the primary exchange or market of trading such Index Constituent Security or such constituent underlying a successor index.

#### **Underlying Index**

The IFED Large-Cap US Equity Index Total Return (Bloomberg: "IFEDLT") is the total return version of the IFED Large-Cap US Equity Index (Bloomberg: "IFEDL"). The Index tracks large-cap U.S. equities that are determined by Economic Index Associates, LLC ("EIA" or the "Index Sponsor") to be best positioned to benefit from the prevailing monetary environment. We refer to the companies included in the Index as the "Index Constituent Securities". The Index is developed by EIA and calculated by Indxx LLC ("Indxx"). The Index is a total return index and the Index level reflects the notional reinvestment of the cash distributions from its constituent securities.

#### Early Redemption at the Option of the Holders

Subject to your compliance with the procedures described below and the potential postponements and adjustments as described under "— Market Disruption Event", you may submit a request to have us redeem your Securities on any Index Business Day no later than 12:00 noon and a confirmation of redemption by no later than 5:00 p.m. on the same Index Business Day. You must request that we redeem a minimum of 50,000 Securities, although we reserve the right from time to time to waive this minimum redemption amount in our sole discretion on a case-by-case basis. You should not assume you will be entitled to the benefit of any such waiver. For any applicable redemption request, the "Redemption Valuation Date" will be the first Index Business Day following the date that the applicable redemption notice and redemption confirmation are delivered, except that we reserve the right from time to time to accelerate, in our sole discretion on a case-by-case basis, the Redemption Valuation Date to the date on which we receive the notice of redemption rather than the following Index Business Day. You should not assume you will be entitled to any such acceleration. To satisfy the minimum redemption amount, your broker or other financial intermediary may bundle your Securities for redemption with those of other investors to reach this minimum amount of 50,000 Securities; however, there can be no assurance that they can or will do so.

The Securities will be redeemed and the holders will receive payment for their Securities on the second Index Business Day following the applicable Redemption Valuation Date (the "Redemption Date"). The First Redemption Date will be the fourth Index Business Day immediately following the Initial Trade Date and the Final Redemption Date will be the fourth Index Business Day immediately preceding the Maturity Date, subject to adjustments. In addition, if we have issued a call notice, the last Redemption Valuation Date will be the fourth Index Business Day prior to the Call Settlement Date, as applicable. If a Zero Value Event occurs, the last Redemption Date will be the date on which the Zero Value Event occurred.

If a Market Disruption Event is continuing or occurs on the applicable scheduled Redemption Valuation Date with respect to any of the Index Constituent Securities, such Redemption Valuation Date may be postponed as described under "— Market Disruption Event".

As of any Redemption Valuation Date, the "Redemption Fee Amount" means an amount per Security equal to:

(0.125% × Closing Indicative Value of the Security as of the Redemption Valuation Date).

If you exercise your right to have us redeem your Securities, subject to your compliance with the procedures described under "— Redemption Procedures", for each applicable Security you will receive a cash payment on the relevant Redemption Date equal to:

Closing Indicative Value as of the Redemption Valuation Date - Redemption Fee Amount.

We refer to this cash payment as the "**Redemption Amount.**" If the amount calculated above is equal to or less than zero, the payment upon early redemption will be zero. We reserve the right from time to time to reduce or waive the Redemption Fee Amount in our sole discretion and on a case-by-case basis. There can be no assurance that we will elect to waive this fee and you should not assume you will be entitled to such fee waiver.

We will inform you of such Redemption Amount on the first Index Business Day following the applicable Redemption Valuation Date.

The redemption feature is intended to induce arbitrageurs to counteract any trading of the Securities at a discount to their indicative value, though there can be no assurance that arbitrageurs will employ the redemption feature in this manner or that they will be successful in counteracting any divergence in the market price of the Securities and their indicative value. The following graphic illustrates the formula to determine the Redemption Amount, which has been simplified for ease of presentation:

Redemption Amount = Closing Indicative Value - Redemption Fee Amount

You may lose all or a substantial portion of your investment upon early redemption. The combined negative effect of the Accrued Fees and the Redemption Fee Amount will reduce your final payment. If the compounded leveraged quarterly return of the Index (or the unleveraged return of the Index, following a Permanent Deleveraging Event) is insufficient to offset the negative effect of the Accrued Fees and the Redemption Fee Amount, if applicable, or if the compounded leveraged quarterly return of the Index (or the unleveraged return of the Index, following a Permanent Deleveraging Event) is negative, you may lose all or a substantial portion of your investment upon early redemption. Loss Rebalancing Events will cause compounding to occur more frequently than quarterly.

The Securities may be called by UBS prior to the Maturity Date pursuant to its Call Right and, upon the occurrence of a Zero Value Event, the Securities will be automatically accelerated and mandatorily redeemed by UBS. See "— UBS Call Right" and "— Automatic Acceleration Upon Zero Value Event".

#### **Redemption Procedures**

To redeem your Securities, you must instruct your broker or other person through whom you hold your Securities to take the following steps through normal clearing system channels:

- deliver a notice of redemption, which we refer to as a "**Redemption Notice**" to UBS via email no later than 12:00 noon on the Index Business Day on which you elect to exercise your redemption right. If we receive your Redemption Notice by the time specified in the preceding sentence, we will respond by sending you a form of confirmation of redemption;
- ➤ deliver the signed confirmation of redemption, which we refer to as the "Redemption Confirmation", to us via email in the specified form by 5:00 p.m. on the same day. We or our affiliate must acknowledge receipt in order for your Redemption Confirmation to be effective;
- instruct your DTC custodian to book a delivery vs. payment trade with respect to your Securities on the applicable Redemption Date at a price equal to the Redemption Amount; and
- > cause your DTC custodian to deliver the trade as booked for settlement via DTC at or prior to 12:00 noon on the applicable Redemption Date.

Different brokerage firms may have different deadlines for accepting instructions from their customers. Accordingly, as a beneficial owner of the Securities, you should consult the brokerage firm through which you own your interest for the relevant deadline. If your broker delivers your Redemption Notice after 12:00 noon, or your Redemption Confirmation after 5:00 p.m., on the Index Business Day prior to the applicable Redemption Valuation Date, your Redemption Notice will not be effective, you will not be able to redeem your Securities until the following Redemption Date and your broker will need to complete all the required steps if you should wish to redeem your Securities on any subsequent Redemption Date. In addition, UBS may request a medallion signature guarantee or such assurances of delivery as it may deem necessary in its sole discretion. All instructions given to participants from beneficial owners of Securities relating to the right to redeem their Securities will be irrevocable. If your DTC custodian or your brokerage firm is not a current UBS customer, UBS will be required to on-board such DTC custodian or brokerage firm, in compliance with its internal policies and procedures, before it can accept your Redemption Notice, your Redemption Confirmation or otherwise process your redemption request. This on-boarding process may delay your Redemption Valuation Date and Redemption Date. Furthermore, in certain circumstances, UBS may be unable to on-board your DTC custodian or your brokerage firm.

We reserve the right from time to time to reduce or waive the minimum redemption amount or the Redemption Fee Amount in our sole discretion on a case-by-case basis. In addition, we reserve the right from time to time to accelerate, in our sole discretion on a case-by-case basis, the Redemption Valuation Date to the date on which we receive the Redemption Notice rather than the following Index Business Day. You should not assume you will be entitled to any such waiver or election to accelerate the Redemption Valuation Date.

#### **UBS Call Right**

UBS may at its option redeem all, but not less than all, of the issued and outstanding Securities. To exercise its Call Right, UBS must provide notice to the holders of such Securities (which may be provided via press release) not less than 18 calendar days prior to the Call Settlement Date specified by UBS in such notice. If we call the Securities, you will receive a cash payment equal to the Closing Indicative Value on the last Index Business Day in the Call Measurement Period. We refer to this cash payment as the "Call Settlement Amount."

If the amount calculated above is equal to or less than zero, the payment upon UBS's exercise of its Call Right will be zero.

We will inform you of such Call Settlement Amount on the first Index Business Day following the last Index Business Day in the Call Measurement Period.

The holders will receive payment for their Securities on the third Index Business Day following the last Index Business Day in the Call Measurement Period (the "Call Settlement Date"). If a Market Disruption Event is continuing or occurs on the scheduled Call Valuation Date with respect to any of the Index Constituent Securities, such Call Valuation Date may be postponed as described under "— Market Disruption Event".

#### The "Call Measurement Period" means:

- (a) if the Market Value of Securities outstanding at the close of trading on the Index Business Day immediately preceding the date we issue a notice of exercise of our Call Right is less than \$500,000,000, the Call Valuation Date, subject to adjustments as described under "— Market Disruption Event"; and
- (b) if the Market Value of Securities outstanding at the close of trading on the Index Business Day immediately preceding the date we issue a notice of exercise of our Call Right is equal to or greater than \$500,000,000, the four Index Business Days from and including the Call Valuation Date, subject to adjustment as described under "— Market Disruption Event."

For the purpose of determining the Final Measurement Period, the "Market Value" of the Securities outstanding as of the close of trading on the Index Business Day immediately preceding the date of delivery by UBS of its notice to holders (which may be provided via press release) of its exercise of its Call Right will equal:

(i) The Closing Indicative Value as of such Index Business Day times (ii) the number of Securities outstanding as reported by FEDLSO <Index> on Bloomberg.

The "Call Valuation Date" means the date we specify in our notice to holders (which may be provided via press release) of our exercise of our Call Right.

In any notice to holders exercising our Call Right, we will specify how many days are included in the Call Measurement Period.

The following graphic illustrates the formula to determine the Call Settlement Amount, which has been simplified for ease of presentation:

Cash Settlement Amount = Closing Indicative Value, on last Index Business Day in Call Measurement Period

You may lose all or a substantial portion of your investment if we exercise our Call Right. The combined negative effect of the Accrued Fees will reduce your final payment. If the compounded leveraged quarterly return of the Index (or the unleveraged return of the Index, following a Permanent Deleveraging Event) is insufficient to offset the negative effect of the Accrued Fees, or if the compounded leveraged quarterly return of the Index (or the unleveraged return of the Index, following a Permanent Deleveraging Event) is negative, you may lose all or a substantial portion of your investment upon a call. Loss Rebalancing Events will cause compounding to occur more frequently than quarterly.

In addition, upon the occurrence of a Zero Value Event, the Securities will be automatically accelerated and mandatorily redeemed by UBS. See "— Automatic Acceleration Upon Zero Value Event" below.

# **Automatic Acceleration Upon Zero Value Event**

A Zero Value Event represents the first instance when the Current Indicative Value (intraday indicative value) or the Closing Indicative Value is less than or equal to zero (other than on an Excluded Day, as defined below). It will have the effect of permanently resetting the value of your Securities to zero and accelerating the Securities. You will not benefit from any future exposure to the Index after the occurrence of a Zero Value Event.

A Zero Value Event can occur only if a Permanent Deleveraging Event occurs and the Current Indicative Value (intraday indicative value) or the Closing Indicative Value declines to zero before the leverage of your Securities is reset to 1.0 at the close of trading on the Index Business Day following such event (or if such event occurs after 3:15 p.m. on any Index Business Day which would not otherwise have been a Loss Rebalancing Valuation Date, the second Index Business Day following such event), as described under "Permanent Deleveraging Valuation Dates" above.

A "Zero Value Event" occurs if the Current Indicative Value (intraday indicative value) or the Closing Indicative Value on any Index Business Day (other than an Excluded Day, as defined below) is less than or equal to zero. From immediately after the Zero Value Event and on all future calendar days, the Current Indicative Value (intraday indicative value) and the Closing Indicative Value will be set equal to zero.

As used above, an "Excluded Day" means (i) any calendar day after the Second Permanent Deleveraging Valuation Date (ii) any calendar day on or after which a Zero Value Event has already occurred, and (iii) any calendar day after the last day of an applicable Measurement Period.

In the event that a Zero Value Event has occurred, UBS will issue a press release shortly after the event; provided that the failure to do so shall not affect the automatic acceleration and redemption of the Securities. The Securities will be suspended from trading intraday shortly after the event occurs and will likely not be open for trading again on NYSE Arca.

#### You will lose your entire investment upon the occurrence of a Zero Value Event.

In addition, we may call the Securities prior to the Maturity Date pursuant to our Call Right. See "Specific Terms of the Securities — UBS Call Right".

#### **Loss Rebalancing Events**

A Loss Rebalancing Event will have the effect of deleveraging your Securities with the aim of resetting the then-current leverage to approximately 2.0. This means that after a Loss Rebalancing Event, a constant percentage increase in the Index Closing Level will have less of a positive effect on the value of your Securities relative to before the occurrence of the Loss Rebalancing Event.

A "Loss Rebalancing Event" occurs if, at any time, the Intraday Index Value on such Index Business Day (other than an Excluded Day, as used below) decreases by 20% or more from the previous Last Reset Index Closing Level.

Loss Rebalancing Events may occur multiple times over the term of the Securities and may occur multiple times during a single calendar quarter. This means both that (i) the Current Principal Amount may be reset more frequently than quarterly and (ii) the cumulative effect of compounding and fees will have increased as a result of the Loss Rebalancing Event(s). Because each Loss Rebalancing Event will have the effect of deleveraging your Securities, following a Loss Rebalancing Event your Securities will have less exposure to a potential positive gain in value relative to the exposure before the occurrence of such Loss Rebalancing Event.

As used above, an "Excluded Day" means (i) the Index Business Day immediately preceding any Quarterly Reset Valuation Date, if a Loss Rebalancing Event occurs after 3:15 p.m. on such day, (ii) any Quarterly Reset Valuation Date, (iii) any Loss Rebalancing Valuation Date, (iv) the Index Business Day immediately preceding the first day of an applicable Measurement Period, if a Loss Rebalancing Event occurs after 3:15 p.m. on such day (v) any calendar day from and including the first day of an applicable Measurement Period, (vi) the First or Second Permanent Deleveraging Valuation Dates, (vii) any calendar day after the Second Permanent Deleveraging Valuation Date, and (viii) any calendar day on or after which a Zero Value Event has occurred.

# "Loss Rebalancing Valuation Date" means:

- (a) if a Loss Rebalancing Event occurs at or prior to 3:15 p.m. on an Index Business Day, the day that such Loss Rebalancing Event occurs, subject to adjustment as described under "— Market Disruption Event" beginning on page S-84; and
- (b) if a Loss Rebalancing Event occurs after 3:15 p.m. on an Index Business Day, the first Index Business Day following the occurrence of such Loss Rebalancing Event, subject to adjustment as described under "— Market Disruption Event."

## **Permanent Deleveraging Event**

A Permanent Deleveraging Event will have the effect of deleveraging your Securities, with the aim of permanently resetting the then-current leverage to 1.0 over two Index Business Days. The leverage at the end of the First Permanent Deleveraging Valuation Date is reset to approximately 2.0 and the leverage at the end of the Second Permanent Deleveraging Valuation Date is reset to 1.0. This means that after a Permanent Deleveraging Event, a constant percentage increase in the Index Closing Level will have less of a positive effect on the value of your Securities than it would have had before the occurrence of the Permanent Deleveraging Event. If such an event were to occur, it most likely would occur only following a Loss Rebalancing Event and prior to the completion of the associated leverage reset to 2.0, which would generally occur at the end of the Index Business Day following the Index Business Day on which the Loss Rebalancing Event occurred or, if the Loss Rebalancing Event occurs 3:15 p.m. on an Index Business Day, at the end of the second Index Business Day following the Index Business Day on which the Loss Rebalancing Event occurred.

A "Permanent Deleveraging Event" occurs if, at any time on an Index Business Day (other than an Excluded Day, as defined below), the Intraday Index Value decreases by 40% or more from the Last Reset Index Closing Level. If a Permanent Deleveraging Event occurs, the Current Principal Amount of the Securities will be reset over two Index Business Days.

As used above, an "Excluded Day" means (i) the First or Second Permanent Deleveraging Valuation Dates, (ii) any calendar day after the Second Permanent Deleveraging Valuation Date, (iii) any day on or after which a Zero Value Event occurs, (iv) the day which is two Index Business Days prior to the first day of a Measurement Period, if a Permanent Deleveraging Event occurs after 3:15 p.m. on such day, and (v) any calendar day from and including the Index Business Day immediately preceding the first day of a Measurement Period.

"Permanent Deleveraging Valuation Dates" means the First Permanent Deleveraging Valuation Date and the Second Permanent Deleveraging Valuation Date, each as defined below:

## (a) The "First Permanent Deleveraging Valuation Date" means:

- (i) any Index Business Day, which otherwise would have been a Loss Rebalancing Valuation Date, but on which a Permanent Deleveraging Event has occurred, subject to adjustment as described under "— Market Disruption Event"; or
- (ii) if a Permanent Deleveraging Event occurs after 3:15 p.m. on any Index Business Day which would not otherwise have been a Loss Rebalancing Valuation Date, then the first Index Business Day following the occurrence of such Permanent Deleveraging Event, subject to adjustment as described under "— Market Disruption Event."

The leverage of your Securities will be reset to approximately 2.0 at the close of trading on the First Permanent Deleveraging Valuation Date.

(b) The "Second Permanent Deleveraging Valuation Date" means the Index Business Day immediately following the First Permanent Deleveraging Valuation Date, subject to adjustment as described under "— Market Disruption Event."

The leverage of your Securities will be reset to 1.0 at the close of trading on the Second Permanent Deleveraging Valuation Date.

# **Split or Reverse Split of the Securities**

We may, at any time in our sole discretion, initiate a split or reverse split of your Securities. If we decide to initiate a split or reverse split, as applicable, we will issue a press release announcing the split or reverse split and its effective date. The date of such press release shall be deemed to be the "announcement date" of the split or the reverse split, the record date for any split or reverse split will be the tenth Business Day after the announcement date, and the effective date will be the next Business Day after the record date.

If the Securities undergo a split or reverse split, we will adjust the Current Principal Amount, Closing Indicative Value, Current Indicative Value, Accrued Fees, Measurement Period Cash Amount and other relevant terms of the Securities accordingly. For example, if the Securities undergo a 4:1 split, every investor who holds a Security via The Depository Trust Company ("DTC") on the relevant record date will, after the split, hold four Securities, and adjustments will be made as described below. The Current Principal Amount on such record date will be divided by four to reflect the 4:1 split. The adjusted Current Principal Amount will be rounded to eight decimal places. The split or reverse split will become effective at the opening of trading of the Securities on the Index Business Day immediately following the record date. The split will not occur if we exercise our Call Right before it becomes effective.

In the case of a reverse split, the Current Principal Amount and other relevant terms of the Securities will be adjusted accordingly and we will determine in our sole discretion the manner in which we will address odd numbers of Securities (commonly referred to as "partials"). For example, if the Securities undergo a 1:4 reverse split, every investor who holds four Securities via DTC on the relevant record date will, after the reverse split, hold only one Security and the Current Principal Amount of the Securities on such record date will be multiplied by four to reflect the 1:4 reverse split. The adjusted Current Principal Amount will be rounded to eight decimal places. The reverse split will become effective at the opening of trading of the Securities on the Index Business Day immediately following the record date. The reverse split will not occur if we exercise our Call Right before it becomes effective.

Holders who own a number of Securities on the record date that is not evenly divisible by the reverse split divisor (which in the case of a 1:4 reverse split, for example, will be 4) will receive the same treatment as all other holders for the maximum number of Securities they hold that is evenly divisible by the reverse split divisor. We will determine in our sole discretion the manner in which we compensate holders for their remaining or "partial" Securities when we announce the reverse split, though our current intention is to provide holders with a cash payment for their partials on the 17th Business Day following the announcement date in an amount equal to the appropriate percentage of the Closing Indicative Value of the reverse split-adjusted Securities on the 15th Business Day following the announcement date. For example, in the case of a 1:4 reverse split, a holder who held 23 Securities via DTC on the record date would receive five post-reverse split Securities on the immediately following Business Day, and a cash payment on the 17th Business Day following the announcement date that is equal to 3/4 of the Current Principal Amount of the reverse split-adjusted Securities on the 15th Business Day following the announcement date.

# **Security Calculation Agent**

UBS Securities LLC will act as the "Security Calculation Agent." The Security Calculation Agent will be solely responsible for all determinations and calculations regarding the value of the Securities, including, among other things, at maturity or upon early redemption or call, or at other times, the Current Principal Amount, Current Indicative Value (which we also refer to as the intraday indicative value), Closing Indicative Value, Market Disruption Events, Business Days, Index Business Days, the Leverage Factor, the Index Factor, the Index Performance Ratio, the Residual Factor, the Index Closing Level, the Financing Rate, the Accrued Fees (including determining any successor to the SOFR base rate), the Redemption Fee Amount, the Cash Settlement Amount, if any, that we will pay you at maturity, the Redemption Amount, if any, that we will pay you upon redemption, the Call Settlement Amount, that we will pay you if we call the Securities, whether a Loss Rebalancing Event has occurred, whether a Permanent Deleveraging Event has occurred and whether any day is an Index Business Day and all such other matters as may be specified elsewhere herein as matters to be determined by the Security Calculation Agent. If any Intraday Index Value as published by Bloomberg on any Index Business Day is manifestly incorrect, the Security Calculation Agent may base its determination of whether a Loss Rebalancing Event, Permanent Deleveraging Event or Zero Value Event shall have occurred on such Index Business Day on its own determination of such Intraday Index Value. In making such determination, the Security Calculation Agent may consider any relevant information, including, without limitation, relevant market data in the relevant market supplied by one or more third parties or from internal sources or affiliates. The Security Calculation Agent will also be responsible for determining whether the Index has been discontinued and whether there has been a material change in the Index. The Security Calculation Agent will make all such determinations and calculations in its sole discretion, and absent manifest error, all determinations of the Security Calculation Agent will be conclusive for all purposes and binding on us, you, and all other persons having an interest in the Securities, without liability on the part of the Security Calculation Agent. You will not be entitled to any compensation from us for any loss suffered as a result of any determinations or calculations made by the Security Calculation Agent. We may appoint a different Security Calculation Agent from time to time after the date of the prospectus supplement without your consent and without notifying you.

The Security Calculation Agent will provide written notice to the trustee at its New York office, on which notice the trustee may conclusively rely, of the amount to be paid at maturity or upon early redemption or call, on or prior to 12:00 noon on the Index Business Day immediately preceding the Maturity Date, any Redemption Date or any Call Settlement Date.

All dollar amounts related to determination of the Accrued Fees, the Current Principal Amount, and any Redemption Amount, Redemption Fee Amount, Call Settlement Amount or Cash Settlement Amount per Security will be rounded to the nearest tenthousandth, with five one hundred-thousandths rounded upward (*e.g.*, .76545 would be rounded up to .7655); and all dollar amounts paid to any holder of Securities will be rounded to the nearest cent, with one-half cent rounded upward.

# **Market Disruption Event**

To the extent a Market Disruption Event with respect to the Index has occurred or is continuing during a four-day Measurement Period, the Index Closing Level for such day will be determined by the Security Calculation Agent or one of its affiliates on the first succeeding Index Business Day on which a Market Disruption Event does not occur or is not continuing with respect to the Index. The remaining Index Business Days in the Measurement Period will be postponed accordingly, and the remaining Index Business Days in the Measurement Period will resume again following the suspension of the Market Disruption Event. For example, if the four-day Measurement Period for purposes of calculating the Call Settlement Amount, is scheduled for June 2, June 3, June 4 and June 5, and there is a Market Disruption Event with respect to the Index on June 2, but no other Market Disruption Event during such Call Measurement Period, then June 3 will become the first Index Business Day of the Measurement Period, June 4th the second Index Business Day, June 5th the third Index Business Day and the next Index Business Day after June 5th would be the final day of the Measurement Period. The same approach would be applied if there is a Market Disruption Event during a four-day Final Measurement Period.

To the extent a Market Disruption Event with respect to the Index has occurred or is continuing on the Redemption Valuation Date, Call Valuation Date (in the event that the Call Measurement Period is the Call Valuation Date), Calculation Date (in the event that the Final Measurement Period is the Calculation Date) or any Reset Valuation Date, the Index Closing Level for such Redemption Valuation Date, Call Valuation Date, Calculation Date or Reset Valuation Date will be determined by the Security Calculation Agent or one of its affiliates on the first succeeding Index Business Day on which a Market Disruption Event does not occur or is not continuing with respect to the Index. For example, if the Redemption Valuation Date, for purposes of calculating a Redemption Amount, is based on the Index Closing Level on June 2 and there is a Market Disruption Event with respect to the Index on June 2, then the Index Closing Level on June 3 will be used to calculate the Redemption Amount, assuming that no such Market Disruption Event has occurred or is continuing on June 3.

In no event, however, will any postponement pursuant to either of the two immediately preceding paragraphs result in the affected Index Business Day of the Measurement Period or any Redemption Valuation Date, Call Valuation Date (in the event that the Call Measurement Period is the Call Valuation Date), Calculation Date (in the event that the Final Measurement Period is the Calculation Date) or Reset Valuation Date occurring more than five Index Business Days following the day originally scheduled to be such Index Business Day of the Measurement Period or such Redemption Valuation Date, Call Valuation Date, Calculation Date or Reset Valuation Date. If a Market Disruption Event has occurred or is continuing with respect to the Index on the fifth Index Business Day following the date originally scheduled to be such Index Business Day of the Measurement Period or any Redemption Valuation Date, Calculation Date or any Reset Valuation Date, the Security Calculation Agent or one of its affiliates will determine the Index Closing Level based on its good faith estimate of the Index Closing Level that would have prevailed on such fifth Index Business Day but for such Market Disruption Event.

Any of the following will be a "Market Disruption Event" with respect to the Index, in each case as determined by the Security Calculation Agent in its sole discretion:

- (a) suspension, absence or material limitation of trading in a material number of Index Constituent Securities, whether by reason of movements in price exceeding limits permitted by the Primary Exchange or otherwise;
- (b) suspension, absence or material limitation of trading in option or futures contracts relating to the Index or to a material number of Index Constituent Securities in the primary market or markets for those contracts;
- (c) the Index is not published; or
- (d) in any other event, if the Security Calculation Agent determines in its sole discretion that the event materially interferes with our ability or the ability of any of our affiliates to unwind all or a material portion of a hedge with respect to the Securities that we or our affiliates have effected or may effect as described in the section entitled "Use of Proceeds and Hedging."

The following events will not be Market Disruption Events with respect to the Index:

- (a) a limitation on the hours or numbers of days of trading, but only if the limitation results from an announced change in the regular business hours of the relevant market; and
- (b) a decision to permanently discontinue trading in the option or futures contracts relating to the Index or any Index Constituent Securities.

For this purpose, an "absence of trading" in the primary securities market on which option or futures contracts related to the Index or any Index Constituent Securities are traded will not include any time when that market is itself closed for trading under ordinary circumstances.

#### **Default Amount on Acceleration**

If an event of default occurs and the maturity of the Securities is accelerated, we will pay the default amount in respect of the principal of the Securities at maturity. We describe the default amount below under "— Default Amount."

For the purpose of determining whether the holders of our Medium-Term Notes, Series B, of which the Securities are a part, are entitled to take any action under the indenture, we will treat the outstanding principal amount of the Medium-Term Notes, Series B, as constituting the outstanding principal amount of the Securities. Although the terms of the Securities may differ from those of the other Medium-Term Notes, Series B, holders of specified percentages in principal amount of all Medium-Term Notes, Series B, together in some cases with other series of our debt securities, will be able to take action affecting all the Medium-Term Notes, Series B, including the Securities. This action may involve changing some of the terms that apply to the Medium-Term Notes, Series B, accelerating the maturity of the Medium-Term Notes, Series B after a default or waiving some of our obligations under the indenture. We discuss these matters in "Medium-Term Notes, Series B" above under "Description of Debt Securities We May Offer — Default, Remedies and Waiver of Default" and "Description of Debt Securities We May Offer — Modification and Waiver of Covenants."

#### **Default Amount**

The default amount for the Securities on any day will be an amount, in U.S. dollars as determined by the Security Calculation Agent in its sole discretion, for the aggregate Stated Principal Amount of the Securities, equal to the cost of having a qualified financial institution, of the kind and selected as described below, expressly assume all our payment and other obligations with respect to the Securities as of that day and as if no default or acceleration had occurred, or to undertake other obligations providing substantially equivalent economic value to you with respect to the Securities. That cost will equal:

- the lowest amount that a qualified financial institution would charge to effect this assumption or undertaking, plus
- the reasonable expenses, including reasonable attorneys' fees, incurred by the holders of the Securities in preparing any documentation necessary for this assumption or undertaking.

During the default quotation period for the Securities, which we describe below, the holders of the Securities and/or we may request a qualified financial institution to provide a quotation of the amount it would charge to effect this assumption or undertaking. If either party obtains a quotation, it must notify the other party in writing of the quotation. The amount referred to in the first bullet point above will equal the lowest — or, if there is only one, the only — quotation obtained, and as to which notice is so given, during the default quotation period. With respect to any quotation, however, the party not obtaining the quotation may object, on reasonable and significant grounds, to the assumption or undertaking by the qualified financial institution providing the quotation and notify the other party in writing of those grounds within two Business Days after the last day of the default quotation period, in which case that quotation will be disregarded in determining the default amount.

#### **Default Quotation Period**

The default quotation period is the period beginning on the day the default amount first becomes due and ending on the third Index Business Day after that day, unless:

- > no quotation of the kind referred to above is obtained, or
- > every quotation of that kind obtained is objected to within five Index Business Days after the due date as described above

If either of these two events occurs, the default quotation period will continue until the third Index Business Day after the first Index Business Day on which prompt notice of a quotation is given as described above. If that quotation is objected to as described above within five Index Business Days after that first Index Business Day, however, the default quotation period will continue as described in the prior sentence and this sentence.

In any event, if the default quotation period and the subsequent two Index Business Day objection period have not ended before the Calculation Date, then the default amount will equal the Stated Principal Amount of the Securities.

## **Qualified Financial Institutions**

For the purpose of determining the default amount at any time, a qualified financial institution must be a financial institution organized under the laws of any jurisdiction in the United States of America, Europe or Japan, which at that time has outstanding debt obligations with a stated maturity of one year or less from the date of issue and rated either:

- A-1 or higher by Standard & Poor's Financial Services LLC, a subsidiary of The McGraw-Hill Companies, Inc., or any successor, or any other comparable rating then used by that rating agency, or
- > P-1 or higher by Moody's Investors Service or any successor, or any other comparable rating then used by that rating agency.

# Discontinuance of, Adjustments to or Benchmark Event Affecting the Index or Termination of Our License Agreement with the Index Sponsor; Alteration of Method of Calculation

If (i) the Index Sponsor or the Index Calculation Agent announces that it intends to discontinue, or discontinues, publication of, or otherwise fails to publish, the Index, (ii) a Benchmark Event (as described below) under the EU Benchmarks Regulation or UK Benchmarks Regulation (each as described under "Risk Factors – The Securities are linked to the Index and are subject to certain regulatory risks") occurs with respect to the Index or the Index Sponsor, if applicable, (iii) our license agreement with the Index Sponsor terminates or (iv) the Index Sponsor or Index Calculation Agent does not make the Index Constituent Securities and/or their unit weighting available to the Security Calculation Agent, and, in each case, any other person or entity publishes an EU Benchmarks Regulation compliant index licensed to UBS that the Security Calculation Agent determines is comparable to the Index and for which the Index Constituent Securities and/or their unit weighting are available to the Security Calculation Agent (such index being referred to herein as a "successor index"), and the Security Calculation Agent approves such index as a successor index, then on and after the date determined by the Security Calculation Agent, the Security Calculation Agent will determine the Index Closing Level on the applicable dates of determination and the amount payable at maturity or upon early redemption or call and all other related payments terms by reference to such successor index.

Upon any selection by the Security Calculation Agent of a successor index, the Security Calculation Agent will cause written notice of the successor index and the date on and after which the Index Closing Level will be determined by reference thereto to be furnished to the trustee, to us and to the holders of the Securities.

If the Index Sponsor or Index Calculation Agent discontinues publication of the Index, our license agreement with the Index Sponsor terminates or the Index Sponsor or Index Calculation Agent do not make the Index Constituent Securities and/or their unit weighting available to the Security Calculation Agent, prior to, and such discontinuation, termination or unavailability is continuing on the Calculation Date or any Index Business Day during a Measurement Period, or on the Redemption Valuation Date or on any Reset Valuation Date, as applicable, or on any other relevant date on which the Index Closing Level is to be determined and the Security Calculation Agent determines that no successor index is available at such time, or the Security Calculation Agent has previously selected a successor index and publication of such successor index is discontinued prior to, and such discontinuation is continuing on the Calculation Date or any Index Business Day during a Measurement Period, or on the Redemption Valuation Date or on any Reset Valuation Date, or any other relevant date on which the Index Closing Level is to be determined, then the Security Calculation Agent will determine the Index Closing Level using the Index Closing Level on the last Index Business Day immediately prior to such discontinuation or unavailability, as adjusted for certain corporate actions. In such event, the Security Calculation Agent will cause notice thereof to be furnished to the trustee, to us and to the holders of the Securities.

Notwithstanding these alternative arrangements, discontinuation of the publication of the Index or successor index, as applicable, may adversely affect the value of the Securities.

For purposes of the above, a "Benchmark Event" may occur if the EU Benchmarks Regulation and/or UK Benchmarks Regulation, as applicable, applies to this issuance of Securities, and the applicable registration for the Index or Index Sponsor is not effective or has been suspended or withdrawn by the relevant authority with the effect that the use of the Index or the Index Sponsor is not permitted under the EU Benchmarks Regulation or UK Benchmarks Regulation, as applicable. In addition, if an Index Replacement Event (as defined below) occurs at any time and the Index Sponsor or anyone else publishes an index that the Security Calculation Agent determines is comparable to the Index (the "Substitute Index"), then the Security Calculation Agent may elect, in its sole discretion, to permanently replace the original Index with the Substitute Index for all purposes under the Securities, and all provisions described in the prospectus supplement as applying to the Index will thereafter apply to the Substitute Index instead. In such event, the Security Calculation Agent will make such adjustments, if any, to any level of the Index or Substitute Index that is used for purposes of the Securities as it determines are appropriate in the circumstances. If the Security Calculation Agent elects to replace the original Index with a Substitute Index, then the Security Calculation Agent will determine all amounts hereunder, Current Principal Amount, Current Indicative Value (intraday indicative value), Closing Indicative Value, Index Factor, Index Performance Ratio, Residual Factor, Accrued Fees, Index Closing Levels on the applicable dates of determination, all other related payment terms and the amount payable at maturity or upon early redemption or call by reference to such Substitute Index. If the Security Calculation Agent so elects to replace the original Index with a Substitute Index, the Security Calculation Agent will cause written notice thereof to be furnished to the trustee, to us and to the holders of the Securities of the Securities.

#### An "Index Replacement Event" means:

- (a) an amendment to or change (including any officially announced proposed change) in the laws, regulations or rules of the United States (or any political subdivision thereof), or any jurisdiction in which a Primary Exchange (as defined herein) is located that (i) makes it illegal for UBS AG or its affiliates to hold, acquire or dispose of the Index Constituent Securities included in the Index or options, futures, swaps or other derivatives on the Index or on the Index Constituent Securities included in the Index (including but not limited to exchange-imposed position limits), (ii) materially increases the cost to us, our affiliates, third parties with whom we transact or similarly situated third parties in performing our or their obligations in connection with the Securities, (iii) has a material adverse effect on any of these parties' ability to perform their obligations in connection with the Securities, or (iv) materially affects our ability to issue or transact in exchange traded notes similar to the Securities, each as determined by the Security Calculation Agent;
- (b) any official administrative decision, judicial decision, administrative action, regulatory interpretation or other official pronouncement interpreting or applying those laws, regulations or rules that is announced on or after September 14, 2021 that (i) makes it illegal for UBS AG or its affiliates to hold, acquire or dispose of the Index Constituent Securities included in the Index or options, futures, swaps or other derivatives on the Index or on the Index Constituent Securities (including but not limited to exchange-imposed position limits), (ii) materially increases the cost to us, our affiliates, third parties with whom we transact or similarly situated third parties in performing our or their obligations in connection with the Securities, (iii) has a material adverse effect on the ability of us, our affiliates, third parties with whom we transact or a similarly situated third party to perform our or their obligations in connection with the Securities, or (iv) materially affects our ability to issue or transact in exchange traded notes similar to the Securities, each as determined by the Security Calculation Agent;

- (c) any event that occurs on or after September 14, 2021 that makes it a violation of any law, regulation or rule of the United States (or any political subdivision thereof), or any jurisdiction in which a Primary Exchange (as defined herein) is located, or of any official administrative decision, judicial decision, administrative action, regulatory interpretation or other official pronouncement interpreting or applying those laws, regulations or rules, (i) for UBS AG or its affiliates to hold, acquire or dispose of the Index Constituent Securities or options, futures, swaps or other derivatives on the Index or on the Index Constituent Securities (including but not limited to exchange-imposed position limits), (ii) for us, our affiliates, third parties with whom we transact or similarly situated third parties to perform our or their obligations in connection with the Securities, or (iii) for us to issue or transact in exchange traded notes similar to the Securities, each as determined by the Security Calculation Agent;
- (d) any event, as determined by the Security Calculation Agent, as a result of which we or any of our affiliates or a similarly situated party would, after using commercially reasonable efforts, be unable to, or would incur a materially increased amount of tax, duty, expense or fee (other than brokerage commissions) to, acquire, establish, re-establish, substitute, maintain, unwind or dispose of any transaction or asset it deems necessary to hedge the risk of the Securities, or realize, recover or remit the proceeds of any such transaction or asset; or
- (e) as determined by the Security Calculation Agent, the primary exchange or market for trading for the Securities, if any, announces that pursuant to the rules of such exchange or market, as applicable, the Securities cease (or will cease) to be listed, traded or publicly quoted on such exchange or market, as applicable, for any reason and are not immediately re-listed, re-traded or re-quoted on an exchange or quotation system located in the same country as such exchange or market, as applicable.

Notwithstanding these alternative arrangements, discontinuation of the publication of the Index or successor index, as applicable, may adversely affect the value of the Securities.

If at any time the method of calculating the Index, a successor index or a Substitute Index, or the value thereof, is changed in a material respect, or if the Index or a successor or Substitute Index is in any other way modified so that the Index Closing Level of the Index or such successor or Substitute Index does not, in the opinion of the Security Calculation Agent, fairly represent the Index Closing Level of the Index or such successor or Substitute Index had such changes or modifications not been made, then the Security Calculation Agent will make such calculations and adjustments as, in the good faith judgment of the Security Calculation Agent, may be necessary in order to arrive at an Index Closing Level of an index comparable to the Index or such successor index, as the case may be, as if such changes or modifications had not been made, and the Security Calculation Agent will calculate the Index Closing Level for the Index or such successor or Substitute Index with reference to the Index or such successor or Substitute Index, as adjusted. The Security Calculation Agent will accordingly calculate the Index Closing Level, the Index Performance Ratio, the Last Reset Index Closing Level, the Accrued Fees, and any Redemption Amount, Redemption Fee Amount, Cash Settlement Amount or Call Settlement Amount, and all related payment terms based directly or indirectly on the Index Closing Level calculated by the Security Calculation Agent. Accordingly, if the method of calculating the Index or a successor or Substitute Index is modified so that the level of the Index or such successor or Substitute Index is a fraction or multiple of what it would have been if there had been no such modification (e.g., due to a rebasing of the Index), which, in turn, causes the Index Closing Level of the Index or such successor or Substitute Index to be a fraction of what it would have been if there had been no such modification, then the Security Calculation Agent will make such calculations and adjustments in order to arrive at an Index Closing Level for the Index or such successor or Substitute Index as if it had not been modified (e.g., as if such rebasing had not occurred).

In the event that the Security Calculation Agent elects to replace the Index with a successor index or a Substitute Index, UBS may, in its sole discretion, amend the title of the Securities in order to remove reference the former Index and to make such other changes to the title of the Securities as it considers necessary or desirable to reflect the name and/or characteristics of the relevant successor index or Substitute Index, as applicable.

All determinations and adjustments to be made by the Security Calculation Agent may be made in the Security Calculation Agent's sole discretion. See "Risk Factors — Risks Relating to Creditworthiness, Conflicts of Interest, Hedging Activities and Regulation of UBS — There are potential conflicts of interest between you and the Security Calculation Agent" in this prospectus supplement for a discussion of certain conflicts of interest which may arise with respect to the Security Calculation Agent.

# Manner of Payment and Delivery

Any payment on or delivery of the Securities at maturity or upon early redemption or call will be made to accounts designated by you and approved by us, or at the corporate trust office of the trustee in New York City, but only when the Securities are surrendered to the trustee at that office. We also may make any payment or delivery in accordance with the applicable procedures of the depositary.

#### **Reissuances or Reopened Issues**

We may, at our sole discretion, "reopen" or reissue the Securities. We issued the Securities initially in an amount having the aggregate Stated Principal Amount specified on the cover of this prospectus supplement. We may issue additional Securities in amounts that exceed the amount on the cover at any time, without your consent and without notifying you. The Securities do not limit our ability to incur other indebtedness or to issue other securities. Also, we are not subject to financial or similar restrictions by the terms of the Securities. For more information, please refer to "Description of Debt Securities We May Offer — Amounts That We May Issue" in "Medium-Term Notes, Series B" above.

These further issuances, if any, will be consolidated to form a single class with the originally issued Securities and will have the same CUSIP number and will trade interchangeably with the Securities immediately upon settlement. Any additional issuances will increase the aggregate Stated Principal Amount of the outstanding Securities of the class. The price of any additional offering will be determined at the time of pricing of that offering.

#### **Booking Branch**

The Securities will be booked through UBS AG, London Branch.

#### **Clearance and Settlement**

The DTC participants that hold the Securities through DTC on behalf of investors will follow the settlement practices applicable to equity securities in DTC's settlement system with respect to the primary distribution of the Securities and secondary market trading between DTC participants.

#### 18. ETRACS IFED Invest with the Fed TR Index ETN due September 15, 2061

# **Specific Terms of the Securities**

In this section, references to "holders" mean those who own the Securities registered in their own names, on the books that we or the trustee maintains for this purpose, and not those who own beneficial interests in the Securities registered in street name or in the Securities issued in book-entry form through The Depository Trust Company ("DTC") or another depositary. Owners of beneficial interests in the Securities should read the section entitled "Legal Ownership and Book-Entry Issuance" under "Medium-Term Notes, Series B" above.

These Securities are part of a series of debt securities entitled "Medium-Term Notes, Series B" that we may issue, from time to time, under the indenture more particularly described under "Medium-Term Notes, Series B" above. This section summarizes general financial and other terms that apply to the Securities. Terms that apply generally to all Medium-Term Notes, Series B are described in "Description of Debt Securities We May Offer" under "Medium-Term Notes, Series B" above. The terms described here supplement those described in "Medium-Term Notes, Series B" above and, if the terms described here are inconsistent with those described there, the terms described here are controlling.

The Securities are part of a single series of senior debt securities issued under our indenture, dated as of June 12, 2015 between us and U.S. Bank Trust National Association, as trustee.

We describe the terms of the Securities in more detail below. The Stated Principal Amount of each Security is \$25.00.

The Securities do not guarantee any return of principal at, or prior to, maturity or call, or upon early redemption. Instead, at maturity, you will receive a cash payment the amount of which will vary depending on the performance and path of the Index calculated in accordance with the formula set forth below and will be reduced by the Daily Tracking Fee as of the last Index Business Day in the applicable

Measurement Period or Redemption Valuation Date.

If you exercise your right to have us redeem your Securities, subject to compliance with the redemption procedures, for each Security you will receive a cash payment on the Redemption Date equal to the Redemption Amount as described below under "— Early Redemption at the Option of the Holders." If the amount so calculated is equal to or less than zero, the Redemption Amount will be zero and you will not receive a cash payment.

If we elect to exercise our call right to redeem all of the Securities, subject to compliance with the procedures set forth below, for each Security you will receive a cash payment on the Call Settlement Date equal to the Call Settlement Amount, as described below under "— UBS Call Right." If the amount so calculated is equal to or less than zero, the Call Settlement Amount will be zero and you will not receive a cash payment.

The Securities will not pay any cash coupon during their term.

#### **Cash Settlement Amount at Maturity**

The "Maturity Date" is September 15, 2061, which will be the third Index Business Day following the last Index Business Day in the Final Measurement Period, subject to adjustment as described below under "— Market Disruption Event."

For each Security, unless earlier called or redeemed, you will receive at maturity a cash payment equal to the Closing Indicative Value on the last day of the Final Measurement Period. We refer to this payment as the "Cash Settlement Amount". If the amount so calculated is equal to or less than zero, the payment at maturity will be zero.

The following graphic illustrates the formula to determine the Cash Settlement Amount, which has been simplified for ease of presentation:

Closing Indicative Value, on last Index
Cash Settlement Amount=
Business Day in Final Measurement Period

You may lose all or a substantial portion of your investment at maturity. The Securities are fully exposed to any decline in the level of the Index. The negative effect of the Daily Tracking Fee will reduce your final payment. If the level of the Index (as measured by the Index Closing Level at the end of the Final Measurement Period, as compared to the initial Index Closing Level or the Index level at the time you purchase the Securities, as applicable) does not increase by an amount sufficient to offset the negative effect of the Daily Tracking Fee, or if the final Index level is less than the initial Index Closing Level (or the Index level at the time you purchase the Securities, as applicable), you may lose all or a substantial portion of your investment at maturity. The Daily Tracking Fee also takes into account the performance of the Index, as measured by the Closing Indicative Value.

The Securities may be called by UBS prior to the Maturity Date pursuant to the UBS Call Right. If the Securities are called by UBS, the Call Settlement Amount may be zero and you may lose all or a substantial portion of your investment. See "— UBS Call Right".

The "Stated Principal Amount" of each Security is \$25.00. The Securities may be issued and sold over time at then-current market prices which may be significantly higher or lower than the Stated Principal Amount. If the Securities undergo a split or reverse split, the Stated Principal Amount will be adjusted accordingly.

The "Closing Indicative Value" represents the dollar value per Security that an investor would receive on any day if it redeemed the Security on such day (excluding any Redemption Fee Amount). The Closing Indicative Value per Security will be calculated as follows:

- (a) On the Initial Trade Date, \$25.00 per Security
- (b) On any subsequent calendar day, prior to but excluding the first day of an applicable Measurement Period, an amount per Security equal to:
  - (Closing Indicative Value on the previous calendar day \* Index Factor)—Daily Tracking Fee
- (c) From and including the first day of an applicable Measurement Period, an amount per Security equal to:

(Closing Indicative Value on the calendar day immediately preceding the first day of the Measurement Period × Index Factor × Residual Factor) + Measurement Period Cash Amount

The minimum value of the Closing Indicative Value on any calendar day will be zero.

The actual trading price of the Securities in the secondary market may vary significantly from their Closing Indicative Value.

If the Securities undergo a split or reverse split, the Closing Indicative Value will be adjusted accordingly.

The "Index Factor" on any Index Business Day prior to but excluding the first day of an applicable Measurement Period, will equal:

(i) the Index Closing Level, on such Index Business Day, divided by, (ii) the Index Closing Level, on the immediately preceding Index Business Day.

From and including the first day of an applicable Measurement Period, the Index Factor will equal:

(i) the Index Closing Level, on such calendar day, divided by, (ii) the Index Closing Level on the calendar day immediately preceding the first day of such Measurement Period.

On any calendar day that is not an Index Business Day, the Index Closing Level will be equal to the Index Closing Level on the immediately preceding Index Business Day. The Index Factor will therefore equal one (1) on any calendar day that is not an Index Business Day and is prior to the first Index Business Day of a five-day Measurement Period.

The "Residual Factor" will be calculated as follows:

- (a) 1.0 on any calendar day, prior to but excluding the first day of an applicable Measurement Period
- (b) From and including the first day of an applicable five-day Measurement Period, (a) the number of Index Business Days from, but excluding, the date of determination to, and including, the last Index Business Day in such five-day Measurement Period, divided by (b) five.

The Residual Factor is intended to approximate the percentage of the Closing Indicative Value that is tracking the Index on any given day. The Residual Factor is relevant only during an applicable Measurement Period but otherwise is not a component of the Closing Indicative Value or Current Indicative Value formulas.

For example, on the first Index Business Day in an applicable five-day Measurement Period, the Residual Factor will equal (4/5), on the second Index Business Day in an applicable five-day Measurement Period, the Residual Factor will equal (3/5), on the third Index Business Day in an applicable five-day Measurement Period, the Residual Factor will equal (2/5), on the fourth Index Business Day in an applicable five-day Measurement Period, the Residual Factor will equal (1/5) and on the last Index Business Day in an applicable five-day Measurement Period, the Residual Factor will equal zero.

On any calendar day from and including the last Index Business Day of an applicable Measurement Period, the Residual Factor will be equal to zero.

The "Index Closing Level" on any date of determination is the closing level of the Index, as reported on Bloomberg and Reuters on such day; however, if the closing level of the Index as reported on Bloomberg (or any successor) differs from the closing level of the Index as reported on Reuters (or any successor), the Index Closing Level will be the closing level of the Index as calculated by the Index Calculation Agent. If the closing level of the Index, as reported on Bloomberg and Reuters for any Index Business Day, is manifestly incorrect, the "Index Closing Level" for such Index Business Day shall be the closing level of the Index as determined by the Security Calculation Agent. In making such determination, the Security Calculation Agent may consider any relevant information, including, without limitation, relevant market data in the relevant market supplied by one or more third parties or from internal sources or affiliates. 23572.14 is the initial Index Closing Level measured on September 14, 2021 (the Initial Trade Date), as determined by the Security Calculation Agent.

On any calendar day that is not an Index Business Day, the Index Closing Level will be equal to the Index Closing Level from the last Index Business Day prior to such calendar day.

"Measurement Period" means the Final Measurement Period or Call Measurement Period, as applicable.

The "Current Indicative Value" or "intraday indicative value", as determined by the Security Calculation Agent, means the Closing Indicative Value per Security calculated on an intraday basis on any Index Business Day.

For the purposes of calculating the Current Indicative Value, the Index Factor will be determined using the Intraday Index Value. Additionally, from and including the first day of an applicable Measurement Period, the Current Indicative Value will be calculated using (i) the Measurement Period Cash Amount from the immediately preceding calendar day, and (ii) the Residual Factor from the immediately preceding calendar day.

The minimum value of the Current Indicative Value (or intraday indicative value) on any calendar day will be zero.

The actual trading price of the Securities in the secondary market may vary significantly from their Current Indicative Value (or intraday indicative value).

If the Securities undergo a split or reverse split, the Current Indicative Value (or intraday indicative value) will be adjusted accordingly.

The "**Daily Tracking Fee**" means, as of any date of determination, an amount per Security equal to 0.45% per annum, calculated as follows:

- (a) On the Initial Trade Date, \$0.00 per Security;
- (b) On any subsequent calendar day, prior to but excluding the first day of an applicable Measurement Period, an amount per Security equal to:
  - (0.45% / 365) × Closing Indicative Value on the immediately preceding calendar day × Index Factor
- (c) From and including the first day of an applicable Measurement Period, an amount per Security equal to:

(0.45% / 365) × Closing Indicative Value on the calendar day immediately preceding the first day of the Measurement Period × Index Factor × Residual Factor on the immediately preceding calendar day

The minimum value of the Daily Tracking Fee on any calendar day will be zero.

If the Securities undergo a split or reverse split, the Daily Tracking Fee will be adjusted accordingly.

The "Measurement Period Cash Amount" is an amount per Security equal to:

- (a) \$0.00, on any calendar day prior to but excluding the first day of an applicable Measurement Period
- (b) On the first day of an applicable one-day Measurement Period:
  - (i) At the close of trading on such Index Business Day, the (Closing Indicative Value, on the immediately preceding calendar day, times Index Factor, on such Index Business Day), minus Daily Tracking Fee.
- (c) From and including the first day of an applicable five-day Measurement Period:
  - (i) At the close of trading on each Index Business Day, will equal:
    - (a) Measurement Period Cash Amount on the immediately preceding calendar day, *plus* (b) ( (i) Closing Indicative Value, on the calendar day immediately preceding the first day of such Measurement Period, *times* (ii) Index Factor, *divided* by (iii) five), *minus* (c) Daily Tracking Fee.

- (ii) On any calendar day that is not an Index Business Day, will equal the Measurement Period Cash Amount on the immediately preceding Index Business Day, *minus* Daily Tracking Fee.
- (d) On any calendar day after the last Index Business Day of an applicable Measurement Period, the Measurement Period Cash Amount on the last Index Business Day of such Measurement Period.

The minimum value of the Measurement Period Cash Amount on any calendar day will be zero.

The Measurement Period Cash Amount represents the portion of the Closing Indicative Value that has been converted to cash on any given day of an applicable Measurement Period and is no longer tracking the Index.

At the close of trading of each Index Business day during a five-day Measurement Period, approximately 20% of the Closing Indicative Value, on the calendar day immediately preceding the first day of the Measurement Period, will be deemed converted to cash. After the close of trading on the final Index Business Day of an applicable five-day Measurement Period, the Measurement Period Cash Amount will represent the averaged value of the Closing Indicative Value that was deemed converted to cash across the five-days of such Measurement Period. In case of a one-day Measurement Period, approximately 100% of the Closing Indicative Value will be deemed converted to cash, at the close of trading of the first day of such Measurement Period.

If the Securities undergo a split or reverse split, the Measurement Period Cash Amount will be adjusted accordingly.

#### The "Final Measurement Period" means:

- (a) if the Market Value of Securities outstanding at the close of trading on the Index Business Day immediately preceding the Calculation Date is less than \$250,000,000, the Calculation Date, subject to adjustments as described under "— Market Disruption Event";
- (b) if the Market Value of Securities outstanding at the close of trading on the Index Business Day immediately preceding the Calculation Date is equal to or greater than \$250,000,000, the five (5) Index Business Days from and including the Calculation Date, subject to adjustments as described under "— Market Disruption Event."

For the purpose of determining the Final Measurement Period, the "Market Value" of the Securities outstanding as of the close of trading on the Index Business Day immediately preceding the Calculation Date, will equal:

(i) the Closing Indicative Value as of such Index Business Day, times (ii) the number of Securities outstanding as reported by IFEDSO <Index> on Bloomberg.

The "Index Calculation Agent" means the entity that calculates and publishes the level of the Index, which is currently Indxx LLC.

The "Calculation Date" means September 6, 2061 unless such day is not an Index Business Day, in which case the Calculation Date will be the next Index Business Day, subject to adjustment.

The Calculation Date represents the first Index Business Day of the Final Measurement Period.

"Index Business Day" means any day on which the Primary Exchange or market for trading of the Securities is scheduled to be open for trading.

"Business Day" means any day that is not a Saturday, Sunday or a day on which banking institutions in The City of New York, generally, are authorized or obligated by law, regulation or executive order to close.

"Primary Exchange" means, with respect to each Index Constituent Security or each constituent underlying a successor index, the primary exchange or market of trading such Index Constituent Security or such constituent underlying a successor index.

## **Underlying Index**

The IFED Large-Cap US Equity Index Total Return (Bloomberg: "IFEDLT") is the total return version of the IFED Large-Cap US Equity Index (Bloomberg: "IFEDL"). The Index tracks large-cap U.S. equities that are determined by Economic Index Associates, LLC ("EIA" or the "Index Sponsor") to be best positioned to benefit from the prevailing monetary environment. We refer to the companies included in the Index as the "Index Constituent Securities". The Index is developed by EIA and calculated by Indxx LLC ("Indxx"). The Index is a total return index and the Index level reflects the notional reinvestment of the cash distributions from its constituent securities.

## Early Redemption at the Option of the Holders

Subject to your compliance with the procedures described below and the potential postponements and adjustments as described under "— Market Disruption Event," you may submit a request to have us redeem your Securities on any Index Business Day no later than 12:00 noon, and a confirmation of redemption by no later than 5:00 p.m., on the same Index Business Day. You must request that we redeem a minimum of 50,000 Securities, although we reserve the right from time-to-time to waive this minimum redemption amount in our sole discretion on a case-by-case basis. You should not assume you will be entitled to the benefit of any such waiver. For any applicable redemption request, the "Redemption Valuation Date" will be the first Index Business Day following the date that the applicable redemption notice and redemption confirmation are delivered, except that we reserve the right from time to time to accelerate, in our sole discretion on a case-by-case basis, the Redemption Valuation Date to the date on which we receive the notice of redemption rather than the following Index Business Day. You should not assume that you will be entitled to any such acceleration. To satisfy the minimum redemption amount, your broker or other financial intermediary may bundle your Securities for redemption with those of other investors to reach this minimum amount of 50,000 Securities; however, there can be no assurance that they can or will do so.

The Securities will be redeemed and the holders will receive payment for their Securities on the second Index Business Day following the applicable Redemption Valuation Date (the "Redemption Date"). The First Redemption Date will be the fourth Index Business Day immediately following the Initial Trade Date and the Final Redemption Date will be the fourth Index Business Day immediately preceding the Maturity Date, subject to adjustments. In addition, if we have issued a call notice, the last Redemption Valuation Date will be the fourth Index Business Day prior to the Call Settlement Date, as applicable. If a Market Disruption Event is continuing or occurs on the applicable scheduled Redemption Valuation Date with respect to any of the Index Constituent Securities, such Redemption Valuation Date may be postponed as described under "— Market Disruption Event".

If you exercise your right to have us redeem your Securities, subject to your compliance with the procedures described under "— Redemption Procedures," for each applicable Security you will receive a cash payment on the relevant Redemption Date equal to:

Closing Indicative Value as of the Redemption Valuation Date – Redemption Fee Amount.

We refer to this cash payment as the "Redemption Amount."

If the amount calculated above is equal to or less than zero, the payment upon early redemption will be zero.

As of any Redemption Valuation Date, the "Redemption Fee Amount" means an amount per Security equal to:

(0.125% × Closing Indicative Value of the Security as of such Redemption Valuation Date).

We reserve the right from time to time to reduce or waive the Redemption Fee Amount in our sole discretion and on a case-by-case basis. There can be no assurance that we will elect to waive this fee and you should not assume you will be entitled to such fee waiver.

We will inform you of such Redemption Amount on the first Index Business Day following the applicable Redemption Valuation Date.

The redemption feature is intended to induce arbitrageurs to counteract any trading of the Securities at a discount to their indicative value, though there can be no assurance that arbitrageurs will employ the redemption feature in this manner or that they will be successful in counteracting any divergence in the market price of the Securities and their indicative value.

The following graphic illustrates the formula to determine the Redemption Amount, which has been simplified for ease of presentation:

# Redemption Amount = Closing Indicative Value — Redemption Fee Amount

You may lose all or a substantial portion of your investment upon early redemption. The combined negative effect of the Daily Tracking Fee and the Redemption Fee Amount will reduce your Redemption Amount. If the level of the Index does not increase by an amount sufficient to offset the combined negative effect of the Daily Tracking Fee and the Redemption Fee Amount, or if the final Index level is less than the initial Index Closing Level (or the Index level at the time you purchase the Securities, as applicable), you may lose some or all of your investment upon early redemption.

The Securities may be called by UBS prior to the Maturity Date pursuant to the UBS Call Right. See – UBS Call Right".

## **Redemption Procedures**

To redeem your Securities, you must instruct your broker or other person through whom you hold your Securities to take the following steps through normal clearing system channels:

- deliver a notice of redemption, which we refer to as a "**Redemption Notice**" to UBS via email no later than 12:00 noon on the Index Business Day on which you elect to exercise your redemption right. If we receive your Redemption Notice by the time specified in the preceding sentence, we will respond by sending you a form of confirmation of redemption;
- deliver the signed confirmation of redemption, which we refer to as the "**Redemption Confirmation**," to us via e-mail in the specified form by 5:00 p.m. on the same day. We or our affiliate must acknowledge receipt in order for your Redemption Confirmation to be effective;
- instruct your DTC custodian to book a delivery vs. payment trade with respect to your Securities on the applicable Redemption Date at a price equal to the Redemption Amount; and
- cause your DTC custodian to deliver the trade as booked for settlement via DTC at or prior to 12:00 noon on the applicable Redemption Date.

Different brokerage firms may have different deadlines for accepting instructions from their customers. Accordingly, as a beneficial owner of the Securities, you should consult the brokerage firm through which you own your interest for the relevant deadline. If your broker delivers your Redemption Notice after 12:00 noon, or your Redemption Confirmation after 5:00 p.m, on the Index Business Day prior to the applicable Redemption Valuation Date, your Redemption Notice will not be effective, you will not be able to redeem your Securities until the following Redemption Date and your broker will need to complete all the required steps if you should wish to redeem your Securities on any subsequent Redemption Date. In addition, UBS may request a medallion signature guarantee or such assurances of delivery as it may deem necessary in its sole discretion. All instructions given to participants from beneficial owners of Securities relating to the right to redeem their Securities will be irrevocable. If your DTC custodian or your brokerage firm is not a current UBS customer, UBS will be required to on-board such DTC custodian or brokerage firm, in compliance with its internal policies and procedures, before it can accept your Redemption Notice, your Redemption Confirmation or otherwise process your redemption request. This on-boarding process may delay your Redemption Valuation Date and Redemption Date. Furthermore, in certain circumstances, UBS may be unable to on-board your DTC custodian or your brokerage firm.

We reserve the right from time to time to reduce or waive the minimum redemption amount or the Redemption Fee Amount in our sole discretion on a case-by-case basis. In addition, we reserve the right from time to time to accelerate, in our sole discretion on a case-by-case basis, the Redemption Valuation Date to the date on which we receive the Redemption Notice rather than the following Index Business Day. You should not assume you will be entitled to any such waiver or election to accelerate the Redemption Valuation Date.

# **UBS Call Right**

UBS may at its option redeem all, but not less than all, of the issued and outstanding Securities. To exercise its Call Right, UBS must provide notice to the holders of such Securities (which notice may be provided via press release), not less than 18 calendar days prior to the Call Settlement Date specified by UBS in such notice. If we call the Securities, you will receive a cash payment equal to the Closing Indicative Value on the last Index Business Day in the Call Measurement Period. We refer to this cash payment as the "Call Settlement Amount."

If the amount calculated above is equal to or less than zero, the payment upon UBS's exercise of its Call Right will be zero.

We will inform you of such Call Settlement Amount on the first Index Business Day following the last Index Business Day in the Call Measurement Period.

The holders will receive payment for their Securities on the third Index Business Day following the last Index Business Day in the Call Measurement Period (the "Call Settlement Date"). If a Market Disruption Event is continuing or occurs on the scheduled Call Valuation Date with respect to any of the Index Constituent Securities, such Call Valuation Date may be postponed as described under "— Market Disruption Event."

# The "Call Measurement Period" means:

- (a) if the Market Value of Securities outstanding at the close of trading on the Index Business Day immediately preceding the date we issue a notice of exercise of our Call Right is less than \$250,000,000, the Call Valuation Date, subject to adjustments as described under "— Market Disruption Event"; or
- (b) if the Market Value of Securities outstanding at the close of trading on the Index Business Day immediately preceding the date we issue a notice of exercise of our Call Right is equal to or greater than \$250,000,000, the five (5) Index Business Days from and including the Call Valuation Date, subject to adjustment as described under "— Market Disruption Event."

For the purpose of determining the Call Measurement Period, the "Market Value" of the Securities outstanding as of the close of trading on the Index Business Day immediately preceding the date of delivery by UBS of its notice to holders (which may be provided via press release) of its exercise of its Call Right, will equal:

(a) the Closing Indicative Value as of such Index Business Day, times (ii) the number of Securities outstanding as reported by IFEDSO <Index> on Bloomberg.

The "Call Valuation Date" means the date we specify in our notice to holders (which may be provided via press release) of our exercise of our Call Right.

In any notice to holders exercising our Call Right, we will specify how many days are included in the Call Measurement Period.

The following graphic illustrates the formula to determine the Call Settlement Amount, which has been simplified for ease of presentation:

# Closing Indicative Value on last Index Call Settlement Amount = Business Day in Call Measurement Period

You may lose all or a substantial portion of your investment upon a call. The negative effect of the Daily Tracking Fee will reduce your final payment. If the level of the Index does not increase by an amount sufficient to offset the negative effect of the Daily Tracking Fee, or if the final Index level is less than the initial Index Closing Level (or the Index level at the time you purchase the Securities, as applicable), you may lose some or all of your investment upon UBS's exercise of its call right.

## **Split or Reverse Split of the Securities**

We may, at any time in our sole discretion, initiate a split or reverse split of your Securities. If we decide to initiate a split or reverse split, as applicable, we will issue a press release announcing the split or reverse split, and its effective date. The date of such press release shall be deemed to be the "announcement date" of the split or the reverse split. The record date for any split or reverse split will be the tenth Business Day after the announcement date, and the effective date will be the next Business Day after the record date.

If the Securities undergo a split or reverse split, we will adjust the Closing Indicative Value and other relevant terms of the Securities accordingly. For example, if the Securities undergo a 4:1 split, every investor who holds a Security via The Depository Trust Company ("DTC") on the relevant record date will, after the split, hold four Securities, and adjustments will be made as described below. The Closing Indicative Value on such record date will be divided by four to reflect the 4:1 split. The adjusted Closing Indicative Value will be rounded to eight decimal places. The split or reverse split will become effective at the opening of trading of the Securities on the Index Business Day immediately following the record date. The split will not occur if we exercise our Call Right before it becomes effective.

In the case of a reverse split, the Closing Indicative Value and other relevant terms of the Securities will be adjusted accordingly, and we will determine in our sole discretion the manner in which we will address odd numbers of Securities (commonly referred to as "partials"). For example, if the Securities undergo a 1:4 reverse split, every investor who holds four Securities via DTC on the relevant record date will, after the reverse split, hold only one Security and the Closing Indicative Value of the Securities on such record date will be multiplied by four to reflect the 1:4 reverse split. The adjusted Closing Indicative Value will be rounded to eight decimal places. The reverse split will become effective at the opening of trading of the Securities on the Index Business Day immediately following the record date. The reverse split will not occur if we exercise our Call Right before it becomes effective.

Holders who own a number of Securities on the record date that is not evenly divisible by the reverse split divisor (which in the case of a 1:4 reverse split, for example, will be 4) will receive the same treatment as all other holders for the maximum number of Securities they hold that is evenly divisible by the reverse split divisor. We will determine in our sole discretion the manner in which we compensate holders for their remaining or "partial" Securities when we announce the reverse split, though our current intention is to provide holders with a cash payment for their partials on the 17th Business Day following the announcement date in an amount equal to the appropriate percentage of the Closing Indicative Value of the reverse split-adjusted Securities on the 15th Business Day following the announcement date. For example, in the case of a 1:4 reverse split, a holder who held 23 Securities via DTC on the record date would receive five post-reverse split Securities on the immediately following Business Day, and a cash payment on the 17th Business Day following the announcement date that is equal to 3/4 of the Closing Indicative Value of the reverse split-adjusted Securities on the 15th Business Day following the announcement date.

#### **Security Calculation Agent**

UBS Securities LLC will act as the "Security Calculation Agent." The Security Calculation Agent will be solely responsible for all determinations and calculations regarding the value of the Securities, including, among other things, at maturity or upon early redemption or call, or at other times, Current Indicative Value (which we also refer to as the "intraday indicative value"), Closing Indicative Value, Market Disruption Events, Business Days, Index Business Days, the Index Factor, the Residual Factor, the Index Closing Level, the Daily Tracking Fee, the Redemption Fee Amount, the Cash Settlement Amount, if any, that we will pay you at maturity, the Redemption Amount, if any, that we will pay you upon redemption, if applicable and the Call Settlement Amount, if any, that we will pay you in the event that UBS calls the Securities, and whether any day is a Business Day or an Index Business Day and all such other matters as may be specified elsewhere herein as matters to be determined by the Security Calculation Agent. The Security Calculation Agent will also be responsible for determining whether the Index has been discontinued and whether there has been a material change in the Index. The Security Calculation Agent will make all such determinations and calculations in its sole discretion, and absent manifest error, all determinations of the Security Calculation Agent will be conclusive for all purposes and binding on us, you and all other persons having an interest in the Securities, without liability on the part of the Security Calculation Agent. You will not be entitled to any compensation from us for any loss suffered as a result of any determinations or calculations made by the Security Calculation Agent. We may appoint a different Security Calculation Agent from time to time after the date of the prospectus supplement without your consent and without notifying you.

The Security Calculation Agent will provide written notice to the trustee at its New York office, on which notice the trustee may conclusively rely, of the amount to be paid at maturity or upon early redemption or call, on or prior to 12:00 noon on the Index Business Day immediately preceding the Maturity Date, any Redemption Date, or any Call Settlement Date.

All dollar amounts related to determination of the Daily Tracking Fee, the Redemption Amount and Redemption Fee Amount, if any, per security, the Call Settlement Amount, if any, per security, and the Cash Settlement Amount, if any, per security, will be rounded to the nearest ten-thousandth, with five one hundred-thousandths rounded upward (e.g., .76545 would be rounded up to .7655); and all dollar amounts paid to any holder of Securities will be rounded to the nearest cent, with one-half cent rounded upward.

## **Market Disruption Event**

To the extent a Market Disruption Event with respect to the Index has occurred or is continuing during a five-day Measurement Period, the Index Closing Level for such day will be determined by the Security Calculation Agent or one of its affiliates on the first succeeding Index Business Day on which a Market Disruption Event does not occur or is not continuing with respect to the Index. The remaining Index Business Days in the Measurement Period will be postponed accordingly, and the remaining Index Business Days in the Measurement Period will resume again following the suspension of the Market Disruption Event. For example, if the five-day Measurement Period for purposes of calculating the Call Settlement Amount, is scheduled for June 2, June 3, June 4, June 5 and June 6, and there is a Market Disruption Event with respect to the Index on June 2, but no other Market Disruption Event during such Call Measurement Period, then June 3 will become the first Index Business Day of the Measurement Period, June 4th the second Index Business Day, June 5th the third Index Business Day, June 6th the fourth Index Business Day and the next Index Business Day after June 6th would be the final day of the Measurement Period. The same approach would be applied if there is a Market Disruption Event during a five-day Final Measurement Period.

To the extent a Market Disruption Event with respect to the Index has occurred or is continuing on the Redemption Valuation Date, Call Valuation Date (in the event that the Call Measurement Period is the Call Valuation Date) or the Calculation Date (in the event that the Final Measurement Period is the Calculation Date), the Index Closing Level for such Redemption Valuation Date, Call Valuation Date or Calculation Date will be determined by the Security Calculation Agent or one of its affiliates on the first succeeding Index Business Day on which a Market Disruption Event does not occur or is not continuing with respect to the Index. For example, if the Redemption Valuation Date, for purposes of calculating a Redemption Amount, is based on the Index Closing Level on June 2 and there is a Market Disruption Event with respect to the Index on June 2, then the Index Closing Level on June 3 will be used to calculate the Redemption Amount, assuming that no such Market Disruption Event has occurred or is continuing on June 3.

In no event, however, will any postponement pursuant to either of the two immediately preceding paragraphs result in the affected Index Business Day of the Measurement Period or any Redemption Valuation Date, Call Valuation Date (in the event that the Call Measurement Period is the Call Valuation Date) or Calculation Date (in the event that the Final Measurement Period is the Calculation Date) occurring more than five Index Business Days following the day originally scheduled to be such Index Business Day of the Measurement Period or such Redemption Valuation Date, Call Valuation Date or Calculation Date. If a Market Disruption Event has occurred or is continuing with respect to the Index on the fifth Index Business Day following the date originally scheduled to be such Index Business Day of the Measurement Period or any Redemption Valuation Date, Call Valuation Date or Calculation Date, the Security Calculation Agent or one of its affiliates will determine the Index Closing Level based on its good faith estimate of the Index Closing Level that would have prevailed on such fifth Index Business Day but for such Market Disruption Event.

Any of the following will be a "Market Disruption Event" with respect to the Index, in each case as determined by the Security Calculation Agent in its sole discretion:

- (a) suspension, absence or material limitation of trading in a material number of Index Constituent Securities, whether by reason of movements in price exceeding limits permitted by the Primary Exchange or otherwise;
- (b) suspension, absence or material limitation of trading in option or futures contracts relating to the Index or to a material number of Index Constituent Securities in the primary market or markets for those contracts;
- (c) the Index is not published; or
- (d) in any other event, if the Security Calculation Agent determines in its sole discretion that the event materially interferes with our ability or the ability of any of our affiliates to unwind all or a material portion of a hedge with respect to the Securities that we or our affiliates have effected or may effect as described in the section entitled "Use of Proceeds and Hedging".

The following events will not be Market Disruption Events with respect to the Index:

- (a) a limitation on the hours or numbers of days of trading, but only if the limitation results from an announced change in the regular business hours of the relevant market; and
- (b) a decision to permanently discontinue trading in the option or futures contracts relating to the Index or any Index Constituent Securities.

For this purpose, an "absence of trading" in the primary securities market on which option or futures contracts related to the Index or any Index Constituent Securities are traded will not include any time when that market is itself closed for trading under ordinary circumstances.

#### **Default Amount on Acceleration**

If an event of default occurs and the maturity of the Securities is accelerated, we will pay the default amount in respect of the principal of the Securities at maturity. We describe the default amount below under "— Default Amount."

For the purpose of determining whether the holders of our Medium-Term Notes, Series B, of which the Securities are a part, are entitled to take any action under the indenture, we will treat the outstanding principal amount of the Medium-Term Notes, Series B, as constituting the outstanding principal amount of the Securities. Although the terms of the Securities may differ from those of the other Medium-Term Notes, Series B, holders of specified percentages in principal amount of all Medium-Term Notes, Series B, together in some cases with other series of our debt securities, will be able to take action affecting all the Medium-Term Notes, Series B, including the Securities. This action may involve changing some of the terms that apply to the Medium-Term Notes, Series B, accelerating the maturity of the Medium-Term Notes, Series B after a default or waiving some of our obligations under the indenture. We discuss these matters in "Medium-Term Notes, Series B" above under "Description of Debt Securities We May Offer — Default, Remedies and Waiver of Default" and "Description of Debt Securities We May Offer — Modification and Waiver of Covenants."

#### **Default Amount**

The default amount for the Securities on any day will be an amount, in U.S. dollars as determined by the Security Calculation Agent, in its sole discretion, for the aggregate Stated Principal Amount of the Securities, equal to the cost of having a qualified financial institution, of the kind and selected as described below, expressly assume all our payment and other obligations with respect to the Securities as of that day and as if no default or acceleration had occurred, or to undertake other obligations providing substantially equivalent economic value to you with respect to the Securities. That cost will equal:

- > the lowest amount that a qualified financial institution would charge to effect this assumption or undertaking, plus
- the reasonable expenses, including reasonable attorneys' fees, incurred by the holders of the Securities in preparing any documentation necessary for this assumption or undertaking.

During the default quotation period for the Securities, which we describe below, the holders of the Securities and/or we may request a qualified financial institution to provide a quotation of the amount it would charge to effect this assumption or undertaking. If either party obtains a quotation, it must notify the other party in writing of the quotation. The amount referred to in the first bullet point above will equal the lowest — or, if there is only one, the only — quotation obtained, and as to which notice is so given, during the default quotation period. With respect to any quotation, however, the party not obtaining the quotation may object, on reasonable and significant grounds, to the assumption or undertaking by the qualified financial institution providing the quotation and notify the other party in writing of those grounds within two Business Days after the last day of the default quotation period, in which case that quotation will be disregarded in determining the default amount.

# **Default Quotation Period**

The default quotation period is the period beginning on the day the default amount first becomes due and ending on the third Index Business Day after that day, unless:

> no quotation of the kind referred to above is obtained, or

> every quotation of that kind obtained is objected to within five (5) Index Business Days after the due date as described above

If either of these two events occurs, the default quotation period will continue until the third Index Business Day after the first Index Business Day on which prompt notice of a quotation is given as described above. If that quotation is objected to as described above within five (5) Index Business Days after that first Index Business Day, however, the default quotation period will continue as described in the prior sentence and this sentence.

In any event, if the default quotation period and the subsequent two Index Business Day objection period have not ended before the Calculation Date, then the default amount will equal the Stated Principal Amount of the Securities.

#### **Oualified Financial Institutions**

For the purpose of determining the default amount at any time, a qualified financial institution must be a financial institution organized under the laws of any jurisdiction in the United States of America, Europe or Japan, which at that time has outstanding debt obligations with a stated maturity of one year or less from the date of issue and rated either:

- A-1 or higher by Standard & Poor's Financial Services LLC, a subsidiary of The McGraw-Hill Companies, Inc., or any successor, or any other comparable rating then used by that rating agency, or
- P-1 or higher by Moody's Investors Service or any successor, or any other comparable rating then used by that rating agency.

# Discontinuance of, Adjustments to or Benchmark Event Affecting the Index or Termination of Our License Agreement with the Index Sponsor; Alteration of Method of Calculation

If (i) the Index Sponsor or the Index Calculation Agent announces that it intends to discontinue, or discontinues, publication of, or otherwise fails to publish, the Index, (ii) a Benchmark Event (as described below) under the EU Benchmarks Regulation or UK Benchmarks Regulation (each as described under "Risk Factors – The Securities are linked to the Index and are subject to certain regulatory risks") occurs with respect to the Index or the Index Sponsor, if applicable, (iii) our license agreement with the Index Sponsor terminates or (iv) the Index Sponsor or Index Calculation Agent does not make the Index Constituent Securities and/or their unit weighting available to the Security Calculation Agent, and, in each case, any other person or entity publishes an EU Benchmarks Regulation compliant index licensed to UBS that the Security Calculation Agent determines is comparable to the Index and for which the Index Constituent Securities and/or their unit weighting are available to the Security Calculation Agent (such index being referred to herein as a "successor index"), and the Security Calculation Agent approves such index as a successor index, then on and after the date determined by the Security Calculation Agent, the Security Calculation Agent will determine the Index Closing Level on the applicable dates of determination, and the amount payable at maturity or upon early redemption or call and all other related payments terms by reference to such successor index.

Upon any selection by the Security Calculation Agent of a successor index, the Security Calculation Agent will cause written notice of the successor index and the date on and after which the Index Closing Level will be determined by reference thereto to be furnished to the trustee, to us and to the holders of the Securities.

If the Index Sponsor or Index Calculation Agent discontinues publication of the Index, our license agreement with the Index Sponsor terminates or the Index Sponsor or Index Calculation Agent do not make the Index Constituent Securities and/or their unit weighting available to the Security Calculation Agent, prior to, and such discontinuation, termination or unavailability is continuing on the Calculation Date or any Index Business Day during a Measurement Period, or on the Redemption Valuation Date, as applicable, or on any other relevant date on which the Index Closing Level is to be determined and the Security Calculation Agent determines that no successor index is available at such time, or the Security Calculation Agent has previously selected a successor index and publication of such successor index is discontinued prior to, and such discontinuation is continuing on the Calculation Date or any Index Business Day during a Measurement Period, or on the Redemption Valuation Date or any other relevant date on which the Index Closing Level is to be determined, then the Security Calculation Agent will determine the Index Closing Level using the Index Closing Level on the last Index Business Day immediately prior to such discontinuation or unavailability, as adjusted for certain corporate actions. In such event, the Security Calculation Agent will cause notice thereof to be furnished to the trustee, to us and to the holders of the Securities.

Notwithstanding these alternative arrangements, discontinuation of the publication of the Index or successor index, as applicable, may adversely affect the value of the Securities.

For purposes of the above, a "Benchmark Event" may occur if the EU Benchmarks Regulation and/or UK Benchmarks Regulation, as applicable, applies to this issuance of Securities, and the applicable registration for the Index or Index Sponsor is not effective or has been suspended or withdrawn by the relevant authority with the effect that the use of the Index or the Index Sponsor is not permitted under the EU Benchmarks Regulation or UK Benchmarks Regulation, as applicable.

In addition, if an Index Replacement Event (as defined below) occurs at any time and the Index Sponsor or anyone else publishes an index that the Security Calculation Agent determines is comparable to the Index (the "Substitute Index"), then the Security Calculation Agent may elect, in its sole discretion, to permanently replace the original Index with the Substitute Index for all purposes under the Securities, and all provisions described in the prospectus supplement as applying to the Index will thereafter apply to the Substitute Index instead. In such event, the Security Calculation Agent will make such adjustments, if any, to any level of the Index or Substitute Index that is used for purposes of the Securities as it determines are appropriate in the circumstances. If the Security Calculation Agent elects to replace the original Index with a Substitute Index, then the Security Calculation Agent will determine all amounts hereunder, including the Current Indicative Value (or "intraday indicative value"), Closing Indicative Value, Index Factor, Residual Factor, Daily Tracking Fee, Index Closing Levels on the applicable dates of determination, all other related payment terms and the amount payable at maturity, call, upon early redemption by reference to such Substitute Index. If the Security Calculation Agent so elects to replace the original Index with a Substitute Index, the Security Calculation Agent will cause written notice thereof to be furnished to the trustee, to us and to the holders of the Securities.

#### An "Index Replacement Event" means:

- (a) an amendment to or change (including any officially announced proposed change) in the laws, regulations or rules of the United States (or any political subdivision thereof), or any jurisdiction in which a Primary Exchange (as defined herein) is located that (i) makes it illegal for UBS AG or its affiliates to hold, acquire or dispose of the Index Constituent Securities included in the Index or options, futures, swaps or other derivatives on the Index or on the Index Constituent Securities included in the Index (including but not limited to exchange- imposed position limits), (ii) materially increases the cost to us, our affiliates, third parties with whom we transact or similarly situated third parties in performing our or their obligations in connection with the Securities, (iii) has a material adverse effect on any of these parties' ability to perform their obligations in connection with the Securities or (iv) materially affects our ability to issue or transact in exchange traded notes similar to the Securities, each as determined by the Security Calculation Agent;
- (b) any official administrative decision, judicial decision, administrative action, regulatory interpretation or other official pronouncement interpreting or applying those laws, regulations or rules that is announced on or after September 14, 2021 that (i) makes it illegal for UBS AG or its affiliates to hold, acquire or dispose of the Index Constituent Securities included in the Index or options, futures, swaps or other derivatives on the Index or on the Index Constituent Securities (including but not limited to exchange-imposed position limits), (ii) materially increases the cost to us, our affiliates, third parties with whom we transact or similarly situated third parties in performing our or their obligations in connection with the Securities, (iii) has a material adverse effect on the ability of us, our affiliates, third parties with whom we transact or a similarly situated third party to perform our or their obligations in connection with the Securities or (iv) materially affects our ability to issue or transact in exchange traded notes similar to the Securities, each as determined by the Security Calculation Agent;
- (c) any event that occurs on or after September 14, 2021 that makes it a violation of any law, regulation or rule of the United States (or any political subdivision thereof), or any jurisdiction in which a Primary Exchange (as defined herein) is located, or of any official administrative decision, judicial decision, administrative action, regulatory interpretation or other official pronouncement interpreting or applying those laws, regulations or rules, (i) for UBS AG or its affiliates to hold, acquire or dispose of the Index Constituent Securities or options, futures, swaps or other derivatives on the Index or on the Index Constituent Securities (including but not limited to exchange-imposed position limits), (ii) for us, our affiliates, third parties with whom we transact or similarly situated third parties to perform our or their obligations in connection with the Securities or (iii) for us to issue or transact in exchange traded notes similar to the Securities, each as determined by the Security Calculation Agent;
- (d) any event, as determined by the Security Calculation Agent, as a result of which we or any of our affiliates or a similarly situated party would, after using commercially reasonable efforts, be unable to, or would incur a materially increased amount of tax, duty, expense or fee (other than brokerage commissions) to, acquire, establish, re-establish, substitute, maintain, unwind or dispose of any transaction or asset it deems necessary to hedge the risk of the Securities, or realize, recover or remit the proceeds of any such transaction or asset; or
- (e) as determined by the Security Calculation Agent, the primary exchange or market for trading for the Securities, if any, announces that pursuant to the rules of such exchange or market, as applicable, the Securities cease (or will cease) to be listed, traded or publicly quoted on such exchange or market, as applicable, for any reason and are not immediately re-listed, re-traded or re-quoted on an exchange or quotation system located in the same country as such exchange or market, as applicable.

Notwithstanding these alternative arrangements, discontinuation of the publication of the Index or successor index, as applicable, may adversely affect the value of the Securities.

If at any time the method of calculating the Index, a successor index or a Substitute Index, or the value thereof, is changed in a material respect, or if the Index or a successor or Substitute Index is in any other way modified so that the Index Closing Level of the Index or such successor or Substitute Index does not, in the opinion of the Security Calculation Agent, fairly represent the Index Closing Level of the Index or such successor or Substitute Index had such changes or modifications not been made, then the Security Calculation Agent will make such calculations and adjustments as, in the good faith judgment of the Security Calculation Agent, may be necessary in order to arrive at an Index Closing Level of an index comparable to the Index or such successor index, as the case may be, as if such changes or modifications had not been made, and the Security Calculation Agent will calculate the Index Closing Level for the Index or such successor or Substitute Index with reference to the Index or such successor Substitute Index, as adjusted. The Security Calculation Agent will accordingly calculate the Index Closing Level, the Daily Tracking Fee, the Redemption Fee Amount, if any, the Cash Settlement Amount, if any, that we will pay you at maturity, the Redemption Amount, if any, upon early redemption, if applicable, the Call Settlement Amount, if any, that we will pay you in the event UBS calls the Securities, and all related payment terms based directly or indirectly on the Index Closing Level calculated by the Security Calculation Agent. Accordingly, if the method of calculating the Index or a successor or Substitute Index is modified so that the level of the Index or such successor index is a fraction of what it would have been if there had been no such modification (e.g., due to a rebasing of the Index), which, in turn, causes the Index Closing Level of the Index or such successor or Substitute Index to be a fraction of what it would have been if there had been no such modification, then the Security Calculation Agent will make such calculations and adjustments in order to arrive at an Index Closing Level for the Index or such successor or Substitute Index as if it had not been modified (e.g., as if such rebasing had not occurred). In the event that the Security Calculation Agent elects to replace the Index with a successor index or a Substitute Index, UBS may, in its sole discretion, amend the title of the Securities in order to remove reference the former Index and to make such other changes to the title of the Securities as it considers necessary or desirable to reflect the name and/or characteristics of the relevant successor index or Substitute Index, as applicable.

All determinations and adjustments to be made by the Security Calculation Agent may be made in the Security Calculation Agent's sole discretion. See "Risk Factors — Risks Relating to Creditworthiness, Conflicts of Interest, Hedging Activities and Regulation of UBS — There are potential conflicts of interest between you and the Security Calculation Agent" in the prospectus supplement for a discussion of certain conflicts of interest which may arise with respect to the Security Calculation Agent.

#### **Manner of Payment and Delivery**

Any payment on or delivery of the Securities at maturity or upon early redemption or call will be made to accounts designated by you and approved by us, or at the corporate trust office of the trustee in New York City, but only when the Securities are surrendered to the trustee at that office. We also may make any payment or delivery in accordance with the applicable procedures of the depositary.

# Reissuances or Reopened Issues

We may, at our sole discretion, "reopen" or reissue the Securities. We issued the Securities initially in an amount having the aggregate Stated Principal Amount specified on the cover of the prospectus supplement. We may issue additional Securities in amounts that exceed the amount on the cover at any time, without your consent and without notifying you. The Securities do not limit our ability to incur other indebtedness or to issue other securities. Also, we are not subject to financial or similar restrictions by the terms of the Securities. For more information, please refer to "Description of Debt Securities We May Offer — Amounts That We May Issue" in "Medium-Term Notes, Series B" above.

These further issuances, if any, will be consolidated to form a single class with the originally issued Securities and will have the same CUSIP number and will trade interchangeably with the Securities immediately upon settlement. Any additional issuances will increase the aggregate Stated Principal Amount of the outstanding Securities of the class. The price of any additional offering will be determined at the time of pricing of that offering.

# **Booking Branch**

The Securities will be booked through UBS AG, London Branch.

#### **Clearance and Settlement**

The DTC participants that hold the Securities through DTC on behalf of investors will follow the settlement practices applicable to equity securities in DTC's settlement system with respect to the primary distribution of the Securities and secondary market trading between DTC participants.

## 19. ETRACS 2x Leveraged US Value Factor TR ETN due February 9, 2051

## **Specific Terms of the Securities**

In this section, references to "holders" mean those who own the Securities registered in their own names, on the books that we or the trustee maintains for this purpose, and not those who own beneficial interests in the Securities registered in street name or in the Securities issued in book-entry form through The Depository Trust Company ("DTC") or another depositary. Owners of beneficial interests in the Securities should read the section entitled "Legal Ownership and Book-Entry Issuance" under "Medium-Term Notes, Series B" above.

Each of the seven series of Securities offered by the prospectus supplement is separate and independent of each other series of Securities. Apart from the applicable Index, however, all of the terms of each series of Securities are the same. Since each series references a different Index, all calculations and adjustments and related events with respect to each series are independent of calculations and adjustments and related events for each other series of Securities, and we may exercise our call right as well as our right to initiate a split or a reverse split independently for each series. The following discussion therefore applies independently to each series of Securities offered by the prospectus supplement and, except as the context may otherwise require, the defined terms refer separately to each series. References to the "Securities" should be understood as references to a single series of Securities and the defined terms should be understood in reference only to that series of Securities.

These Securities are part of a series of debt securities entitled "Medium-Term Notes, Series B" that we may issue, from time to time, under the indenture more particularly described under "Medium-Term Notes, Series B" above. This section summarizes general financial and other terms that apply to the Securities. Terms that apply generally to all Medium-Term Notes, Series B are described in "Description of Debt Securities We May Offer" under "Medium-Term Notes, Series B" above. The terms described here supplement those described in "Medium-Term Notes, Series B" above and, if the terms described here are inconsistent with those described there, the terms described here are controlling.

The Securities are part of a single series of senior debt securities issued under our indenture, dated as of June 2, 2015 between us and U.S. Bank Trust National Association, as trustee.

Please note that the information about the offering prices and the net proceeds to UBS on the front cover of the prospectus supplement relates only to the initial sale of the Securities. If you have purchased the Securities in a secondary market transaction after the initial sale, information about the price and date of sale to you will be provided in a separate confirmation of sale.

We describe the terms of the Securities in more detail below. The Stated Principal Amount of each Security is \$25.00.

The Securities do not guarantee any return of principal at, or prior to, maturity or upon early redemption or call. Instead, at maturity, you will receive a cash payment per Security the amount of which will vary depending on the performance and path of the Index and will be reduced by the Accrued Fees as of the last Index Business Day in the Final Measurement Period as described under "— Cash Settlement Amount at Maturity." If the amount as calculated is equal to or less than zero, the Cash Settlement Amount will be zero and you will not receive a cash payment.

If you exercise your right to have us redeem your Securities, subject to compliance with the redemption procedures, for each Security you will receive a cash payment per Security on the relevant Redemption Date equal to the Redemption Amount as described under "— Early Redemption at the Option of the Holders." If the amount as calculated is equal to or less than zero, the Redemption Amount will be zero and you will not receive a cash payment.

#### **Cash Settlement Amount at Maturity**

The "Maturity Date" is February 9, 2051, which will be the third Index Business Day following the last Index Business Day in the Final Measurement Period, subject to adjustment as described below under "— Market Disruption Event."

For each Security, unless earlier called, redeemed or accelerated upon Zero Value Event, you will receive at maturity a cash payment equal to its Closing Indicative Value on the last Index Business Day in the applicable Measurement Period. We refer to this cash payment as the "Cash Settlement Amount." If the amount so calculated is equal to or less than zero, the payment will be zero.

The following graphic illustrates the formula to determine the Cash Settlement Amount, which has been simplified for ease of presentation:

Closing Indicative Value, on last
Index Business Day in Final
Measurement Period

You may lose all or a substantial portion of your investment at maturity. The combined negative effect of the Accrued Fees will reduce your final payment. If the compounded leveraged quarterly return of the Index (or the unleveraged return of the Index, following a Permanent Deleveraging Event) is insufficient to offset the negative effect of the Accrued Fees, you may lose all or a substantial portion of your investment at maturity. The occurrence of Loss Rebalancing Events will result in more frequent than quarterly compounding.

UBS may call the Securities prior to the Maturity Date pursuant to its Call Right. If the Securities are called by UBS, the Call Settlement Amount may be zero and you may lose all or a substantial portion of your investment. See "Specific Terms of the Securities — UBS's Call Right" beginning on page S-117.

The "Stated Principal Amount" of each Security is \$25.00. The Securities may be issued and sold over time at then-current market prices which may be significantly higher or lower than the Stated Principal Amount. If the Securities undergo a split or reverse split, the Stated Principal Amount will be adjusted accordingly.

The Closing Indicative Value represents the dollar value per Security that an investor would receive on any day if it redeemed the Security that day (without giving effect to any Redemption Fee Amount).

The "Closing Indicative Value" per Security, will be calculated as follows:

- (a) On the Initial Trade Date, \$25.00 per Security.
- (b) On any other calendar day, prior to the first day of an applicable Measurement Period, an amount per Security equal to:
  - (Current Principal Amount on the immediately preceding calendar day × Index Factor) Accrued Fees
- (c) From and including the first day of an applicable Measurement Period, an amount per Security equal to:
  - (Current Principal Amount on the calendar day immediately preceding the first day of the Measurement Period × Index Factor × Residual Factor) Accrued Fees + Measurement Period Cash Amount
  - However, if, on any day during a Measurement Period, the Current Indicative Value or the Closing Indicative Value *is less than or equal to* the Measurement Period Cash Amount from the immediately preceding calendar day, the Closing Indicative Value for that day and all subsequent days will be fixed to be equal to the Measurement Period Cash Amount from the immediately preceding calendar day.
- (d) The minimum value of the Closing Indicative Value on any calendar day will be zero.

If a Zero Value Event occurs, the Closing Indicative Value will be equal to zero on the day it occurs and on all future calendar days. Upon the occurrence of a Zero Value Event, investors will lose their entire investment. You will not benefit from any future exposure to the Index after the occurrence of a Zero Value Event. See "— Automatic Acceleration Upon Zero Value Event" beginning on page S-118.

The actual trading price of the Securities in the secondary market may vary significantly from their Closing Indicative Value.

If the Securities undergo a split or reverse split, the Closing Indicative Value will be adjusted accordingly.

The "Current Principal Amount" represents the unleveraged notional investment in the Index Constituent Securities per Security at the close of trading on any Reset Valuation Date. The notional financing amount per Security in order to generate the leveraged returns would approximately equal the Current Principal Amount at the close of trading on any Reset Valuation Date. If a Permanent Deleveraging Event occurs, the leverage of your Securities will be permanently reset to 1.0 and the notional financing amount will be equal to zero for the remaining term of the Securities. If a Zero Value Event occurs prior to your Securities permanently resetting to 1.0 at the end of the Second Permanent Deleveraging Valuation Date, then your Securities will be automatically accelerated and mandatorily redeemed and you will lose your entire investment.

The Current Principal Amount per Security, will be calculated as follows:

- (a) From and including the Initial Trade Date to and excluding the first Reset Valuation Date, \$25.00 per Security.
- (b) At the close of trading on each Reset Valuation Date after the Initial Trade Date, the Current Principal Amount of the Securities will be reset as follows:

New Current Principal Amount = (Current Principal Amount on immediately preceding calendar day  $\times$  Index Factor) – Accrued Fees

The Current Principal Amount will not change until the first Reset Valuation Date.

If a day that would otherwise be a Reset Valuation Date occurs on or after the first day of a Measurement Period, such day will not be a valid Reset Valuation Date.

If the Securities undergo a split or reverse split, the Current Principal Amount will be adjusted accordingly.

At the close of trading on each Reset Valuation Date, the Current Principal Amount is reset.

## The "Reset Valuation Date" means:

(a) Any calendar day up to and including the Second Permanent Deleveraging Valuation Date, that is either: (i) the Initial Trade Date, (ii) a Quarterly Reset Valuation Date, (iii) a Loss Rebalancing

Valuation Date (iv) the First Permanent Deleveraging Valuation Date, or (v) the Second Permanent Deleveraging Valuation Date; and

(b) Any calendar day following the Second Permanent Deleveraging Valuation Date.

The valuation dates are defined below.

If a day that would otherwise be a Reset Valuation Date occurs on or after the first day of a Measurement Period, it will not be a valid Reset Valuation Date and the Last Reset Index Closing Level will remain the same.

The "Quarterly Reset Valuation Date" is the second Wednesday of January, April, July and October of each calendar year during the term of the Securities (other than an Excluded Day, as defined below), subject to adjustment as described under "—Market Disruption Event" beginning on page S-122.

As used above, an "Excluded Day" means (i) the Index Business Day immediately preceding the first day of an applicable Measurement Period, and any calendar day thereafter, and (ii) any calendar day after the Second Permanent Deleveraging Valuation Date.

The "Index Factor" is: 1 + (Leverage Factor × Index Performance Ratio).

The Index Factor represents the leveraged percentage change in the Index level since the Last Reset Index Closing Level. The Index Factor *times* the applicable Current Principal Amount on the preceding calendar day represents the current value of the unleveraged notional amount per Security that is deemed invested in the Index on any calendar day. This does not reflect the Redemption Amount that an investor would receive upon early redemption on such calendar day.

The "Residual Factor" will be calculated as follows:

- (a) 1.0 on any calendar day, to but excluding the first day of an applicable Measurement Period.
- (b) From and including the first day of an applicable four-day Measurement Period, (a) the number of Index Business Days from, but excluding, the date of determination to, and including, the last Index Business Day in such four-day Measurement Period, divided by (b) four.
  - For example, on the first Index Business Day in an applicable four-day Measurement Period, the Residual Factor will equal 3/4, on the second Index Business Day in an applicable four-day Measurement Period, the Residual Factor will equal 2/4, on the third Index Business Day in an applicable four-day Measurement Period, the Residual Factor will equal 1/4 and on the last Index Business Day in an applicable four-day Measurement Period, the Residual Factor will equal zero.
- (c) On any calendar day from and including the last Index Business Day of an applicable Measurement Period, the Residual Factor will be equal to zero.

The Residual Factor is intended to approximate the percentage of the Current Principal Amount that is tracking the Index on any given day. The Residual Factor is relevant only during an applicable Measurement Period but otherwise is not a component of the Closing Indicative Value or Current Indicative Value formulas. At the close of trading on each Index Business Day during a four-day Measurement Period, approximately 25% of the Current Principal Amount and the corresponding amount of financing will be deemed converted to cash. In case of a one-day Measurement Period, approximately 100% of the Current Principal Amount and the corresponding amount of financing will be deemed converted to cash.

The "Leverage Factor" on any calendar day until the occurrence of a Permanent Deleveraging Event and the close of trading on the Second Permanent Deleveraging Valuation Date, will equal 2.0. If a Permanent Deleveraging Event occurs, then on any calendar day following the Second Permanent Deleveraging Valuation Date, the Leverage Factor will equal 1.0.

The "Index Performance Ratio" on any Index Business Day will be equal to:

<u>Index Closing Level – Last Reset Index Closing Level</u>
Last Reset Index Closing Level

On any calendar day that is not an Index Business Day, the Index Closing Level will be equal to the Index Closing Level on the Index Business Day immediately preceding such calendar day.

The "Last Reset Index Closing Level" is the Index Closing Level on the most recent Reset Valuation Date prior to such day. The initial Last Reset Index Closing Level is the Index Closing Level on the Initial Trade Date, as reported by Bloomberg and Reuters.

The "Index Closing Level" on any date of determination is the closing level of the Index, as reported on Bloomberg and Reuters on such day; however, if the closing level of the Index as reported on Bloomberg (or any successor) differs from the closing level of the Index as reported on Reuters (or any successor), the Index Closing Level will be the closing level of the Index as calculated by the Index Calculation Agent. The initial Index Closing Level (which is also the first Last Reset Index Closing Level) was determined on February 4, 2021 by the Security Calculation Agent. If the closing level of an Index, as reported on Bloomberg and Reuters for any Index Business Day, is manifestly incorrect, the "Index Closing Level" for such Index Business Day shall be the closing level of the Index as determined by the Security Calculation Agent. In making such determination, the Security Calculation Agent may consider any relevant information, including, without limitation, relevant market data in the relevant market supplied by one or more third parties or from internal sources or affiliates.

On any calendar day that is not an Index Business Day, the Index Closing level will be equal to the Index Closing Level on the Index Business Day immediately preceding such calendar day.

"Measurement Period" means the Final Measurement Period or, if UBS exercises its Call Right, the Call Measurement Period.

The "Current Indicative Value" or "intraday indicative value", as determined by the Security Calculation Agent, is an amount per Security, on an intraday basis on any Index Business Day, equal to:

- (a) On the Initial Trade Date, \$25.00.
- (b) On any other calendar day prior to the first day of a Measurement Period:
  - (Current Principal Amount on the immediately preceding calendar day × Index Factor, calculated using the Intraday Index Value) Accrued Fees
- (c) From and including the first day of a Measurement Period, an amount per Security equal to:

(Current Principal Amount on the calendar day immediately preceding the first day of the Measurement Period × Index Factor, calculated using the Intraday Index Value × Residual Factor on the immediately preceding calendar day) – Accrued Fees + Measurement Period Cash Amount, from the immediately preceding calendar day

However, if, on any day during a Measurement Period, the Current Indicative Value or the Closing Indicative Value is less than or equal to the Measurement Period Cash Amount from the immediately preceding calendar day, the Current Indicative Value for the remainder of that day and all subsequent days will be fixed to be equal to the Measurement Period Cash Amount from the immediately preceding calendar day.

(d) The minimum value of the Current Indicative Value on any calendar day will be zero.

The actual trading price of the Securities in the secondary market may vary significantly from their Current Indicative Value (intraday indicative value).

If a Zero Value Event occurs, the Current Indicative Value (intraday indicative value) will be equal to zero for the remainder of the day it occurs and on all future calendar days. Upon the occurrence of a Zero Value Event, investors will lose their entire investment. You will not benefit from any future exposure to the Index after the occurrence of a Zero Value Event. See "Specific Terms of the Securities — Automatic Acceleration Upon Zero Value Event".

If the Securities undergo a split or reverse split, the Current Indicative Value (intraday indicative value) will be adjusted accordingly.

The "Accrued Fees" as of any date of determination means the Accrued Tracking Fee + the Accrued Financing Fee.

If the Securities undergo a split or reverse split, the Accrued Fees will be adjusted accordingly.

The Securities are subject to an "Accrued Tracking Fee" per Security, calculated as follows:

- (a) On the Initial Trade Date, the Accrued Tracking Fee is equal to zero.
- (b) On any subsequent calendar day, the Accrued Tracking Fee is equal to: (a) the Accrued Tracking Fee as of the immediately preceding calendar day, plus the Daily Tracking Fee on such calendar day.
- (c) On the calendar day after each Reset Valuation Date, the Accrued Tracking Fee is reset to be equal to the Daily Tracking Fee on such calendar day.

"CME Term SOFR" means the CME Term SOFR Reference Rates published for one-, three-, six-, and 12-month tenors as administered by CME Group Benchmark Administration, Ltd. (or any successor administrator thereof).

The "Daily Tracking Fee" is an amount per Security calculated as follows:

- (a) On the Initial Trade Date, the Daily Tracking Fee is zero.
- (b) On any subsequent calendar day, the Daily Tracking Fee is equal to:
  - (1) (i) 0.95% times (ii) the Current Principal Amount on the immediately preceding calendar day times (iii) the Index Factor on such calendar day times (iv) the Residual Factor on the immediately preceding calendar day, divided by (2) 365.
- (c) The minimum value of the Daily Tracking Fee on any calendar day will be zero.

The Daily Tracking Fee represents the investor fees calculated each day on the current value of the unleveraged notional amount invested in the Index per Security. These charges accrue and compound during the applicable period, and will reduce any amount you are entitled to receive at maturity or upon early redemption or call.

If the Securities undergo a split or reverse split, the Daily Tracking Fee will be adjusted accordingly.

The Securities are subject to an "Accrued Financing Fee" per Security calculated as follows:

- (a) On the Initial Trade Date, the Accrued Financing Fee is equal to zero.
- (b) On any subsequent calendar day, the Accrued Financing Fee is equal to:
  - (1) the Accrued Financing Fee as of the immediately preceding calendar day, plus (2) the Daily Financing Fee on such calendar day.
- (c) On the calendar day after each Reset Valuation Date, the Accrued Financing Fee is reset to be equal to the Daily Financing Fee on such calendar day.
- (d) If a Permanent Deleveraging Event occurs, then on any calendar day following the Second Permanent Deleveraging Valuation Date, the Accrued Financing Fee will be equal to zero.

The "Daily Financing Fee" is an amount per Security calculated as follows:

- (a) On the Initial Trade Date, the Daily Financing Fee is equal to zero.
- (b) On any subsequent calendar day, the Daily Financing Fee is equal to:
  - (1) (i) the Financing Rate on such calendar day *times* (ii) the Current Principal Amount on the immediately preceding calendar day *times* (iii) the Residual Factor on the immediately preceding calendar day, *divided by* (2) 360.
- (c) If a Permanent Deleveraging Event occurs, then on any calendar day following the Second Permanent Deleveraging Valuation Date, the Daily Financing Fee will be equal to zero.
- (d) The minimum value of the Daily Financing Fee on any calendar day will be zero.

The Daily Financing Fee seeks to compensate UBS for providing investors with a leveraged participation in movements of the Index and is intended to approximate the financing costs that investors may have otherwise incurred had they sought to borrow funds at a similar rate from a third party to invest in the Index. These charges accrue and compound during the applicable period, and will reduce any amount that you will be entitled to receive at maturity or upon early redemption or call.

If the Securities undergo a split or reverse split, the Daily Financing Fee will be adjusted accordingly.

The "**Financing Rate**" will equal the sum of (a) 0.95% and (b) three-month CME Term SOFR rate plus a 0.2616% adjustment on the immediately preceding U.S. Government Securities Business Day. The minimum Financing Rate at any time will be 0.95%

For example, 5.24665% was the three-month CME Term SOFR rate on June 29, 2023. The Financing Rate (if it were based on the SOFR-Based Benchmark Replacement) on June 30, 2023 would have therefore been equal to: 0.95% + 5.24665% + 0.2616%, or 6.45825%.

#### The "Measurement Period Cash Amount" is an amount per Security equal to:

- (a) \$0.00 on any calendar day, to but excluding the first day of a Measurement Period.
- (b) On the first day of a one-day Measurement Period:
  - At the close of trading on such Index Business Day, (Current Principal Amount on the immediately preceding calendar day × Index Factor, on such Index Business Day).
- (c) From and including the first day of a four-day Measurement Period:
  - (i) At the close of trading on each Index Business Day during the Measurement Period, the Measurement Period Cash Amount on the immediately preceding calendar day + (Current Principal Amount on the calendar day immediately preceding the first day of such Measurement Period  $\times$  0.25  $\times$  Index Factor, on such Index Business Day); and
  - (ii) On any calendar day during the Measurement Period that is not an Index Business Day, the Measurement Period Cash Amount on the immediately preceding Index Business Day.
- (d) On any calendar day after the last Index Business Day of a Measurement Period, the Measurement Period Cash Amount on the last Index Business Day of such Measurement Period.

Notwithstanding the foregoing, if, on any day during a Measurement Period, the Current Indicative Value or the Closing Indicative Value is *less than or equal to* the Measurement Period Cash Amount from the immediately preceding calendar day, then the Measurement Period Cash Amount for that day and all subsequent days will be fixed to be equal to the Measurement Period Cash amount from the immediately preceding calendar day.

The Measurement Period Cash Amount represents the portion of the Current Principal Amount that has been converted to cash on any given day of an applicable Measurement Period and is no longer tracking the Index.

At the close of trading of each Index Business Day during a four-day Measurement Period, approximately 25% of the Current Principal Amount on the calendar day immediately preceding the first day of the Measurement Period, will be deemed converted to cash and an applicable portion of the notional financing amount will separately be deemed converted to cash as well. After the close of trading on the final Index Business Day of a four-day Measurement Period, the Measurement Period Cash Amount will represent the averaged value of the Current Principal Amount that was deemed converted to cash across the four-days of such Measurement Period. In case of a one-day Measurement Period, approximately 100% of the Current Principal Amount will be deemed converted to cash and an applicable amount of financing will separately be deemed converted to cash, at the close of trading of the first day of such Measurement Period.

If the Securities undergo a split or reverse split, the Measurement Period Cash Amount will be adjusted accordingly.

#### The "Final Measurement Period" means:

- (a) if the Market Value of Securities outstanding as at the close of trading on the Index Business Day immediately preceding the Calculation Date is less than \$500,000,000, the Calculation Date, subject to adjustments as described under "— Market Disruption Event";
- (b) if the Market Value of Securities outstanding as at the close of trading on the Index Business Day immediately preceding the Calculation Date is equal to or greater than \$500,000,000, the four Index Business Days from and including the Calculation Date, subject to adjustments as described under "— Market Disruption Event."

For the purpose of determining the Final Measurement Period, the "Market Value" of the Securities outstanding as of the close of trading on the Index Business Day immediately preceding the Calculation Date, will equal:

(i) the Closing Indicative Value as of such Index Business Day *times* (ii) the number of Securities outstanding as reported on Bloomberg.

The "Index Calculation Agent" means the entity that calculates and publishes the level of the Index, which for each series of Securities is the entity set forth below:

Title of Securities	<b>Index Calculation Agent</b>
ETRACS 2x Leveraged US Dividend Factor TR ETN	S&P Dow Jones Indices
ETRACS 2x Leveraged US Growth Factor TR ETN	FTSE Russell
ETRACS 2x Leveraged US Size Factor TR ETN	FTSE Russell
ETRACS 2x Leveraged US Value Factor TR ETN	FTSE Russell
ETRACS 2x Leveraged MSCI US Minimum Volatility Factor TR ETN	MSCI, Inc.
ETRACS 2x Leveraged MSCI US Momentum Factor TR ETN	MSCI, Inc.
ETRACS 2x Leveraged MSCI US Quality Factor TR ETN	MSCI, Inc.

The "Calculation Date" means February 1, 2051, unless such day is not an Index Business Day, in which case the Calculation Date will be the next Index Business Day, subject to adjustment.

The Calculation Date represents the first Index Business Day of the Final Measurement Period.

"Index Business Day" means any day on which the Primary Exchange or market for trading of the Securities is scheduled to be open for trading.

"Primary Exchange" means, with respect to each Index Constituent Security or each constituent underlying a successor index, the primary exchange or market of trading such Index Constituent Security or such constituent underlying a successor index.

"U.S. Government Securities Business Day" means any day except for a Saturday, a Sunday or a day on which the Securities Industry and Financial Markets Association recommends that the fixed income departments of its members be closed for the entire day for purposes of trading in U.S. government securities.

## **Underlying Index**

The return of each series of Securities is based upon the performance of the applicable Index set forth on the cover page of the prospectus supplement. Each Index is designed to track the performance of a sector of the U.S. equity market and to reflect an investing style.

## Early Redemption at the Option of the Holders

Subject to your compliance with the procedures described below and the potential postponements and adjustments as described under "— Market Disruption Event", you may submit a request to have us redeem your Securities on any Index Business Day no later than 12:00 noon and a confirmation of redemption by no later than 5:00 p.m. on the same Index Business Day. You must request that we redeem a minimum of 50,000 Securities, although we reserve the right from time to time to waive this minimum redemption amount in our sole discretion on a case-by-case basis. You should not assume you will be entitled to the benefit of any such waiver. For any applicable redemption request, the "Redemption Valuation Date" will be the first Index Business Day following the date that the applicable redemption notice and redemption confirmation are delivered, except that we reserve the right from time to time to accelerate, in our sole discretion on a case-by-case basis, the Redemption Valuation Date to the date on which we receive the notice of redemption rather than the following Index Business Day. You should not assume you will be entitled to any such acceleration. To satisfy the minimum redemption amount, your broker or other financial intermediary may bundle your Securities for redemption with those of other investors to reach this minimum amount of 50,000 Securities; however, there can be no assurance that they can or will do so.

The Securities will be redeemed and the holders will receive payment for their Securities on the second Index Business Day following the applicable Redemption Valuation Date (the "Redemption Date"). The first Redemption Date will be the fourth Index Business Day immediately following the Initial Trade Date and the Final Redemption Date will be the fourth Index Business Day immediately preceding the Maturity Date, subject to adjustments. In addition, if we have issued a call notice, the last Redemption Valuation Date will be the fourth Index Business Day prior to the Call Settlement Date, as applicable. If a Zero Value Event occurs, the last Redemption Date will be the date on which the Zero Value Event occurred.

If a Market Disruption Event is continuing or occurs on the applicable scheduled Redemption Valuation Date with respect to any of the Index Constituent Securities, such Redemption Valuation Date may be postponed as described under "— Market Disruption Event".

As of any Redemption Valuation Date, the "Redemption Fee Amount" means an amount per Security equal to:

(0.125% × Closing Indicative Value of the Security as of the Redemption Valuation Date).

If you exercise your right to have us redeem your Securities, subject to your compliance with the procedures described under "— Redemption Procedures", for each applicable Security you will receive a cash payment on the relevant Redemption Date equal to:

Closing Indicative Value as of the Redemption Valuation Date - Redemption Fee Amount.

We refer to this cash payment as the "**Redemption Amount**." If the amount calculated above is equal to or less than zero, the payment upon early redemption will be zero. We reserve the right from time to time to waive the Redemption Fee Amount in our sole discretion and on a case-by-case basis. There can be no assurance that we will elect to waive this fee and you should not assume you will be entitled to such fee waiver.

We will inform you of such Redemption Amount on the first Index Business Day following the applicable Redemption Valuation Date.

The redemption feature is intended to induce arbitrageurs to counteract any trading of the Securities at a discount to their indicative value, though there can be no assurance that arbitrageurs will employ the redemption feature in this manner or that they will be successful in counteracting any divergence in the market price of the Securities and their indicative value.

The following graphic illustrates the formula to determine the Redemption Amount, which has been simplified for ease of presentation:

Redemption Amount = Closing Indicative Value - Redemption Fee Amount

You may lose all or a substantial portion of your investment upon early redemption. The combined negative effect of the Accrued Fees and the Redemption Fee Amount will reduce your final payment. If the compounded leveraged quarterly return of the Index (or the unleveraged return of the Index, following a Permanent Deleveraging Event) is insufficient to offset the negative effect of the Accrued Fees and the Redemption Fee Amount, if applicable, or if the compounded leveraged quarterly return of the Index (or the unleveraged return of the Index, following a Permanent Deleveraging Event) is negative, you may lose all or a substantial portion of your investment upon early redemption. Loss Rebalancing Events will cause compounding to occur more frequently than quarterly.

The Securities may be called by UBS prior to the Maturity Date pursuant to its Call Right and, upon the occurrence of a Zero Value Event, the Securities will be automatically accelerated and mandatorily redeemed by UBS. See "Specific Terms of the Securities — UBS's Call Right" and "Specific Terms of the Securities — Automatic Acceleration Upon Zero Value Event".

## **Redemption Procedures**

To redeem your Securities, you must instruct your broker or other person through whom you hold your Securities to take the following steps through normal clearing system channels:

deliver a notice of redemption, which we refer to as a "**Redemption Notice**" to UBS via email no later than 12:00 noon on the Index Business Day on which you elect to exercise your redemption right. If we receive your Redemption Notice by the time specified in the preceding sentence, we will respond by sending you a form of confirmation of redemption;

- deliver the signed confirmation of redemption, which we refer to as the "**Redemption Confirmation**", to us via email in the specified form by 5:00 p.m. on the same day. We or our affiliate must acknowledge receipt in order for your Redemption Confirmation to be effective;
- instruct your DTC custodian to book a delivery vs. payment trade with respect to your Securities on the applicable Redemption Date at a price equal to the Redemption Amount; and
- cause your DTC custodian to deliver the trade as booked for settlement via DTC at or prior to 12:00 noon on the applicable Redemption Date.

Different brokerage firms may have different deadlines for accepting instructions from their customers. Accordingly, as a beneficial owner of the Securities, you should consult the brokerage firm through which you own your interest for the relevant deadline. If your broker delivers your Redemption Notice after 12:00 noon, or your Redemption Confirmation after 5:00 p.m., on the Index Business Day prior to the applicable Redemption Valuation Date, your Redemption Notice will not be effective, you will not be able to redeem your Securities until the following Redemption Date and your broker will need to complete all the required steps if you should wish to redeem your Securities on any subsequent Redemption Date. In addition, UBS may request a medallion signature guarantee or such assurances of delivery as it may deem necessary in its sole discretion. All instructions given to participants from beneficial owners of Securities relating to the right to redeem their Securities will be irrevocable. If your DTC custodian or your brokerage firm is not a current UBS customer, UBS will be required to on-board such DTC custodian or brokerage firm, in compliance with its internal policies and procedures, before it can accept your Redemption Notice, your Redemption Confirmation or otherwise process your redemption request. This on-boarding process may delay your Redemption Valuation Date and Redemption Date. Furthermore, in certain circumstances, UBS may be unable to on-board your DTC custodian or your brokerage firm.

We reserve the right from time to time to waive the minimum redemption amount or the Redemption Fee Amount in our sole discretion on a case-by-case basis. In addition, we reserve the right from time to time to accelerate, in our sole discretion on a case-by-case basis, the Redemption Valuation Date to the date on which we receive the Redemption Notice rather than the following Index Business Day. You should not assume you will be entitled to any such waiver or election to accelerate the Redemption Valuation Date.

#### **UBS's Call Right**

UBS may at its option redeem all, but not less than all, of the issued and outstanding Securities of any series. To exercise its Call Right, UBS must provide notice to the holders of such Securities (which may be provided via press release) not less than 18 calendar days prior to the Call Settlement Date specified by UBS in such notice. If we call the Securities, you will receive a cash payment equal to the Closing Indicative Value on the last Index Business Day in the Call Measurement Period. We refer to this cash payment as the "Call Settlement Amount."

If the amount calculated above is equal to or less than zero, the payment upon UBS's exercise of its Call Right will be zero.

We will inform you of such Call Settlement Amount on the first Index Business Day following the last Index Business Day in the Call Measurement Period.

The holders will receive payment for their Securities on the third Index Business Day following the last Index Business Day in the Call Measurement Period (the "Call Settlement Date"). If a Market Disruption Event is continuing or occurs on the scheduled Call Valuation Date with respect to any of the Index Constituent Securities, such Call Valuation Date may be postponed as described under "— Market Disruption Event".

## The "Call Measurement Period" means:

- if the Market Value of Securities outstanding at the close of trading on the Index Business Day immediately preceding the date we issue a notice of exercise of our Call Right is less than \$500,000,000, the Call Valuation Date, subject to adjustments as described under "— Market Disruption Event"; and
- (b) if the Market Value of Securities outstanding as at the close of trading on the Index Business Day immediately preceding the date we issue a notice of exercise of our Call Right is equal to or greater than \$500,000,000, the four Index Business Days from and including the Call Valuation Date, subject to adjustment as described under "— Market Disruption Event."

For the purpose of determining the Final Measurement Period, the "Market Value" of the Securities outstanding as of the close of trading on the Index Business Day immediately preceding the date of delivery by UBS of its notice to holders (which may be provided via press release) of its exercise of its Call Right will equal:

(i) The Closing Indicative Value as of such Index Business Day times (ii) the number of Securities outstanding as reported on Bloomberg.

The "Call Valuation Date" means the date we specify in our notice to holders (which may be provided via press release) of our exercise of our Call Right.

In any notice to holders exercising our Call Right, we will specify how many days are included in the Call Measurement Period.

The following graphic illustrates the formula to determine the Call Settlement Amount, which has been simplified for ease of presentation:

## Cash Settlement Amount = Closing Indicative Value, on last Index Business Day in Call Measurement Period

You may lose all or a substantial portion of your investment if we exercise our Call Right. The combined negative effect of the Accrued Fees will reduce your final payment. If the compounded leveraged quarterly return of the Index (or the unleveraged return of the Index, following a Permanent Deleveraging Event) is insufficient to offset the negative effect of the Accrued Fees, or if the compounded leveraged quarterly return of the Index (or the unleveraged return of the Index, following a Permanent Deleveraging Event) is negative, you may lose all or a substantial portion of your investment upon a call. Loss Rebalancing Events will cause compounding to occur more frequently than quarterly.

In addition, upon the occurrence of a Zero Value Event, the Securities will be automatically accelerated and mandatorily redeemed by UBS. See "Specific Terms of the Securities — Automatic Acceleration Upon Zero Value Event" below.

#### **Automatic Acceleration Upon Zero Value Event**

For each series of Securities, a Zero Value Event represents the first instance when the Current Indicative Value (intraday indicative value) or the Closing Indicative Value is less than or equal to zero (other than on an Excluded Day, as defined below). It will have the effect of permanently resetting the value of your Securities to zero and accelerating the Securities. You will not benefit from any future exposure to the applicable Index after the occurrence of a Zero Value Event.

A Zero Value Event can occur only if a Permanent Deleveraging Event occurs and the Current Indicative Value (intraday indicative value) or the Closing Indicative Value declines to zero before the leverage of your Securities is reset to 1.0 at the close of trading on the Index Business Day following such event (or if such event occurs after 3:15 p.m. on any Index Business Day which would not otherwise have been a Loss Rebalancing Valuation Date, the second Index Business Day following such event), as described under "Permanent Deleveraging Valuation Dates" above.

A "Zero Value Event" occurs if the Current Indicative Value (intraday indicative value) or the Closing Indicative Value on any Index Business Day (other than an Excluded Day, as defined below) is less than or equal to zero. From immediately after the Zero Value Event and on all future calendar days, the Current Indicative Value (intraday indicative value) and the Closing Indicative Value will be set equal to zero.

As used above, an "Excluded Day" means (i) any calendar day after the Second Permanent Deleveraging Valuation Date (ii) any calendar day on or after which a Zero Value Event has already occurred, and (iii) any calendar day after the last day of an applicable Measurement Period.

In the event that a Zero Value Event has occurred, UBS will issue a press release shortly after the event; provided that the failure to do so shall not affect the automatic acceleration and redemption of the Securities. The Securities will be suspended from trading intraday shortly after the event occurs and will likely not be open for trading again on NYSE Arca.

You will lose your entire investment upon the occurrence of a Zero Value Event.

In addition, we may call the Securities prior to the Maturity Date pursuant to our Call Right. See "Specific Terms of the Securities — UBS's Call Right".

## **Loss Rebalancing Events**

A Loss Rebalancing Event will have the effect of deleveraging your Securities with the aim of resetting the then-current leverage to approximately 2.0. This means that after a Loss Rebalancing Event, a constant percentage increase in the Index Closing Level will have less of a positive effect on the value of your Securities relative to before the occurrence of the Loss Rebalancing Event.

A "Loss Rebalancing Event" occurs if, at any time, the Intraday Index Value on such Index Business Day (other than an Excluded Day, as used below) decreases by 20% or more from the previous Last Reset Index Closing Level.

Loss Rebalancing Events may occur multiple times over the term of the Securities and may occur multiple times during a single calendar quarter. This means both that (i) the Current Principal Amount may be reset more frequently than quarterly and (ii) the cumulative effect of compounding and fees will have increased as a result of the Loss Rebalancing Event(s). Because each Loss Rebalancing Event will have the effect of deleveraging your Securities, following a Loss Rebalancing Event your Securities will have less exposure to a potential positive gain in value relative to the exposure before the occurrence of such Loss Rebalancing Event.

As used above, an "Excluded Day" means (i) the Index Business Day immediately preceding any Quarterly Reset Valuation Date, if a Loss Rebalancing Event occurs after 3:15 p.m. on such day, (ii) any Quarterly Reset Valuation Date, (iii) any Loss Rebalancing Valuation Date, (iv) the Index Business Day immediately preceding the first day of an applicable Measurement Period, if a Loss Rebalancing Event occurs after 3:15 p.m. on such day (v) any calendar day from and including the first day of an applicable Measurement Period, (vi) the First or Second Permanent Deleveraging Valuation Dates, (vii) any calendar day after the Second Permanent Deleveraging Valuation Date, and (ix) any calendar day on or after which a Zero Value Event has occurred.

# "Loss Rebalancing Valuation Date" means:

- (a) if a Loss Rebalancing Event occurs at or prior to 3:15 p.m. on an Index Business Day, the day that such Loss Rebalancing Event occurs, subject to adjustment as described under "— Market Disruption Event"; and
- (b) if a Loss Rebalancing Event occurs after 3:15 p.m. on an Index Business Day, the first Index Business Day following the occurrence of such Loss Rebalancing Event, subject to adjustment as described under "— Market Disruption Event."

## **Permanent Deleveraging Event**

A Permanent Deleveraging Event will have the effect of deleveraging your Securities, with the aim of permanently resetting the then-current leverage to 1.0 over two Index Business Days. The leverage at the end of the First Permanent Deleveraging Valuation Date is reset to approximately 2.0 and the leverage at the end of the Second Permanent Deleveraging Valuation Date is reset to 1.0. This means that after a Permanent Deleveraging Event, a constant percentage increase in the Index Closing Level will have less of a positive effect on the value of your Securities than it would have had before the occurrence of the Permanent Deleveraging Event. If such an event were to occur, it most likely would occur only following a Loss Rebalancing Event and prior to the completion of the associated leverage reset to 2.0, which would generally occur at the end of the Index Business Day following the Index Business Day on which the Loss Rebalancing Event occurred or, if the Loss Rebalancing Event occurs 3:15 p.m. on an Index Business Day, at the end of the second Index Business Day following the Index Business Day on which the Loss Rebalancing Event occurred.

A "Permanent Deleveraging Event" occurs if, at any time on an Index Business Day (other than an Excluded Day, as defined below), the Intraday Index Value decreases by 40% or more from the Last Reset Index Closing Level. If a Permanent Deleveraging Event occurs, the Current Principal Amount of the Securities will be reset over two Index Business Days.

As used above, an "Excluded Day" means (i) the First or Second Permanent Deleveraging Valuation Dates, (ii) any calendar day after the Second Permanent Deleveraging Valuation Date, (iii) any day on or after which a Zero Value Event occurs, (iv) the day which is two Index Business Days prior to the first day of a Measurement Period, if a Permanent Deleveraging Event occurs after 3:15 p.m. on such day, and (v) any calendar day from and including the Index Business Day immediately preceding the first day of a Measurement Period.

"Permanent Deleveraging Valuation Dates" means the First Permanent Deleveraging Valuation Date and the Second Permanent Deleveraging Valuation Date, each as defined below:

- (a) The "First Permanent Deleveraging Valuation Date" means:
  - (i) any Index Business Day, which otherwise would have been a Loss Rebalancing Valuation Date, but on which a Permanent Deleveraging Event has occurred, subject to adjustment as described under "— Market Disruption Event"; or
  - (ii) if a Permanent Deleveraging Event occurs after 3:15 p.m. on any Index Business Day which would not otherwise have been a Loss Rebalancing Valuation Date, then the first Index Business Day following the occurrence of such Permanent Deleveraging Event, subject to adjustment as described under "— Market Disruption Event."

The leverage of your Securities will be reset to approximately 2.0 at the close of trading on the First Permanent Deleveraging Valuation Date.

(b) The "Second Permanent Deleveraging Valuation Date" means the Index Business Day immediately following the First Permanent Deleveraging Valuation Date, subject to adjustment as described under "—Market Disruption Event."

The leverage of your Securities will be reset to 1.0 at the close of trading on the Second Permanent Deleveraging Valuation Date.

## Split or Reverse Split of the Securities

We may, at any time in our sole discretion, initiate a split or reverse split of your Securities. If we decide to initiate a split or reverse split, as applicable, we will issue a press release announcing the split or reverse split and its effective date. The date of such press release shall be deemed to be the "announcement date" of the split or the reverse split, the record date for any split or reverse split will be the tenth Business Day after the announcement date, and the effective date will be the next Business Day after the record date.

If the Securities undergo a split or reverse split, we will adjust the Current Principal Amount, Closing Indicative Value, Current Indicative Value, Accrued Fees, Measurement Period Cash Amount and other relevant terms of the Securities accordingly. For example, if the Securities undergo a 4:1 split, every investor who holds a Security via The Depository Trust Company ("DTC") on the relevant record date will, after the split, hold four Securities, and adjustments will be made as described below. The Current Principal Amount on such record date will be *divided by* four to reflect the 4:1 split. The adjusted Current Principal Amount will be rounded to eight decimal places. The split or reverse split will become effective at the opening of trading of the Securities on the Index Business Day immediately following the record date. The split will not occur if we exercise our Call Right before it becomes effective.

In the case of a reverse split, the Current Principal Amount and other relevant terms of the Securities will be adjusted accordingly and we will determine in our sole discretion the manner in which we will address odd numbers of Securities (commonly referred to as "partials"). For example, if the Securities undergo a 1:4 reverse split, every investor who holds four Securities via DTC on the relevant record date will, after the reverse split, hold only one Security and the Current Principal Amount of the Securities on such record date will be multiplied by four to reflect the 1:4 reverse split. The adjusted Current Principal Amount will be rounded to eight decimal places. The reverse split will become effective at the opening of trading of the Securities on the Index Business Day immediately following the record date. The reverse split will not occur if we exercise our Call Right before it becomes effective.

Holders who own a number of Securities on the record date that is not evenly divisible by the reverse split divisor (which in the case of a 1:4 reverse split, for example, will be 4) will receive the same treatment as all other holders for the maximum number of Securities they hold that is evenly divisible by the reverse split divisor. We will determine in our sole discretion the manner in which we compensate holders for their remaining or "partial" Securities when we announce the reverse split, though our current intention is to provide holders with a cash payment for their partials on the 17th Business Day following the announcement date in an amount equal to the appropriate percentage of the Closing Indicative Value of the reverse split-adjusted Securities on the 15th Business Day following the announcement date. For example, in the case of a 1:4 reverse split, a holder who held 23 Securities via DTC on the record date would receive five post-reverse split Securities on the immediately following Business Day, and a cash payment on the 17th Business Day following the announcement date that is equal to 3/4 of the Current Principal Amount of the reverse split-adjusted Securities on the 15th Business Day following the announcement date.

## **Security Calculation Agent**

UBS Securities LLC will act as the Security Calculation Agent. The Security Calculation Agent will be solely responsible for all determinations and calculations regarding the value of the Securities, including, among other things, at maturity or upon early redemption or call, or at other times, the Current Principal

Amount, Current Indicative Value (which we also refer to as the intraday indicative value), Closing Indicative Value, Market Disruption Events, Business Days, Index Business Days, the Leverage Factor, the Index Factor, the Index Performance Ratio, the Residual Factor, the Index Closing Level, the Financing Rate, the Accrued Fees (including determining any successor to the LIBOR base rate), the Redemption Fee Amount, the Cash Settlement Amount, if any, that we will pay you at maturity, the Redemption Amount, if any, that we will pay you upon redemption, the Call Settlement Amount, that we will pay you if we call the Securities, whether a Loss Rebalancing Event has occurred, whether a Permanent Deleveraging Event has occurred and whether any day is an Index Business Day and all such other matters as may be specified elsewhere herein as matters to be determined by the Security Calculation Agent. If any Intraday Index Value as published by Bloomberg on any Index Business Day is manifestly incorrect, the Security Calculation Agent may base its determination of whether a Loss Rebalancing Event, Permanent Deleveraging Event or Zero Value Event shall have occurred on such Index Business Day on its own determination of such Intraday Index Value. In making such determination, the Security Calculation Agent may consider any relevant information, including, without limitation, relevant market data in the relevant market supplied by one or more third parties or from internal sources or affiliates. The Security Calculation Agent will also be responsible for determining whether the Index has been discontinued and whether there has been a material change in the Index. The Security Calculation Agent will make all such determinations and calculations in its sole discretion, and absent manifest error, all determinations of the Security Calculation Agent will be conclusive for all purposes and binding on us, you, and all other persons having an interest in the Securities, without liability on the part of the Security Calculation Agent. You will not be entitled to any compensation from us for any loss suffered as a result of any determinations or calculations made by the Security Calculation Agent. We may appoint a different Security Calculation Agent from time to time after the date of the prospectus supplement without your consent and without notifying you.

The Security Calculation Agent will provide written notice to the trustee at its New York office, on which notice the trustee may conclusively rely, of the amount to be paid at maturity or upon early redemption or call, on or prior to 12:00 noon on the Index Business Day immediately preceding the Maturity Date, any Redemption Date or any Call Settlement Date.

All dollar amounts related to determination of the Accrued Fees, the Current Principal Amount, and any Redemption Amount, Redemption Fee Amount, Call Settlement Amount or Cash Settlement Amount per Security will be rounded to the nearest tenthousandth, with five one hundred-thousandths rounded upward (e.g., .76545 would be rounded up to .7655); and all dollar amounts paid to any holder of Securities will be rounded to the nearest cent, with one-half cent rounded upward.

## **Market Disruption Event**

To the extent a Market Disruption Event with respect to the Index has occurred or is continuing during a four-day Measurement Period, the Index Closing Level for such day will be determined by the Security Calculation Agent or one of its affiliates on the first succeeding Index Business Day on which a Market Disruption Event does not occur or is not continuing with respect to the Index. The remaining Index Business Days in the Measurement Period will be postponed accordingly, and the remaining Index Business Days in the Measurement Period will resume again following the suspension of the Market Disruption Event. For example, if the four-day Measurement Period for purposes of calculating the Call Settlement Amount, is scheduled for June 2, June 3, June 4 and June 5, and there is a Market Disruption Event with respect to the Index on June 2, but no other Market Disruption Event during such Call Measurement Period, then June 3 will become the first Index Business Day of the Measurement Period, June 4th the second Index Business Day, June 5th the third Index Business Day and the next Index Business Day after June 5th would be the final day of the Measurement Period. The same approach would be applied if there is a Market Disruption Event during a four-day Final Measurement Period.

To the extent a Market Disruption Event with respect to the Index has occurred or is continuing on the Redemption Valuation Date, Call Valuation Date (in the event that the Call Measurement Period is the Call Valuation Date), Calculation Date (in the event that the Final Measurement Period is the Calculation Date) or any Reset Valuation Date, the Index Closing Level for such Redemption Valuation Date, Call Valuation Date, Calculation Date or Reset Valuation Date will be determined by the Security Calculation Agent or one of its affiliates on the first succeeding Index Business Day on which a Market Disruption Event does not occur or is not continuing with respect to the Index. For example, if the Redemption Valuation Date, for purposes of calculating a Redemption Amount, is based on the Index Closing Level on June 2 and there is a Market Disruption Event with respect to the Index on June 2, then the Index Closing Level on June 3 will be used to calculate the Redemption Amount, assuming that no such Market Disruption Event has occurred or is continuing on June 3.

In no event, however, will any postponement pursuant to either of the two immediately preceding paragraphs result in the affected Index Business Day of the Measurement Period or any Redemption Valuation Date, Call Valuation Date (in the event that the Call Measurement Period is the Call Valuation Date), Calculation Date (in the event that the Final Measurement Period is the Calculation Date) or Reset Valuation Date occurring more than five Index Business Days following the day originally scheduled to be such Index Business Day of the Measurement Period or such Redemption Valuation Date, Call Valuation Date, Calculation Date or Reset Valuation Date. If a Market Disruption Event has occurred or is continuing with respect to the Index on the fifth Index Business Day following the date originally scheduled to be such Index Business Day of the Measurement Period or any Redemption Valuation Date, Calculation Date or any Reset Valuation Date, the Security Calculation Agent or one of its affiliates will determine the Index Closing Level based on its good faith estimate of the Index Closing Level that would have prevailed on such fifth Index Business Day but for such Market Disruption Event.

Any of the following will be a "Market Disruption Event" with respect to the Index, in each case as determined by the Security Calculation Agent in its sole discretion:

- (a) suspension, absence or material limitation of trading in a material number of Index Constituent Securities, whether by reason of movements in price exceeding limits permitted by the Primary Exchange or otherwise;
- (b) suspension, absence or material limitation of trading in option or futures contracts relating to the Index or to a material number of Index Constituent Securities in the primary market or markets for those contracts;
- (c) the Index is not published; or
- (d) in any other event, if the Security Calculation Agent determines in its sole discretion that the event materially interferes with our ability or the ability of any of our affiliates to unwind all or a material portion of a hedge with respect to the Securities that we or our affiliates have effected or may effect as described in the section entitled "Use of Proceeds and Hedging."

The following events will not be Market Disruption Events with respect to the Index:

- (a) a limitation on the hours or numbers of days of trading, but only if the limitation results from an announced change in the regular business hours of the relevant market; and
- (b) a decision to permanently discontinue trading in the option or futures contracts relating to the Index or any Index Constituent Securities.

For this purpose, an "absence of trading" in the primary securities market on which option or futures contracts related to the Index or any Index Constituent Securities are traded will not include any time when that market is itself closed for trading under ordinary circumstances.

## **Default Amount on Acceleration**

If an event of default occurs and the maturity of the Securities is accelerated, we will pay the default amount in respect of the principal of the Securities at maturity. We describe the default amount below under "— Default Amount."

For the purpose of determining whether the holders of our Medium-Term Notes, Series B, of which the Securities are a part, are entitled to take any action under the indenture, we will treat the outstanding principal amount of the Medium-Term Notes, Series B, as constituting the outstanding principal amount of the Securities. Although the terms of the Securities may differ from those of the other Medium-Term Notes, Series B, holders of specified percentages in principal amount of all Medium-Term Notes, Series B, together in some cases with other series of our debt securities, will be able to take action affecting all the Medium-Term Notes, Series B, including the Securities. This action may involve changing some of the terms that apply to the Medium-Term Notes, Series B, accelerating the maturity of the Medium-Term Notes, Series B after a default or waiving some of our obligations under the indenture. We discuss these matters in "Medium-Term Notes, Series B" above under "Description of Debt Securities We May Offer — Default, Remedies and Waiver of Default" and "Description of Debt Securities We May Offer — Modification and Waiver of Covenants."

#### **Default Amount**

The default amount for the Securities on any day will be an amount, in U.S. dollars as determined by the Security Calculation Agent in its sole discretion, for the aggregate Stated Principal Amount of the Securities, equal to the cost of having a qualified financial institution, of the kind and selected as described below, expressly assume all our payment and other obligations with respect to the Securities as of that day and as if no default or acceleration had occurred, or to undertake other obligations providing substantially equivalent economic value to you with respect to the Securities. That cost will equal:

- > the lowest amount that a qualified financial institution would charge to effect this assumption or undertaking, plus
- the reasonable expenses, including reasonable attorneys' fees, incurred by the holders of the Securities in preparing any documentation necessary for this assumption or undertaking.

During the default quotation period for the Securities, which we describe below, the holders of the Securities and/or we may request a qualified financial institution to provide a quotation of the amount it would charge to effect this assumption or undertaking. If either party obtains a quotation, it must notify the other party in writing of the quotation. The amount referred to in the first bullet point above will equal the lowest — or, if there is only one, the only — quotation obtained, and as to which notice is so given, during the default quotation period. With respect to any quotation, however, the party not obtaining the quotation may object, on reasonable and significant grounds, to the assumption or undertaking by the qualified financial institution providing the quotation and notify the other party in writing of those grounds within two Business Days after the last day of the default quotation period, in which case that quotation will be disregarded in determining the default amount.

## **Default Quotation Period**

The default quotation period is the period beginning on the day the default amount first becomes due and ending on the third Index Business Day after that day, unless:

- > no quotation of the kind referred to above is obtained, or
- every quotation of that kind obtained is objected to within five Index Business Days after the due date as described above.

If either of these two events occurs, the default quotation period will continue until the third Index Business Day after the first Index Business Day on which prompt notice of a quotation is given as described above. If that quotation is objected to as described above within five Index Business Days after that first Index Business Day, however, the default quotation period will continue as described in the prior sentence and this sentence.

In any event, if the default quotation period and the subsequent two Index Business Day objection period have not ended before the Calculation Date, then the default amount will equal the Stated Principal Amount of the Securities.

#### **Qualified Financial Institutions**

For the purpose of determining the default amount at any time, a qualified financial institution must be a financial institution organized under the laws of any jurisdiction in the United States of America, Europe or Japan, which at that time has outstanding debt obligations with a stated maturity of one year or less from the date of issue and rated either:

- A-1 or higher by Standard & Poor's Financial Services LLC, a subsidiary of The McGraw-Hill Companies, Inc., or any successor, or any other comparable rating then used by that rating agency, or
- P-1 or higher by Moody's Investors Service or any successor, or any other comparable rating then used by that rating agency.

# Discontinuance of or Adjustments to the Index or Termination of Our License Agreements with the Index Sponsors; Alteration of Method of Calculation

If (i) an Index Sponsor or the Index Calculation Agent announces that it intends to discontinue, or discontinues, publication of, or otherwise fails to publish, the Index, (ii) our license agreement with the Index Sponsor terminates or (iii) the Index Sponsor or Index Calculation Agent does not make the Index Constituent Securities and/or their unit weighting available to the Security Calculation Agent, and, in each case, any other person or entity publishes an index licensed to UBS that the Security Calculation Agent determines is comparable to the Index and for which the Index Constituent Securities and/or their unit weighting are available to the Security Calculation Agent (such index being referred to herein as a "successor index"), and the Security Calculation Agent approves such index as a successor index, then on and after the date determined by the Security Calculation Agent, the Security Calculation Agent will determine the Index Closing Level on the applicable dates of determination and the amount payable at maturity or upon early redemption or call and all other related payments terms by reference to such successor index.

Upon any selection by the Security Calculation Agent of a successor index, the Security Calculation Agent will cause written notice of the successor index and the date on and after which the Index Closing Level will be determined by reference thereto be furnished to the trustee, to us and to the holders of the Securities.

If an Index Sponsor or Index Calculation Agent discontinues publication of the Index, our license agreement with the Index Sponsor terminates or the Index Sponsor or Index Calculation Agent do not make the Index Constituent Securities and/or their unit weighting available to the Security Calculation Agent, prior to, and such discontinuation, termination or unavailability is continuing on the Calculation Date or any Index Business Day during a Measurement Period, or on the Redemption Valuation Date or on any Reset Valuation Date, as applicable, or on any other relevant date on which the Index Closing Level is to be determined and the Security Calculation Agent determines that no successor index is available at such time, or the Security Calculation Agent has previously selected a successor index and publication of such successor index is discontinued prior to, and such discontinuation is continuing on the Calculation Date or any Index Business Day during a Measurement Period, or on the Redemption Valuation Date or on any Reset Valuation Date, or any other relevant date on which the Index Closing Level is to be determined, then the Security Calculation Agent will determine the Index Closing Level using the Index Closing Level on the last Index Business Day immediately prior to such discontinuation or unavailability, as adjusted for certain corporate actions. In such event, the Security Calculation Agent will cause notice thereof to be furnished to the trustee, to us and to the holders of the Securities.

Notwithstanding these alternative arrangements, discontinuation of the publication of the Index or successor index, as applicable, may adversely affect the value of the Securities.

In addition, if an Index Replacement Event (as defined below) occurs at any time and the Index Sponsor or anyone else publishes an index that the Security Calculation Agent determines is comparable to the Index (the "Substitute Index"), then the Security Calculation Agent may elect, in its sole discretion, to permanently replace the original Index with the Substitute Index for all purposes under the Securities, and all provisions described in the prospectus supplement as applying to the Index will thereafter apply to the Substitute Index instead. In such event, the Security Calculation Agent will make such adjustments, if any, to any level of the Index or Substitute Index that is used for purposes of the Securities as it determines are appropriate in the circumstances. If the Security Calculation Agent elects to replace the original Index with a Substitute Index, then the Security Calculation Agent will determine all amounts hereunder, Current Principal Amount, Current Indicative Value (intraday indicative value), Closing Indicative Value, Index Factor, Index Performance Ratio, Residual Factor, Accrued Fees, Index Closing Levels on the applicable dates of determination, all other related payment terms and the amount payable at maturity or upon early redemption or call by reference to such Substitute Index. If the Security Calculation Agent so elects to replace the original Index with a Substitute Index, the Security Calculation Agent will cause written notice thereof to be furnished to the trustee, to us and to the holders of the Securities of the Securities.

## An "Index Replacement Event" means:

- an amendment to or change (including any officially announced proposed change) in the laws, regulations or rules of the United States (or any political subdivision thereof), or any jurisdiction in which a Primary Exchange (as defined herein) is located that (i) makes it illegal for UBS AG or its affiliates to hold, acquire or dispose of the Index Constituent Securities included in the Index or options, futures, swaps or other derivatives on the Index or on the Index Constituent Securities included in the Index (including but not limited to exchange-imposed position limits), (ii) materially increases the cost to us, our affiliates, third parties with whom we transact or similarly situated third parties in performing our or their obligations in connection with the Securities, (iii) has a material adverse effect on any of these parties' ability to perform their obligations in connection with the Securities, or (iv) materially affects our ability to issue or transact in exchange traded notes similar to the Securities, each as determined by the Security Calculation Agent;
- (b) any official administrative decision, judicial decision, administrative action, regulatory interpretation or other official pronouncement interpreting or applying those laws, regulations or rules that is announced on or after February 4, 2021 that (i) makes it illegal for UBS AG or its affiliates to hold, acquire or dispose of the Index Constituent Securities included in the Index or options, futures, swaps or other derivatives on the Index or on the Index Constituent Securities (including but not limited to exchange-imposed position limits), (ii) materially increases the cost to us, our affiliates, third parties with whom we transact or similarly situated third parties in performing our or their obligations in connection with the Securities, (iii) has a material adverse effect on the ability of us, our affiliates, third parties with whom we transact or a similarly situated third party to perform our or their obligations in connection with the Securities, or (iv) materially affects our ability to issue or transact in exchange traded notes similar to the Securities, each as determined by the Security Calculation Agent;
- (c) any event that occurs on or after February 4, 2021 that makes it a violation of any law, regulation or rule of the United States (or any political subdivision thereof), or any jurisdiction in which a Primary Exchange (as defined herein) is located, or of any official administrative decision, judicial decision, administrative action, regulatory interpretation or other official pronouncement interpreting or applying those laws, regulations or rules, (i) for UBS AG or its affiliates to hold, acquire or dispose of the Index Constituent Securities or options, futures, swaps or other derivatives on the Index or on the Index Constituent Securities (including but not limited to exchange-imposed position limits), (ii) for us, our affiliates, third parties with whom we transact or similarly situated third parties to perform our or their obligations in connection with the Securities, or (iii) for us to issue or transact in exchange traded notes similar to the Securities, each as determined by the Security Calculation Agent;

- (d) any event, as determined by the Security Calculation Agent, as a result of which we or any of our affiliates or a similarly situated party would, after using commercially reasonable efforts, be unable to, or would incur a materially increased amount of tax, duty, expense or fee (other than brokerage commissions) to, acquire, establish, re-establish, substitute, maintain, unwind or dispose of any transaction or asset it deems necessary to hedge the risk of the Securities, or realize, recover or remit the proceeds of any such transaction or asset; or
- (e) as determined by the Security Calculation Agent, the primary exchange or market for trading for the Securities, if any, announces that pursuant to the rules of such exchange or market, as applicable, the Securities cease (or will cease) to be listed, traded or publicly quoted on such exchange or market, as applicable, for any reason and are not immediately re-listed, re-traded or re-quoted on an exchange or quotation system located in the same country as such exchange or market, as applicable.

Notwithstanding these alternative arrangements, discontinuation of the publication of the Index or successor index, as applicable, may adversely affect the value of the Securities.

If at any time the method of calculating the Index, a successor index or a Substitute Index, or the value thereof, is changed in a material respect, or if the Index or a successor or Substitute Index is in any other way modified so that the Index Closing Level of the Index or such successor or Substitute Index does not, in the opinion of the Security Calculation Agent, fairly represent the Index Closing Level of the Index or such successor or Substitute Index had such changes or modifications not been made, then the Security Calculation Agent will make such calculations and adjustments as, in the good faith judgment of the Security Calculation Agent, may be necessary in order to arrive at an Index Closing Level of an index comparable to the Index or such successor index, as the case may be, as if such changes or modifications had not been made, and the Security Calculation Agent will calculate the Index Closing Level for the Index or such successor or Substitute Index with reference to the Index or such successor or Substitute Index, as adjusted. The Security Calculation Agent will accordingly calculate the Index Closing Level, the Index Performance Ratio, the Last Reset Index Closing Level, the Accrued Fees, and any Redemption Amount, Redemption Fee Amount, Cash Settlement Amount or Call Settlement Amount, and all related payment terms based directly or indirectly on the Index Closing Level calculated by the Security Calculation Agent. Accordingly, if the method of calculating the Index or a successor or Substitute Index is modified so that the level of the Index or such successor or Substitute Index is a fraction or multiple of what it would have been if there had been no such modification (e.g., due to a rebasing of the Index), which, in turn, causes the Index Closing Level of the Index or such successor or Substitute Index to be a fraction of what it would have been if there had been no such modification, then the Security Calculation Agent will make such calculations and adjustments in order to arrive at an Index Closing Level for the Index or such successor or Substitute Index as if it had not been modified (e.g., as if such rebasing had not occurred).

In the event that the Security Calculation Agent elects to replace the Index with a successor index or a Substitute Index, UBS may, in its sole discretion, amend the title of the Securities in order to remove reference the former Index and to make such other changes to the title of the Securities as it considers necessary or desirable to reflect the name and/or characteristics of the relevant successor index or Substitute Index, as applicable.

All determinations and adjustments to be made by the Security Calculation Agent may be made in the Security Calculation Agent's sole discretion. See "Risk Factors — Risks Relating to Creditworthiness, Conflicts of Interest, Hedging Activities and Regulation of UBS — There are potential conflicts of interest between you and the Security Calculation Agent" in the prospectus supplement for a discussion of certain conflicts of interest which may arise with respect to the Security Calculation Agent.

## **Manner of Payment and Delivery**

Any payment on or delivery of the Securities at maturity or upon early redemption or call will be made to accounts designated by you and approved by us, or at the corporate trust office of the trustee in New York City, but only when the Securities are surrendered to the trustee at that office. We also may make any payment or delivery in accordance with the applicable procedures of the depositary.

## Reissuances or Reopened Issues

We may, at our sole discretion, "reopen" or reissue any series of Securities. We issued the Securities initially in an amount having the aggregate Stated Principal Amount specified on the cover of the prospectus supplement. We may issue additional Securities in amounts that exceed the amount on the cover at any time, without your consent and without notifying you. The Securities do not limit our ability to incur other indebtedness or to issue other securities. Also, we are not subject to financial or similar restrictions by the terms of the Securities. For more information, please refer to "Description of Debt Securities We May Offer — Amounts That We May Issue" in "Medium-Term Notes, Series B" above.

These further issuances, if any, will be consolidated to form a single class with the originally issued Securities of the same series and will have the same CUSIP number and will trade interchangeably with such Securities immediately upon settlement. Any additional issuances will increase the aggregate Stated Principal Amount of the outstanding Securities of the class. The price of any additional offering will be determined at the time of pricing of that offering.

#### **Booking Branch**

The Securities will be booked through UBS AG, London Branch.

# **Clearance and Settlement**

The DTC participants that hold the Securities through DTC on behalf of investors will follow the settlement practices applicable to equity securities in DTC's settlement system with respect to the primary distribution of the Securities and secondary market trading between DTC participants.

## 20. ETRACS 2x Leveraged US Growth Factor TR ETN due February 9, 2051

# **Specific Terms of the Securities**

In this section, references to "holders" mean those who own the Securities registered in their own names, on the books that we or the trustee maintains for this purpose, and not those who own beneficial interests in the Securities registered in street name or in the Securities issued in book-entry form through The Depository Trust Company ("DTC") or another depositary. Owners of beneficial interests in the Securities should read the section entitled "Legal Ownership and Book-Entry Issuance" under "Medium-Term Notes, Series B" above.

Each of the seven series of Securities offered by the prospectus supplement is separate and independent of each other series of Securities. Apart from the applicable Index, however, all of the terms of each series of Securities are the same. Since each series references a different Index, all calculations and adjustments and related events with respect to each series are independent of calculations and adjustments and related events for each other series of Securities, and we may exercise our call right as well as our right to initiate a split or a reverse split independently for each series. The following discussion therefore applies independently to each series of Securities offered by the prospectus supplement and, except as the context may otherwise require, the defined terms refer separately to each series. References to the "Securities" should be understood as references to a single series of Securities and the defined terms should be understood in reference only to that series of Securities.

These Securities are part of a series of debt securities entitled "Medium-Term Notes, Series B" that we may issue, from time to time, under the indenture more particularly described under "Medium-Term Notes, Series B" above. This section summarizes general financial and other terms that apply to the Securities. Terms that apply generally to all Medium-Term Notes, Series B are described in "Description of Debt Securities We May Offer" under "Medium-Term Notes, Series B" above. The terms described here supplement those described in "Medium-Term Notes, Series B" above and, if the terms described here are inconsistent with those described there, the terms described here are controlling.

The Securities are part of a single series of senior debt securities issued under our indenture, dated as of June 2, 2015 between us and U.S. Bank Trust National Association, as trustee.

We describe the terms of the Securities in more detail below. The Stated Principal Amount of each Security is \$25.00.

The Securities do not guarantee any return of principal at, or prior to, maturity or upon early redemption or call. Instead, at maturity, you will receive a cash payment per Security the amount of which will vary depending on the performance and path of the Index and will be reduced by the Accrued Fees as of the last Index Business Day in the Final Measurement Period as described under "— Cash Settlement Amount at Maturity." If the amount as calculated is equal to or less than zero, the Cash Settlement Amount will be zero and you will not receive a cash payment.

If you exercise your right to have us redeem your Securities, subject to compliance with the redemption procedures, for each Security you will receive a cash payment per Security on the relevant Redemption Date equal to the Redemption Amount as described under "— Early Redemption at the Option of the Holders." If the amount as calculated is equal to or less than zero, the Redemption Amount will be zero and you will not receive a cash payment.

## **Cash Settlement Amount at Maturity**

The "Maturity Date" is February 9, 2051, which will be the third Index Business Day following the last Index Business Day in the Final Measurement Period, subject to adjustment as described below under "— Market Disruption Event."

For each Security, unless earlier called, redeemed or accelerated upon Zero Value Event, you will receive at maturity a cash payment equal to its Closing Indicative Value on the last Index Business Day in the applicable Measurement Period. We refer to this cash payment as the "Cash Settlement Amount." If the amount so calculated is equal to or less than zero, the payment will be zero.

The following graphic illustrates the formula to determine the Cash Settlement Amount, which has been simplified for ease of presentation:

Cash Settlement Amount = Closing Indicative Value, on last Index
Business Day in Final Measurement Period

You may lose all or a substantial portion of your investment at maturity. The combined negative effect of the Accrued Fees will reduce your final payment. If the compounded leveraged quarterly return of the Index (or the unleveraged return of the Index, following a Permanent Deleveraging Event) is insufficient to offset the negative effect of the Accrued Fees, you may lose all or a substantial portion of your investment at maturity. The occurrence of Loss Rebalancing Events will result in more frequent than quarterly compounding.

UBS may call the Securities prior to the Maturity Date pursuant to its Call Right. If the Securities are called by UBS, the Call Settlement Amount may be zero and you may lose all or a substantial portion of your investment. See "Specific Terms of the Securities — UBS's Call Right".

The "Stated Principal Amount" of each Security is \$25.00. The Securities may be issued and sold over time at then-current market prices which may be significantly higher or lower than the Stated Principal Amount. If the Securities undergo a split or reverse split, the Stated Principal Amount will be adjusted accordingly.

The Closing Indicative Value represents the dollar value per Security that an investor would receive on any day if it redeemed the Security that day (without giving effect to any Redemption Fee Amount).

The "Closing Indicative Value" per Security, will be calculated as follows:

- (a) On the Initial Trade Date, \$25.00 per Security.
- (b) On any other calendar day, prior to the first day of an applicable Measurement Period, an amount per Security equal to:

(Current Principal Amount on the immediately preceding calendar day × Index Factor) - Accrued Fees

(c) From and including the first day of an applicable Measurement Period, an amount per Security equal to:

(Current Principal Amount on the calendar day immediately preceding the first day of the Measurement Period × Index Factor × Residual Factor) – Accrued Fees + Measurement Period Cash Amount

However, if, on any day during a Measurement Period, the Current Indicative Value or the Closing Indicative Value *is less than or equal to* the Measurement Period Cash Amount from the immediately preceding calendar day, the Closing Indicative Value for that day and all subsequent days will be fixed to be equal to the Measurement Period Cash Amount from the immediately preceding calendar day.

(d) The minimum value of the Closing Indicative Value on any calendar day will be zero.

If a Zero Value Event occurs, the Closing Indicative Value will be equal to zero on the day it occurs and on all future calendar days. Upon the occurrence of a Zero Value Event, investors will lose their entire investment. You will not benefit from any future exposure to the Index after the occurrence of a Zero Value Event. See "— Automatic Acceleration Upon Zero Value Event".

The actual trading price of the Securities in the secondary market may vary significantly from their Closing Indicative Value.

If the Securities undergo a split or reverse split, the Closing Indicative Value will be adjusted accordingly.

The "Current Principal Amount" represents the unleveraged notional investment in the Index Constituent Securities per Security at the close of trading on any Reset Valuation Date. The notional financing amount per Security in order to generate the leveraged returns would approximately equal the Current Principal Amount at the close of trading on any Reset Valuation Date. If a Permanent Deleveraging Event occurs, the leverage of your Securities will be permanently reset to 1.0 and the notional financing amount will be equal to zero for the remaining term of the Securities. If a Zero Value Event occurs prior to your Securities permanently resetting to 1.0 at the end of the Second Permanent Deleveraging Valuation Date, then your Securities will be automatically accelerated and mandatorily redeemed and you will lose your entire investment.

The Current Principal Amount per Security, will be calculated as follows:

- (a) From and including the Initial Trade Date to and excluding the first Reset Valuation Date, \$25.00 per Security.
- (b) At the close of trading on each Reset Valuation Date after the Initial Trade Date, the Current Principal Amount of the Securities will be reset as follows:

New Current Principal Amount = (Current Principal Amount on immediately preceding calendar day × Index Factor)

– Accrued Fees The Current Principal Amount will not change until the first Reset Valuation Date.

If a day that would otherwise be a Reset Valuation Date occurs on or after the first day of a Measurement Period, such day will not be a valid Reset Valuation Date.

If the Securities undergo a split or reverse split, the Current Principal Amount will be adjusted accordingly.

At the close of trading on each Reset Valuation Date, the Current Principal Amount is reset. The "Reset Valuation Date" means:

- (a) Any calendar day up to and including the Second Permanent Deleveraging Valuation Date, that is either: (i) the Initial Trade Date, (ii) a Quarterly Reset Valuation Date, (iii) a Loss Rebalancing Valuation Date (iv) the First Permanent Deleveraging Valuation Date, or (v) the Second Permanent Deleveraging Valuation Date; and
- (b) Any calendar day following the Second Permanent Deleveraging Valuation Date.

The valuation dates are defined below.

If a day that would otherwise be a Reset Valuation Date occurs on or after the first day of a Measurement Period, it will not be a valid Reset Valuation Date and the Last Reset Index Closing Level will remain the same.

The "Quarterly Reset Valuation Date" is the second Wednesday of January, April, July and October of each calendar year during the term of the Securities (other than an Excluded Day, as defined below), subject to adjustment as described under "—Market Disruption Event".

As used above, an "Excluded Day" means (i) the Index Business Day immediately preceding the first day of an applicable Measurement Period, and any calendar day thereafter, and (ii) any calendar day after the Second Permanent Deleveraging Valuation Date.

The "Index Factor" is: 1 + (Leverage Factor × Index Performance Ratio).

The Index Factor represents the leveraged percentage change in the Index level since the Last Reset Index Closing Level. The Index Factor *times* the applicable Current Principal Amount on the preceding calendar day represents the current value of the unleveraged notional amount per Security that is deemed invested in the Index on any calendar day. This does not reflect the Redemption Amount that an investor would receive upon early redemption on such calendar day.

The "Residual Factor" will be calculated as follows:

- (a) 1.0 on any calendar day, to but excluding the first day of an applicable Measurement Period.
- (b) From and including the first day of an applicable four-day Measurement Period, (a) the number of Index Business Days from, but excluding, the date of determination to, and including, the last Index Business Day in such four-day Measurement Period, *divided by* (b) four.

For example, on the first Index Business Day in an applicable four-day Measurement Period, the Residual Factor will equal 3/4, on the second Index Business Day in an applicable four-day Measurement Period, the Residual Factor will equal 2/4, on the third Index Business Day in an applicable four-day Measurement Period, the Residual Factor will equal 1/4 and on the last Index Business Day in an applicable four-day Measurement Period, the Residual Factor will equal zero.

(c) On any calendar day from and including the last Index Business Day of an applicable Measurement Period, the Residual Factor will be equal to zero.

The Residual Factor is intended to approximate the percentage of the Current Principal Amount that is tracking the Index on any given day. The Residual Factor is relevant only during an applicable Measurement Period but otherwise is not a component of the Closing Indicative Value or Current Indicative Value formulas. At the close of trading on each Index Business Day during a four-day Measurement Period, approximately 25% of the Current Principal Amount and the corresponding amount of financing will be deemed converted to cash. In case of a one-day Measurement Period, approximately 100% of the Current Principal Amount and the corresponding amount of financing will be deemed converted to cash.

The "Leverage Factor" on any calendar day until the occurrence of a Permanent Deleveraging Event and the close of trading on the Second Permanent Deleveraging Valuation Date, will equal 2.0. If a Permanent Deleveraging Event occurs, then on any calendar day following the Second Permanent Deleveraging Valuation Date, the Leverage Factor will equal 1.0.

The "Index Performance Ratio" on any Index Business Day will be equal to:

<u>Index Closing Level – Last Reset Index Closing Level</u> Last Reset Index Closing Level

On any calendar day that is not an Index Business Day, the Index Closing Level will be equal to the Index Closing Level on the Index Business Day immediately preceding such calendar day.

The "Last Reset Index Closing Level" is the Index Closing Level on the most recent Reset Valuation Date prior to such day. The initial Last Reset Index Closing Level is the Index Closing Level on the Initial Trade Date, as reported by Bloomberg and Reuters.

The "Index Closing Level" on any date of determination is the closing level of the Index, as reported on Bloomberg and Reuters on such day; however, if the closing level of the Index as reported on Bloomberg (or any successor) differs from the closing level of the Index as reported on Reuters (or any successor), the Index Closing Level will be the closing level of the Index as calculated by the Index Calculation Agent. The initial Index Closing Level (which is also the first Last Reset Index Closing Level) was determined on February 4, 2021 by the Security Calculation Agent. If the closing level of an Index, as reported on Bloomberg and Reuters for any Index Business Day, is manifestly incorrect, the "Index Closing Level" for such Index Business Day shall be the closing level of the Index as determined by the Security Calculation Agent. In making such determination, the Security Calculation Agent may consider any relevant information, including, without limitation, relevant market data in the relevant market supplied by one or more third parties or from internal sources or affiliates.

On any calendar day that is not an Index Business Day, the Index Closing level will be equal to the Index Closing Level on the Index Business Day immediately preceding such calendar day.

"Measurement Period" means the Final Measurement Period or, if UBS exercises its Call Right, the Call Measurement Period.

The "Current Indicative Value" or "intraday indicative value", as determined by the Security Calculation Agent, is an amount per Security, on an intraday basis on any Index Business Day, equal to:

- (a) On the Initial Trade Date, \$25.00.
- (b) On any other calendar day prior to the first day of a Measurement Period:

(Current Principal Amount on the immediately preceding calendar day × Index Factor, calculated using the Intraday Index Value) – Accrued Fees

(c) From and including the first day of a Measurement Period, an amount per Security equal to:

(Current Principal Amount on the calendar day immediately preceding the first day of the Measurement Period × Index Factor, calculated using the Intraday Index Value × Residual Factor on the immediately preceding calendar day) – Accrued Fees + Measurement Period Cash Amount, from the immediately preceding calendar day

However, if, on any day during a Measurement Period, the Current Indicative Value or the Closing Indicative Value *is less than or equal to* the Measurement Period Cash Amount from the immediately preceding calendar day, the Current Indicative Value for the remainder of that day and all subsequent days will be fixed to be equal to the Measurement Period Cash Amount from the immediately preceding calendar day.

(d) The minimum value of the Current Indicative Value on any calendar day will be zero.

The actual trading price of the Securities in the secondary market may vary significantly from their Current Indicative Value (intraday indicative value).

If a Zero Value Event occurs, the Current Indicative Value (intraday indicative value) will be equal to zero for the remainder of the day it occurs and on all future calendar days. Upon the occurrence of a Zero Value Event, investors will lose their entire investment. You will not benefit from any future exposure to the Index after the occurrence of a Zero Value Event. See "Specific Terms of the Securities — Automatic Acceleration Upon Zero Value Event".

If the Securities undergo a split or reverse split, the Current Indicative Value (intraday indicative value) will be adjusted accordingly.

The "Accrued Fees" as of any date of determination means the Accrued Tracking Fee + the Accrued Financing Fee.

If the Securities undergo a split or reverse split, the Accrued Fees will be adjusted accordingly. The Securities are subject to an "Accrued Tracking Fee" per Security, calculated as follows:

- (a) On the Initial Trade Date, the Accrued Tracking Fee is equal to zero.
- (b) On any subsequent calendar day, the Accrued Tracking Fee is equal to: (a) the Accrued Tracking Fee as of the immediately preceding calendar day, *plus* the Daily Tracking Fee on such calendar day.
- (c) On the calendar day after each Reset Valuation Date, the Accrued Tracking Fee is reset to be equal to the Daily Tracking Fee on such calendar day.

The "Daily Tracking Fee" is an amount per Security calculated as follows:

- (a) On the Initial Trade Date, the Daily Tracking Fee is zero.
- (b) On any subsequent calendar day, the Daily Tracking Fee is equal to:
  - (1) (i) 0.95% *times* (ii) the Current Principal Amount on the immediately preceding calendar day *times* (iii) the Index Factor on such calendar day *times* (iv) the Residual Factor on the immediately preceding calendar day, *divided by* (2) 365.
- (c) The minimum value of the Daily Tracking Fee on any calendar day will be zero.

The Daily Tracking Fee represents the investor fees calculated each day on the current value of the unleveraged notional amount invested in the Index per Security. These charges accrue and compound during the applicable period, and will reduce any amount you are entitled to receive at maturity or upon early redemption or call.

If the Securities undergo a split or reverse split, the Daily Tracking Fee will be adjusted accordingly. The Securities are subject to an "**Accrued Financing Fee**" per Security calculated as follows:

- (a) On the Initial Trade Date, the Accrued Financing Fee is equal to zero.
- (b) On any subsequent calendar day, the Accrued Financing Fee is equal to:
  - (1) the Accrued Financing Fee as of the immediately preceding calendar day, *plus* (2) the Daily Financing Fee on such calendar day.
- (c) On the calendar day after each Reset Valuation Date, the Accrued Financing Fee is reset to be equal to the Daily Financing Fee on such calendar day.
- (d) If a Permanent Deleveraging Event occurs, then on any calendar day following the Second Permanent Deleveraging Valuation Date, the Accrued Financing Fee will be equal to zero.

"CME Term SOFR" means the CME Term SOFR Reference Rates published for one-, three-, six-, and 12-month tenors as administered by CME Group Benchmark Administration, Ltd. (or any successor administrator thereof).

The "Daily Financing Fee" is an amount per Security calculated as follows:

- (a) On the Initial Trade Date, the Daily Financing Fee is equal to zero.
- (b) On any subsequent calendar day, the Daily Financing Fee is equal to:
  - (1) (i) the Financing Rate on such calendar day *times* (ii) the Current Principal Amount on the immediately preceding calendar day *times* (iii) the Residual Factor on the immediately preceding calendar day, *divided by* (2) 360.
- (c) If a Permanent Deleveraging Event occurs, then on any calendar day following the Second Permanent Deleveraging Valuation Date, the Daily Financing Fee will be equal to zero.
- (d) The minimum value of the Daily Financing Fee on any calendar day will be zero.

The Daily Financing Fee seeks to compensate UBS for providing investors with a leveraged participation in movements of the Index and is intended to approximate the financing costs that investors may have otherwise incurred had they sought to borrow funds at a similar rate from a third party to invest in the Index. These charges accrue and compound during the applicable period, and will reduce any amount that you will be entitled to receive at maturity or upon early redemption or call.

If the Securities undergo a split or reverse split, the Daily Financing Fee will be adjusted accordingly.

The "**Financing Rate**" will equal the sum of (a) 0.95% and (b) three-month CME Term SOFR rate plus a 0.2616% adjustment on the immediately preceding U.S. Government Securities Business Day. The minimum Financing Rate at any time will be 0.95%

For example, 5.24665% was the three-month CME Term SOFR rate on June 29, 2023. The Financing Rate (if it were based on the SOFR-Based Benchmark Replacement) on June 30, 2023 would have therefore been equal to: 0.95% + 5.24665% + 0.2616%, or 6.45825%.

## The "Measurement Period Cash Amount" is an amount per Security equal to:

- (a) \$0.00 on any calendar day, to but excluding the first day of a Measurement Period.
- (b) On the first day of a one-day Measurement Period:

At the close of trading on such Index Business Day, (Current Principal Amount on the immediately preceding calendar day × Index Factor, on such Index Business Day).

- (c) From and including the first day of a four-day Measurement Period:
  - (i) At the close of trading on each Index Business Day during the Measurement Period, the Measurement Period Cash Amount on the immediately preceding calendar day + (Current Principal Amount on the calendar day immediately preceding the first day of such Measurement Period × 0.25 × Index Factor, on such Index Business Day); and
  - (ii) On any calendar day during the Measurement Period that is not an Index Business Day, the Measurement Period Cash Amount on the immediately preceding Index Business Day.
- (d) On any calendar day after the last Index Business Day of a Measurement Period, the Measurement Period Cash Amount on the last Index Business Day of such Measurement Period.

Notwithstanding the foregoing, if, on any day during a Measurement Period, the Current Indicative Value or the Closing Indicative Value is *less than or equal to* the Measurement Period Cash Amount from the immediately preceding calendar day, then the Measurement Period Cash Amount for that day and all subsequent days will be fixed to be equal to the Measurement Period Cash amount from the immediately preceding calendar day.

The Measurement Period Cash Amount represents the portion of the Current Principal Amount that has been converted to cash on any given day of an applicable Measurement Period and is no longer tracking the Index.

At the close of trading of each Index Business Day during a four-day Measurement Period, approximately 25% of the Current Principal Amount on the calendar day immediately preceding the first

day of the Measurement Period, will be deemed converted to cash and an applicable portion of the notional financing amount will separately be deemed converted to cash as well. After the close of trading on the final Index Business Day of a four-day Measurement Period, the Measurement Period Cash Amount will represent the averaged value of the Current Principal Amount that was deemed converted to cash across the four-days of such Measurement Period. In case of a one-day Measurement Period, approximately 100% of the Current Principal Amount will be deemed converted to cash and an applicable amount of financing will separately be deemed converted to cash, at the close of trading of the first day of such Measurement Period.

If the Securities undergo a split or reverse split, the Measurement Period Cash Amount will be adjusted accordingly.

#### The "Final Measurement Period" means:

- (a) if the Market Value of Securities outstanding as at the close of trading on the Index Business Day immediately preceding the Calculation Date is less than \$500,000,000, the Calculation Date, subject to adjustments as described under "— Market Disruption Event";
- (b) if the Market Value of Securities outstanding as at the close of trading on the Index Business Day immediately preceding the Calculation Date is equal to or greater than \$500,000,000, the four Index Business Days from and including the Calculation Date, subject to adjustments as described under "— Market Disruption Event."

For the purpose of determining the Final Measurement Period, the "Market Value" of the Securities outstanding as of the close of trading on the Index Business Day immediately preceding the Calculation Date, will equal:

(i) the Closing Indicative Value as of such Index Business Day *times* (ii) the number of Securities outstanding as reported on Bloomberg.

The "Index Calculation Agent" means the entity that calculates and publishes the level of the Index, which for each series of Securities is the entity set forth below:

<u>Title of Securities</u>	<b>Index Calculation Agent</b>
ETRACS 2x Leveraged US Dividend Factor TR ETN	S&P Dow Jones Indices
ETRACS 2x Leveraged US Growth Factor TR ETN	FTSE Russell
ETRACS 2x Leveraged US Size Factor TR ETN	FTSE Russell
ETRACS 2x Leveraged US Value Factor TR ETN	FTSE Russell
ETRACS 2x Leveraged MSCI US Minimum Volatility	MSCI, Inc.
Factor TR ETN	
ETRACS 2x Leveraged MSCI US Momentum Factor	MSCI, Inc.
TR ETN	
ETRACS 2x Leveraged MSCI US Quality Factor TR	MSCI, Inc.
ETN	

The "Calculation Date" means February 1, 2051, unless such day is not an Index Business Day, in which case the Calculation Date will be the next Index Business Day, subject to adjustment.

The Calculation Date represents the first Index Business Day of the Final Measurement Period.

"Index Business Day" means any day on which the Primary Exchange or market for trading of the Securities is scheduled to be open for trading.

"Primary Exchange" means, with respect to each Index Constituent Security or each constituent underlying a successor index, the primary exchange or market of trading such Index Constituent Security or such constituent underlying a successor index.

"U.S. Government Securities Business Day" means any day except for a Saturday, a Sunday or a day on which the Securities Industry and Financial Markets Association recommends that the fixed income departments of its members be closed for the entire day for purposes of trading in U.S. government securities.

#### **Underlying Index**

The return of each series of Securities is based upon the performance of the applicable Index set forth on the cover page of the prospectus supplement. Each Index is designed to track the performance of a sector of the U.S. equity market and to reflect an investing style. We refer to the securities included in each Index as the "Index Constituent Securities" for such Index.

## Early Redemption at the Option of the Holders

Subject to your compliance with the procedures described below and the potential postponements and adjustments as described under "— Market Disruption Event", you may submit a request to have us redeem your Securities on any Index Business Day no later than 12:00 noon and a confirmation of redemption by no later than 5:00 p.m. on the same Index Business Day. You must request that we redeem a minimum of 50,000 Securities, although we reserve the right from time to time to waive this minimum redemption amount in our sole discretion on a case-by-case basis. You should not assume you will be entitled to the benefit of any such waiver. For any applicable redemption request, the "Redemption Valuation Date" will be the first Index Business Day following the date that the applicable redemption notice and redemption confirmation are delivered, except that we reserve the right from time to time to accelerate, in our sole discretion on a case-by-case basis, the Redemption Valuation Date to the date on which we receive the notice of redemption rather than the following Index Business Day. You should not assume you will be entitled to any such acceleration. To satisfy the minimum redemption amount, your broker or other financial intermediary may bundle your Securities for redemption with those of other investors to reach this minimum amount of 50,000 Securities; however, there can be no assurance that they can or will do so.

The Securities will be redeemed and the holders will receive payment for their Securities on the second Index Business Day following the applicable Redemption Valuation Date (the "Redemption Date"). The first Redemption Date will be the fourth Index Business Day immediately following the Initial Trade Date and the Final Redemption Date will be the fourth Index Business Day immediately preceding the Maturity Date, subject to adjustments. In addition, if we have issued a call notice, the last Redemption Valuation Date will be the fourth Index Business Day prior to the Call Settlement Date, as applicable. If a Zero Value Event occurs, the last Redemption Date will be the date on which the Zero Value Event occurred.

If a Market Disruption Event is continuing or occurs on the applicable scheduled Redemption Valuation Date with respect to any of the Index Constituent Securities, such Redemption Valuation Date may be postponed as described under "— Market Disruption Event".

As of any Redemption Valuation Date, the "Redemption Fee Amount" means an amount per Security equal to:

(0.125% × Closing Indicative Value of the Security as of the Redemption Valuation Date).

If you exercise your right to have us redeem your Securities, subject to your compliance with the procedures described under "— Redemption Procedures", for each applicable Security you will receive a cash payment on the relevant Redemption Date equal to:

Closing Indicative Value as of the Redemption Valuation Date – Redemption Fee Amount.

We refer to this cash payment as the "**Redemption Amount**." If the amount calculated above is equal to or less than zero, the payment upon early redemption will be zero. We reserve the right from time to time to waive the Redemption Fee Amount in our sole discretion and on a case-by-case basis. There can be no assurance that we will elect to waive this fee and you should not assume you will be entitled to such fee waiver.

We will inform you of such Redemption Amount on the first Index Business Day following the applicable Redemption Valuation Date.

The redemption feature is intended to induce arbitrageurs to counteract any trading of the Securities at a discount to their indicative value, though there can be no assurance that arbitrageurs will employ the redemption feature in this manner or that they will be successful in counteracting any divergence in the market price of the Securities and their indicative value.

The following graphic illustrates the formula to determine the Redemption Amount, which has been simplified for ease of presentation:

Redemption Amount = Closing Indicative Value - Redemption Fee Amount

You may lose all or a substantial portion of your investment upon early redemption. The combined negative effect of the Accrued Fees and the Redemption Fee Amount will reduce your final payment. If the compounded leveraged quarterly return of the Index (or the unleveraged return of the Index, following a Permanent Deleveraging Event) is insufficient to offset the negative effect of the Accrued Fees and the Redemption Fee Amount, if applicable, or if the compounded leveraged quarterly return of the Index (or the unleveraged return of the Index, following a Permanent Deleveraging Event) is negative, you may lose all or a substantial portion of your investment upon early redemption. Loss Rebalancing Events will cause compounding to occur more frequently than quarterly.

The Securities may be called by UBS prior to the Maturity Date pursuant to its Call Right and, upon the occurrence of a Zero Value Event, the Securities will be automatically accelerated and mandatorily redeemed by UBS. See "Specific Terms of the Securities — UBS's Call Right" and "Specific Terms of the Securities — Automatic Acceleration Upon Zero Value Event".

## **Redemption Procedures**

To redeem your Securities, you must instruct your broker or other person through whom you hold your Securities to take the following steps through normal clearing system channels:

- deliver a notice of redemption, which we refer to as a "**Redemption Notice**" to UBS via email no later than 12:00 noon on the Index Business Day on which you elect to exercise your redemption right. If we receive your Redemption Notice by the time specified in the preceding sentence, we will respond by sending you a form of confirmation of redemption which is attached;
- deliver the signed confirmation of redemption, which we refer to as the "**Redemption Confirmation**", to us via email in the specified form by 5:00 p.m. on the same day. We or our affiliate must acknowledge receipt in order for your Redemption Confirmation to be effective;
- instruct your DTC custodian to book a delivery vs. payment trade with respect to your Securities on the applicable Redemption Date at a price equal to the Redemption Amount; and
- > cause your DTC custodian to deliver the trade as booked for settlement via DTC at or prior to 12:00 noon on the applicable Redemption Date.

Different brokerage firms may have different deadlines for accepting instructions from their customers. Accordingly, as a beneficial owner of the Securities, you should consult the brokerage firm through which you own your interest for the relevant deadline. If your broker delivers your Redemption Notice after 12:00 noon, or your Redemption Confirmation after 5:00 p.m., on the Index Business Day prior to the applicable Redemption Valuation Date, your Redemption Notice will not be effective, you will not be able to redeem your Securities until the following Redemption Date and your broker will need to complete all the required steps if you should wish to redeem your Securities on any subsequent Redemption Date. In addition, UBS may request a medallion signature guarantee or such assurances of delivery as it may deem necessary in its sole discretion. All instructions given to participants from beneficial owners of Securities relating to the right to redeem their Securities will be irrevocable. If your DTC custodian or your brokerage firm is not a current UBS customer, UBS will be required to on-board such DTC custodian or brokerage firm, in compliance with its internal policies and procedures, before it can accept your Redemption Notice, your Redemption Confirmation or otherwise process your redemption request. This on-boarding process may delay your Redemption Valuation Date and Redemption Date. Furthermore, in certain circumstances, UBS may be unable to on-board your DTC custodian or your brokerage firm.

We reserve the right from time to time to waive the minimum redemption amount or the Redemption Fee Amount in our sole discretion on a case-by-case basis. In addition, we reserve the right from time to time to accelerate, in our sole discretion on a case-by-case basis, the Redemption Valuation Date to the date on which we receive the Redemption Notice rather than the following Index Business Day. You should not assume you will be entitled to any such waiver or election to accelerate the Redemption Valuation Date.

## **UBS's Call Right**

UBS may at its option redeem all, but not less than all, of the issued and outstanding Securities of any series. To exercise its Call Right, UBS must provide notice to the holders of such Securities (which may be provided via press release) not less than 18 calendar days prior to the Call Settlement Date specified by UBS in such notice. If we call the Securities, you will receive a cash payment equal to the Closing Indicative Value on the last Index Business Day in the Call Measurement Period. We refer to this cash payment as the "Call Settlement Amount."

If the amount calculated above is equal to or less than zero, the payment upon UBS's exercise of its Call Right will be zero.

We will inform you of such Call Settlement Amount on the first Index Business Day following the last Index Business Day in the Call Measurement Period.

The holders will receive payment for their Securities on the third Index Business Day following the last Index Business Day in the Call Measurement Period (the "Call Settlement Date"). If a Market Disruption Event is continuing or occurs on the scheduled Call Valuation Date with respect to any of the Index Constituent Securities, such Call Valuation Date may be postponed as described under "— Market Disruption Event".

# The "Call Measurement Period" means:

- (a) if the Market Value of Securities outstanding at the close of trading on the Index Business Day immediately preceding the date we issue a notice of exercise of our Call Right is less than \$500,000,000, the Call Valuation Date, subject to adjustments as described under "— Market Disruption Event"; and
- (b) if the Market Value of Securities outstanding as at the close of trading on the Index Business Day immediately preceding the date we issue a notice of exercise of our Call Right is equal to or greater than \$500,000,000, the four Index Business Days from and including the Call Valuation Date, subject to adjustment as described under "— Market Disruption Event."

For the purpose of determining the Final Measurement Period, the "Market Value" of the Securities outstanding as of the close of trading on the Index Business Day immediately preceding the date of delivery by UBS of its notice to holders (which may be provided via press release) of its exercise of its Call Right will equal:

(i) The Closing Indicative Value as of such Index Business Day *times* (ii) the number of Securities outstanding as reported on Bloomberg.

The "Call Valuation Date" means the date we specify in our notice to holders (which may be provided via press release) of our exercise of our Call Right.

In any notice to holders exercising our Call Right, we will specify how many days are included in the Call Measurement Period.

The following graphic illustrates the formula to determine the Call Settlement Amount, which has been simplified for ease of presentation:

Cash Settlement Amount = Closing Indicative Value, on last Index Business

Day in Call Measurement Period

You may lose all or a substantial portion of your investment if we exercise our Call Right. The combined negative effect of the Accrued Fees will reduce your final payment. If the compounded leveraged quarterly return of the Index (or the unleveraged return of the Index, following a Permanent Deleveraging Event) is insufficient to offset the negative effect of the Accrued Fees, or if the compounded leveraged quarterly return of the Index (or the unleveraged return of the Index, following a Permanent Deleveraging Event) is negative, you may lose all or a substantial portion of your investment upon a call. Loss Rebalancing Events will cause compounding to occur more frequently than quarterly.

In addition, upon the occurrence of a Zero Value Event, the Securities will be automatically accelerated and mandatorily redeemed by UBS. See "Specific Terms of the Securities — Automatic Acceleration Upon Zero Value Event" below.

#### **Automatic Acceleration Upon Zero Value Event**

For each series of Securities, a Zero Value Event represents the first instance when the Current Indicative Value (intraday indicative value) or the Closing Indicative Value is less than or equal to zero (other than on an Excluded Day, as defined below). It will have the effect of permanently resetting the value of your Securities to zero and accelerating the Securities. You will not benefit from any future exposure to the applicable Index after the occurrence of a Zero Value Event.

A Zero Value Event can occur only if a Permanent Deleveraging Event occurs and the Current Indicative Value (intraday indicative value) or the Closing Indicative Value declines to zero before the leverage of your Securities is reset to 1.0 at the close of trading on the Index Business Day following such event (or if such event occurs after 3:15 p.m. on any Index Business Day which would not otherwise have been a Loss Rebalancing Valuation Date, the second Index Business Day following such event), as described under "Permanent Deleveraging Valuation Dates" above.

A "Zero Value Event" occurs if the Current Indicative Value (intraday indicative value) or the Closing Indicative Value on any Index Business Day (other than an Excluded Day, as defined below) is less than or equal to zero. From immediately after the Zero Value Event and on all future calendar days, the Current Indicative Value (intraday indicative value) and the Closing Indicative Value will be set equal to zero.

As used above, an "Excluded Day" means (i) any calendar day after the Second Permanent Deleveraging Valuation Date (ii) any calendar day on or after which a Zero Value Event has already occurred, and (iii) any calendar day after the last day of an applicable Measurement Period.

In the event that a Zero Value Event has occurred, UBS will issue a press release shortly after the event; provided that the failure to do so shall not affect the automatic acceleration and redemption of the Securities. The Securities will be suspended from trading intraday shortly after the event occurs and will likely not be open for trading again on NYSE Arca.

## You will lose your entire investment upon the occurrence of a Zero Value Event.

In addition, we may call the Securities prior to the Maturity Date pursuant to our Call Right. See "Specific Terms of the Securities — UBS's Call Right".

# **Loss Rebalancing Events**

A Loss Rebalancing Event will have the effect of deleveraging your Securities with the aim of resetting the then-current leverage to approximately 2.0. This means that after a Loss Rebalancing Event, a constant percentage increase in the Index Closing Level will have less of a positive effect on the value of your Securities relative to before the occurrence of the Loss Rebalancing Event.

A "Loss Rebalancing Event" occurs if, at any time, the Intraday Index Value on such Index Business Day (other than an Excluded Day, as used below) decreases by 20% or more from the previous Last Reset Index Closing Level.

Loss Rebalancing Events may occur multiple times over the term of the Securities and may occur multiple times during a single calendar quarter. This means both that (i) the Current Principal Amount may be reset more frequently than quarterly and (ii) the cumulative effect of compounding and fees will have increased as a result of the Loss Rebalancing Event(s). Because each Loss Rebalancing Event will have the effect of deleveraging your Securities, following a Loss Rebalancing Event your Securities will have less exposure to a potential positive gain in value relative to the exposure before the occurrence of such Loss Rebalancing Event.

As used above, an "Excluded Day" means (i) the Index Business Day immediately preceding any Quarterly Reset Valuation Date, if a Loss Rebalancing Event occurs after 3:15 p.m. on such day, (ii) any Quarterly Reset Valuation Date, (iii) any Loss Rebalancing Valuation Date, (iv) the Index Business Day immediately preceding the first day of an applicable Measurement Period, if a Loss Rebalancing Event occurs after 3:15 p.m. on such day (v) any calendar day from and including the first day of an applicable Measurement Period, (vi) the First or Second Permanent Deleveraging Valuation Dates, (vii) any calendar day after the Second Permanent Deleveraging Valuation Date, and (ix) any calendar day on or after which a Zero Value Event has occurred

## "Loss Rebalancing Valuation Date" means:

- (a) if a Loss Rebalancing Event occurs at or prior to 3:15 p.m. on an Index Business Day, the day that such Loss Rebalancing Event occurs, subject to adjustment as described under "— Market Disruption Event"; and
- (b) if a Loss Rebalancing Event occurs after 3:15 p.m. on an Index Business Day, the first Index Business Day following the occurrence of such Loss Rebalancing Event, subject to adjustment as described under "— Market Disruption Event."

# **Permanent Deleveraging Event**

A Permanent Deleveraging Event will have the effect of deleveraging your Securities, with the aim of permanently resetting the then-current leverage to 1.0 over two Index Business Days. The leverage at the end of the First Permanent Deleveraging Valuation Date is reset to approximately 2.0 and the leverage at the end of the Second Permanent Deleveraging Valuation Date is reset to 1.0. This means that after a Permanent Deleveraging Event, a constant percentage increase in the Index Closing Level will have less of a positive effect on the value of your Securities than it would have had before the occurrence of the Permanent Deleveraging Event. If such an event were to occur, it most likely would occur only following a Loss Rebalancing Event and prior to the completion of the associated leverage reset to 2.0, which would generally occur at the end of the Index Business Day following the Index Business Day on which the Loss Rebalancing Event occurred or, if the Loss Rebalancing Event occurs 3:15 p.m. on an Index Business Day, at the end of the second Index Business Day following the Index Business Day on which the Loss Rebalancing Event occurred.

A "Permanent Deleveraging Event" occurs if, at any time on an Index Business Day (other than an Excluded Day, as defined below), the Intraday Index Value decreases by 40% or more from the Last Reset Index Closing Level. If a Permanent Deleveraging Event occurs, the Current Principal Amount of the Securities will be reset over two Index Business Days.

As used above, an "Excluded Day" means (i) the First or Second Permanent Deleveraging Valuation Dates, (ii) any calendar day after the Second Permanent Deleveraging Valuation Date, (iii) any day on or after which a Zero Value Event occurs, (iv) the day which is two Index Business Days prior to the first day of a Measurement Period, if a Permanent Deleveraging Event occurs after 3:15 p.m. on such day, and (v) any calendar day from and including the Index Business Day immediately preceding the first day of a Measurement Period.

"Permanent Deleveraging Valuation Dates" means the First Permanent Deleveraging Valuation Date and the Second Permanent Deleveraging Valuation Date, each as defined below:

- (a) The "First Permanent Deleveraging Valuation Date" means:
  - (i) any Index Business Day, which otherwise would have been a Loss Rebalancing Valuation Date, but on which a Permanent Deleveraging Event has occurred, subject to adjustment as described under "— Market Disruption Event"; or
  - (ii) if a Permanent Deleveraging Event occurs after 3:15 p.m. on any Index Business Day which would not otherwise have been a Loss Rebalancing Valuation Date, then the first Index Business Day following the occurrence of such Permanent Deleveraging Event, subject to adjustment as described under "— Market Disruption Event."

The leverage of your Securities will be reset to approximately 2.0 at the close of trading on the First Permanent Deleveraging Valuation Date.

(b) The "Second Permanent Deleveraging Valuation Date" means the Index Business Day immediately following the First Permanent Deleveraging Valuation Date, subject to adjustment as described under "— Market Disruption Event."

The leverage of your Securities will be reset to 1.0 at the close of trading on the Second Permanent Deleveraging Valuation Date.

# **Split or Reverse Split of the Securities**

We may, at any time in our sole discretion, initiate a split or reverse split of your Securities. If we decide to initiate a split or reverse split, as applicable, we will issue a press release announcing the split or reverse split and its effective date. The date of such press release shall be deemed to be the "announcement date" of the split or the reverse split, the record date for any split or reverse split will be the tenth Business Day after the announcement date, and the effective date will be the next Business Day after the record date.

If the Securities undergo a split or reverse split, we will adjust the Current Principal Amount, Closing Indicative Value, Current Indicative Value, Accrued Fees, Measurement Period Cash Amount and other relevant terms of the Securities accordingly. For example, if the Securities undergo a 4:1 split, every investor who holds a Security via The Depository Trust Company ("DTC") on the relevant record date will, after the split, hold four Securities, and adjustments will be made as described below. The Current Principal Amount on such record date will be *divided by* four to reflect the 4:1 split. The adjusted Current Principal Amount will be rounded to eight decimal places. The split or reverse split will become effective at the opening of trading of the Securities on the Index Business Day immediately following the record date. The split will not occur if we exercise our Call Right before it becomes effective.

In the case of a reverse split, the Current Principal Amount and other relevant terms of the Securities will be adjusted accordingly and we will determine in our sole discretion the manner in which we will address odd numbers of Securities (commonly referred to as "partials"). For example, if the Securities undergo a 1:4 reverse split, every investor who holds four Securities via DTC on the relevant record date will, after the reverse split, hold only one Security and the Current Principal Amount of the Securities on such record date will be multiplied by four to reflect the 1:4 reverse split. The adjusted Current Principal Amount will be rounded to eight decimal places. The reverse split will become effective at the opening of trading of the Securities on the Index Business Day immediately following the record date. The reverse split will not occur if we exercise our Call Right before it becomes effective.

Holders who own a number of Securities on the record date that is not evenly divisible by the reverse split divisor (which in the case of a 1:4 reverse split, for example, will be 4) will receive the same treatment as all other holders for the maximum number of Securities they hold that is evenly divisible by the reverse split divisor. We will determine in our sole discretion the manner in which we compensate holders for their remaining or "partial" Securities when we announce the reverse split, though our current intention is to provide holders with a cash payment for their partials on the 17th Business Day following the announcement date in an amount equal to the appropriate percentage of the Closing Indicative Value of the reverse split-adjusted Securities on the 15th Business Day following the announcement date. For example, in the case of a 1:4 reverse split, a holder who held 23 Securities via DTC on the record date would receive five post-reverse split Securities on the immediately following Business Day, and a cash payment on the 17th Business Day following the announcement date that is equal to 3/4 of the Current Principal Amount of the reverse split-adjusted Securities on the 15th Business Day following the announcement date.

## **Security Calculation Agent**

UBS Securities LLC will act as the Security Calculation Agent. The Security Calculation Agent will be solely responsible for all determinations and calculations regarding the value of the Securities, including, among other things, at maturity or upon early redemption or call, or at other times, the Current Principal

Amount, Current Indicative Value (which we also refer to as the intraday indicative value), Closing Indicative Value, Market Disruption Events, Business Days, Index Business Days, the Leverage Factor, the Index Factor, the Index Performance Ratio, the Residual Factor, the Index Closing Level, the Financing Rate, the Accrued Fees (including determining any successor to the LIBOR base rate), the Redemption Fee Amount, the Cash Settlement Amount, if any, that we will pay you at maturity, the Redemption Amount, if any, that we will pay you upon redemption, the Call Settlement Amount, that we will pay you if we call the Securities, whether a Loss Rebalancing Event has occurred, whether a Permanent Deleveraging Event has occurred and whether any day is an Index Business Day and all such other matters as may be specified elsewhere herein as matters to be determined by the Security Calculation Agent. If any Intraday Index Value as published by Bloomberg on any Index Business Day is manifestly incorrect, the Security Calculation Agent may base its determination of whether a Loss Rebalancing Event, Permanent Deleveraging Event or Zero Value Event shall have occurred on such Index Business Day on its own determination of such Intraday Index Value. In making such determination, the Security Calculation Agent may consider any relevant information, including, without limitation, relevant market data in the relevant market supplied by one or more third parties or from internal sources or affiliates. The Security Calculation Agent will also be responsible for determining whether the Index has been discontinued and whether there has been a material change in the Index. The Security Calculation Agent will make all such determinations and calculations in its sole discretion, and absent manifest error, all determinations of the Security Calculation Agent will be conclusive for all purposes and binding on us, you, and all other persons having an interest in the Securities, without liability on the part of the Security Calculation Agent. You will not be entitled to any compensation from us for any loss suffered as a result of any determinations or calculations made by the Security Calculation Agent. We may appoint a different Security Calculation Agent from time to time after the date of the prospectus supplement without your consent and without notifying you.

The Security Calculation Agent will provide written notice to the trustee at its New York office, on which notice the trustee may conclusively rely, of the amount to be paid at maturity or upon early redemption or call, on or prior to 12:00 noon on the Index Business Day immediately preceding the Maturity Date, any Redemption Date or any Call Settlement Date.

All dollar amounts related to determination of the Accrued Fees, the Current Principal Amount, and any Redemption Amount, Redemption Fee Amount, Call Settlement Amount or Cash Settlement Amount per Security will be rounded to the nearest tenthousandth, with five one hundred-thousandths rounded upward (e.g., .76545 would be rounded up to .7655); and all dollar amounts paid to any holder of Securities will be rounded to the nearest cent, with one-half cent rounded upward.

# **Market Disruption Event**

To the extent a Market Disruption Event with respect to the Index has occurred or is continuing during a four-day Measurement Period, the Index Closing Level for such day will be determined by the Security Calculation Agent or one of its affiliates on the first succeeding Index Business Day on which a Market Disruption Event does not occur or is not continuing with respect to the Index. The remaining Index Business Days in the Measurement Period will be postponed accordingly, and the remaining Index Business Days in the Measurement Period will resume again following the suspension of the Market Disruption Event. For example, if the four-day Measurement Period for purposes of calculating the Call Settlement Amount, is scheduled for June 2, June 3, June 4 and June 5, and there is a Market Disruption Event with respect to the Index on June 2, but no other Market Disruption Event during such Call Measurement Period, then June 3 will become the first Index Business Day of the Measurement Period, June 4th the second Index Business Day, June 5th the third Index Business Day and the next Index Business Day after June 5th would be the final day of the Measurement Period. The same approach would be applied if there is a Market Disruption Event during a four-day Final Measurement Period.

To the extent a Market Disruption Event with respect to the Index has occurred or is continuing on the Redemption Valuation Date, Call Valuation Date (in the event that the Call Measurement Period is the Call Valuation Date), Calculation Date (in the event that the Final Measurement Period is the Calculation Date) or any Reset Valuation Date, the Index Closing Level for such Redemption Valuation Date, Call Valuation Date, Calculation Date or Reset Valuation Date will be determined by the Security Calculation Agent or one of its affiliates on the first succeeding Index Business Day on which a Market Disruption Event does not occur or is not continuing with respect to the Index. For example, if the Redemption Valuation Date, for purposes of calculating a Redemption Amount, is based on the Index Closing Level on June 2 and there is a Market Disruption Event with respect to the Index on June 2, then the Index Closing Level on June 3 will be used to calculate the Redemption Amount, assuming that no such Market Disruption Event has occurred or is continuing on June 3.

In no event, however, will any postponement pursuant to either of the two immediately preceding paragraphs result in the affected Index Business Day of the Measurement Period or any Redemption Valuation Date, Call Valuation Date (in the event that the Call Measurement Period is the Call Valuation Date), Calculation Date (in the event that the Final Measurement Period is the Calculation Date) or Reset Valuation Date occurring more than five Index Business Days following the day originally scheduled to be such Index Business Day of the Measurement Period or such Redemption Valuation Date, Call Valuation Date, Calculation Date or Reset Valuation Date. If a Market Disruption Event has occurred or is continuing with respect to the Index on the fifth Index Business Day following the date originally scheduled to be such Index Business Day of the Measurement Period or any Redemption Valuation Date, Calculation Date or any Reset Valuation Date, the Security Calculation Agent or one of its affiliates will determine the Index Closing Level based on its good faith estimate of the Index Closing Level that would have prevailed on such fifth Index Business Day but for such Market Disruption Event.

Any of the following will be a "Market Disruption Event" with respect to the Index, in each case as determined by the Security Calculation Agent in its sole discretion:

- (a) suspension, absence or material limitation of trading in a material number of Index Constituent Securities, whether by reason of movements in price exceeding limits permitted by the Primary Exchange or otherwise;
- (b) suspension, absence or material limitation of trading in option or futures contracts relating to the Index or to a material number of Index Constituent Securities in the primary market or markets for those contracts;
- (c) the Index is not published; or
- (d) in any other event, if the Security Calculation Agent determines in its sole discretion that the event materially interferes with our ability or the ability of any of our affiliates to unwind all or a material portion of a hedge with respect to the Securities that we or our affiliates have effected or may effect as described in the section entitled "Use of Proceeds and Hedging."

The following events will not be Market Disruption Events with respect to the Index:

- (a) a limitation on the hours or numbers of days of trading, but only if the limitation results from an announced change in the regular business hours of the relevant market; and
- (b) a decision to permanently discontinue trading in the option or futures contracts relating to the Index or any Index Constituent Securities.

For this purpose, an "absence of trading" in the primary securities market on which option or futures contracts related to the Index or any Index Constituent Securities are traded will not include any time when that market is itself closed for trading under ordinary circumstances.

## **Default Amount on Acceleration**

If an event of default occurs and the maturity of the Securities is accelerated, we will pay the default amount in respect of the principal of the Securities at maturity. We describe the default amount below under "— Default Amount."

For the purpose of determining whether the holders of our Medium-Term Notes, Series B, of which the Securities are a part, are entitled to take any action under the indenture, we will treat the outstanding principal amount of the Medium-Term Notes, Series B, as constituting the outstanding principal amount of the Securities. Although the terms of the Securities may differ from those of the other Medium-Term Notes, Series B, holders of specified percentages in principal amount of all Medium-Term Notes, Series B, together in some cases with other series of our debt securities, will be able to take action affecting all the Medium-Term Notes, Series B, including the Securities. This action may involve changing some of the terms that apply to the Medium-Term Notes, Series B, accelerating the maturity of the Medium-Term Notes, Series B after a default or waiving some of our obligations under the indenture. We discuss these matters in "Medium-Term Notes, Series B" above under "Description of Debt Securities We May Offer — Default, Remedies and Waiver of Default" and "Description of Debt Securities We May Offer — Modification and Waiver of Covenants."

#### **Default Amount**

The default amount for the Securities on any day will be an amount, in U.S. dollars as determined by the Security Calculation Agent in its sole discretion, for the aggregate Stated Principal Amount of the Securities, equal to the cost of having a qualified financial institution, of the kind and selected as described below, expressly assume all our payment and other obligations with respect to the Securities as of that day and as if no default or acceleration had occurred, or to undertake other obligations providing substantially equivalent economic value to you with respect to the Securities. That cost will equal:

- the lowest amount that a qualified financial institution would charge to effect this assumption or undertaking, plus
- the reasonable expenses, including reasonable attorneys' fees, incurred by the holders of the Securities in preparing any documentation necessary for this assumption or undertaking.

During the default quotation period for the Securities, which we describe below, the holders of the Securities and/or we may request a qualified financial institution to provide a quotation of the amount it would charge to effect this assumption or undertaking. If either party obtains a quotation, it must notify the other party in writing of the quotation. The amount referred to in the first bullet point above will equal the lowest — or, if there is only one, the only — quotation obtained, and as to which notice is so given, during the default quotation period. With respect to any quotation, however, the party not obtaining the quotation may object, on reasonable and significant grounds, to the assumption or undertaking by the qualified financial institution providing the quotation and notify the other party in writing of those grounds within two Business Days after the last day of the default quotation period, in which case that quotation will be disregarded in determining the default amount.

## **Default Quotation Period**

The default quotation period is the period beginning on the day the default amount first becomes due and ending on the third Index Business Day after that day, unless:

- > no quotation of the kind referred to above is obtained, or
- > every quotation of that kind obtained is objected to within five Index Business Days after the due date as described above

If either of these two events occurs, the default quotation period will continue until the third Index Business Day after the first Index Business Day on which prompt notice of a quotation is given as described above. If that quotation is objected to as described above within five Index Business Days after that first Index Business Day, however, the default quotation period will continue as described in the prior sentence and this sentence.

In any event, if the default quotation period and the subsequent two Index Business Day objection period have not ended before the Calculation Date, then the default amount will equal the Stated Principal Amount of the Securities.

## **Qualified Financial Institutions**

For the purpose of determining the default amount at any time, a qualified financial institution must be a financial institution organized under the laws of any jurisdiction in the United States of America, Europe or Japan, which at that time has outstanding debt obligations with a stated maturity of one year or less from the date of issue and rated either:

- A-1 or higher by Standard & Poor's Financial Services LLC, a subsidiary of The McGraw-Hill Companies, Inc., or any successor, or any other comparable rating then used by that rating agency, or
- P-1 or higher by Moody's Investors Service or any successor, or any other comparable rating then used by that rating agency.

# Discontinuance of or Adjustments to the Index or Termination of Our License Agreements with the Index Sponsors; Alteration of Method of Calculation

If (i) an Index Sponsor or the Index Calculation Agent announces that it intends to discontinue, or discontinues, publication of, or otherwise fails to publish, the Index, (ii) our license agreement with the Index Sponsor terminates or (iii) the Index Sponsor or Index Calculation Agent does not make the Index Constituent Securities and/or their unit weighting available to the Security Calculation Agent, and, in each case, any other person or entity publishes an index licensed to UBS that the Security Calculation Agent determines is comparable to the Index and for which the Index Constituent Securities and/or their unit weighting are available to the Security Calculation Agent (such index being referred to herein as a "successor index"), and the Security Calculation Agent approves such index as a successor index, then on and after the date determined by the Security Calculation Agent, the Security Calculation Agent will determine the Index Closing Level on the applicable dates of determination and the amount payable at maturity or upon early redemption or call and all other related payments terms by reference to such successor index.

Upon any selection by the Security Calculation Agent of a successor index, the Security Calculation Agent will cause written notice of the successor index and the date on and after which the Index Closing Level will be determined by reference thereto be furnished to the trustee, to us and to the holders of the Securities.

If an Index Sponsor or Index Calculation Agent discontinues publication of the Index, our license agreement with the Index Sponsor terminates or the Index Sponsor or Index Calculation Agent do not make the Index Constituent Securities and/or their unit weighting available to the Security Calculation Agent, prior to, and such discontinuation, termination or unavailability is continuing on the Calculation Date or any Index Business Day during a Measurement Period, or on the Redemption Valuation Date or on any Reset Valuation Date, as applicable, or on any other relevant date on which the Index Closing Level is to be determined and the Security Calculation Agent determines that no successor index is available at such time, or the Security Calculation Agent has previously selected a successor index and publication of such successor index is discontinued prior to, and such discontinuation is continuing on the Calculation Date or any Index Business Day during a Measurement Period, or on the Redemption Valuation Date or on any Reset Valuation Date, or any other relevant date on which the Index Closing Level is to be determined, then the Security Calculation Agent will determine the Index Closing Level using the Index Closing Level on the last Index Business Day immediately prior to such discontinuation or unavailability, as adjusted for certain corporate actions. In such event, the Security Calculation Agent will cause notice thereof to be furnished to the trustee, to us and to the holders of the Securities.

Notwithstanding these alternative arrangements, discontinuation of the publication of the Index or successor index, as applicable, may adversely affect the value of the Securities.

In addition, if an Index Replacement Event (as defined below) occurs at any time and the Index Sponsor or anyone else publishes an index that the Security Calculation Agent determines is comparable to the Index (the "Substitute Index"), then the Security Calculation Agent may elect, in its sole discretion, to permanently replace the original Index with the Substitute Index for all purposes under the Securities, and all provisions described in the prospectus supplement as applying to the Index will thereafter apply to the Substitute Index instead. In such event, the Security Calculation Agent will make such adjustments, if any, to any level of the Index or Substitute Index that is used for purposes of the Securities as it determines are appropriate in the circumstances. If the Security Calculation Agent elects to replace the original Index with a Substitute Index, then the Security Calculation Agent will determine all amounts hereunder, Current Principal Amount, Current Indicative Value (intraday indicative value), Closing Indicative Value, Index Factor, Index Performance Ratio, Residual Factor, Accrued Fees, Index Closing Levels on the applicable dates of determination, all other related payment terms and the amount payable at maturity or upon early redemption or call by reference to such Substitute Index. If the Security Calculation Agent so elects to replace the original Index with a Substitute Index, the Security Calculation Agent will cause written notice thereof to be furnished to the trustee, to us and to the holders of the Securities of the Securities.

## An "Index Replacement Event" means:

an amendment to or change (including any officially announced proposed change) in the laws, regulations or rules of the United States (or any political subdivision thereof), or any jurisdiction in which a Primary Exchange (as defined herein) is located that (i) makes it illegal for UBS AG or its affiliates to hold, acquire or dispose of the Index Constituent Securities included in the Index or options, futures, swaps or other derivatives on the Index or on the Index Constituent Securities included in the Index (including but not limited to exchange-imposed position limits), (ii) materially increases the cost to us, our affiliates, third parties with whom we transact or similarly situated third parties in performing our or their obligations in connection with the Securities, (iii) has a material adverse effect on any of these parties' ability to perform their obligations in connection with the Securities, or (iv) materially affects our ability to issue or transact in exchange traded notes similar to the Securities, each as determined by the Security Calculation Agent;

- (b) any official administrative decision, judicial decision, administrative action, regulatory interpretation or other official pronouncement interpreting or applying those laws, regulations or rules that is announced on or after February 4, 2021 that (i) makes it illegal for UBS AG or its affiliates to hold, acquire or dispose of the Index Constituent Securities included in the Index or options, futures, swaps or other derivatives on the Index or on the Index Constituent Securities (including but not limited to exchange-imposed position limits), (ii) materially increases the cost to us, our affiliates, third parties with whom we transact or similarly situated third parties in performing our or their obligations in connection with the Securities, (iii) has a material adverse effect on the ability of us, our affiliates, third parties with whom we transact or a similarly situated third party to perform our or their obligations in connection with the Securities, or (iv) materially affects our ability to issue or transact in exchange traded notes similar to the Securities, each as determined by the Security Calculation Agent;
- (c) any event that occurs on or after February 4, 2021 that makes it a violation of any law, regulation or rule of the United States (or any political subdivision thereof), or any jurisdiction in which a Primary Exchange (as defined herein) is located, or of any official administrative decision, judicial decision, administrative action, regulatory interpretation or other official pronouncement interpreting or applying those laws, regulations or rules, (i) for UBS AG or its affiliates to hold, acquire or dispose of the Index Constituent Securities or options, futures, swaps or other derivatives on the Index or on the Index Constituent Securities (including but not limited to exchange-imposed position limits), (ii) for us, our affiliates, third parties with whom we transact or similarly situated third parties to perform our or their obligations in connection with the Securities, or (iii) for us to issue or transact in exchange traded notes similar to the Securities, each as determined by the Security Calculation Agent;
- (d) any event, as determined by the Security Calculation Agent, as a result of which we or any of our affiliates or a similarly situated party would, after using commercially reasonable efforts, be unable to, or would incur a materially increased amount of tax, duty, expense or fee (other than brokerage commissions) to, acquire, establish, re-establish, substitute, maintain, unwind or dispose of any transaction or asset it deems necessary to hedge the risk of the Securities, or realize, recover or remit the proceeds of any such transaction or asset; or
- (e) as determined by the Security Calculation Agent, the primary exchange or market for trading for the Securities, if any, announces that pursuant to the rules of such exchange or market, as applicable, the Securities cease (or will cease) to be listed, traded or publicly quoted on such exchange or market, as applicable, for any reason and are not immediately re-listed, re-traded or re-quoted on an exchange or quotation system located in the same country as such exchange or market, as applicable.

Notwithstanding these alternative arrangements, discontinuation of the publication of the Index or successor index, as applicable, may adversely affect the value of the Securities.

If at any time the method of calculating the Index, a successor index or a Substitute Index, or the value thereof, is changed in a material respect, or if the Index or a successor or Substitute Index is in any other way modified so that the Index Closing Level of the Index or such successor or Substitute Index does not, in the opinion of the Security Calculation Agent, fairly represent the Index Closing Level of the Index or such successor or Substitute Index had such changes or modifications not been made, then the Security Calculation Agent will make such calculations and adjustments as, in the good faith judgment of the Security Calculation Agent, may be necessary in order to arrive at an Index Closing Level of an index comparable to the Index or such successor index, as the case may be, as if such changes or modifications had not been made, and the Security Calculation Agent will calculate the Index Closing Level for the Index or such successor or Substitute Index with reference to the Index or such successor or Substitute Index, as adjusted. The Security Calculation Agent will accordingly calculate the Index Closing Level, the Index Performance Ratio, the Last Reset Index Closing Level, the Accrued Fees, and any Redemption Amount, Redemption Fee Amount, Cash Settlement Amount or Call Settlement Amount, and all related payment terms based directly or indirectly on the Index Closing Level calculated by the Security Calculation Agent. Accordingly, if the method of calculating the Index or a successor or Substitute Index is modified so that the level of the Index or such successor or Substitute Index is a fraction or multiple of what it would have been if there had been no such modification (e.g., due to a rebasing of the Index), which, in turn, causes the Index Closing Level of the Index or such successor or Substitute Index to be a fraction of what it would have been if there had been no such modification, then the Security Calculation Agent will make such calculations and adjustments in order to arrive at an Index Closing Level for the Index or such successor or Substitute Index as if it had not been modified (e.g., as if such rebasing had not occurred).

In the event that the Security Calculation Agent elects to replace the Index with a successor index or a Substitute Index, UBS may, in its sole discretion, amend the title of the Securities in order to remove reference the former Index and to make such other changes to the title of the Securities as it considers necessary or desirable to reflect the name and/or characteristics of the relevant successor index or Substitute Index, as applicable.

All determinations and adjustments to be made by the Security Calculation Agent may be made in the Security Calculation Agent's sole discretion. See "Risk Factors — Risks Relating to Creditworthiness, Conflicts of Interest, Hedging Activities and Regulation of UBS — There are potential conflicts of interest between you and the Security Calculation Agent" in the prospectus supplement for a discussion of certain conflicts of interest which may arise with respect to the Security Calculation Agent.

## **Manner of Payment and Delivery**

Any payment on or delivery of the Securities at maturity or upon early redemption or call will be made to accounts designated by you and approved by us, or at the corporate trust office of the trustee in New York City, but only when the Securities are surrendered to the trustee at that office. We also may make any payment or delivery in accordance with the applicable procedures of the depositary.

# **Reissuances or Reopened Issues**

We may, at our sole discretion, "reopen" or reissue any series of Securities. We issued the Securities initially in an amount having the aggregate Stated Principal Amount specified on the cover of the prospectus supplement. We may issue additional Securities in amounts that exceed the amount on the cover at any time, without your consent and without notifying you. The Securities do not limit our ability to incur other indebtedness or to issue other securities. Also, we are not subject to financial or similar restrictions by the terms of the Securities. For more information, please refer to "Description of Debt Securities We May Offer — Amounts That We May Issue" in "Medium-Term Notes, Series B" above.

These further issuances, if any, will be consolidated to form a single class with the originally issued Securities of the same series and will have the same CUSIP number and will trade interchangeably with such Securities immediately upon settlement. Any additional issuances will increase the aggregate Stated Principal Amount of the outstanding Securities of the class. The price of any additional offering will be determined at the time of pricing of that offering.

## **Booking Branch**

The Securities will be booked through UBS AG, London Branch.

## **Clearance and Settlement**

The DTC participants that hold the Securities through DTC on behalf of investors will follow the settlement practices applicable to equity securities in DTC's settlement system with respect to the primary distribution of the Securities and secondary market trading between DTC participants.

## 21. ETRACS 2x Leveraged US Size Factor TR ETN due February 9, 2051

## **Specific Terms of the Securities**

In this section, references to "holders" mean those who own the Securities registered in their own names, on the books that we or the trustee maintains for this purpose, and not those who own beneficial interests in the Securities registered in street name or in the Securities issued in book-entry form through The Depository Trust Company ("DTC") or another depositary. Owners of beneficial interests in the Securities should read the section entitled "Legal Ownership and Book-Entry Issuance" under "Medium-Term Notes, Series B" above.

Each of the seven series of Securities offered by the prospectus supplement is separate and independent of each other series of Securities. Apart from the applicable Index, however, all of the terms of each series of Securities are the same. Since each series references a different Index, all calculations and adjustments and related events with respect to each series are independent of calculations and adjustments and related events for each other series of Securities, and we may exercise our call right as well as our right to initiate a split or a reverse split independently for each series. The following discussion therefore applies independently to each series of Securities offered by the prospectus supplement and, except as the context may otherwise require, the defined terms refer separately to each series. References to the "Securities" should be understood as references to a single series of Securities and the defined terms should be understood in reference only to that series of Securities.

These Securities are part of a series of debt securities entitled "Medium-Term Notes, Series B" that we may issue, from time to time, under the indenture more particularly described under "Medium-Term Notes, Series B" above. This section summarizes general financial and other terms that apply to the Securities. Terms that apply generally to all Medium-Term Notes, Series B are described in "Description of Debt Securities We May Offer" under "Medium-Term Notes, Series B" above. The terms described here supplement those described in "Medium-Term Notes, Series B" above and, if the terms described here are inconsistent with those described there, the terms described here are controlling.

The Securities are part of a single series of senior debt securities issued under our indenture, dated as of June 2, 2015 between us and U.S. Bank Trust National Association, as trustee.

Please note that the information about the offering prices and the net proceeds to UBS on the front cover of the prospectus supplement relates only to the initial sale of the Securities. If you have purchased the Securities in a secondary market transaction after the initial sale, information about the price and date of sale to you will be provided in a separate confirmation of sale.

We describe the terms of the Securities in more detail below. The Stated Principal Amount of each Security is \$25.00.

The Securities do not guarantee any return of principal at, or prior to, maturity or upon early redemption or call. Instead, at maturity, you will receive a cash payment per Security the amount of which will vary depending on the performance and path of the Index and will be reduced by the Accrued Fees as of the last Index Business Day in the Final Measurement Period as described under "— Cash Settlement Amount at Maturity." If the amount as calculated is equal to or less than zero, the Cash Settlement Amount will be zero and you will not receive a cash payment.

If you exercise your right to have us redeem your Securities, subject to compliance with the redemption procedures, for each Security you will receive a cash payment per Security on the relevant Redemption Date equal to the Redemption Amount as described under "— Early Redemption at the Option of the Holders." If the amount as calculated is equal to or less than zero, the Redemption Amount will be zero and you will not receive a cash payment.

## **Cash Settlement Amount at Maturity**

The "Maturity Date" is February 9, 2051, which will be the third Index Business Day following the last Index Business Day in the Final Measurement Period, subject to adjustment as described below under "— Market Disruption Event."

For each Security, unless earlier called, redeemed or accelerated upon Zero Value Event, you will receive at maturity a cash payment equal to its Closing Indicative Value on the last Index Business Day in the applicable Measurement Period. We refer to this cash payment as the "Cash Settlement Amount." If the amount so calculated is equal to or less than zero, the payment will be zero.

The following graphic illustrates the formula to determine the Cash Settlement Amount, which has been simplified for ease of presentation:

Cash Settlement Amount = Closing Indicative Value, on last Index Business Day in Final Measurement Period

You may lose all or a substantial portion of your investment at maturity. The combined negative effect of the Accrued Fees will reduce your final payment. If the compounded leveraged quarterly return of the Index (or the unleveraged return of the Index, following a Permanent Deleveraging Event) is insufficient to offset the negative effect of the Accrued Fees, you may lose all or a substantial portion of your investment at maturity. The occurrence of Loss Rebalancing Events will result in more frequent than quarterly compounding.

UBS may call the Securities prior to the Maturity Date pursuant to its Call Right. If the Securities are called by UBS, the Call Settlement Amount may be zero and you may lose all or a substantial portion of your investment. See "Specific Terms of the Securities — UBS's Call Right".

The "Stated Principal Amount" of each Security is \$25.00. The Securities may be issued and sold over time at then-current market prices which may be significantly higher or lower than the Stated Principal Amount. If the Securities undergo a split or reverse split, the Stated Principal Amount will be adjusted accordingly.

The Closing Indicative Value represents the dollar value per Security that an investor would receive on any day if it redeemed the Security that day (without giving effect to any Redemption Fee Amount).

The "Closing Indicative Value" per Security, will be calculated as follows:

- (a) On the Initial Trade Date, \$25.00 per Security.
- (b) On any other calendar day, prior to the first day of an applicable Measurement Period, an amount per Security equal to:
  - (Current Principal Amount on the immediately preceding calendar day × Index Factor) Accrued Fees
- (c) From and including the first day of an applicable Measurement Period, an amount per Security equal to:
  - (Current Principal Amount on the calendar day immediately preceding the first day of the Measurement Period × Index Factor × Residual Factor) Accrued Fees + Measurement Period Cash Amount
  - However, if, on any day during a Measurement Period, the Current Indicative Value or the Closing Indicative Value *is less than or equal to* the Measurement Period Cash Amount from the immediately preceding calendar day, the Closing Indicative Value for that day and all subsequent days will be fixed to be equal to the Measurement Period Cash Amount from the immediately preceding calendar day.
- (d) The minimum value of the Closing Indicative Value on any calendar day will be zero.

If a Zero Value Event occurs, the Closing Indicative Value will be equal to zero on the day it occurs and on all future calendar days. Upon the occurrence of a Zero Value Event, investors will lose their entire investment. You will not benefit from any future exposure to the Index after the occurrence of a Zero Value Event. See "— Automatic Acceleration Upon Zero Value Event".

The actual trading price of the Securities in the secondary market may vary significantly from their Closing Indicative Value.

If the Securities undergo a split or reverse split, the Closing Indicative Value will be adjusted accordingly.

The "Current Principal Amount" represents the unleveraged notional investment in the Index Constituent Securities per Security at the close of trading on any Reset Valuation Date. The notional financing amount per Security in order to generate the leveraged returns would approximately equal the Current Principal Amount at the close of trading on any Reset Valuation Date. If a Permanent Deleveraging Event occurs, the leverage of your Securities will be permanently reset to 1.0 and the notional financing amount will be equal to zero for the remaining term of the Securities. If a Zero Value Event occurs prior to your Securities permanently resetting to 1.0 at the end of the Second Permanent Deleveraging Valuation Date, then your Securities will be automatically accelerated and mandatorily redeemed and you will lose your entire investment.

The Current Principal Amount per Security, will be calculated as follows:

- (a) From and including the Initial Trade Date to and excluding the first Reset Valuation Date, \$25.00 per Security.
- (b) At the close of trading on each Reset Valuation Date after the Initial Trade Date, the Current Principal Amount of the Securities will be reset as follows:

New Current Principal Amount = (Current Principal Amount on immediately preceding calendar day  $\times$  Index Factor) – Accrued Fees

The Current Principal Amount will not change until the first Reset Valuation Date.

If a day that would otherwise be a Reset Valuation Date occurs on or after the first day of a Measurement Period, such day will not be a valid Reset Valuation Date.

If the Securities undergo a split or reverse split, the Current Principal Amount will be adjusted accordingly.

At the close of trading on each Reset Valuation Date, the Current Principal Amount is reset. The "Reset Valuation Date" means:

- (a) Any calendar day up to and including the Second Permanent Deleveraging Valuation Date, that is either: (i) the Initial Trade Date, (ii) a Quarterly Reset Valuation Date, (iii) a Loss Rebalancing Valuation Date (iv) the First Permanent Deleveraging Valuation Date, or (v) the Second Permanent Deleveraging Valuation Date; and
- (b) Any calendar day following the Second Permanent Deleveraging Valuation Date.

The valuation dates are defined below.

If a day that would otherwise be a Reset Valuation Date occurs on or after the first day of a Measurement Period, it will not be a valid Reset Valuation Date and the Last Reset Index Closing Level will remain the same.

The "Quarterly Reset Valuation Date" is the second Wednesday of January, April, July and October of each calendar year during the term of the Securities (other than an Excluded Day, as defined below), subject to adjustment as described under "—Market Disruption Event".

As used above, an "Excluded Day" means (i) the Index Business Day immediately preceding the first day of an applicable Measurement Period, and any calendar day thereafter, and (ii) any calendar day after the Second Permanent Deleveraging Valuation Date.

The "Index Factor" is: 1 + (Leverage Factor × Index Performance Ratio).

The Index Factor represents the leveraged percentage change in the Index level since the Last Reset Index Closing Level. The Index Factor *times* the applicable Current Principal Amount on the preceding calendar day represents the current value of the unleveraged notional amount per Security that is deemed invested in the Index on any calendar day. This does not reflect the Redemption Amount that an investor would receive upon early redemption on such calendar day.

The "Residual Factor" will be calculated as follows:

- (a) 1.0 on any calendar day, to but excluding the first day of an applicable Measurement Period.
- (b) From and including the first day of an applicable four-day Measurement Period, (a) the number of Index Business Days from, but excluding, the date of determination to, and including, the last Index Business Day in such four-day Measurement Period, *divided by* (b) four.
  - For example, on the first Index Business Day in an applicable four-day Measurement Period, the Residual Factor will equal 3/4, on the second Index Business Day in an applicable four-day Measurement Period, the Residual Factor will equal 2/4, on the third Index Business Day in an applicable four-day Measurement Period, the Residual Factor will equal 1/4 and on the last Index Business Day in an applicable four-day Measurement Period, the Residual Factor will equal zero.
- (c) On any calendar day from and including the last Index Business Day of an applicable Measurement Period, the Residual Factor will be equal to zero.

The Residual Factor is intended to approximate the percentage of the Current Principal Amount that is tracking the Index on any given day. The Residual Factor is relevant only during an applicable Measurement Period but otherwise is not a component of the Closing Indicative Value or Current Indicative Value formulas. At the close of trading on each Index Business Day during a four-day Measurement Period, approximately 25% of the Current Principal Amount and the corresponding amount of financing will be deemed converted to cash. In case of a one-day Measurement Period, approximately 100% of the Current Principal Amount and the corresponding amount of financing will be deemed converted to cash.

The "Leverage Factor" on any calendar day until the occurrence of a Permanent Deleveraging Event and the close of trading on the Second Permanent Deleveraging Valuation Date, will equal 2.0. If a Permanent Deleveraging Event occurs, then on any calendar day following the Second Permanent Deleveraging Valuation Date, the Leverage Factor will equal 1.0.

The "Index Performance Ratio" on any Index Business Day will be equal to:

<u>Index Closing Level – Last Reset Index Closing Level</u>
Last Reset Index Closing Level

On any calendar day that is not an Index Business Day, the Index Closing Level will be equal to the Index Closing Level on the Index Business Day immediately preceding such calendar day.

The "Last Reset Index Closing Level" is the Index Closing Level on the most recent Reset Valuation Date prior to such day. The initial Last Reset Index Closing Level is the Index Closing Level on the Initial Trade Date, as reported by Bloomberg and Reuters.

The "Index Closing Level" on any date of determination is the closing level of the Index, as reported on Bloomberg and Reuters on such day; however, if the closing level of the Index as reported on Bloomberg (or any successor) differs from the closing level of the Index as reported on Reuters (or any successor), the Index Closing Level will be the closing level of the Index as calculated by the Index Calculation Agent. The initial Index Closing Level (which is also the first Last Reset Index Closing Level) was determined on February 4, 2021 by the Security Calculation Agent. If the closing level of an Index, as reported on Bloomberg and Reuters for any Index Business Day, is manifestly incorrect, the "Index Closing Level" for such Index Business Day shall be the closing level of the Index as determined by the Security Calculation Agent. In making such determination, the Security Calculation Agent may consider any relevant information, including, without limitation, relevant market data in the relevant market supplied by one or more third parties or from internal sources or affiliates.

On any calendar day that is not an Index Business Day, the Index Closing level will be equal to the Index Closing Level on the Index Business Day immediately preceding such calendar day.

"Measurement Period" means the Final Measurement Period or, if UBS exercises its Call Right, the Call Measurement Period.

The "Current Indicative Value" or "intraday indicative value", as determined by the Security Calculation Agent, is an amount per Security, on an intraday basis on any Index Business Day, equal to:

- (a) On the Initial Trade Date, \$25.00.
- (b) On any other calendar day prior to the first day of a Measurement Period:
  - (Current Principal Amount on the immediately preceding calendar day × Index Factor, calculated using the Intraday Index Value) Accrued Fees
- (c) From and including the first day of a Measurement Period, an amount per Security equal to:

(Current Principal Amount on the calendar day immediately preceding the first day of the Measurement Period × Index Factor, calculated using the Intraday Index Value × Residual Factor on the immediately preceding calendar day) – Accrued Fees + Measurement Period Cash Amount, from the immediately preceding calendar day

However, if, on any day during a Measurement Period, the Current Indicative Value or the Closing Indicative Value is less than or equal to the Measurement Period Cash Amount from the immediately preceding calendar day, the Current Indicative Value for the remainder of that day and all subsequent days will be fixed to be equal to the Measurement Period Cash Amount from the immediately preceding calendar day.

(d) The minimum value of the Current Indicative Value on any calendar day will be zero.

The actual trading price of the Securities in the secondary market may vary significantly from their Current Indicative Value (intraday indicative value).

If a Zero Value Event occurs, the Current Indicative Value (intraday indicative value) will be equal to zero for the remainder of the day it occurs and on all future calendar days. Upon the occurrence of a Zero Value Event, investors will lose their entire investment. You will not benefit from any future exposure to the Index after the occurrence of a Zero Value Event. See "Specific Terms of the Securities — Automatic Acceleration Upon Zero Value Event".

If the Securities undergo a split or reverse split, the Current Indicative Value (intraday indicative value) will be adjusted accordingly.

The "Accrued Fees" as of any date of determination means the Accrued Tracking Fee + the Accrued Financing Fee.

If the Securities undergo a split or reverse split, the Accrued Fees will be adjusted accordingly. The Securities are subject to an "**Accrued Tracking Fee**" per Security, calculated as follows:

- (a) On the Initial Trade Date, the Accrued Tracking Fee is equal to zero.
- (b) On any subsequent calendar day, the Accrued Tracking Fee is equal to: (a) the Accrued Tracking Fee as of the immediately preceding calendar day, *plus* the Daily Tracking Fee on such calendar day.
- (c) On the calendar day after each Reset Valuation Date, the Accrued Tracking Fee is reset to be equal to the Daily Tracking Fee on such calendar day.

The "Daily Tracking Fee" is an amount per Security calculated as follows:

- (a) On the Initial Trade Date, the Daily Tracking Fee is zero.
- (b) On any subsequent calendar day, the Daily Tracking Fee is equal to:

- (1) (i) 0.95% times (ii) the Current Principal Amount on the immediately preceding calendar day times (iii) the Index Factor on such calendar day times (iv) the Residual Factor on the immediately preceding calendar day, divided by (2) 365.
- (c) The minimum value of the Daily Tracking Fee on any calendar day will be zero.

The Daily Tracking Fee represents the investor fees calculated each day on the current value of the unleveraged notional amount invested in the Index per Security. These charges accrue and compound during the applicable period, and will reduce any amount you are entitled to receive at maturity or upon early redemption or call.

If the Securities undergo a split or reverse split, the Daily Tracking Fee will be adjusted accordingly. The Securities are subject to an "Accrued Financing Fee" per Security calculated as follows:

- (a) On the Initial Trade Date, the Accrued Financing Fee is equal to zero.
- (b) On any subsequent calendar day, the Accrued Financing Fee is equal to:
  - (1) the Accrued Financing Fee as of the immediately preceding calendar day, *plus* (2) the Daily Financing Fee on such calendar day.
- (c) On the calendar day after each Reset Valuation Date, the Accrued Financing Fee is reset to be equal to the Daily Financing Fee on such calendar day.
- (d) If a Permanent Deleveraging Event occurs, then on any calendar day following the Second Permanent Deleveraging Valuation Date, the Accrued Financing Fee will be equal to zero.

"CME Term SOFR" means the CME Term SOFR Reference Rates published for one-, three-, six-, and 12-month tenors as administered by CME Group Benchmark Administration, Ltd. (or any successor administrator thereof).

The "Daily Financing Fee" is an amount per Security calculated as follows:

- (a) On the Initial Trade Date, the Daily Financing Fee is equal to zero.
- (b) On any subsequent calendar day, the Daily Financing Fee is equal to:
  - (1) (i) the Financing Rate on such calendar day *times* (ii) the Current Principal Amount on the immediately preceding calendar day *times* (iii) the Residual Factor on the immediately preceding calendar day, *divided by* (2) 360.
- (c) If a Permanent Deleveraging Event occurs, then on any calendar day following the Second Permanent Deleveraging Valuation Date, the Daily Financing Fee will be equal to zero.
- (d) The minimum value of the Daily Financing Fee on any calendar day will be zero.

The Daily Financing Fee seeks to compensate UBS for providing investors with a leveraged participation in movements of the Index and is intended to approximate the financing costs that investors may have otherwise incurred had they sought to borrow funds at a similar rate from a third party to invest in the Index. These charges accrue and compound during the applicable period, and will reduce any amount that you will be entitled to receive at maturity or upon early redemption or call.

If the Securities undergo a split or reverse split, the Daily Financing Fee will be adjusted accordingly.

The "**Financing Rate**" will equal the sum of (a) 0.95% and (b) three-month CME Term SOFR rate plus a 0.2616% adjustment on the immediately preceding U.S. Government Securities Business Day. The minimum Financing Rate at any time will be 0.95%

For example, 5.24665% was the three-month CME Term SOFR rate on June 29, 2023. The Financing Rate (if it were based on the SOFR-Based Benchmark Replacement) on June 30, 2023 would have therefore been equal to: 0.95% + 5.24665% + 0.2616%, or 6.45825%.

The "Measurement Period Cash Amount" is an amount per Security equal to:

- (a) \$0.00 on any calendar day, to but excluding the first day of a Measurement Period.
- (b) On the first day of a one-day Measurement Period:
  - At the close of trading on such Index Business Day, (Current Principal Amount on the immediately preceding calendar day × Index Factor, on such Index Business Day).
- (c) From and including the first day of a four-day Measurement Period:

- (i) At the close of trading on each Index Business Day during the Measurement Period, the Measurement Period Cash Amount on the immediately preceding calendar day + (Current Principal Amount on the calendar day immediately preceding the first day of such Measurement Period × 0.25 × Index Factor, on such Index Business Day); and
- (ii) On any calendar day during the Measurement Period that is not an Index Business Day, the Measurement Period Cash Amount on the immediately preceding Index Business Day.
- (d) On any calendar day after the last Index Business Day of a Measurement Period, the Measurement Period Cash Amount on the last Index Business Day of such Measurement Period.

Notwithstanding the foregoing, if, on any day during a Measurement Period, the Current Indicative Value or the Closing Indicative Value is *less than or equal to* the Measurement Period Cash Amount from the immediately preceding calendar day, then the Measurement Period Cash Amount for that day and all subsequent days will be fixed to be equal to the Measurement Period Cash amount from the immediately preceding calendar day.

The Measurement Period Cash Amount represents the portion of the Current Principal Amount that has been converted to cash on any given day of an applicable Measurement Period and is no longer tracking the Index.

At the close of trading of each Index Business Day during a four-day Measurement Period, approximately 25% of the Current Principal Amount on the calendar day immediately preceding the first day of the Measurement Period, will be deemed converted to cash and an applicable portion of the notional financing amount will separately be deemed converted to cash as well. After the close of trading on the final Index Business Day of a four-day Measurement Period, the Measurement Period Cash Amount will represent the averaged value of the Current Principal Amount that was deemed converted to cash across the four-days of such Measurement Period. In case of a one-day Measurement Period, approximately 100% of the Current Principal Amount will be deemed converted to cash and an applicable amount of financing will separately be deemed converted to cash, at the close of trading of the first day of such Measurement Period.

If the Securities undergo a split or reverse split, the Measurement Period Cash Amount will be adjusted accordingly.

# The "Final Measurement Period" means:

- (a) if the Market Value of Securities outstanding as at the close of trading on the Index Business Day immediately preceding the Calculation Date is less than \$500,000,000, the Calculation Date, subject to adjustments as described under "— Market Disruption Event";
- (b) if the Market Value of Securities outstanding as at the close of trading on the Index Business Day immediately preceding the Calculation Date is equal to or greater than \$500,000,000, the four Index Business Days from and including the Calculation Date, subject to adjustments as described under "— Market Disruption Event."

For the purpose of determining the Final Measurement Period, the "Market Value" of the Securities outstanding as of the close of trading on the Index Business Day immediately preceding the Calculation Date, will equal:

(i) the Closing Indicative Value as of such Index Business Day *times* (ii) the number of Securities outstanding as reported on Bloomberg.

The "Index Calculation Agent" means the entity that calculates and publishes the level of the Index, which for each series of Securities is the entity set forth below:

Title of Securities	Index Calculation Agent
ETRACS 2x Leveraged US Dividend Factor TR ETN	S&P Dow Jones Indices
ETRACS 2x Leveraged US Growth Factor TR ETN	FTSE Russell
ETRACS 2x Leveraged US Size Factor TR ETN	FTSE Russell
ETRACS 2x Leveraged US Value Factor TR ETN	FTSE Russell
ETRACS 2x Leveraged MSCI US Minimum Volatility Factor TR ETN	MSCI, Inc.
ETRACS 2x Leveraged MSCI US Momentum Factor TR ETN	MSCI, Inc.
ETRACS 2x Leveraged MSCI US Quality Factor TR ETN	MSCI, Inc.

The "Calculation Date" means February 1, 2051, unless such day is not an Index Business Day, in which case the Calculation Date will be the next Index Business Day, subject to adjustment.

The Calculation Date represents the first Index Business Day of the Final Measurement Period.

"Index Business Day" means any day on which the Primary Exchange or market for trading of the Securities is scheduled to be open for trading.

"Primary Exchange" means, with respect to each Index Constituent Security or each constituent underlying a successor index, the primary exchange or market of trading such Index Constituent Security or such constituent underlying a successor index.

"U.S. Government Securities Business Day" means any day except for a Saturday, a Sunday or a day on which the Securities Industry and Financial Markets Association recommends that the fixed income departments of its members be closed for the entire day for purposes of trading in U.S. government securities.

## **Underlying Index**

The return of each series of Securities is based upon the performance of the applicable Index set forth on the cover page of the prospectus supplement. Each Index is designed to track the performance of a sector of the U.S. equity market and to reflect an investing style. We refer to the securities included in each Index as the "Index Constituent Securities" for such Index.

## Early Redemption at the Option of the Holders

Subject to your compliance with the procedures described below and the potential postponements and adjustments as described under "— Market Disruption Event", you may submit a request to have us redeem your Securities on any Index Business Day no later than 12:00 noon and a confirmation of redemption by no later than 5:00 p.m. on the same Index Business Day. You must request that we redeem a minimum of 50,000 Securities, although we reserve the right from time to time to waive this minimum redemption amount in our sole discretion on a case-by-case basis. You should not assume you will be entitled to the benefit of any such waiver. For any applicable redemption request, the "Redemption Valuation Date" will be the first Index Business Day following the date that the applicable redemption notice and redemption confirmation are delivered, except that we reserve the right from time to time to accelerate, in our sole discretion on a case-by-case basis, the Redemption Valuation Date to the date on which we receive the notice of redemption rather than the following Index Business Day. You should not assume you will be entitled to any such acceleration. To satisfy the minimum redemption amount, your broker or other financial intermediary may bundle your Securities for redemption with those of other investors to reach this minimum amount of 50,000 Securities; however, there can be no assurance that they can or will do so.

The Securities will be redeemed and the holders will receive payment for their Securities on the second Index Business Day following the applicable Redemption Valuation Date (the "Redemption Date"). The first Redemption Date will be the fourth Index Business Day immediately following the Initial Trade Date and the Final Redemption Date will be the fourth Index Business Day immediately preceding the Maturity Date, subject to adjustments. In addition, if we have issued a call notice, the last Redemption Valuation Date will be the fourth Index Business Day prior to the Call Settlement Date, as applicable. If a Zero Value Event occurs, the last Redemption Date will be the date on which the Zero Value Event occurred.

If a Market Disruption Event is continuing or occurs on the applicable scheduled Redemption Valuation Date with respect to any of the Index Constituent Securities, such Redemption Valuation Date may be postponed as described under "— Market Disruption Event".

As of any Redemption Valuation Date, the "Redemption Fee Amount" means an amount per Security equal to:

(0.125% × Closing Indicative Value of the Security as of the Redemption Valuation Date).

If you exercise your right to have us redeem your Securities, subject to your compliance with the procedures described under "— Redemption Procedures", for each applicable Security you will receive a cash payment on the relevant Redemption Date equal to:

Closing Indicative Value as of the Redemption Valuation Date – Redemption Fee Amount.

We refer to this cash payment as the "**Redemption Amount**." If the amount calculated above is equal to or less than zero, the payment upon early redemption will be zero. We reserve the right from time to time to waive the Redemption Fee Amount in our sole discretion and on a case-by-case basis. There can be no assurance that we will elect to waive this fee and you should not assume you will be entitled to such fee waiver.

We will inform you of such Redemption Amount on the first Index Business Day following the applicable Redemption Valuation Date.

The redemption feature is intended to induce arbitrageurs to counteract any trading of the Securities at a discount to their indicative value, though there can be no assurance that arbitrageurs will employ the redemption feature in this manner or that they will be successful in counteracting any divergence in the market price of the Securities and their indicative value.

The following graphic illustrates the formula to determine the Redemption Amount, which has been simplified for ease of presentation:

Redemption Amount = Closing Indicative Value - Redemption Fee Amount

You may lose all or a substantial portion of your investment upon early redemption. The combined negative effect of the Accrued Fees and the Redemption Fee Amount will reduce your final payment. If the compounded leveraged quarterly return of the Index (or the unleveraged return of the Index, following a Permanent Deleveraging Event) is insufficient to offset the negative effect of the Accrued Fees and the Redemption Fee Amount, if applicable, or if the compounded leveraged quarterly return of the Index (or the unleveraged return of the Index, following a Permanent Deleveraging Event) is negative, you may lose all or a substantial portion of your investment upon early redemption. Loss Rebalancing Events will cause compounding to occur more frequently than quarterly.

The Securities may be called by UBS prior to the Maturity Date pursuant to its Call Right and, upon the occurrence of a Zero Value Event, the Securities will be automatically accelerated and mandatorily redeemed by UBS. See "Specific Terms of the Securities — UBS's Call Right" and "Specific Terms of the Securities — Automatic Acceleration Upon Zero Value Event".

#### **Redemption Procedures**

To redeem your Securities, you must instruct your broker or other person through whom you hold your Securities to take the following steps through normal clearing system channels:

- deliver a notice of redemption, which we refer to as a "**Redemption Notice**" to UBS via email no later than 12:00 noon on the Index Business Day on which you elect to exercise your redemption right. If we receive your Redemption Notice by the time specified in the preceding sentence, we will respond by sending you a form of confirmation of redemption;
- deliver the signed confirmation of redemption, which we refer to as the "**Redemption Confirmation**", to us via email in the specified form by 5:00 p.m. on the same day. We or our affiliate must acknowledge receipt in order for your Redemption Confirmation to be effective;
- instruct your DTC custodian to book a delivery vs. payment trade with respect to your Securities on the applicable Redemption Date at a price equal to the Redemption Amount; and
- > cause your DTC custodian to deliver the trade as booked for settlement via DTC at or prior to 12:00 noon on the applicable Redemption Date.

Different brokerage firms may have different deadlines for accepting instructions from their customers. Accordingly, as a beneficial owner of the Securities, you should consult the brokerage firm through which you own your interest for the relevant deadline. If your broker delivers your Redemption Notice after 12:00 noon, or your Redemption Confirmation after 5:00 p.m., on the Index Business Day prior to the applicable Redemption Valuation Date, your Redemption Notice will not be effective, you will not be able to redeem your Securities until the following Redemption Date and your broker will need to complete all the required steps if you should wish to redeem your Securities on any subsequent Redemption Date. In addition, UBS may request a medallion signature guarantee or such assurances of delivery as it may deem necessary in its sole discretion. All instructions given to participants from beneficial owners of Securities relating to the right to redeem their Securities will be irrevocable. If your DTC custodian or your brokerage firm is not a current UBS customer, UBS will be required to on-board such DTC custodian or brokerage firm, in compliance with its internal policies and procedures, before it can accept your Redemption Notice, your Redemption Confirmation or otherwise process your redemption request. This on-boarding process may delay your Redemption Valuation Date and Redemption Date. Furthermore, in certain circumstances, UBS may be unable to on-board your DTC custodian or your brokerage firm.

We reserve the right from time to time to waive the minimum redemption amount or the Redemption Fee Amount in our sole discretion on a case-by-case basis. In addition, we reserve the right from time to time to accelerate, in our sole discretion on a case-by-case basis, the Redemption Valuation Date to the date on which we receive the Redemption Notice rather than the following Index Business Day. You should not assume you will be entitled to any such waiver or election to accelerate the Redemption Valuation Date.

## **UBS's Call Right**

UBS may at its option redeem all, but not less than all, of the issued and outstanding Securities of any series. To exercise its Call Right, UBS must provide notice to the holders of such Securities (which may be provided via press release) not less than 18 calendar days prior to the Call Settlement Date specified by UBS in such notice. If we call the Securities, you will receive a cash payment equal to the Closing Indicative Value on the last Index Business Day in the Call Measurement Period. We refer to this cash payment as the "Call Settlement Amount."

If the amount calculated above is equal to or less than zero, the payment upon UBS's exercise of its Call Right will be zero.

We will inform you of such Call Settlement Amount on the first Index Business Day following the last Index Business Day in the Call Measurement Period.

The holders will receive payment for their Securities on the third Index Business Day following the last Index Business Day in the Call Measurement Period (the "Call Settlement Date"). If a Market Disruption Event is continuing or occurs on the scheduled Call Valuation Date with respect to any of the Index Constituent Securities, such Call Valuation Date may be postponed as described under "— Market Disruption Event".

# The "Call Measurement Period" means:

- if the Market Value of Securities outstanding at the close of trading on the Index Business Day immediately preceding the date we issue a notice of exercise of our Call Right is less than \$500,000,000, the Call Valuation Date, subject to adjustments as described under "— Market Disruption Event"; and
- (b) if the Market Value of Securities outstanding as at the close of trading on the Index Business Day immediately preceding the date we issue a notice of exercise of our Call Right is equal to or greater than \$500,000,000, the four Index Business Days from and including the Call Valuation Date, subject to adjustment as described under "— Market Disruption Event."

For the purpose of determining the Final Measurement Period, the "Market Value" of the Securities outstanding as of the close of trading on the Index Business Day immediately preceding the date of delivery by UBS of its notice to holders (which may be provided via press release) of its exercise of its Call Right will equal:

(i) The Closing Indicative Value as of such Index Business Day *times* (ii) the number of Securities outstanding as reported on Bloomberg.

The "Call Valuation Date" means the date we specify in our notice to holders (which may be provided via press release) of our exercise of our Call Right.

In any notice to holders exercising our Call Right, we will specify how many days are included in the Call Measurement Period.

The following graphic illustrates the formula to determine the Call Settlement Amount, which has been simplified for ease of presentation:

Cash Settlement Amount = Closing Indicative Value, on last Index
Business Day in Call Measurement Period

You may lose all or a substantial portion of your investment if we exercise our Call Right. The combined negative effect of the Accrued Fees will reduce your final payment. If the compounded leveraged quarterly return of the Index (or the unleveraged return of the Index, following a Permanent Deleveraging Event) is insufficient to offset the negative effect of the Accrued Fees, or if the compounded leveraged quarterly return of the Index (or the unleveraged return of the Index, following a Permanent Deleveraging Event) is negative, you may lose all or a substantial portion of your investment upon a call. Loss Rebalancing Events will cause compounding to occur more frequently than quarterly.

In addition, upon the occurrence of a Zero Value Event, the Securities will be automatically accelerated and mandatorily redeemed by UBS. See "Specific Terms of the Securities — Automatic Acceleration Upon Zero Value Event" below.

# **Automatic Acceleration Upon Zero Value Event**

For each series of Securities, a Zero Value Event represents the first instance when the Current Indicative Value (intraday indicative value) or the Closing Indicative Value is less than or equal to zero (other than on an Excluded Day, as defined below). It will have the effect of permanently resetting the value of your Securities to zero and accelerating the Securities. You will not benefit from any future exposure to the applicable Index after the occurrence of a Zero Value Event.

A Zero Value Event can occur only if a Permanent Deleveraging Event occurs and the Current Indicative Value (intraday indicative value) or the Closing Indicative Value declines to zero before the leverage of your Securities is reset to 1.0 at the close of trading on the Index Business Day following such event (or if such event occurs after 3:15 p.m. on any Index Business Day which would not otherwise have been a Loss Rebalancing Valuation Date, the second Index Business Day following such event), as described under "Permanent Deleveraging Valuation Dates" above.

A "Zero Value Event" occurs if the Current Indicative Value (intraday indicative value) or the Closing Indicative Value on any Index Business Day (other than an Excluded Day, as defined below) is less than or equal to zero. From immediately after the Zero Value Event and on all future calendar days, the Current Indicative Value (intraday indicative value) and the Closing Indicative Value will be set equal to zero.

As used above, an "Excluded Day" means (i) any calendar day after the Second Permanent Deleveraging Valuation Date (ii) any calendar day on or after which a Zero Value Event has already occurred, and (iii) any calendar day after the last day of an applicable Measurement Period.

In the event that a Zero Value Event has occurred, UBS will issue a press release shortly after the event; provided that the failure to do so shall not affect the automatic acceleration and redemption of the Securities. The Securities will be suspended from trading intraday shortly after the event occurs and will likely not be open for trading again on NYSE Arca.

You will lose your entire investment upon the occurrence of a Zero Value Event.

In addition, we may call the Securities prior to the Maturity Date pursuant to our Call Right. See "Specific Terms of the Securities — UBS's Call Right".

# **Loss Rebalancing Events**

A Loss Rebalancing Event will have the effect of deleveraging your Securities with the aim of resetting the then-current leverage to approximately 2.0. This means that after a Loss Rebalancing Event, a constant percentage increase in the Index Closing Level will have less of a positive effect on the value of your Securities relative to before the occurrence of the Loss Rebalancing Event.

A "Loss Rebalancing Event" occurs if, at any time, the Intraday Index Value on such Index Business Day (other than an Excluded Day, as used below) decreases by 20% or more from the previous Last Reset Index Closing Level.

Loss Rebalancing Events may occur multiple times over the term of the Securities and may occur multiple times during a single calendar quarter. This means both that (i) the Current Principal Amount may be reset more frequently than quarterly and (ii) the cumulative effect of compounding and fees will have increased as a result of the Loss Rebalancing Event(s). Because each Loss Rebalancing Event will have the effect of deleveraging your Securities, following a Loss Rebalancing Event your Securities will have less exposure to a potential positive gain in value relative to the exposure before the occurrence of such Loss Rebalancing Event.

As used above, an "Excluded Day" means (i) the Index Business Day immediately preceding any Quarterly Reset Valuation Date, if a Loss Rebalancing Event occurs after 3:15 p.m. on such day, (ii) any Quarterly Reset Valuation Date, (iii) any Loss Rebalancing Valuation Date, (iv) the Index Business Day immediately preceding the first day of an applicable Measurement Period, if a Loss Rebalancing Event occurs after 3:15 p.m. on such day (v) any calendar day from and including the first day of an applicable Measurement Period, (vi) the First or Second Permanent Deleveraging Valuation Dates, (vii) any calendar day after the Second Permanent Deleveraging Valuation Date, and (ix) any calendar day on or after which a Zero Value Event has occurred.

# "Loss Rebalancing Valuation Date" means:

- (a) if a Loss Rebalancing Event occurs at or prior to 3:15 p.m. on an Index Business Day, the day that such Loss Rebalancing Event occurs, subject to adjustment as described under "— Market Disruption Event"; and
- (b) if a Loss Rebalancing Event occurs after 3:15 p.m. on an Index Business Day, the first Index Business Day following the occurrence of such Loss Rebalancing Event, subject to adjustment as described under "— Market Disruption Event."

# **Permanent Deleveraging Event**

A Permanent Deleveraging Event will have the effect of deleveraging your Securities, with the aim of permanently resetting the then-current leverage to 1.0 over two Index Business Days. The leverage at the end of the First Permanent Deleveraging Valuation Date is reset to approximately 2.0 and the leverage at the end of the Second Permanent Deleveraging Valuation Date is reset to 1.0. This means that after a Permanent Deleveraging Event, a constant percentage increase in the Index Closing Level will have less of a positive effect on the value of your Securities than it would have had before the occurrence of the Permanent Deleveraging Event. If such an event were to occur, it most likely would occur only following a Loss Rebalancing Event and prior to the completion of the associated leverage reset to 2.0, which would generally occur at the end of the Index Business Day following the Index Business Day on which the Loss Rebalancing Event occurred or, if the Loss Rebalancing Event occurs 3:15 p.m. on an Index Business Day, at the end of the second Index Business Day following the Index Business Day on which the Loss Rebalancing Event occurred.

A "Permanent Deleveraging Event" occurs if, at any time on an Index Business Day (other than an Excluded Day, as defined below), the Intraday Index Value decreases by 40% or more from the Last Reset Index Closing Level. If a Permanent Deleveraging Event occurs, the Current Principal Amount of the Securities will be reset over two Index Business Days.

As used above, an "Excluded Day" means (i) the First or Second Permanent Deleveraging Valuation Dates, (ii) any calendar day after the Second Permanent Deleveraging Valuation Date, (iii) any day on or after which a Zero Value Event occurs, (iv) the day which is two Index Business Days prior to the first day of a Measurement Period, if a Permanent Deleveraging Event occurs after 3:15 p.m. on such day, and (v) any calendar day from and including the Index Business Day immediately preceding the first day of a Measurement Period.

"Permanent Deleveraging Valuation Dates" means the First Permanent Deleveraging Valuation Date and the Second Permanent Deleveraging Valuation Date, each as defined below:

- (a) The "First Permanent Deleveraging Valuation Date" means:
  - (i) any Index Business Day, which otherwise would have been a Loss Rebalancing Valuation Date, but on which a Permanent Deleveraging Event has occurred, subject to adjustment as described under "— Market Disruption Event"; or
  - (ii) if a Permanent Deleveraging Event occurs after 3:15 p.m. on any Index Business Day which would not otherwise have been a Loss Rebalancing Valuation Date, then the first Index Business Day following the occurrence of such Permanent Deleveraging Event, subject to adjustment as described under "— Market Disruption Event."

The leverage of your Securities will be reset to approximately 2.0 at the close of trading on the First Permanent Deleveraging Valuation Date.

(b) The "Second Permanent Deleveraging Valuation Date" means the Index Business Day immediately following the First Permanent Deleveraging Valuation Date, subject to adjustment as described under "—Market Disruption Event."

The leverage of your Securities will be reset to 1.0 at the close of trading on the Second Permanent Deleveraging Valuation Date.

## **Split or Reverse Split of the Securities**

We may, at any time in our sole discretion, initiate a split or reverse split of your Securities. If we decide to initiate a split or reverse split, as applicable, we will issue a press release announcing the split or reverse split and its effective date. The date of such press release shall be deemed to be the "announcement date" of the split or the reverse split, the record date for any split or reverse split will be the tenth Business Day after the announcement date, and the effective date will be the next Business Day after the record date.

If the Securities undergo a split or reverse split, we will adjust the Current Principal Amount, Closing Indicative Value, Current Indicative Value, Accrued Fees, Measurement Period Cash Amount and other relevant terms of the Securities accordingly. For example, if the Securities undergo a 4:1 split, every investor who holds a Security via The Depository Trust Company ("DTC") on the relevant record date will, after the split, hold four Securities, and adjustments will be made as described below. The Current Principal Amount on such record date will be *divided by* four to reflect the 4:1 split. The adjusted Current Principal Amount will be rounded to eight decimal places. The split or reverse split will become effective at the opening of trading of the Securities on the Index Business Day immediately following the record date. The split will not occur if we exercise our Call Right before it becomes effective.

In the case of a reverse split, the Current Principal Amount and other relevant terms of the Securities will be adjusted accordingly and we will determine in our sole discretion the manner in which we will address odd numbers of Securities (commonly referred to as "partials"). For example, if the Securities undergo a 1:4 reverse split, every investor who holds four Securities via DTC on the relevant record date will, after the reverse split, hold only one Security and the Current Principal Amount of the Securities on such record date will be multiplied by four to reflect the 1:4 reverse split. The adjusted Current Principal Amount will be rounded to eight decimal places. The reverse split will become effective at the opening of trading of the Securities on the Index Business Day immediately following the record date. The reverse split will not occur if we exercise our Call Right before it becomes effective.

Holders who own a number of Securities on the record date that is not evenly divisible by the reverse split divisor (which in the case of a 1:4 reverse split, for example, will be 4) will receive the same treatment as all other holders for the maximum number of Securities they hold that is evenly divisible by the reverse split divisor. We will determine in our sole discretion the manner in which we compensate holders for their remaining or "partial" Securities when we announce the reverse split, though our current intention is to provide holders with a cash payment for their partials on the 17th Business Day following the announcement date in an amount equal to the appropriate percentage of the Closing Indicative Value of the reverse split-adjusted Securities on the 15th Business Day following the announcement date. For example, in the case of a 1:4 reverse split, a holder who held 23 Securities via DTC on the record date would receive five post-reverse split Securities on the immediately following Business Day, and a cash payment on the 17th Business Day following the announcement date that is equal to 3/4 of the Current Principal Amount of the reverse split-adjusted Securities on the 15th Business Day following the announcement date.

# **Security Calculation Agent**

UBS Securities LLC will act as the Security Calculation Agent. The Security Calculation Agent will be solely responsible for all determinations and calculations regarding the value of the Securities, including, among other things, at maturity or upon early redemption or call, or at other times, the Current Principal Amount, Current Indicative Value (which we also refer to as the intraday indicative value), Closing Indicative Value, Market Disruption Events, Business Days, Index Business Days, the Leverage Factor, the Index Factor, the Index Performance Ratio, the Residual Factor, the Index Closing Level, the Financing Rate, the Accrued Fees (including determining any successor to the LIBOR base rate), the Redemption Fee Amount, the Cash Settlement Amount, if any, that we will pay you at maturity, the Redemption Amount, if any, that we will pay you upon redemption, the Call Settlement Amount, that we will pay you if we call the Securities, whether a Loss Rebalancing Event has occurred, whether a Permanent Deleveraging Event has occurred and whether any day is an Index Business Day and all such other matters as may be specified elsewhere herein as matters to be determined by the Security Calculation Agent. If any Intraday Index Value as published by Bloomberg on any Index Business Day is manifestly incorrect, the Security Calculation Agent may base its determination of whether a Loss Rebalancing Event, Permanent Deleveraging Event or Zero Value Event shall have occurred on such Index Business Day on its own determination of such Intraday Index Value. In making such determination, the Security Calculation Agent may consider any relevant information, including, without limitation, relevant market data in the relevant market supplied by one or more third parties or from internal sources or affiliates. The Security Calculation Agent will also be responsible for determining whether the Index has been discontinued and whether there has been a material change in the Index. The Security Calculation Agent will make all such determinations and calculations in its sole discretion, and absent manifest error, all determinations of the Security Calculation Agent will be conclusive for all purposes and binding on us, you, and all other persons having an interest in the Securities, without liability on the part of the Security Calculation Agent. You will not be entitled to any compensation from us for any loss suffered as a result of any determinations or calculations made by the Security Calculation Agent. We may appoint a different Security Calculation Agent from time to time after the date of the prospectus supplement without your consent and without notifying you.

The Security Calculation Agent will provide written notice to the trustee at its New York office, on which notice the trustee may conclusively rely, of the amount to be paid at maturity or upon early redemption or call, on or prior to 12:00 noon on the Index Business Day immediately preceding the Maturity Date, any Redemption Date or any Call Settlement Date.

All dollar amounts related to determination of the Accrued Fees, the Current Principal Amount, and any Redemption Amount, Redemption Fee Amount, Call Settlement Amount or Cash Settlement Amount per Security will be rounded to the nearest tenthousandth, with five one hundred-thousandths rounded upward (e.g., .76545 would be rounded up to .7655); and all dollar amounts paid to any holder of Securities will be rounded to the nearest cent, with one-half cent rounded upward.

#### **Market Disruption Event**

To the extent a Market Disruption Event with respect to the Index has occurred or is continuing during a four-day Measurement Period, the Index Closing Level for such day will be determined by the Security Calculation Agent or one of its affiliates on the first succeeding Index Business Day on which a Market Disruption Event does not occur or is not continuing with respect to the Index. The remaining Index Business Days in the Measurement Period will be postponed accordingly, and the remaining Index Business Days in the Measurement Period will resume again following the suspension of the Market Disruption Event. For example, if the four-day Measurement Period for purposes of calculating the Call Settlement Amount, is scheduled for June 2, June 3, June 4 and June 5, and there is a Market Disruption Event with respect to the Index on June 2, but no other Market Disruption Event during such Call Measurement Period, then June 3 will become the first Index Business Day of the Measurement Period, June 4th the second Index Business Day, June 5th the third Index Business Day and the next Index Business Day after June 5th would be the final day of the Measurement Period. The same approach would be applied if there is a Market Disruption Event during a four-day Final Measurement Period.

To the extent a Market Disruption Event with respect to the Index has occurred or is continuing on the Redemption Valuation Date, Call Valuation Date (in the event that the Call Measurement Period is the Call Valuation Date), Calculation Date (in the event that the Final Measurement Period is the Calculation Date) or any Reset Valuation Date, the Index Closing Level for such Redemption Valuation Date, Call Valuation Date, Calculation Date or Reset Valuation Date will be determined by the Security Calculation Agent or one of its affiliates on the first succeeding Index Business Day on which a Market Disruption Event does not occur or is not continuing with respect to the Index. For example, if the Redemption Valuation Date, for purposes of calculating a Redemption Amount, is based on the Index Closing Level on June 2 and there is a Market Disruption Event with respect to the Index on June 2, then the Index Closing Level on June 3 will be used to calculate the Redemption Amount, assuming that no such Market Disruption Event has occurred or is continuing on June 3.

In no event, however, will any postponement pursuant to either of the two immediately preceding paragraphs result in the affected Index Business Day of the Measurement Period or any Redemption Valuation Date, Call Valuation Date (in the event that the Call Measurement Period is the Call Valuation Date), Calculation Date (in the event that the Final Measurement Period is the Calculation Date) or Reset Valuation Date occurring more than five Index Business Days following the day originally scheduled to be such Index Business Day of the Measurement Period or such Redemption Valuation Date, Call Valuation Date, Calculation Date or Reset Valuation Date. If a Market Disruption Event has occurred or is continuing with respect to the Index on the fifth Index Business Day following the date originally scheduled to be such Index Business Day of the Measurement Period or any Redemption Valuation Date, Calculation Date or any Reset Valuation Date, the Security Calculation Agent or one of its affiliates will determine the Index Closing Level based on its good faith estimate of the Index Closing Level that would have prevailed on such fifth Index Business Day but for such Market Disruption Event.

Any of the following will be a "Market Disruption Event" with respect to the Index, in each case as determined by the Security Calculation Agent in its sole discretion:

- (a) suspension, absence or material limitation of trading in a material number of Index Constituent Securities, whether by reason of movements in price exceeding limits permitted by the Primary Exchange or otherwise;
- (b) suspension, absence or material limitation of trading in option or futures contracts relating to the Index or to a material number of Index Constituent Securities in the primary market or markets for those contracts;
- (c) the Index is not published; or
- (d) in any other event, if the Security Calculation Agent determines in its sole discretion that the event materially interferes with our ability or the ability of any of our affiliates to unwind all or a material portion of a hedge with respect to the Securities that we or our affiliates have effected or may effect as described in the section entitled "Use of Proceeds and Hedging."

The following events will not be Market Disruption Events with respect to the Index:

- (a) a limitation on the hours or numbers of days of trading, but only if the limitation results from an announced change in the regular business hours of the relevant market; and
- (b) a decision to permanently discontinue trading in the option or futures contracts relating to the Index or any Index Constituent Securities.

For this purpose, an "absence of trading" in the primary securities market on which option or futures contracts related to the Index or any Index Constituent Securities are traded will not include any time when that market is itself closed for trading under ordinary circumstances.

#### **Default Amount on Acceleration**

If an event of default occurs and the maturity of the Securities is accelerated, we will pay the default amount in respect of the principal of the Securities at maturity. We describe the default amount below under "— Default Amount."

For the purpose of determining whether the holders of our Medium-Term Notes, Series B, of which the Securities are a part, are entitled to take any action under the indenture, we will treat the outstanding principal amount of the Medium-Term Notes, Series B, as constituting the outstanding principal amount of the Securities. Although the terms of the Securities may differ from those of the other Medium-Term Notes, Series B, holders of specified percentages in principal amount of all Medium-Term Notes, Series B, together in some cases with other series of our debt securities, will be able to take action affecting all the Medium-Term Notes, Series B, including the Securities. This action may involve changing some of the terms that apply to the Medium-Term Notes, Series B, accelerating the maturity of the Medium-Term Notes, Series B after a default or waiving some of our obligations under the indenture. We discuss these matters in "Medium-Term Notes, Series B" above under "Description of Debt Securities We May Offer — Default, Remedies and Waiver of Default" and "Description of Debt Securities We May Offer — Modification and Waiver of Covenants."

## **Default Amount**

The default amount for the Securities on any day will be an amount, in U.S. dollars as determined by the Security Calculation Agent in its sole discretion, for the aggregate Stated Principal Amount of the Securities, equal to the cost of having a qualified financial institution, of the kind and selected as described below, expressly assume all our payment and other obligations with respect to the Securities as of that day and as if no default or acceleration had occurred, or to undertake other obligations providing substantially equivalent economic value to you with respect to the Securities. That cost will equal:

- > the lowest amount that a qualified financial institution would charge to effect this assumption or undertaking, plus
- the reasonable expenses, including reasonable attorneys' fees, incurred by the holders of the Securities in preparing any documentation necessary for this assumption or undertaking.

During the default quotation period for the Securities, which we describe below, the holders of the Securities and/or we may request a qualified financial institution to provide a quotation of the amount it would charge to effect this assumption or undertaking. If either party obtains a quotation, it must notify the other party in writing of the quotation. The amount referred to in the first bullet point above will equal the lowest — or, if there is only one, the only — quotation obtained, and as to which notice is so given, during the default quotation period. With respect to any quotation, however, the party not obtaining the quotation may object, on reasonable and significant grounds, to the assumption or undertaking by the qualified financial institution providing the quotation and notify the other party in writing of those grounds within two Business Days after the last day of the default quotation period, in which case that quotation will be disregarded in determining the default amount.

# **Default Quotation Period**

The default quotation period is the period beginning on the day the default amount first becomes due and ending on the third Index Business Day after that day, unless:

- > no quotation of the kind referred to above is obtained, or
- every quotation of that kind obtained is objected to within five Index Business Days after the due date as described above.

If either of these two events occurs, the default quotation period will continue until the third Index Business Day after the first Index Business Day on which prompt notice of a quotation is given as described above. If that quotation is objected to as described above within five Index Business Days after that first Index Business Day, however, the default quotation period will continue as described in the prior sentence and this sentence.

In any event, if the default quotation period and the subsequent two Index Business Day objection period have not ended before the Calculation Date, then the default amount will equal the Stated Principal Amount of the Securities.

## **Qualified Financial Institutions**

For the purpose of determining the default amount at any time, a qualified financial institution must be a financial institution organized under the laws of any jurisdiction in the United States of America, Europe or Japan, which at that time has outstanding debt obligations with a stated maturity of one year or less from the date of issue and rated either:

- A-1 or higher by Standard & Poor's Financial Services LLC, a subsidiary of The McGraw-Hill Companies, Inc., or any successor, or any other comparable rating then used by that rating agency, or
- P-1 or higher by Moody's Investors Service or any successor, or any other comparable rating then used by that rating agency.

# Discontinuance of or Adjustments to the Index or Termination of Our License Agreements with the Index Sponsors; Alteration of Method of Calculation

If (i) an Index Sponsor or the Index Calculation Agent announces that it intends to discontinue, or discontinues, publication of, or otherwise fails to publish, the Index, (ii) our license agreement with the Index Sponsor terminates or (iii) the Index Sponsor or Index Calculation Agent does not make the Index Constituent Securities and/or their unit weighting available to the Security Calculation Agent, and, in each case, any other person or entity publishes an index licensed to UBS that the Security Calculation Agent determines is comparable to the Index and for which the Index Constituent Securities and/or their unit weighting are available to the Security Calculation Agent (such index being referred to herein as a "successor index"), and the Security Calculation Agent approves such index as a successor index, then on and after the date determined by the Security Calculation Agent, the Security Calculation Agent will determine the Index Closing Level on the applicable dates of determination and the amount payable at maturity or upon early redemption or call and all other related payments terms by reference to such successor index.

Upon any selection by the Security Calculation Agent of a successor index, the Security Calculation Agent will cause written notice of the successor index and the date on and after which the Index Closing Level will be determined by reference thereto be furnished to the trustee, to us and to the holders of the Securities.

If an Index Sponsor or Index Calculation Agent discontinues publication of the Index, our license agreement with the Index Sponsor terminates or the Index Sponsor or Index Calculation Agent do not make the Index Constituent Securities and/or their unit weighting available to the Security Calculation Agent, prior to, and such discontinuation, termination or unavailability is continuing on the Calculation Date or any Index Business Day during a Measurement Period, or on the Redemption Valuation Date or on any Reset Valuation Date, as applicable, or on any other relevant date on which the Index Closing Level is to be determined and the Security Calculation Agent determines that no successor index is available at such time, or the Security Calculation Agent has previously selected a successor index and publication of such successor index is discontinued prior to, and such discontinuation is continuing on the Calculation Date or any Index Business Day during a Measurement Period, or on the Redemption Valuation Date or on any Reset Valuation Date, or any other relevant date on which the Index Closing Level is to be determined, then the Security Calculation Agent will determine the Index Closing Level using the Index Closing Level on the last Index Business Day immediately prior to such discontinuation or unavailability, as adjusted for certain corporate actions. In such event, the Security Calculation Agent will cause notice thereof to be furnished to the trustee, to us and to the holders of the Securities.

Notwithstanding these alternative arrangements, discontinuation of the publication of the Index or successor index, as applicable, may adversely affect the value of the Securities.

In addition, if an Index Replacement Event (as defined below) occurs at any time and the Index Sponsor or anyone else publishes an index that the Security Calculation Agent determines is comparable to the Index (the "Substitute Index"), then the Security Calculation Agent may elect, in its sole discretion, to permanently replace the original Index with the Substitute Index for all purposes under the Securities, and all provisions described in the prospectus supplement as applying to the Index will thereafter apply to the Substitute Index instead. In such event, the Security Calculation Agent will make such adjustments, if any, to any level of the Index or Substitute Index that is used for purposes of the Securities as it determines are appropriate in the circumstances. If the Security Calculation Agent elects to replace the original Index with a Substitute Index, then the Security Calculation Agent will determine all amounts hereunder, Current Principal Amount, Current Indicative Value (intraday indicative value), Closing Indicative Value, Index Factor, Index Performance Ratio, Residual Factor, Accrued Fees, Index Closing Levels on the applicable dates of determination, all other related payment terms and the amount payable at maturity or upon early redemption or call by reference to such Substitute Index. If the Security Calculation Agent so elects to replace the original Index with a Substitute Index, the Security Calculation Agent will cause written notice thereof to be furnished to the trustee, to us and to the holders of the Securities of the Securities.

# An "Index Replacement Event" means:

(a) an amendment to or change (including any officially announced proposed change) in the laws, regulations or rules of the United States (or any political subdivision thereof), or any jurisdiction in which a Primary Exchange (as defined herein) is located that (i) makes it illegal for UBS AG or its affiliates to hold, acquire or dispose of the Index Constituent Securities included in the Index or options, futures, swaps or other derivatives on the Index or on the Index Constituent Securities included in the Index (including but not limited to exchange-imposed position limits), (ii) materially increases the cost to us, our affiliates, third parties with whom we transact or similarly situated third parties in performing our or their obligations in connection with the Securities, (iii) has a material adverse effect on any of these parties' ability to perform their obligations in connection with the Securities, or (iv) materially affects our ability to issue or transact in exchange traded notes similar to the Securities, each as determined by the Security Calculation Agent;

- (b) any official administrative decision, judicial decision, administrative action, regulatory interpretation or other official pronouncement interpreting or applying those laws, regulations or rules that is announced on or after February 4, 2021 that (i) makes it illegal for UBS AG or its affiliates to hold, acquire or dispose of the Index Constituent Securities included in the Index or options, futures, swaps or other derivatives on the Index or on the Index Constituent Securities (including but not limited to exchange-imposed position limits), (ii) materially increases the cost to us, our affiliates, third parties with whom we transact or similarly situated third parties in performing our or their obligations in connection with the Securities, (iii) has a material adverse effect on the ability of us, our affiliates, third parties with whom we transact or a similarly situated third party to perform our or their obligations in connection with the Securities, or (iv) materially affects our ability to issue or transact in exchange traded notes similar to the Securities, each as determined by the Security Calculation Agent;
- (c) any event that occurs on or after February 4, 2021 that makes it a violation of any law, regulation or rule of the United States (or any political subdivision thereof), or any jurisdiction in which a Primary Exchange (as defined herein) is located, or of any official administrative decision, judicial decision, administrative action, regulatory interpretation or other official pronouncement interpreting or applying those laws, regulations or rules, (i) for UBS AG or its affiliates to hold, acquire or dispose of the Index Constituent Securities or options, futures, swaps or other derivatives on the Index or on the Index Constituent Securities (including but not limited to exchange-imposed position limits), (ii) for us, our affiliates, third parties with whom we transact or similarly situated third parties to perform our or their obligations in connection with the Securities, or (iii) for us to issue or transact in exchange traded notes similar to the Securities, each as determined by the Security Calculation Agent;
- (d) any event, as determined by the Security Calculation Agent, as a result of which we or any of our affiliates or a similarly situated party would, after using commercially reasonable efforts, be unable to, or would incur a materially increased amount of tax, duty, expense or fee (other than brokerage commissions) to, acquire, establish, re-establish, substitute, maintain, unwind or dispose of any transaction or asset it deems necessary to hedge the risk of the Securities, or realize, recover or remit the proceeds of any such transaction or asset; or
- (e) as determined by the Security Calculation Agent, the primary exchange or market for trading for the Securities, if any, announces that pursuant to the rules of such exchange or market, as applicable, the Securities cease (or will cease) to be listed, traded or publicly quoted on such exchange or market, as applicable, for any reason and are not immediately re-listed, re-traded or re-quoted on an exchange or quotation system located in the same country as such exchange or market, as applicable.

Notwithstanding these alternative arrangements, discontinuation of the publication of the Index or successor index, as applicable, may adversely affect the value of the Securities.

If at any time the method of calculating the Index, a successor index or a Substitute Index, or the value thereof, is changed in a material respect, or if the Index or a successor or Substitute Index is in any other way modified so that the Index Closing Level of the Index or such successor or Substitute Index does not, in the opinion of the Security Calculation Agent, fairly represent the Index Closing Level of the Index or such successor or Substitute Index had such changes or modifications not been made, then the Security Calculation Agent will make such calculations and adjustments as, in the good faith judgment of the Security Calculation Agent, may be necessary in order to arrive at an Index Closing Level of an index comparable to the Index or such successor index, as the case may be, as if such changes or modifications had not been made, and the Security Calculation Agent will calculate the Index Closing Level for the Index or such successor or Substitute Index with reference to the Index or such successor or Substitute Index, as adjusted. The Security Calculation Agent will accordingly calculate the Index Closing Level, the Index Performance Ratio, the Last Reset Index Closing Level, the Accrued Fees, and any Redemption Amount, Redemption Fee Amount, Cash Settlement Amount or Call Settlement Amount, and all related payment terms based directly or indirectly on the Index Closing Level calculated by the Security Calculation Agent. Accordingly, if the method of calculating the Index or a successor or Substitute Index is modified so that the level of the Index or such successor or Substitute Index is a fraction or multiple of what it would have been if there had been no such modification (e.g., due to a rebasing of the Index), which, in turn, causes the Index Closing Level of the Index or such successor or Substitute Index to be a fraction of what it would have been if there had been no such modification, then the Security Calculation Agent will make such calculations and adjustments in order to arrive at an Index Closing Level for the Index or such successor or Substitute Index as if it had not been modified (e.g., as if such rebasing had not occurred).

In the event that the Security Calculation Agent elects to replace the Index with a successor index or a Substitute Index, UBS may, in its sole discretion, amend the title of the Securities in order to remove reference the former Index and to make such other changes to the title of the Securities as it considers necessary or desirable to reflect the name and/or characteristics of the relevant successor index or Substitute Index, as applicable.

All determinations and adjustments to be made by the Security Calculation Agent may be made in the Security Calculation Agent's sole discretion. See "Risk Factors — Risks Relating to Creditworthiness, Conflicts of Interest, Hedging Activities and Regulation of UBS — There are potential conflicts of interest between you and the Security Calculation Agent" in the prospectus supplement for a discussion of certain conflicts of interest which may arise with respect to the Security Calculation Agent.

## **Manner of Payment and Delivery**

Any payment on or delivery of the Securities at maturity or upon early redemption or call will be made to accounts designated by you and approved by us, or at the corporate trust office of the trustee in New York City, but only when the Securities are surrendered to the trustee at that office. We also may make any payment or delivery in accordance with the applicable procedures of the depositary.

# **Reissuances or Reopened Issues**

We may, at our sole discretion, "reopen" or reissue any series of Securities. We issued the Securities initially in an amount having the aggregate Stated Principal Amount specified on the cover of the prospectus supplement. We may issue additional Securities in amounts that exceed the amount on the cover at any time, without your consent and without notifying you. The Securities do not limit our ability to incur other indebtedness or to issue other securities. Also, we are not subject to financial or similar restrictions by the terms of the Securities. For more information, please refer to "Description of Debt Securities We May Offer — Amounts That We May Issue" in "Medium-Term Notes, Series B" above.

These further issuances, if any, will be consolidated to form a single class with the originally issued Securities of the same series and will have the same CUSIP number and will trade interchangeably with such Securities immediately upon settlement. Any additional issuances will increase the aggregate Stated Principal Amount of the outstanding Securities of the class. The price of any additional offering will be determined at the time of pricing of that offering.

# **Booking Branch**

The Securities will be booked through UBS AG, London Branch.

## **Clearance and Settlement**

The DTC participants that hold the Securities through DTC on behalf of investors will follow the settlement practices applicable to equity securities in DTC's settlement system with respect to the primary distribution of the Securities and secondary market trading between DTC participants.

# 22. ETRACS 2x Leveraged MSCI US Momentum Factor TR ETN due February 9, 2051

#### **Specific Terms of the Securities**

In this section, references to "holders" mean those who own the Securities registered in their own names, on the books that we or the trustee maintains for this purpose, and not those who own beneficial interests in the Securities registered in street name or in the Securities issued in book-entry form through The Depository Trust Company ("DTC") or another depositary. Owners of beneficial interests in the Securities should read the section entitled "Legal Ownership and Book-Entry Issuance" under "Medium-Term Notes, Series B" above.

Each of the seven series of Securities offered by the prospectus supplement is separate and independent of each other series of Securities. Apart from the applicable Index, however, all of the terms of each series of Securities are the same. Since each series references a different Index, all calculations and adjustments and related events with respect to each series are independent of calculations and adjustments and related events for each other series of Securities, and we may exercise our call right as well as our right to initiate a split or a reverse split independently for each series. The following discussion therefore applies independently to each series of Securities offered by the prospectus supplement and, except as the context may otherwise require, the defined terms refer separately to each series. References to the "Securities" should be understood as references to a single series of Securities and the defined terms should be understood in reference only to that series of Securities.

These Securities are part of a series of debt securities entitled "Medium-Term Notes, Series B" that we may issue, from time to time, under the indenture more particularly described under "Medium-Term Notes, Series B" above. This section summarizes general financial and other terms that apply to the Securities. Terms that apply generally to all Medium-Term Notes, Series B are described in "Description of Debt Securities We May Offer" under "Medium-Term Notes, Series B" above. The terms described here supplement those described in "Medium-Term Notes, Series B" above and, if the terms described here are inconsistent with those described there, the terms described here are controlling.

The Securities are part of a single series of senior debt securities issued under our indenture, dated as of June 2, 2015 between us and U.S. Bank Trust National Association, as trustee.

We describe the terms of the Securities in more detail below. The Stated Principal Amount of each Security is \$25.00.

The Securities do not guarantee any return of principal at, or prior to, maturity or upon early redemption or call. Instead, at maturity, you will receive a cash payment per Security the amount of which will vary depending on the performance and path of the Index and will be reduced by the Accrued Fees as of the last Index Business Day in the Final Measurement Period as described under "— Cash Settlement Amount at Maturity." If the amount as calculated is equal to or less than zero, the Cash Settlement Amount will be zero and you will not receive a cash payment.

If you exercise your right to have us redeem your Securities, subject to compliance with the redemption procedures, for each Security you will receive a cash payment per Security on the relevant Redemption Date equal to the Redemption Amount as described under "— Early Redemption at the Option of the Holders." If the amount as calculated is equal to or less than zero, the Redemption Amount will be zero and you will not receive a cash payment.

# **Cash Settlement Amount at Maturity**

The "Maturity Date" is February 9, 2051, which will be the third Index Business Day following the last Index Business Day in the Final Measurement Period, subject to adjustment as described below under "— Market Disruption Event."

For each Security, unless earlier called, redeemed or accelerated upon Zero Value Event, you will receive at maturity a cash payment equal to its Closing Indicative Value on the last Index Business Day in the applicable Measurement Period. We refer to this cash payment as the "Cash Settlement Amount." If the amount so calculated is equal to or less than zero, the payment will be zero.

The following graphic illustrates the formula to determine the Cash Settlement Amount, which has been simplified for ease of presentation:

Cash Settlement Amount = Closing Indicative Value, on last Index
Business Day in Final Measurement Period

You may lose all or a substantial portion of your investment at maturity. The combined negative effect of the Accrued Fees will reduce your final payment. If the compounded leveraged quarterly return of the Index (or the unleveraged return of the Index, following a Permanent Deleveraging Event) is insufficient to offset the negative effect of the Accrued Fees, you may lose all or a substantial portion of your investment at maturity. The occurrence of Loss Rebalancing Events will result in more frequent than quarterly compounding.

UBS may call the Securities prior to the Maturity Date pursuant to its Call Right. If the Securities are called by UBS, the Call Settlement Amount may be zero and you may lose all or a substantial portion of your investment. See "Specific Terms of the Securities — UBS's Call Right".

The "Stated Principal Amount" of each Security is \$25.00. The Securities may be issued and sold over time at then-current market prices which may be significantly higher or lower than the Stated Principal Amount. If the Securities undergo a split or reverse split, the Stated Principal Amount will be adjusted accordingly.

The Closing Indicative Value represents the dollar value per Security that an investor would receive on any day if it redeemed the Security that day (without giving effect to any Redemption Fee Amount).

The "Closing Indicative Value" per Security, will be calculated as follows:

- (a) On the Initial Trade Date, \$25.00 per Security.
- (b) On any other calendar day, prior to the first day of an applicable Measurement Period, an amount per Security equal to:

(Current Principal Amount on the immediately preceding calendar day × Index Factor) – Accrued Fees

(c) From and including the first day of an applicable Measurement Period, an amount per Security equal to:

(Current Principal Amount on the calendar day immediately preceding the first day of the Measurement Period × Index Factor × Residual Factor) – Accrued Fees + Measurement Period Cash Amount

However, if, on any day during a Measurement Period, the Current Indicative Value or the Closing Indicative Value *is less than or equal to* the Measurement Period Cash Amount from the immediately preceding calendar day, the Closing Indicative Value for that day and all subsequent days will be fixed to be equal to the Measurement Period Cash Amount from the immediately preceding calendar day.

(d) The minimum value of the Closing Indicative Value on any calendar day will be zero.

If a Zero Value Event occurs, the Closing Indicative Value will be equal to zero on the day it occurs and on all future calendar days. Upon the occurrence of a Zero Value Event, investors will lose their entire investment. You will not benefit from any future exposure to the Index after the occurrence of a Zero Value Event. See "— Automatic Acceleration Upon Zero Value Event".

The actual trading price of the Securities in the secondary market may vary significantly from their Closing Indicative Value.

If the Securities undergo a split or reverse split, the Closing Indicative Value will be adjusted accordingly.

The "Current Principal Amount" represents the unleveraged notional investment in the Index Constituent Securities per Security at the close of trading on any Reset Valuation Date. The notional financing amount per Security in order to generate the leveraged returns would approximately equal the Current Principal Amount at the close of trading on any Reset Valuation Date. If a Permanent Deleveraging Event occurs, the leverage of your Securities will be permanently reset to 1.0 and the notional financing amount will be equal to zero for the remaining term of the Securities. If a Zero Value Event occurs prior to your Securities permanently resetting to 1.0 at the end of the Second Permanent Deleveraging Valuation Date, then your Securities will be automatically accelerated and mandatorily redeemed and you will lose your entire investment.

The Current Principal Amount per Security, will be calculated as follows:

- (a) From and including the Initial Trade Date to and excluding the first Reset Valuation Date, \$25.00 per Security.
- (b) At the close of trading on each Reset Valuation Date after the Initial Trade Date, the Current Principal Amount of the Securities will be reset as follows:

New Current Principal Amount = (Current Principal Amount on immediately preceding calendar day × Index Factor) – Accrued Fees

The Current Principal Amount will not change until the first Reset Valuation Date.

If a day that would otherwise be a Reset Valuation Date occurs on or after the first day of a Measurement Period, such day will not be a valid Reset Valuation Date.

If the Securities undergo a split or reverse split, the Current Principal Amount will be adjusted accordingly.

At the close of trading on each Reset Valuation Date, the Current Principal Amount is reset. The "Reset Valuation Date" means:

- (a) Any calendar day up to and including the Second Permanent Deleveraging Valuation Date, that is either: (i) the Initial Trade Date, (ii) a Quarterly Reset Valuation Date, (iii) a Loss Rebalancing Valuation Date (iv) the First Permanent Deleveraging Valuation Date, or (v) the Second Permanent Deleveraging Valuation Date; and
- (b) Any calendar day following the Second Permanent Deleveraging Valuation Date.

The valuation dates are defined below.

If a day that would otherwise be a Reset Valuation Date occurs on or after the first day of a Measurement Period, it will not be a valid Reset Valuation Date and the Last Reset Index Closing Level will remain the same.

The "Quarterly Reset Valuation Date" is the second Wednesday of January, April, July and October of each calendar year during the term of the Securities (other than an Excluded Day, as defined below), subject to adjustment as described under "—Market Disruption Event".

As used above, an "Excluded Day" means (i) the Index Business Day immediately preceding the first day of an applicable Measurement Period, and any calendar day thereafter, and (ii) any calendar day after the Second Permanent Deleveraging Valuation Date.

The "Index Factor" is: 1 + (Leverage Factor × Index Performance Ratio).

The Index Factor represents the leveraged percentage change in the Index level since the Last Reset Index Closing Level. The Index Factor *times* the applicable Current Principal Amount on the preceding calendar day represents the current value of the unleveraged notional amount per Security that is deemed invested in the Index on any calendar day. This does not reflect the Redemption Amount that an investor would receive upon early redemption on such calendar day.

The "Residual Factor" will be calculated as follows:

- (a) 1.0 on any calendar day, to but excluding the first day of an applicable Measurement Period.
- (b) From and including the first day of an applicable four-day Measurement Period, (a) the number of Index Business Days from, but excluding, the date of determination to, and including, the last Index Business Day in such four-day Measurement Period, *divided by* (b) four.

For example, on the first Index Business Day in an applicable four-day Measurement Period, the Residual Factor will equal 3/4, on the second Index Business Day in an applicable four-day Measurement Period, the Residual Factor will equal 2/4, on the third Index Business Day in an applicable four-day Measurement Period, the Residual Factor will equal 1/4 and on the last Index Business Day in an applicable four-day Measurement Period, the Residual Factor will equal zero.

(c) On any calendar day from and including the last Index Business Day of an applicable Measurement Period, the Residual Factor will be equal to zero.

The Residual Factor is intended to approximate the percentage of the Current Principal Amount that is tracking the Index on any given day. The Residual Factor is relevant only during an applicable Measurement Period but otherwise is not a component of the Closing Indicative Value or Current Indicative Value formulas. At the close of trading on each Index Business Day during a four-day Measurement Period, approximately 25% of the Current Principal Amount and the corresponding amount of financing will be deemed converted to cash. In case of a one-day Measurement Period, approximately 100% of the Current Principal Amount and the corresponding amount of financing will be deemed converted to cash.

The "Leverage Factor" on any calendar day until the occurrence of a Permanent Deleveraging Event and the close of trading on the Second Permanent Deleveraging Valuation Date, will equal 2.0. If a Permanent Deleveraging Event occurs, then on any calendar day following the Second Permanent Deleveraging Valuation Date, the Leverage Factor will equal 1.0.

The "Index Performance Ratio" on any Index Business Day will be equal to:

<u>Index Closing Level – Last Reset Index Closing Level</u> Last Reset Index Closing Level

On any calendar day that is not an Index Business Day, the Index Closing Level will be equal to the Index Closing Level on the Index Business Day immediately preceding such calendar day.

The "Last Reset Index Closing Level" is the Index Closing Level on the most recent Reset Valuation Date prior to such day. The initial Last Reset Index Closing Level is the Index Closing Level on the Initial Trade Date, as reported by Bloomberg and Reuters.

The "Index Closing Level" on any date of determination is the closing level of the Index, as reported on Bloomberg and Reuters on such day; however, if the closing level of the Index as reported on Bloomberg (or any successor) differs from the closing level of the Index as reported on Reuters (or any successor), the Index Closing Level will be the closing level of the Index as calculated by the Index Calculation Agent. The initial Index Closing Level (which is also the first Last Reset Index Closing Level) was determined on February 4, 2021 by the Security Calculation Agent. If the closing level of an Index, as reported on Bloomberg and Reuters for any Index Business Day, is manifestly incorrect, the "Index Closing Level" for such Index Business Day shall be the closing level of the Index as determined by the Security Calculation Agent. In making such determination, the Security Calculation Agent may consider any relevant information, including, without limitation, relevant market data in the relevant market supplied by one or more third parties or from internal sources or affiliates.

On any calendar day that is not an Index Business Day, the Index Closing level will be equal to the Index Closing Level on the Index Business Day immediately preceding such calendar day.

"Measurement Period" means the Final Measurement Period or, if UBS exercises its Call Right, the Call Measurement Period.

The "Current Indicative Value" or "intraday indicative value", as determined by the Security Calculation Agent, is an amount per Security, on an intraday basis on any Index Business Day, equal to:

- (a) On the Initial Trade Date, \$25.00.
- (b) On any other calendar day prior to the first day of a Measurement Period:

(Current Principal Amount on the immediately preceding calendar day × Index Factor, calculated using the Intraday Index Value) – Accrued Fees

(c) From and including the first day of a Measurement Period, an amount per Security equal to:

(Current Principal Amount on the calendar day immediately preceding the first day of the Measurement Period × Index Factor, calculated using the Intraday Index Value × Residual Factor on the immediately preceding calendar day) – Accrued Fees + Measurement Period Cash Amount, from the immediately preceding calendar day However, if, on any day during a Measurement Period, the Current Indicative Value or the Closing Indicative Value *is less than or equal to* the Measurement Period Cash Amount from the immediately preceding calendar day, the Current Indicative Value for the remainder of that day and all subsequent days will be fixed to be equal to the Measurement Period Cash Amount from the immediately preceding calendar day.

(d) The minimum value of the Current Indicative Value on any calendar day will be zero.

The actual trading price of the Securities in the secondary market may vary significantly from their Current Indicative Value (intraday indicative value).

If a Zero Value Event occurs, the Current Indicative Value (intraday indicative value) will be equal to zero for the remainder of the day it occurs and on all future calendar days. Upon the occurrence of a Zero Value Event, investors will lose their entire investment. You will not benefit from any future exposure to the Index after the occurrence of a Zero Value Event. See "Specific Terms of the Securities — Automatic Acceleration Upon Zero Value Event".

If the Securities undergo a split or reverse split, the Current Indicative Value (intraday indicative value) will be adjusted accordingly.

The "Accrued Fees" as of any date of determination means the Accrued Tracking Fee + the Accrued Financing Fee.

If the Securities undergo a split or reverse split, the Accrued Fees will be adjusted accordingly. The Securities are subject to an "Accrued Tracking Fee" per Security, calculated as follows:

- (a) On the Initial Trade Date, the Accrued Tracking Fee is equal to zero.
- (b) On any subsequent calendar day, the Accrued Tracking Fee is equal to: (a) the Accrued Tracking Fee as of the immediately preceding calendar day, *plus* the Daily Tracking Fee on such calendar day.
- (c) On the calendar day after each Reset Valuation Date, the Accrued Tracking Fee is reset to be equal to the Daily Tracking Fee on such calendar day.

"CME Term SOFR" means the CME Term SOFR Reference Rates published for one-, three-, six-, and 12-month tenors as administered by CME Group Benchmark Administration, Ltd. (or any successor administrator thereof).

The "Daily Tracking Fee" is an amount per Security calculated as follows:

- (a) On the Initial Trade Date, the Daily Tracking Fee is zero.
- (b) On any subsequent calendar day, the Daily Tracking Fee is equal to:
  - (1) (i) 0.95% *times* (ii) the Current Principal Amount on the immediately preceding calendar day *times* (iii) the Index Factor on such calendar day *times* (iv) the Residual Factor on the immediately preceding calendar day, *divided by* (2) 365
- (c) The minimum value of the Daily Tracking Fee on any calendar day will be zero.

The Daily Tracking Fee represents the investor fees calculated each day on the current value of the unleveraged notional amount invested in the Index per Security. These charges accrue and compound during the applicable period, and will reduce any amount you are entitled to receive at maturity or upon early redemption or call.

If the Securities undergo a split or reverse split, the Daily Tracking Fee will be adjusted accordingly. The Securities are subject to an "**Accrued Financing Fee**" per Security calculated as follows:

- (a) On the Initial Trade Date, the Accrued Financing Fee is equal to zero.
- (b) On any subsequent calendar day, the Accrued Financing Fee is equal to:
  - (1) the Accrued Financing Fee as of the immediately preceding calendar day, *plus* (2) the Daily Financing Fee on such calendar day.
- (c) On the calendar day after each Reset Valuation Date, the Accrued Financing Fee is reset to be equal to the Daily Financing Fee on such calendar day.
- (d) If a Permanent Deleveraging Event occurs, then on any calendar day following the Second Permanent Deleveraging Valuation Date, the Accrued Financing Fee will be equal to zero.

The "Daily Financing Fee" is an amount per Security calculated as follows:

- (a) On the Initial Trade Date, the Daily Financing Fee is equal to zero.
- (b) On any subsequent calendar day, the Daily Financing Fee is equal to:
  - (1) (i) the Financing Rate on such calendar day *times* (ii) the Current Principal Amount on the immediately preceding calendar day *times* (iii) the Residual Factor on the immediately preceding calendar day, *divided by* (2) 360.
- (c) If a Permanent Deleveraging Event occurs, then on any calendar day following the Second Permanent Deleveraging Valuation Date, the Daily Financing Fee will be equal to zero.
- (d) The minimum value of the Daily Financing Fee on any calendar day will be zero.

The Daily Financing Fee seeks to compensate UBS for providing investors with a leveraged participation in movements of the Index and is intended to approximate the financing costs that investors may have otherwise incurred had they sought to borrow funds at a similar rate from a third party to invest in the Index. These charges accrue and compound during the applicable period, and will reduce any amount that you will be entitled to receive at maturity or upon early redemption or call.

If the Securities undergo a split or reverse split, the Daily Financing Fee will be adjusted accordingly.

The "Financing Rate" will equal the sum of (a) 0.95% and (b) three-month CME Term SOFR rate plus a 0.2616% adjustment on the immediately preceding U.S. Government Securities Business Day. The minimum Financing Rate at any time will be 0.95%

For example, 5.24665% was the three-month CME Term SOFR rate on June 29, 2023. The Financing Rate (if it were based on the SOFR-Based Benchmark Replacement) on June 30, 2023 would have therefore been equal to: 0.95% + 5.24665% + 0.2616%, or 6.45825%.

# The "Measurement Period Cash Amount" is an amount per Security equal to:

- (a) \$0.00 on any calendar day, to but excluding the first day of a Measurement Period.
- (b) On the first day of a one-day Measurement Period:

At the close of trading on such Index Business Day, (Current Principal Amount on the immediately preceding calendar day × Index Factor, on such Index Business Day).

- (c) From and including the first day of a four-day Measurement Period:
  - (i) At the close of trading on each Index Business Day during the Measurement Period, the Measurement Period Cash Amount on the immediately preceding calendar day + (Current Principal Amount on the calendar day immediately preceding the first day of such Measurement Period × 0.25 × Index Factor, on such Index Business Day); and
  - (ii) On any calendar day during the Measurement Period that is not an Index Business Day, the Measurement Period Cash Amount on the immediately preceding Index Business Day.
- (d) On any calendar day after the last Index Business Day of a Measurement Period, the Measurement Period Cash Amount on the last Index Business Day of such Measurement Period.

Notwithstanding the foregoing, if, on any day during a Measurement Period, the Current Indicative Value or the Closing Indicative Value is *less than or equal to* the Measurement Period Cash Amount from the immediately preceding calendar day, then the Measurement Period Cash Amount for that day and all subsequent days will be fixed to be equal to the Measurement Period Cash amount from the immediately preceding calendar day.

The Measurement Period Cash Amount represents the portion of the Current Principal Amount that has been converted to cash on any given day of an applicable Measurement Period and is no longer tracking the Index.

At the close of trading of each Index Business Day during a four-day Measurement Period, approximately 25% of the Current Principal Amount on the calendar day immediately preceding the first day of the Measurement Period, will be deemed converted to cash and an applicable portion of the notional financing amount will separately be deemed converted to cash as well. After the close of trading on the final Index Business Day of a four-day Measurement Period, the Measurement Period Cash Amount will represent the averaged value of the Current Principal Amount that was deemed converted to cash across the four-days of such Measurement Period. In case of a one-day Measurement Period, approximately 100% of the Current Principal Amount will be deemed converted to cash and an applicable amount of financing will separately be deemed converted to cash, at the close of trading of the first day of such Measurement Period.

If the Securities undergo a split or reverse split, the Measurement Period Cash Amount will be adjusted accordingly.

- (a) if the Market Value of Securities outstanding as at the close of trading on the Index Business Day immediately preceding the Calculation Date is less than \$500,000,000, the Calculation Date, subject to adjustments as described under "— Market Disruption Event";
- (b) if the Market Value of Securities outstanding as at the close of trading on the Index Business Day immediately preceding the Calculation Date is equal to or greater than \$500,000,000, the four Index Business Days from and including the Calculation Date, subject to adjustments as described under "— Market Disruption Event."

For the purpose of determining the Final Measurement Period, the "Market Value" of the Securities outstanding as of the close of trading on the Index Business Day immediately preceding the Calculation Date, will equal:

(i) the Closing Indicative Value as of such Index Business Day *times* (ii) the number of Securities outstanding as reported on Bloomberg.

The "Index Calculation Agent" means the entity that calculates and publishes the level of the Index, which for each series of Securities is the entity set forth below:

Title of Securities	<b>Index Calculation Agent</b>
ETRACS 2x Leveraged US Dividend Factor TR ETN	S&P Dow Jones Indices
ETRACS 2x Leveraged US Growth Factor TR ETN	FTSE Russell
ETRACS 2x Leveraged US Size Factor TR ETN	FTSE Russell
ETRACS 2x Leveraged US Value Factor TR ETN	FTSE Russell
ETRACS 2x Leveraged MSCI US Minimum Volatility Factor TR ETN	MSCI, Inc.
ETRACS 2x Leveraged MSCI US Momentum Factor TR ETN	MSCI, Inc.
ETRACS 2x Leveraged MSCI US Quality Factor TR ETN	MSCI, Inc.

The "Calculation Date" means February 1, 2051, unless such day is not an Index Business Day, in which case the Calculation Date will be the next Index Business Day, subject to adjustment.

The Calculation Date represents the first Index Business Day of the Final Measurement Period.

"Index Business Day" means any day on which the Primary Exchange or market for trading of the Securities is scheduled to be open for trading.

"Primary Exchange" means, with respect to each Index Constituent Security or each constituent underlying a successor index, the primary exchange or market of trading such Index Constituent Security or such constituent underlying a successor index.

"U.S. Government Securities Business Day" means any day except for a Saturday, a Sunday or a day on which the Securities Industry and Financial Markets Association recommends that the fixed income departments of its members be closed for the entire day for purposes of trading in U.S. government securities.

# **Underlying Index**

The return of each series of Securities is based upon the performance of the applicable Index set forth on the cover page of the prospectus supplement. Each Index is designed to track the performance of a sector of the U.S. equity market and to reflect an investing style. We refer to the securities included in each Index as the "Index Constituent Securities" for such Index.

#### Early Redemption at the Option of the Holders

Subject to your compliance with the procedures described below and the potential postponements and adjustments as described under "— Market Disruption Event", you may submit a request to have us redeem your Securities on any Index Business Day no later than 12:00 noon and a confirmation of redemption by no later than 5:00 p.m. on the same Index Business Day. You must request that we redeem a minimum of 50,000 Securities, although we reserve the right from time to time to waive this minimum redemption amount in our sole discretion on a case-by-case basis. You should not assume you will be entitled to the benefit of any such waiver. For any applicable redemption request, the "Redemption Valuation Date" will be the first Index Business Day following the date that the applicable redemption notice and redemption confirmation are delivered, except that we reserve the right from time to time to accelerate, in our sole discretion on a case-by-case basis, the Redemption Valuation Date to the date on which we receive the notice of redemption rather than the following Index Business Day. You should not assume you will be entitled to any such acceleration. To satisfy the minimum redemption amount, your broker or other financial intermediary may bundle your Securities for redemption with those of other investors to reach this minimum amount of 50,000 Securities; however, there can be no assurance that they can or will do so.

The Securities will be redeemed and the holders will receive payment for their Securities on the second Index Business Day following the applicable Redemption Valuation Date (the "Redemption Date"). The first Redemption Date will be the fourth Index Business Day immediately following the Initial Trade Date and the Final Redemption Date will be the fourth Index Business Day immediately preceding the Maturity Date, subject to adjustments. In addition, if we have issued a call notice, the last Redemption Valuation Date will be the fourth Index Business Day prior to the Call Settlement Date, as applicable. If a Zero Value Event occurs, the last Redemption Date will be the date on which the Zero Value Event occurred.

If a Market Disruption Event is continuing or occurs on the applicable scheduled Redemption Valuation Date with respect to any of the Index Constituent Securities, such Redemption Valuation Date may be postponed as described under "— Market Disruption Event".

As of any Redemption Valuation Date, the "Redemption Fee Amount" means an amount per Security equal to:

(0.125% × Closing Indicative Value of the Security as of the Redemption Valuation Date).

If you exercise your right to have us redeem your Securities, subject to your compliance with the procedures described under "— Redemption Procedures", for each applicable Security you will receive a cash payment on the relevant Redemption Date equal to:

Closing Indicative Value as of the Redemption Valuation Date – Redemption Fee Amount.

We refer to this cash payment as the "**Redemption Amount**." If the amount calculated above is equal to or less than zero, the payment upon early redemption will be zero. We reserve the right from time to time to waive the Redemption Fee Amount in our sole discretion and on a case-by-case basis. There can be no assurance that we will elect to waive this fee and you should not assume you will be entitled to such fee waiver.

We will inform you of such Redemption Amount on the first Index Business Day following the applicable Redemption Valuation Date.

The redemption feature is intended to induce arbitrageurs to counteract any trading of the Securities at a discount to their indicative value, though there can be no assurance that arbitrageurs will employ the redemption feature in this manner or that they will be successful in counteracting any divergence in the market price of the Securities and their indicative value.

The following graphic illustrates the formula to determine the Redemption Amount, which has been simplified for ease of presentation:

Redemption Amount = Closing Indicative - Redemption Fee Amount Value

You may lose all or a substantial portion of your investment upon early redemption. The combined negative effect of the Accrued Fees and the Redemption Fee Amount will reduce your final payment. If the compounded leveraged quarterly return of the Index (or the unleveraged return of the Index, following a Permanent Deleveraging Event) is insufficient to offset the negative effect of the Accrued Fees and the Redemption Fee Amount, if applicable, or if the compounded leveraged quarterly return of the Index (or the unleveraged return of the Index, following a Permanent Deleveraging Event) is negative, you may lose all or a substantial portion of your investment upon early redemption. Loss Rebalancing Events will cause compounding to occur more frequently than quarterly.

The Securities may be called by UBS prior to the Maturity Date pursuant to its Call Right and, upon the occurrence of a Zero Value Event, the Securities will be automatically accelerated and mandatorily redeemed by UBS. See "Specific Terms of the Securities — UBS's Call Right" and "Specific Terms of the Securities — Automatic Acceleration Upon Zero Value Event".

# **Redemption Procedures**

To redeem your Securities, you must instruct your broker or other person through whom you hold your Securities to take the following steps through normal clearing system channels:

- deliver a notice of redemption, which we refer to as a "**Redemption Notice**" to UBS via email no later than 12:00 noon on the Index Business Day on which you elect to exercise your redemption right. If we receive your Redemption Notice by the time specified in the preceding sentence, we will respond by sending you a form of confirmation of redemption;
- deliver the signed confirmation of redemption, which we refer to as the "Redemption Confirmation", to us via email in the specified form by 5:00 p.m. on the same day. We or our affiliate must acknowledge receipt in order for your Redemption Confirmation to be effective;
- instruct your DTC custodian to book a delivery vs. payment trade with respect to your Securities on the applicable Redemption Date at a price equal to the Redemption Amount; and
- > cause your DTC custodian to deliver the trade as booked for settlement via DTC at or prior to 12:00 noon on the applicable Redemption Date.

Different brokerage firms may have different deadlines for accepting instructions from their customers. Accordingly, as a beneficial owner of the Securities, you should consult the brokerage firm through which you own your interest for the relevant deadline. If your broker delivers your Redemption Notice after 12:00 noon, or your Redemption Confirmation after 5:00 p.m., on the Index Business Day prior to the applicable Redemption Valuation Date, your Redemption Notice will not be effective, you will not be able to redeem your Securities until the following Redemption Date and your broker will need to complete all the required steps if you should wish to redeem your Securities on any subsequent Redemption Date. In addition, UBS may request a medallion signature guarantee or such assurances of delivery as it may deem necessary in its sole discretion. All instructions given to participants from beneficial owners of Securities relating to the right to redeem their Securities will be irrevocable. If your DTC custodian or your brokerage firm is not a current UBS customer, UBS will be required to on-board such DTC custodian or brokerage firm, in compliance with its internal policies and procedures, before it can accept your Redemption Notice, your Redemption Confirmation or otherwise process your redemption request. This on-boarding process may delay your Redemption Valuation Date and Redemption Date. Furthermore, in certain circumstances, UBS may be unable to on-board your DTC custodian or your brokerage firm.

We reserve the right from time to time to waive the minimum redemption amount or the Redemption Fee Amount in our sole discretion on a case-by-case basis. In addition, we reserve the right from time to time to accelerate, in our sole discretion on a case-by-case basis, the Redemption Valuation Date to the date on which we receive the Redemption Notice rather than the following Index Business Day. You should not assume you will be entitled to any such waiver or election to accelerate the Redemption Valuation Date.

## **UBS's Call Right**

UBS may at its option redeem all, but not less than all, of the issued and outstanding Securities of any series. To exercise its Call Right, UBS must provide notice to the holders of such Securities (which may be provided via press release) not less than 18 calendar days prior to the Call Settlement Date specified by UBS in such notice. If we call the Securities, you will receive a cash payment equal to the Closing Indicative Value on the last Index Business Day in the Call Measurement Period. We refer to this cash payment as the "Call Settlement Amount."

If the amount calculated above is equal to or less than zero, the payment upon UBS's exercise of its Call Right will be zero.

We will inform you of such Call Settlement Amount on the first Index Business Day following the last Index Business Day in the Call Measurement Period.

The holders will receive payment for their Securities on the third Index Business Day following the last Index Business Day in the Call Measurement Period (the "Call Settlement Date"). If a Market Disruption Event is continuing or occurs on the scheduled Call Valuation Date with respect to any of the Index Constituent Securities, such Call Valuation Date may be postponed as described under "— Market Disruption Event".

## The "Call Measurement Period" means:

- (a) if the Market Value of Securities outstanding at the close of trading on the Index Business Day immediately preceding the date we issue a notice of exercise of our Call Right is less than \$500,000,000, the Call Valuation Date, subject to adjustments as described under "— Market Disruption Event"; and
- (b) if the Market Value of Securities outstanding as at the close of trading on the Index Business Day immediately preceding the date we issue a notice of exercise of our Call Right is equal to or greater than \$500,000,000, the four Index Business Days from and including the Call Valuation Date, subject to adjustment as described under "— Market Disruption Event."

For the purpose of determining the Final Measurement Period, the "Market Value" of the Securities outstanding as of the close of trading on the Index Business Day immediately preceding the date of delivery by UBS of its notice to holders (which may be provided via press release) of its exercise of its Call Right will equal:

(i) The Closing Indicative Value as of such Index Business Day *times* (ii) the number of Securities outstanding as reported on Bloomberg.

The "Call Valuation Date" means the date we specify in our notice to holders (which may be provided via press release) of our exercise of our Call Right.

In any notice to holders exercising our Call Right, we will specify how many days are included in the Call Measurement Period.

The following graphic illustrates the formula to determine the Call Settlement Amount, which has been simplified for ease of presentation:

# Cash Settlement Amount = Closing Indicative Value, on last Index Business Day in Call Measurement Period

You may lose all or a substantial portion of your investment if we exercise our Call Right. The combined negative effect of the Accrued Fees will reduce your final payment. If the compounded leveraged quarterly return of the Index (or the unleveraged return of the Index, following a Permanent Deleveraging Event) is insufficient to offset the negative effect of the Accrued Fees, or if the compounded leveraged quarterly return of the Index (or the unleveraged return of the Index, following a Permanent Deleveraging Event) is negative, you may lose all or a substantial portion of your investment upon a call. Loss Rebalancing Events will cause compounding to occur more frequently than quarterly.

In addition, upon the occurrence of a Zero Value Event, the Securities will be automatically accelerated and mandatorily redeemed by UBS. See "Specific Terms of the Securities — Automatic Acceleration Upon Zero Value Event" below.

# **Automatic Acceleration Upon Zero Value Event**

For each series of Securities, a Zero Value Event represents the first instance when the Current Indicative Value (intraday indicative value) or the Closing Indicative Value is less than or equal to zero (other than on an Excluded Day, as defined below). It will have the effect of permanently resetting the value of your Securities to zero and accelerating the Securities. You will not benefit from any future exposure to the applicable Index after the occurrence of a Zero Value Event.

A Zero Value Event can occur only if a Permanent Deleveraging Event occurs and the Current Indicative Value (intraday indicative value) or the Closing Indicative Value declines to zero before the leverage of your Securities is reset to 1.0 at the close of trading on the Index Business Day following such event (or if such event occurs after 3:15 p.m. on any Index Business Day which would not otherwise have been a Loss Rebalancing Valuation Date, the second Index Business Day following such event), as described under "Permanent Deleveraging Valuation Dates" above.

A "Zero Value Event" occurs if the Current Indicative Value (intraday indicative value) or the Closing Indicative Value on any Index Business Day (other than an Excluded Day, as defined below) is less than or equal to zero. From immediately after the Zero Value Event and on all future calendar days, the Current Indicative Value (intraday indicative value) and the Closing Indicative Value will be set equal to zero.

As used above, an "Excluded Day" means (i) any calendar day after the Second Permanent Deleveraging Valuation Date (ii) any calendar day on or after which a Zero Value Event has already occurred, and (iii) any calendar day after the last day of an applicable Measurement Period.

In the event that a Zero Value Event has occurred, UBS will issue a press release shortly after the event; provided that the failure to do so shall not affect the automatic acceleration and redemption of the Securities. The Securities will be suspended from trading intraday shortly after the event occurs and will likely not be open for trading again on NYSE Arca.

# You will lose your entire investment upon the occurrence of a Zero Value Event.

In addition, we may call the Securities prior to the Maturity Date pursuant to our Call Right. See "Specific Terms of the Securities — UBS's Call Right".

# **Loss Rebalancing Events**

A Loss Rebalancing Event will have the effect of deleveraging your Securities with the aim of resetting the then-current leverage to approximately 2.0. This means that after a Loss Rebalancing Event, a constant percentage increase in the Index Closing Level will have less of a positive effect on the value of your Securities relative to before the occurrence of the Loss Rebalancing Event.

A "Loss Rebalancing Event" occurs if, at any time, the Intraday Index Value on such Index Business Day (other than an Excluded Day, as used below) decreases by 20% or more from the previous Last Reset Index Closing Level.

Loss Rebalancing Events may occur multiple times over the term of the Securities and may occur multiple times during a single calendar quarter. This means both that (i) the Current Principal Amount may be reset more frequently than quarterly and (ii) the cumulative effect of compounding and fees will have increased as a result of the Loss Rebalancing Event(s). Because each Loss Rebalancing Event will have the effect of deleveraging your Securities, following a Loss Rebalancing Event your Securities will have less exposure to a potential positive gain in value relative to the exposure before the occurrence of such Loss Rebalancing Event.

As used above, an "Excluded Day" means (i) the Index Business Day immediately preceding any Quarterly Reset Valuation Date, if a Loss Rebalancing Event occurs after 3:15 p.m. on such day, (ii) any Quarterly Reset Valuation Date, (iii) any Loss Rebalancing Valuation Date, (iv) the Index Business Day immediately preceding the first day of an applicable Measurement Period, if a Loss Rebalancing Event occurs after 3:15 p.m. on such day (v) any calendar day from and including the first day of an applicable Measurement Period, (vi) the First or Second Permanent Deleveraging Valuation Dates, (vii) any calendar day after the Second Permanent Deleveraging Valuation Date, and (ix) any calendar day on or after which a Zero Value Event has occurred.

# "Loss Rebalancing Valuation Date" means:

- (a) if a Loss Rebalancing Event occurs at or prior to 3:15 p.m. on an Index Business Day, the day that such Loss Rebalancing Event occurs, subject to adjustment as described under "— Market Disruption Event"; and
- (b) if a Loss Rebalancing Event occurs after 3:15 p.m. on an Index Business Day, the first Index Business Day following the occurrence of such Loss Rebalancing Event, subject to adjustment as described under "— Market Disruption Event."

# **Permanent Deleveraging Event**

A Permanent Deleveraging Event will have the effect of deleveraging your Securities, with the aim of permanently resetting the then-current leverage to 1.0 over two Index Business Days. The leverage at the end of the First Permanent Deleveraging Valuation Date is reset to approximately 2.0 and the leverage at the end of the Second Permanent Deleveraging Valuation Date is reset to 1.0. This means that after a Permanent Deleveraging Event, a constant percentage increase in the Index Closing Level will have less of a positive effect on the value of your Securities than it would have had before the occurrence of the Permanent Deleveraging Event. If such an event were to occur, it most likely would occur only following a Loss Rebalancing Event and prior to the completion of the associated leverage reset to 2.0, which would generally occur at the end of the Index Business Day following the Index Business Day on which the Loss Rebalancing Event occurred or, if the Loss Rebalancing Event occurs 3:15 p.m. on an Index Business Day, at the end of the second Index Business Day following the Index Business Day on which the Loss Rebalancing Event occurred.

A "Permanent Deleveraging Event" occurs if, at any time on an Index Business Day (other than an Excluded Day, as defined below), the Intraday Index Value decreases by 40% or more from the Last Reset Index Closing Level. If a Permanent Deleveraging Event occurs, the Current Principal Amount of the Securities will be reset over two Index Business Days.

As used above, an "Excluded Day" means (i) the First or Second Permanent Deleveraging Valuation Dates, (ii) any calendar day after the Second Permanent Deleveraging Valuation Date, (iii) any day on or after which a Zero Value Event occurs, (iv) the day which is two Index Business Days prior to the first day of a Measurement Period, if a Permanent Deleveraging Event occurs after 3:15 p.m. on such day, and (v) any calendar day from and including the Index Business Day immediately preceding the first day of a Measurement Period.

"Permanent Deleveraging Valuation Dates" means the First Permanent Deleveraging Valuation Date and the Second Permanent Deleveraging Valuation Date, each as defined below:

- (a) The "First Permanent Deleveraging Valuation Date" means:
  - (i) any Index Business Day, which otherwise would have been a Loss Rebalancing Valuation Date, but on which a Permanent Deleveraging Event has occurred, subject to adjustment as described under "— Market Disruption Event"; or
  - (ii) if a Permanent Deleveraging Event occurs after 3:15 p.m. on any Index Business Day which would not otherwise have been a Loss Rebalancing Valuation Date, then the first Index Business Day following the occurrence of such Permanent Deleveraging Event, subject to adjustment as described under "— Market Disruption Event."

The leverage of your Securities will be reset to approximately 2.0 at the close of trading on the First Permanent Deleveraging Valuation Date.

(b) The "Second Permanent Deleveraging Valuation Date" means the Index Business Day immediately following the First Permanent Deleveraging Valuation Date, subject to adjustment as described under "— Market Disruption Event."

The leverage of your Securities will be reset to 1.0 at the close of trading on the Second Permanent Deleveraging Valuation Date.

## **Split or Reverse Split of the Securities**

We may, at any time in our sole discretion, initiate a split or reverse split of your Securities. If we decide to initiate a split or reverse split, as applicable, we will issue a press release announcing the split or reverse split and its effective date. The date of such press release shall be deemed to be the "announcement date" of the split or the reverse split, the record date for any split or reverse split will be the tenth Business Day after the announcement date, and the effective date will be the next Business Day after the record date.

If the Securities undergo a split or reverse split, we will adjust the Current Principal Amount, Closing Indicative Value, Current Indicative Value, Accrued Fees, Measurement Period Cash Amount and other relevant terms of the Securities accordingly. For example, if the Securities undergo a 4:1 split, every investor who holds a Security via The Depository Trust Company ("DTC") on the relevant record date will, after the split, hold four Securities, and adjustments will be made as described below. The Current Principal Amount on such record date will be *divided by* four to reflect the 4:1 split. The adjusted Current Principal Amount will be rounded to eight decimal places. The split or reverse split will become effective at the opening of trading of the Securities on the Index Business Day immediately following the record date. The split will not occur if we exercise our Call Right before it becomes effective.

In the case of a reverse split, the Current Principal Amount and other relevant terms of the Securities will be adjusted accordingly and we will determine in our sole discretion the manner in which we will address odd numbers of Securities (commonly referred to as "partials"). For example, if the Securities undergo a 1:4 reverse split, every investor who holds four Securities via DTC on the relevant record date will, after the reverse split, hold only one Security and the Current Principal Amount of the Securities on such record date will be multiplied by four to reflect the 1:4 reverse split. The adjusted Current Principal Amount will be rounded to eight decimal places. The reverse split will become effective at the opening of trading of the Securities on the Index Business Day immediately following the record date. The reverse split will not occur if we exercise our Call Right before it becomes effective.

Holders who own a number of Securities on the record date that is not evenly divisible by the reverse split divisor (which in the case of a 1:4 reverse split, for example, will be 4) will receive the same treatment as all other holders for the maximum number of Securities they hold that is evenly divisible by the reverse split divisor. We will determine in our sole discretion the manner in which we compensate holders for their remaining or "partial" Securities when we announce the reverse split, though our current intention is to provide holders with a cash payment for their partials on the 17th Business Day following the announcement date in an amount equal to the appropriate percentage of the Closing Indicative Value of the reverse split-adjusted Securities on the 15th Business Day following the announcement date. For example, in the case of a 1:4 reverse split, a holder who held 23 Securities via DTC on the record date would receive five post-reverse split Securities on the immediately following Business Day, and a cash payment on the 17th Business Day following the announcement date that is equal to 3/4 of the Current Principal Amount of the reverse split-adjusted Securities on the 15th Business Day following the announcement date.

## **Security Calculation Agent**

UBS Securities LLC will act as the Security Calculation Agent. The Security Calculation Agent will be solely responsible for all determinations and calculations regarding the value of the Securities, including, among other things, at maturity or upon early redemption or call, or at other times, the Current Principal

Amount, Current Indicative Value (which we also refer to as the intraday indicative value), Closing Indicative Value, Market Disruption Events, Business Days, Index Business Days, the Leverage Factor, the Index Factor, the Index Performance Ratio, the Residual Factor, the Index Closing Level, the Financing Rate, the Accrued Fees (including determining any successor to the LIBOR base rate), the Redemption Fee Amount, the Cash Settlement Amount, if any, that we will pay you at maturity, the Redemption Amount, if any, that we will pay you upon redemption, the Call Settlement Amount, that we will pay you if we call the Securities, whether a Loss Rebalancing Event has occurred, whether a Permanent Deleveraging Event has occurred and whether any day is an Index Business Day and all such other matters as may be specified elsewhere herein as matters to be determined by the Security Calculation Agent. If any Intraday Index Value as published by Bloomberg on any Index Business Day is manifestly incorrect, the Security Calculation Agent may base its determination of whether a Loss Rebalancing Event, Permanent Deleveraging Event or Zero Value Event shall have occurred on such Index Business Day on its own determination of such Intraday Index Value. In making such determination, the Security Calculation Agent may consider any relevant information, including, without limitation, relevant market data in the relevant market supplied by one or more third parties or from internal sources or affiliates. The Security Calculation Agent will also be responsible for determining whether the Index has been discontinued and whether there has been a material change in the Index. The Security Calculation Agent will make all such determinations and calculations in its sole discretion, and absent manifest error, all determinations of the Security Calculation Agent will be conclusive for all purposes and binding on us, you, and all other persons having an interest in the Securities, without liability on the part of the Security Calculation Agent. You will not be entitled to any compensation from us for any loss suffered as a result of any determinations or calculations made by the Security Calculation Agent. We may appoint a different Security Calculation Agent from time to time after the date of the prospectus supplement without your consent and without notifying you.

The Security Calculation Agent will provide written notice to the trustee at its New York office, on which notice the trustee may conclusively rely, of the amount to be paid at maturity or upon early redemption or call, on or prior to 12:00 noon on the Index Business Day immediately preceding the Maturity Date, any Redemption Date or any Call Settlement Date.

All dollar amounts related to determination of the Accrued Fees, the Current Principal Amount, and any Redemption Amount, Redemption Fee Amount, Call Settlement Amount or Cash Settlement Amount per Security will be rounded to the nearest tenthousandth, with five one hundred-thousandths rounded upward (*e.g.*, .76545 would be rounded up to .7655); and all dollar amounts paid to any holder of Securities will be rounded to the nearest cent, with one-half cent rounded upward.

# **Market Disruption Event**

To the extent a Market Disruption Event with respect to the Index has occurred or is continuing during a four-day Measurement Period, the Index Closing Level for such day will be determined by the Security Calculation Agent or one of its affiliates on the first succeeding Index Business Day on which a Market Disruption Event does not occur or is not continuing with respect to the Index. The remaining Index Business Days in the Measurement Period will be postponed accordingly, and the remaining Index Business Days in the Measurement Period will resume again following the suspension of the Market Disruption Event. For example, if the four-day Measurement Period for purposes of calculating the Call Settlement Amount, is scheduled for June 2, June 3, June 4 and June 5, and there is a Market Disruption Event with respect to the Index on June 2, but no other Market Disruption Event during such Call Measurement Period, then June 3 will become the first Index Business Day of the Measurement Period, June 4th the second Index Business Day, June 5th the third Index Business Day and the next Index Business Day after June 5th would be the final day of the Measurement Period. The same approach would be applied if there is a Market Disruption Event during a four-day Final Measurement Period.

To the extent a Market Disruption Event with respect to the Index has occurred or is continuing on the Redemption Valuation Date, Call Valuation Date (in the event that the Call Measurement Period is the Call Valuation Date), Calculation Date (in the event that the Final Measurement Period is the Calculation Date) or any Reset Valuation Date, the Index Closing Level for such Redemption Valuation Date, Call Valuation Date, Calculation Date or Reset Valuation Date will be determined by the Security Calculation Agent or one of its affiliates on the first succeeding Index Business Day on which a Market Disruption Event does not occur or is not continuing with respect to the Index. For example, if the Redemption Valuation Date, for purposes of calculating a Redemption Amount, is based on the Index Closing Level on June 2 and there is a Market Disruption Event with respect to the Index on June 2, then the Index Closing Level on June 3 will be used to calculate the Redemption Amount, assuming that no such Market Disruption Event has occurred or is continuing on June 3.

In no event, however, will any postponement pursuant to either of the two immediately preceding paragraphs result in the affected Index Business Day of the Measurement Period or any Redemption Valuation Date, Call Valuation Date (in the event that the Call Measurement Period is the Call Valuation Date), Calculation Date (in the event that the Final Measurement Period is the Calculation Date) or Reset Valuation Date occurring more than five Index Business Days following the day originally scheduled to be such Index Business Day of the Measurement Period or such Redemption Valuation Date, Call Valuation Date, Calculation Date or Reset Valuation Date. If a Market Disruption Event has occurred or is continuing with respect to the Index on the fifth Index Business Day following the date originally scheduled to be such Index Business Day of the Measurement Period or any Redemption Valuation Date, Call Valuation Date, Calculation Date or any Reset Valuation Date, the Security Calculation Agent or one of its affiliates will determine the Index Closing Level based on its good faith estimate of the Index Closing Level that would have prevailed on such fifth Index Business Day but for such Market Disruption Event.

Any of the following will be a "Market Disruption Event" with respect to the Index, in each case as determined by the Security Calculation Agent in its sole discretion:

- (a) suspension, absence or material limitation of trading in a material number of Index Constituent Securities, whether by reason of movements in price exceeding limits permitted by the Primary Exchange or otherwise;
- (b) suspension, absence or material limitation of trading in option or futures contracts relating to the Index or to a material number of Index Constituent Securities in the primary market or markets for those contracts;
- (c) the Index is not published; or
- (d) in any other event, if the Security Calculation Agent determines in its sole discretion that the event materially interferes with our ability or the ability of any of our affiliates to unwind all or a material portion of a hedge with respect to the Securities that we or our affiliates have effected or may effect as described in the section entitled "Use of Proceeds and Hedging."

The following events will not be Market Disruption Events with respect to the Index:

- (a) a limitation on the hours or numbers of days of trading, but only if the limitation results from an announced change in the regular business hours of the relevant market; and
- (b) a decision to permanently discontinue trading in the option or futures contracts relating to the Index or any Index Constituent Securities.

For this purpose, an "absence of trading" in the primary securities market on which option or futures contracts related to the Index or any Index Constituent Securities are traded will not include any time when that market is itself closed for trading under ordinary circumstances.

# **Default Amount on Acceleration**

If an event of default occurs and the maturity of the Securities is accelerated, we will pay the default amount in respect of the principal of the Securities at maturity. We describe the default amount below under "— Default Amount."

For the purpose of determining whether the holders of our Medium-Term Notes, Series B, of which the Securities are a part, are entitled to take any action under the indenture, we will treat the outstanding principal amount of the Medium-Term Notes, Series B, as constituting the outstanding principal amount of the Securities. Although the terms of the Securities may differ from those of the other Medium-Term Notes, Series B, holders of specified percentages in principal amount of all Medium-Term Notes, Series B, together in some cases with other series of our debt securities, will be able to take action affecting all the Medium-Term Notes, Series B, including the Securities. This action may involve changing some of the terms that apply to the Medium-Term Notes, Series B, accelerating the maturity of the Medium-Term Notes, Series B after a default or waiving some of our obligations under the indenture. We discuss these matters in "Medium-Term Notes, Series B" above under "Description of Debt Securities We May Offer — Default, Remedies and Waiver of Default" and "Description of Debt Securities We May Offer — Modification and Waiver of Covenants."

#### **Default Amount**

The default amount for the Securities on any day will be an amount, in U.S. dollars as determined by the Security Calculation Agent in its sole discretion, for the aggregate Stated Principal Amount of the Securities, equal to the cost of having a qualified financial institution, of the kind and selected as described below, expressly assume all our payment and other obligations with respect to the Securities as of that day and as if no default or acceleration had occurred, or to undertake other obligations providing substantially equivalent economic value to you with respect to the Securities. That cost will equal:

- > the lowest amount that a qualified financial institution would charge to effect this assumption or undertaking, plus
- the reasonable expenses, including reasonable attorneys' fees, incurred by the holders of the Securities in preparing any documentation necessary for this assumption or undertaking.

During the default quotation period for the Securities, which we describe below, the holders of the Securities and/or we may request a qualified financial institution to provide a quotation of the amount it would charge to effect this assumption or undertaking. If either party obtains a quotation, it must notify the other party in writing of the quotation. The amount referred to in the first bullet point above will equal the lowest — or, if there is only one, the only — quotation obtained, and as to which notice is so given, during the default quotation period. With respect to any quotation, however, the party not obtaining the quotation may object, on reasonable and significant grounds, to the assumption or undertaking by the qualified financial institution providing the quotation and notify the other party in writing of those grounds within two Business Days after the last day of the default quotation period, in which case that quotation will be disregarded in determining the default amount.

## **Default Quotation Period**

The default quotation period is the period beginning on the day the default amount first becomes due and ending on the third Index Business Day after that day, unless:

- > no quotation of the kind referred to above is obtained, or
- > every quotation of that kind obtained is objected to within five Index Business Days after the due date as described above

If either of these two events occurs, the default quotation period will continue until the third Index Business Day after the first Index Business Day on which prompt notice of a quotation is given as described above. If that quotation is objected to as described above within five Index Business Days after that first Index Business Day, however, the default quotation period will continue as described in the prior sentence and this sentence.

In any event, if the default quotation period and the subsequent two Index Business Day objection period have not ended before the Calculation Date, then the default amount will equal the Stated Principal Amount of the Securities.

#### **Qualified Financial Institutions**

For the purpose of determining the default amount at any time, a qualified financial institution must be a financial institution organized under the laws of any jurisdiction in the United States of America, Europe or Japan, which at that time has outstanding debt obligations with a stated maturity of one year or less from the date of issue and rated either:

- A-1 or higher by Standard & Poor's Financial Services LLC, a subsidiary of The McGraw-Hill Companies, Inc., or any successor, or any other comparable rating then used by that rating agency, or
- ➤ P-1 or higher by Moody's Investors Service or any successor, or any other comparable rating then used by that rating agency.

# Discontinuance of or Adjustments to the Index or Termination of Our License Agreements with the Index Sponsors; Alteration of Method of Calculation

If (i) an Index Sponsor or the Index Calculation Agent announces that it intends to discontinue, or discontinues, publication of, or otherwise fails to publish, the Index, (ii) our license agreement with the Index Sponsor terminates or (iii) the Index Sponsor or Index Calculation Agent does not make the Index Constituent Securities and/or their unit weighting available to the Security Calculation Agent, and, in each case, any other person or entity publishes an index licensed to UBS that the Security Calculation Agent determines is comparable to the Index and for which the Index Constituent Securities and/or their unit weighting are available to the Security Calculation Agent (such index being referred to herein as a "successor index"), and the Security Calculation Agent approves such index as a successor index, then on and after the date determined by the Security Calculation Agent, the Security Calculation Agent will determine the Index Closing Level on the applicable dates of determination and the amount payable at maturity or upon early redemption or call and all other related payments terms by reference to such successor index.

Upon any selection by the Security Calculation Agent of a successor index, the Security Calculation Agent will cause written notice of the successor index and the date on and after which the Index Closing Level will be determined by reference thereto be furnished to the trustee, to us and to the holders of the Securities.

If an Index Sponsor or Index Calculation Agent discontinues publication of the Index, our license agreement with the Index Sponsor terminates or the Index Sponsor or Index Calculation Agent do not make the Index Constituent Securities and/or their unit weighting available to the Security Calculation Agent, prior to, and such discontinuation, termination or unavailability is continuing on the Calculation Date or any Index Business Day during a Measurement Period, or on the Redemption Valuation Date or

on any Reset Valuation Date, as applicable, or on any other relevant date on which the Index Closing Level is to be determined and the Security Calculation Agent determines that no successor index is available at such time, or the Security Calculation Agent has previously selected a successor index and publication of such successor index is discontinued prior to, and such discontinuation is continuing on the Calculation Date or any Index Business Day during a Measurement Period, or on the Redemption Valuation Date or on any Reset Valuation Date, or any other relevant date on which the Index Closing Level is to be determined, then the Security Calculation Agent will determine the Index Closing Level using the Index Closing Level on the last Index Business Day immediately prior to such discontinuation or unavailability, as adjusted for certain corporate actions. In such event, the Security Calculation Agent will cause notice thereof to be furnished to the trustee, to us and to the holders of the Securities.

Notwithstanding these alternative arrangements, discontinuation of the publication of the Index or successor index, as applicable, may adversely affect the value of the Securities.

In addition, if an Index Replacement Event (as defined below) occurs at any time and the Index Sponsor or anyone else publishes an index that the Security Calculation Agent determines is comparable to the Index (the "Substitute Index"), then the Security Calculation Agent may elect, in its sole discretion, to permanently replace the original Index with the Substitute Index for all purposes under the Securities, and all provisions described in the prospectus supplement as applying to the Index will thereafter apply to the Substitute Index instead. In such event, the Security Calculation Agent will make such adjustments, if any, to any level of the Index or Substitute Index that is used for purposes of the Securities as it determines are appropriate in the circumstances. If the Security Calculation Agent elects to replace the original Index with a Substitute Index, then the Security Calculation Agent will determine all amounts hereunder, Current Principal Amount, Current Indicative Value (intraday indicative value), Closing Indicative Value, Index Factor, Index Performance Ratio, Residual Factor, Accrued Fees, Index Closing Levels on the applicable dates of determination, all other related payment terms and the amount payable at maturity or upon early redemption or call by reference to such Substitute Index. If the Security Calculation Agent so elects to replace the original Index with a Substitute Index, the Security Calculation Agent will cause written notice thereof to be furnished to the trustee, to us and to the holders of the Securities of the Securities.

# An "Index Replacement Event" means:

- an amendment to or change (including any officially announced proposed change) in the laws, regulations or rules of the United States (or any political subdivision thereof), or any jurisdiction in which a Primary Exchange (as defined herein) is located that (i) makes it illegal for UBS AG or its affiliates to hold, acquire or dispose of the Index Constituent Securities included in the Index or options, futures, swaps or other derivatives on the Index or on the Index Constituent Securities included in the Index (including but not limited to exchange-imposed position limits), (ii) materially increases the cost to us, our affiliates, third parties with whom we transact or similarly situated third parties in performing our or their obligations in connection with the Securities, (iii) has a material adverse effect on any of these parties' ability to perform their obligations in connection with the Securities, or (iv) materially affects our ability to issue or transact in exchange traded notes similar to the Securities, each as determined by the Security Calculation Agent;
- (b) any official administrative decision, judicial decision, administrative action, regulatory interpretation or other official pronouncement interpreting or applying those laws, regulations or rules that is announced on or after February 4, 2021 that (i) makes it illegal for UBS AG or its affiliates to hold, acquire or dispose of the Index Constituent Securities included in the Index or options, futures, swaps or other derivatives on the Index or on the Index Constituent Securities (including but not limited to exchange-imposed position limits), (ii) materially increases the cost to us, our affiliates, third parties with whom we transact or similarly situated third parties in performing our or their obligations in connection with the Securities, (iii) has a material adverse effect on the ability of us, our affiliates, third parties with whom we transact or a similarly situated third party to perform our or their obligations in connection with the Securities, or (iv) materially affects our ability to issue or transact in exchange traded notes similar to the Securities, each as determined by the Security Calculation Agent;
- (c) any event that occurs on or after February 4, 2021 that makes it a violation of any law, regulation or rule of the United States (or any political subdivision thereof), or any jurisdiction in which a Primary Exchange (as defined herein) is located, or of any official administrative decision, judicial decision, administrative action, regulatory interpretation or other official pronouncement interpreting or applying those laws, regulations or rules, (i) for UBS AG or its affiliates to hold, acquire or dispose of the Index Constituent Securities or options, futures, swaps or other derivatives on the Index or on the Index Constituent Securities (including but not limited to exchange-imposed position limits), (ii) for us, our affiliates, third parties with whom we transact or similarly situated third parties to perform our or their obligations in connection with the Securities, or (iii) for us to issue or transact in exchange traded notes similar to the Securities, each as determined by the Security Calculation Agent;
- (d) any event, as determined by the Security Calculation Agent, as a result of which we or any of our affiliates or a similarly situated party would, after using commercially reasonable efforts, be unable to, or would incur a materially increased amount of tax, duty, expense or fee (other than brokerage commissions) to, acquire, establish, re-establish, substitute, maintain, unwind or dispose of any transaction or asset it deems necessary to hedge the risk of the Securities, or realize, recover or remit the proceeds of any such transaction or asset; or

(e) as determined by the Security Calculation Agent, the primary exchange or market for trading for the Securities, if any, announces that pursuant to the rules of such exchange or market, as applicable, the Securities cease (or will cease) to be listed, traded or publicly quoted on such exchange or market, as applicable, for any reason and are not immediately re-listed, re-traded or re-quoted on an exchange or quotation system located in the same country as such exchange or market, as applicable.

Notwithstanding these alternative arrangements, discontinuation of the publication of the Index or successor index, as applicable, may adversely affect the value of the Securities.

If at any time the method of calculating the Index, a successor index or a Substitute Index, or the value thereof, is changed in a material respect, or if the Index or a successor or Substitute Index is in any other way modified so that the Index Closing Level of the Index or such successor or Substitute Index does not, in the opinion of the Security Calculation Agent, fairly represent the Index Closing Level of the Index or such successor or Substitute Index had such changes or modifications not been made, then the Security Calculation Agent will make such calculations and adjustments as, in the good faith judgment of the Security Calculation Agent, may be necessary in order to arrive at an Index Closing Level of an index comparable to the Index or such successor index, as the case may be, as if such changes or modifications had not been made, and the Security Calculation Agent will calculate the Index Closing Level for the Index or such successor or Substitute Index with reference to the Index or such successor or Substitute Index, as adjusted. The Security Calculation Agent will accordingly calculate the Index Closing Level, the Index Performance Ratio, the Last Reset Index Closing Level, the Accrued Fees, and any Redemption Amount, Redemption Fee Amount, Cash Settlement Amount or Call Settlement Amount, and all related payment terms based directly or indirectly on the Index Closing Level calculated by the Security Calculation Agent. Accordingly, if the method of calculating the Index or a successor or Substitute Index is modified so that the level of the Index or such successor or Substitute Index is a fraction or multiple of what it would have been if there had been no such modification (e.g., due to a rebasing of the Index ),

which, in turn, causes the Index Closing Level of the Index or such successor or Substitute Index to be a fraction of what it would have been if there had been no such modification, then the Security Calculation Agent will make such calculations and adjustments in order to arrive at an Index Closing Level for the Index or such successor or Substitute Index as if it had not been modified (*e.g.*, as if such rebasing had not occurred).

In the event that the Security Calculation Agent elects to replace the Index with a successor index or a Substitute Index, UBS may, in its sole discretion, amend the title of the Securities in order to remove reference the former Index and to make such other changes to the title of the Securities as it considers necessary or desirable to reflect the name and/or characteristics of the relevant successor index or Substitute Index, as applicable.

All determinations and adjustments to be made by the Security Calculation Agent may be made in the Security Calculation Agent's sole discretion. See "Risk Factors — Risks Relating to Creditworthiness, Conflicts of Interest, Hedging Activities and Regulation of UBS — There are potential conflicts of interest between you and the Security Calculation Agent" in the prospectus supplement for a discussion of certain conflicts of interest which may arise with respect to the Security Calculation Agent.

# Manner of Payment and Delivery

Any payment on or delivery of the Securities at maturity or upon early redemption or call will be made to accounts designated by you and approved by us, or at the corporate trust office of the trustee in New York City, but only when the Securities are surrendered to the trustee at that office. We also may make any payment or delivery in accordance with the applicable procedures of the depositary.

# **Reissuances or Reopened Issues**

We may, at our sole discretion, "reopen" or reissue any series of Securities. We issued the Securities initially in an amount having the aggregate Stated Principal Amount specified on the cover of the prospectus supplement. We may issue additional Securities in amounts that exceed the amount on the cover at any time, without your consent and without notifying you. The Securities do not limit our ability to incur other indebtedness or to issue other securities. Also, we are not subject to financial or similar restrictions by the terms of the Securities. For more information, please refer to "Description of Debt Securities We May Offer — Amounts That We May Issue" in "Medium-Term Notes, Series B" above.

These further issuances, if any, will be consolidated to form a single class with the originally issued Securities of the same series and will have the same CUSIP number and will trade interchangeably with such Securities immediately upon settlement. Any additional issuances will increase the aggregate Stated Principal Amount of the outstanding Securities of the class. The price of any additional offering will be determined at the time of pricing of that offering.

# **Booking Branch**

The Securities will be booked through UBS AG, London Branch.

# **Clearance and Settlement**

The DTC participants that hold the Securities through DTC on behalf of investors will follow the settlement practices applicable to equity securities in DTC's settlement system with respect to the primary distribution of the Securities and secondary market trading between DTC participants.

# 23. ETRACS 2x Leveraged MSCI US Quality Factor TR ETN due February 9, 2051

# **Specific Terms of the Securities**

In this section, references to "holders" mean those who own the Securities registered in their own names, on the books that we or the trustee maintains for this purpose, and not those who own beneficial interests in the Securities registered in street name or in the Securities issued in book-entry form through The Depository Trust Company ("DTC") or another depositary. Owners of beneficial interests in the Securities should read the section entitled "Legal Ownership and Book-Entry Issuance" under "Medium-Term Notes, Series B" above.

Each of the seven series of Securities offered by the prospectus supplement is separate and independent of each other series of Securities. Apart from the applicable Index, however, all of the terms of each series of Securities are the same. Since each series references a different Index, all calculations and adjustments and related events with respect to each series are independent of calculations and adjustments and related events for each other series of Securities, and we may exercise our call right as well as our right to initiate a split or a reverse split independently for each series. The following discussion therefore applies independently to each series of Securities offered by the prospectus supplement and, except as the context may otherwise require, the defined terms refer separately to each series. References to the "Securities" should be understood as references to a single series of Securities and the defined terms should be understood in reference only to that series of Securities.

These Securities are part of a series of debt securities entitled "Medium-Term Notes, Series B" that we may issue, from time to time, under the indenture more particularly described under "Medium-Term Notes, Series B" above. This section summarizes general financial and other terms that apply to the Securities. Terms that apply generally to all Medium-Term Notes, Series B are described in "Description of Debt Securities We May Offer" under "Medium-Term Notes, Series B" above. The terms described here supplement those described in "Medium-Term Notes, Series B" above and, if the terms described here are inconsistent with those described there, the terms described here are controlling.

The Securities are part of a single series of senior debt securities issued under our indenture, dated as of June 2, 2015 between us and U.S. Bank Trust National Association, as trustee.

We describe the terms of the Securities in more detail below. The Stated Principal Amount of each Security is \$25.00.

The Securities do not guarantee any return of principal at, or prior to, maturity or upon early redemption or call. Instead, at maturity, you will receive a cash payment per Security the amount of which will vary depending on the performance and path of the Index and will be reduced by the Accrued Fees as of the last Index Business Day in the Final Measurement Period as described under "— Cash Settlement Amount at Maturity." If the amount as calculated is equal to or less than zero, the Cash Settlement Amount will be zero and you will not receive a cash payment.

If you exercise your right to have us redeem your Securities, subject to compliance with the redemption procedures, for each Security you will receive a cash payment per Security on the relevant Redemption Date equal to the Redemption Amount as described under "— Early Redemption at the Option of the Holders." If the amount as calculated is equal to or less than zero, the Redemption Amount will be zero and you will not receive a cash payment.

# **Cash Settlement Amount at Maturity**

The "Maturity Date" is February 9, 2051, which will be the third Index Business Day following the last Index Business Day in the Final Measurement Period, subject to adjustment as described below under "— Market Disruption Event."

For each Security, unless earlier called, redeemed or accelerated upon Zero Value Event, you will receive at maturity a cash payment equal to its Closing Indicative Value on the last Index Business Day in the applicable Measurement Period. We refer to this cash payment as the "Cash Settlement Amount." If the amount so calculated is equal to or less than zero, the payment will be zero.

The following graphic illustrates the formula to determine the Cash Settlement Amount, which has been simplified for ease of presentation:

Cash Settlement Amount = Closing Indicative Value, on last Index Business Day in Final Measurement Period

You may lose all or a substantial portion of your investment at maturity. The combined negative effect of the Accrued Fees will reduce your final payment. If the compounded leveraged quarterly return of the Index (or the unleveraged return of the Index, following a Permanent Deleveraging Event) is insufficient to offset the negative effect of the Accrued Fees, you may lose all or a substantial portion of your investment at maturity. The occurrence of Loss Rebalancing Events will result in more frequent than quarterly compounding.

UBS may call the Securities prior to the Maturity Date pursuant to its Call Right. If the Securities are called by UBS, the Call Settlement Amount may be zero and you may lose all or a substantial portion of your investment. See "Specific Terms of the Securities — UBS's Call Right".

The "Stated Principal Amount" of each Security is \$25.00. The Securities may be issued and sold over time at then-current market prices which may be significantly higher or lower than the Stated Principal Amount. If the Securities undergo a split or reverse split, the Stated Principal Amount will be adjusted accordingly.

The Closing Indicative Value represents the dollar value per Security that an investor would receive on any day if it redeemed the Security that day (without giving effect to any Redemption Fee Amount).

The "Closing Indicative Value" per Security, will be calculated as follows:

- (a) On the Initial Trade Date, \$25.00 per Security.
- (b) On any other calendar day, prior to the first day of an applicable Measurement Period, an amount per Security equal to:

(Current Principal Amount on the immediately preceding calendar day × Index Factor) – Accrued Fees

(c) From and including the first day of an applicable Measurement Period, an amount per Security equal to:

(Current Principal Amount on the calendar day immediately preceding the first day of the Measurement Period × Index Factor × Residual Factor) – Accrued Fees + Measurement Period Cash Amount

However, if, on any day during a Measurement Period, the Current Indicative Value or the Closing Indicative Value *is less than or equal to* the Measurement Period Cash Amount from the immediately preceding calendar day, the Closing Indicative Value for that day and all subsequent days will be fixed to be equal to the Measurement Period Cash Amount from the immediately preceding calendar day.

(d) The minimum value of the Closing Indicative Value on any calendar day will be zero.

If a Zero Value Event occurs, the Closing Indicative Value will be equal to zero on the day it occurs and on all future calendar days. Upon the occurrence of a Zero Value Event, investors will lose their entire investment. You will not benefit from any future exposure to the Index after the occurrence of a Zero Value Event. See "— Automatic Acceleration Upon Zero Value Event".

The actual trading price of the Securities in the secondary market may vary significantly from their Closing Indicative Value.

If the Securities undergo a split or reverse split, the Closing Indicative Value will be adjusted accordingly.

The "Current Principal Amount" represents the unleveraged notional investment in the Index Constituent Securities per Security at the close of trading on any Reset Valuation Date. The notional financing amount per Security in order to generate the leveraged returns would approximately equal the Current Principal Amount at the close of trading on any Reset Valuation Date. If a Permanent Deleveraging Event occurs, the leverage of your Securities will be permanently reset to 1.0 and the notional financing amount will be equal to zero for the remaining term of the Securities. If a Zero Value Event occurs prior to your Securities permanently resetting to 1.0 at the end of the Second Permanent Deleveraging Valuation Date, then your Securities will be automatically accelerated and mandatorily redeemed and you will lose your entire investment.

The Current Principal Amount per Security, will be calculated as follows:

- (a) From and including the Initial Trade Date to and excluding the first Reset Valuation Date, \$25.00 per Security.
- (b) At the close of trading on each Reset Valuation Date after the Initial Trade Date, the Current Principal Amount of the Securities will be reset as follows:

New Current Principal Amount = (Current Principal Amount on immediately preceding calendar day × Index Factor)

– Accrued Fees

The Current Principal Amount will not change until the first Reset Valuation Date.

If a day that would otherwise be a Reset Valuation Date occurs on or after the first day of a Measurement Period, such day will not be a valid Reset Valuation Date.

If the Securities undergo a split or reverse split, the Current Principal Amount will be adjusted accordingly.

At the close of trading on each Reset Valuation Date, the Current Principal Amount is reset. The "Reset Valuation Date" means:

- (a) Any calendar day up to and including the Second Permanent Deleveraging Valuation Date, that is either: (i) the Initial Trade Date, (ii) a Quarterly Reset Valuation Date, (iii) a Loss Rebalancing Valuation Date (iv) the First Permanent Deleveraging Valuation Date, or (v) the Second Permanent Deleveraging Valuation Date; and
- (b) Any calendar day following the Second Permanent Deleveraging Valuation Date.

The valuation dates are defined below.

If a day that would otherwise be a Reset Valuation Date occurs on or after the first day of a Measurement Period, it will not be a valid Reset Valuation Date and the Last Reset Index Closing Level will remain the same.

The "Quarterly Reset Valuation Date" is the second Wednesday of January, April, July and October of each calendar year during the term of the Securities (other than an Excluded Day, as defined below), subject to adjustment as described under "—Market Disruption Event".

As used above, an "Excluded Day" means (i) the Index Business Day immediately preceding the first day of an applicable Measurement Period, and any calendar day thereafter, and (ii) any calendar day after the Second Permanent Deleveraging Valuation Date.

The "Index Factor" is: 1 + (Leverage Factor × Index Performance Ratio).

The Index Factor represents the leveraged percentage change in the Index level since the Last Reset Index Closing Level. The Index Factor *times* the applicable Current Principal Amount on the preceding calendar day represents the current value of the unleveraged notional amount per Security that is deemed invested in the Index on any calendar day. This does not reflect the Redemption Amount that an investor would receive upon early redemption on such calendar day.

The "Residual Factor" will be calculated as follows:

- (a) 1.0 on any calendar day, to but excluding the first day of an applicable Measurement Period.
- (b) From and including the first day of an applicable four-day Measurement Period, (a) the number of Index Business Days from, but excluding, the date of determination to, and including, the last Index Business Day in such four-day Measurement Period, *divided by* (b) four.
  - For example, on the first Index Business Day in an applicable four-day Measurement Period, the Residual Factor will equal 3/4, on the second Index Business Day in an applicable four-day Measurement Period, the Residual Factor will equal 2/4, on the third Index Business Day in an applicable four-day Measurement Period, the Residual Factor will equal 1/4 and on the last Index Business Day in an applicable four-day Measurement Period, the Residual Factor will equal zero.
- (c) On any calendar day from and including the last Index Business Day of an applicable Measurement Period, the Residual Factor will be equal to zero.

The Residual Factor is intended to approximate the percentage of the Current Principal Amount that is tracking the Index on any given day. The Residual Factor is relevant only during an applicable Measurement Period but otherwise is not a component of the Closing Indicative Value or Current Indicative Value formulas. At the close of trading on each Index Business Day during a four-day Measurement Period, approximately 25% of the Current Principal Amount and the corresponding amount of financing will be deemed converted to cash. In case of a one-day Measurement Period, approximately 100% of the Current Principal Amount and the corresponding amount of financing will be deemed converted to cash.

The "Leverage Factor" on any calendar day until the occurrence of a Permanent Deleveraging Event and the close of trading on the Second Permanent Deleveraging Valuation Date, will equal 2.0. If a Permanent Deleveraging Event occurs, then on any calendar day following the Second Permanent Deleveraging Valuation Date, the Leverage Factor will equal 1.0.

The "Index Performance Ratio" on any Index Business Day will be equal to:

<u>Index Closing Level – Last Reset Index Closing Level</u>
Last Reset Index Closing Level

On any calendar day that is not an Index Business Day, the Index Closing Level will be equal to the Index Closing Level on the Index Business Day immediately preceding such calendar day.

The "Last Reset Index Closing Level" is the Index Closing Level on the most recent Reset Valuation Date prior to such day. The initial Last Reset Index Closing Level is the Index Closing Level on the Initial Trade Date, as reported by Bloomberg and Reuters.

The "Index Closing Level" on any date of determination is the closing level of the Index, as reported on Bloomberg and Reuters on such day; however, if the closing level of the Index as reported on Bloomberg (or any successor) differs from the closing level of the Index as reported on Reuters (or any successor), the Index Closing Level will be the closing level of the Index as calculated by the Index Calculation Agent. The initial Index Closing Level (which is also the first Last Reset Index Closing Level) was determined on February 4, 2021 by the Security Calculation Agent. If the closing level of an Index, as reported on Bloomberg and Reuters for any Index Business Day, is manifestly incorrect, the "Index Closing Level" for such Index Business Day shall be the closing level of the Index as determined by the Security Calculation Agent. In making such determination, the Security Calculation Agent may consider any relevant information, including, without limitation, relevant market data in the relevant market supplied by one or more third parties or from internal sources or affiliates.

On any calendar day that is not an Index Business Day, the Index Closing level will be equal to the Index Closing Level on the Index Business Day immediately preceding such calendar day.

"Measurement Period" means the Final Measurement Period or, if UBS exercises its Call Right, the Call Measurement Period.

The "Current Indicative Value" or "intraday indicative value", as determined by the Security Calculation Agent, is an amount per Security, on an intraday basis on any Index Business Day, equal to:

- (a) On the Initial Trade Date, \$25.00.
- (b) On any other calendar day prior to the first day of a Measurement Period:

(Current Principal Amount on the immediately preceding calendar day  $\times$  Index Factor, calculated using the Intraday Index Value) – Accrued Fees

(c) From and including the first day of a Measurement Period, an amount per Security equal to:

(Current Principal Amount on the calendar day immediately preceding the first day of the Measurement Period × Index Factor, calculated using the Intraday Index Value × Residual Factor on the immediately preceding calendar day) – Accrued Fees + Measurement Period Cash Amount, from the immediately preceding calendar day

However, if, on any day during a Measurement Period, the Current Indicative Value or the Closing Indicative Value *is less than or equal to* the Measurement Period Cash Amount from the immediately preceding calendar day, the Current Indicative Value for the remainder of that day and all subsequent days will be fixed to be equal to the Measurement Period Cash Amount from the immediately preceding calendar day.

(d) The minimum value of the Current Indicative Value on any calendar day will be zero.

The actual trading price of the Securities in the secondary market may vary significantly from their Current Indicative Value (intraday indicative value).

If a Zero Value Event occurs, the Current Indicative Value (intraday indicative value) will be equal to zero for the remainder of the day it occurs and on all future calendar days. Upon the occurrence of a Zero Value Event, investors will lose their entire investment. You will not benefit from any future exposure to the Index after the occurrence of a Zero Value Event. See "Specific Terms of the Securities — Automatic Acceleration Upon Zero Value Event".

If the Securities undergo a split or reverse split, the Current Indicative Value (intraday indicative value) will be adjusted accordingly.

The "Accrued Fees" as of any date of determination means the Accrued Tracking Fee + the Accrued Financing Fee.

If the Securities undergo a split or reverse split, the Accrued Fees will be adjusted accordingly. The Securities are subject to an "Accrued Tracking Fee" per Security, calculated as follows:

- (a) On the Initial Trade Date, the Accrued Tracking Fee is equal to zero.
- (b) On any subsequent calendar day, the Accrued Tracking Fee is equal to: (a) the Accrued Tracking Fee as of the immediately preceding calendar day, *plus* the Daily Tracking Fee on such calendar day.
- (c) On the calendar day after each Reset Valuation Date, the Accrued Tracking Fee is reset to be equal to the Daily Tracking Fee on such calendar day.

"CME Term SOFR" means the CME Term SOFR Reference Rates published for one-, three-, six-, and 12-month tenors as administered by CME Group Benchmark Administration, Ltd. (or any successor administrator thereof).

The "Daily Tracking Fee" is an amount per Security calculated as follows:

- (a) On the Initial Trade Date, the Daily Tracking Fee is zero.
- (b) On any subsequent calendar day, the Daily Tracking Fee is equal to:
  - (1) (i) 0.95% *times* (ii) the Current Principal Amount on the immediately preceding calendar day *times* (iii) the Index Factor on such calendar day *times* (iv) the Residual Factor on the immediately preceding calendar day, *divided by* (2) 365.
- (c) The minimum value of the Daily Tracking Fee on any calendar day will be zero.

The Daily Tracking Fee represents the investor fees calculated each day on the current value of the unleveraged notional amount invested in the Index per Security. These charges accrue and compound during the applicable period, and will reduce any amount you are entitled to receive at maturity or upon early redemption or call.

If the Securities undergo a split or reverse split, the Daily Tracking Fee will be adjusted accordingly. The Securities are subject to an "**Accrued Financing Fee**" per Security calculated as follows:

- (a) On the Initial Trade Date, the Accrued Financing Fee is equal to zero.
- (b) On any subsequent calendar day, the Accrued Financing Fee is equal to:

- (1) the Accrued Financing Fee as of the immediately preceding calendar day, *plus* (2) the Daily Financing Fee on such calendar day.
- (c) On the calendar day after each Reset Valuation Date, the Accrued Financing Fee is reset to be equal to the Daily Financing Fee on such calendar day.
- (d) If a Permanent Deleveraging Event occurs, then on any calendar day following the Second Permanent Deleveraging Valuation Date, the Accrued Financing Fee will be equal to zero.

# The "Daily Financing Fee" is an amount per Security calculated as follows:

- (a) On the Initial Trade Date, the Daily Financing Fee is equal to zero.
- (b) On any subsequent calendar day, the Daily Financing Fee is equal to:
  - (1) (i) the Financing Rate on such calendar day *times* (ii) the Current Principal Amount on the immediately preceding calendar day *times* (iii) the Residual Factor on the immediately preceding calendar day, *divided by* (2) 360.
- (c) If a Permanent Deleveraging Event occurs, then on any calendar day following the Second Permanent Deleveraging Valuation Date, the Daily Financing Fee will be equal to zero.
- (d) The minimum value of the Daily Financing Fee on any calendar day will be zero.

The Daily Financing Fee seeks to compensate UBS for providing investors with a leveraged participation in movements of the Index and is intended to approximate the financing costs that investors may have otherwise incurred had they sought to borrow funds at a similar rate from a third party to invest in the Index. These charges accrue and compound during the applicable period, and will reduce any amount that you will be entitled to receive at maturity or upon early redemption or call.

If the Securities undergo a split or reverse split, the Daily Financing Fee will be adjusted accordingly.

The "**Financing Rate**" will equal the sum of (a) 0.95% and (b) three-month CME Term SOFR rate plus a 0.2616% adjustment on the immediately preceding U.S. Government Securities Business Day. The minimum Financing Rate at any time will be 0.95%

For example, 5.24665% was the three-month CME Term SOFR rate on June 29, 2023. The Financing Rate (if it were based on the SOFR-Based Benchmark Replacement) on June 30, 2023 would have therefore been equal to: 0.95% + 5.24665% + 0.2616%, or 6.45825%.

# The "Measurement Period Cash Amount" is an amount per Security equal to:

- (a) \$0.00 on any calendar day, to but excluding the first day of a Measurement Period.
- (b) On the first day of a one-day Measurement Period:
  - At the close of trading on such Index Business Day, (Current Principal Amount on the immediately preceding calendar day × Index Factor, on such Index Business Day).
- (c) From and including the first day of a four-day Measurement Period:
  - (i) At the close of trading on each Index Business Day during the Measurement Period, the Measurement Period Cash Amount on the immediately preceding calendar day + (Current Principal Amount on the calendar day immediately preceding the first day of such Measurement Period × 0.25 × Index Factor, on such Index Business Day); and
  - (ii) On any calendar day during the Measurement Period that is not an Index Business Day, the Measurement Period Cash Amount on the immediately preceding Index Business Day.
- (d) On any calendar day after the last Index Business Day of a Measurement Period, the Measurement Period Cash Amount on the last Index Business Day of such Measurement Period.

Notwithstanding the foregoing, if, on any day during a Measurement Period, the Current Indicative Value or the Closing Indicative Value is *less than or equal to* the Measurement Period Cash Amount from the immediately preceding calendar day, then the Measurement Period Cash Amount for that day and all subsequent days will be fixed to be equal to the Measurement Period Cash amount from the immediately preceding calendar day.

The Measurement Period Cash Amount represents the portion of the Current Principal Amount that has been converted to cash on any given day of an applicable Measurement Period and is no longer tracking the Index.

At the close of trading of each Index Business Day during a four-day Measurement Period, approximately 25% of the Current Principal Amount on the calendar day immediately preceding the first

day of the Measurement Period, will be deemed converted to cash and an applicable portion of the notional financing amount will separately be deemed converted to cash as well. After the close of trading on the final Index Business Day of a four-day Measurement Period, the Measurement Period Cash Amount will represent the averaged value of the Current Principal Amount that was deemed converted to cash across the four-days of such Measurement Period. In case of a one-day Measurement Period, approximately 100% of the Current Principal Amount will be deemed converted to cash and an applicable amount of financing will separately be deemed converted to cash, at the close of trading of the first day of such Measurement Period.

If the Securities undergo a split or reverse split, the Measurement Period Cash Amount will be adjusted accordingly.

#### The "Final Measurement Period" means:

- (a) if the Market Value of Securities outstanding as at the close of trading on the Index Business Day immediately preceding the Calculation Date is less than \$500,000,000, the Calculation Date, subject to adjustments as described under "— Market Disruption Event";
- (b) if the Market Value of Securities outstanding as at the close of trading on the Index Business Day immediately preceding the Calculation Date is equal to or greater than \$500,000,000, the four Index Business Days from and including the Calculation Date, subject to adjustments as described under "— Market Disruption Event."

For the purpose of determining the Final Measurement Period, the "Market Value" of the Securities outstanding as of the close of trading on the Index Business Day immediately preceding the Calculation Date, will equal:

(i) the Closing Indicative Value as of such Index Business Day *times* (ii) the number of Securities outstanding as reported on Bloomberg.

The "Index Calculation Agent" means the entity that calculates and publishes the level of the Index, which for each series of Securities is the entity set forth below:

Title of Securities	<b>Index Calculation Agent</b>
ETRACS 2x Leveraged US Dividend Factor TR ETN	S&P Dow Jones Indices
ETRACS 2x Leveraged US Growth Factor TR ETN	FTSE Russell
ETRACS 2x Leveraged US Size Factor TR ETN	FTSE Russell
ETRACS 2x Leveraged US Value Factor TR ETN	FTSE Russell
ETRACS 2x Leveraged MSCI US Minimum Volatility Factor TR ETN	MSCI, Inc.
ETRACS 2x Leveraged MSCI US Momentum Factor TR ETN	MSCI, Inc.
ETRACS 2x Leveraged MSCI US Quality Factor TR ETN	MSCI, Inc.

The "Calculation Date" means February 1, 2051, unless such day is not an Index Business Day, in which case the Calculation Date will be the next Index Business Day, subject to adjustment.

The Calculation Date represents the first Index Business Day of the Final Measurement Period.

"Index Business Day" means any day on which the Primary Exchange or market for trading of the Securities is scheduled to be open for trading.

"Primary Exchange" means, with respect to each Index Constituent Security or each constituent underlying a successor index, the primary exchange or market of trading such Index Constituent Security or such constituent underlying a successor index.

"U.S. Government Securities Business Day" means any day except for a Saturday, a Sunday or a day on which the Securities Industry and Financial Markets Association recommends that the fixed income departments of its members be closed for the entire day for purposes of trading in U.S. government securities.

## **Underlying Index**

The return of each series of Securities is based upon the performance of the applicable Index set forth on the cover page of the prospectus supplement. Each Index is designed to track the performance of a sector of the U.S. equity market and to reflect an investing style. We refer to the securities included in each Index as the "Index Constituent Securities" for such Index.

# Early Redemption at the Option of the Holders

Subject to your compliance with the procedures described below and the potential postponements and adjustments as described under "— Market Disruption Event", you may submit a request to have us redeem your Securities on any Index Business Day no later than 12:00 noon and a confirmation of redemption by no later than 5:00 p.m. on the same Index Business Day. You must request that we redeem a minimum of 50,000 Securities, although we reserve the right from time to time to waive this minimum redemption amount in our sole discretion on a case-by-case basis. You should not assume you will be entitled to the benefit of any such waiver. For any applicable redemption request, the "Redemption Valuation Date" will be the first Index Business Day following the date that the applicable redemption notice and redemption confirmation are delivered, except that we reserve the right from time to time to accelerate, in our sole discretion on a case-by-case basis, the Redemption Valuation Date to the date on which we receive the notice of redemption rather than the following Index Business Day. You should not assume you will be entitled to any such acceleration. To satisfy the minimum redemption amount, your broker or other financial intermediary may bundle your Securities for redemption with those of other investors to reach this minimum amount of 50,000 Securities; however, there can be no assurance that they can or will do so.

The Securities will be redeemed and the holders will receive payment for their Securities on the second Index Business Day following the applicable Redemption Valuation Date (the "Redemption Date"). The first Redemption Date will be the fourth Index Business Day immediately following the Initial Trade Date and the Final Redemption Date will be the fourth Index Business Day immediately preceding the Maturity Date, subject to adjustments. In addition, if we have issued a call notice, the last Redemption Valuation Date will be the fourth Index Business Day prior to the Call Settlement Date, as applicable. If a Zero Value Event occurs, the last Redemption Date will be the date on which the Zero Value Event occurred.

If a Market Disruption Event is continuing or occurs on the applicable scheduled Redemption Valuation Date with respect to any of the Index Constituent Securities, such Redemption Valuation Date may be postponed as described under "— Market Disruption Event".

As of any Redemption Valuation Date, the "Redemption Fee Amount" means an amount per Security equal to:

(0.125% × Closing Indicative Value of the Security as of the Redemption Valuation Date).

If you exercise your right to have us redeem your Securities, subject to your compliance with the procedures described under "— Redemption Procedures", for each applicable Security you will receive a cash payment on the relevant Redemption Date equal to:

Closing Indicative Value as of the Redemption Valuation Date – Redemption Fee Amount.

We refer to this cash payment as the "**Redemption Amount**." If the amount calculated above is equal to or less than zero, the payment upon early redemption will be zero. We reserve the right from time to time to waive the Redemption Fee Amount in our sole discretion and on a case-by-case basis. There can be no assurance that we will elect to waive this fee and you should not assume you will be entitled to such fee waiver.

We will inform you of such Redemption Amount on the first Index Business Day following the applicable Redemption Valuation Date.

The redemption feature is intended to induce arbitrageurs to counteract any trading of the Securities at a discount to their indicative value, though there can be no assurance that arbitrageurs will employ the redemption feature in this manner or that they will be successful in counteracting any divergence in the market price of the Securities and their indicative value.

The following graphic illustrates the formula to determine the Redemption Amount, which has been simplified for ease of presentation:

Redemption = Closing Indicative Value - Redemption Fee Amount

You may lose all or a substantial portion of your investment upon early redemption. The combined negative effect of the Accrued Fees and the Redemption Fee Amount will reduce your final payment. If the compounded leveraged quarterly return of the Index (or the unleveraged return of the Index, following a Permanent Deleveraging Event) is insufficient to offset the negative effect of the Accrued Fees and the Redemption Fee Amount, if applicable, or if the compounded leveraged quarterly return of the Index (or the unleveraged return of the Index, following a Permanent Deleveraging Event) is negative, you may lose all or a substantial portion of your investment upon early redemption. Loss Rebalancing Events will cause compounding to occur more frequently than quarterly.

The Securities may be called by UBS prior to the Maturity Date pursuant to its Call Right and, upon the occurrence of a Zero Value Event, the Securities will be automatically accelerated and mandatorily redeemed by UBS. See "Specific Terms of the Securities — UBS's Call Right" and "Specific Terms of the Securities — Automatic Acceleration Upon Zero Value Event".

# **Redemption Procedures**

To redeem your Securities, you must instruct your broker or other person through whom you hold your Securities to take the following steps through normal clearing system channels:

- deliver a notice of redemption, which we refer to as a "**Redemption Notice**" to UBS via email no later than 12:00 noon on the Index Business Day on which you elect to exercise your redemption right. If we receive your Redemption Notice by the time specified in the preceding sentence, we will respond by sending you a form of confirmation of redemption;
- deliver the signed confirmation of redemption, which we refer to as the "**Redemption Confirmation**", to us via email in the specified form by 5:00 p.m. on the same day. We or our affiliate must acknowledge receipt in order for your Redemption Confirmation to be effective;
- instruct your DTC custodian to book a delivery vs. payment trade with respect to your Securities on the applicable Redemption Date at a price equal to the Redemption Amount; and
- > cause your DTC custodian to deliver the trade as booked for settlement via DTC at or prior to 12:00 noon on the applicable Redemption Date.

Different brokerage firms may have different deadlines for accepting instructions from their customers. Accordingly, as a beneficial owner of the Securities, you should consult the brokerage firm through which you own your interest for the relevant deadline. If your broker delivers your Redemption Notice after 12:00 noon, or your Redemption Confirmation after 5:00 p.m., on the Index Business Day prior to the applicable Redemption Valuation Date, your Redemption Notice will not be effective, you will not be able to redeem your Securities until the following Redemption Date and your broker will need to complete all the required steps if you should wish to redeem your Securities on any subsequent Redemption Date. In addition, UBS may request a medallion signature guarantee or such assurances of delivery as it may deem necessary in its sole discretion. All instructions given to participants from beneficial owners of Securities relating to the right to redeem their Securities will be irrevocable. If your DTC custodian or your brokerage firm is not a current UBS customer, UBS will be required to on-board such DTC custodian or brokerage firm, in compliance with its internal policies and procedures, before it can accept your Redemption Notice, your Redemption Confirmation or otherwise process your redemption request. This on-boarding process may delay your Redemption Valuation Date and Redemption Date. Furthermore, in certain circumstances, UBS may be unable to on-board your DTC custodian or your brokerage firm.

We reserve the right from time to time to waive the minimum redemption amount or the Redemption Fee Amount in our sole discretion on a case-by-case basis. In addition, we reserve the right from time to time to accelerate, in our sole discretion on a case-by-case basis, the Redemption Valuation Date to the date on which we receive the Redemption Notice rather than the following Index Business Day. You should not assume you will be entitled to any such waiver or election to accelerate the Redemption Valuation Date.

# **UBS's Call Right**

UBS may at its option redeem all, but not less than all, of the issued and outstanding Securities of any series. To exercise its Call Right, UBS must provide notice to the holders of such Securities (which may be provided via press release) not less than 18 calendar days prior to the Call Settlement Date specified by UBS in such notice. If we call the Securities, you will receive a cash payment equal to the Closing Indicative Value on the last Index Business Day in the Call Measurement Period. We refer to this cash payment as the "Call Settlement Amount."

If the amount calculated above is equal to or less than zero, the payment upon UBS's exercise of its Call Right will be zero.

We will inform you of such Call Settlement Amount on the first Index Business Day following the last Index Business Day in the Call Measurement Period.

The holders will receive payment for their Securities on the third Index Business Day following the last Index Business Day in the Call Measurement Period (the "Call Settlement Date"). If a Market Disruption Event is continuing or occurs on the scheduled Call Valuation Date with respect to any of the Index Constituent Securities, such Call Valuation Date may be postponed as described under "— Market Disruption Event".

## The "Call Measurement Period" means:

- (a) if the Market Value of Securities outstanding at the close of trading on the Index Business Day immediately preceding the date we issue a notice of exercise of our Call Right is less than \$500,000,000, the Call Valuation Date, subject to adjustments as described under "— Market Disruption Event"; and
- (b) if the Market Value of Securities outstanding as at the close of trading on the Index Business Day immediately preceding the date we issue a notice of exercise of our Call Right is equal to or greater than \$500,000,000, the four Index Business Days from and including the Call Valuation Date, subject to adjustment as described under "— Market Disruption Event."

For the purpose of determining the Final Measurement Period, the "Market Value" of the Securities outstanding as of the close of trading on the Index Business Day immediately preceding the date of delivery by UBS of its notice to holders (which may be provided via press release) of its exercise of its Call Right will equal:

(i) The Closing Indicative Value as of such Index Business Day *times* (ii) the number of Securities outstanding as reported on Bloomberg.

The "Call Valuation Date" means the date we specify in our notice to holders (which may be provided via press release) of our exercise of our Call Right.

In any notice to holders exercising our Call Right, we will specify how many days are included in the Call Measurement Period.

The following graphic illustrates the formula to determine the Call Settlement Amount, which has been simplified for ease of presentation:

Cash Settlement Amount = Closing Indicative Value, on last Index Business Day in Call Measurement Period

You may lose all or a substantial portion of your investment if we exercise our Call Right. The combined negative effect of the Accrued Fees will reduce your final payment. If the compounded leveraged quarterly return of the Index (or the unleveraged return of the Index, following a Permanent Deleveraging Event) is insufficient to offset the negative effect of the Accrued Fees, or if the compounded leveraged quarterly return of the Index (or the unleveraged return of the Index, following a Permanent Deleveraging Event) is negative, you may lose all or a substantial portion of your investment upon a call. Loss Rebalancing Events will cause compounding to occur more frequently than quarterly.

In addition, upon the occurrence of a Zero Value Event, the Securities will be automatically accelerated and mandatorily redeemed by UBS. See "Specific Terms of the Securities — Automatic Acceleration Upon Zero Value Event" below.

## **Automatic Acceleration Upon Zero Value Event**

For each series of Securities, a Zero Value Event represents the first instance when the Current Indicative Value (intraday indicative value) or the Closing Indicative Value is less than or equal to zero (other than on an Excluded Day, as defined below). It will have the effect of permanently resetting the value of your Securities to zero and accelerating the Securities. You will not benefit from any future exposure to the applicable Index after the occurrence of a Zero Value Event.

A Zero Value Event can occur only if a Permanent Deleveraging Event occurs and the Current Indicative Value (intraday indicative value) or the Closing Indicative Value declines to zero before the leverage of your Securities is reset to 1.0 at the close of trading on the Index Business Day following such event (or if such event occurs after 3:15 p.m. on any Index Business Day which would not otherwise have been a Loss Rebalancing Valuation Date, the second Index Business Day following such event), as described under "Permanent Deleveraging Valuation Dates" above.

A "Zero Value Event" occurs if the Current Indicative Value (intraday indicative value) or the Closing Indicative Value on any Index Business Day (other than an Excluded Day, as defined below) is less than or equal to zero. From immediately after the Zero Value Event and on all future calendar days, the Current Indicative Value (intraday indicative value) and the Closing Indicative Value will be set equal to zero.

As used above, an "Excluded Day" means (i) any calendar day after the Second Permanent Deleveraging Valuation Date (ii) any calendar day on or after which a Zero Value Event has already occurred, and (iii) any calendar day after the last day of an applicable Measurement Period.

In the event that a Zero Value Event has occurred, UBS will issue a press release shortly after the event; provided that the failure to do so shall not affect the automatic acceleration and redemption of the Securities. The Securities will be suspended from trading intraday shortly after the event occurs and will likely not be open for trading again on NYSE Arca.

You will lose your entire investment upon the occurrence of a Zero Value Event.

In addition, we may call the Securities prior to the Maturity Date pursuant to our Call Right. See "Specific Terms of the Securities — UBS's Call Right".

## **Loss Rebalancing Events**

A Loss Rebalancing Event will have the effect of deleveraging your Securities with the aim of resetting the then-current leverage to approximately 2.0. This means that after a Loss Rebalancing Event, a constant percentage increase in the Index Closing Level will have less of a positive effect on the value of your Securities relative to before the occurrence of the Loss Rebalancing Event.

A "Loss Rebalancing Event" occurs if, at any time, the Intraday Index Value on such Index Business Day (other than an Excluded Day, as used below) decreases by 20% or more from the previous Last Reset Index Closing Level.

Loss Rebalancing Events may occur multiple times over the term of the Securities and may occur multiple times during a single calendar quarter. This means both that (i) the Current Principal Amount may be reset more frequently than quarterly and (ii) the cumulative effect of compounding and fees will have increased as a result of the Loss Rebalancing Event(s). Because each Loss Rebalancing Event will have the effect of deleveraging your Securities, following a Loss Rebalancing Event your Securities will have less exposure to a potential positive gain in value relative to the exposure before the occurrence of such Loss Rebalancing Event.

As used above, an "Excluded Day" means (i) the Index Business Day immediately preceding any Quarterly Reset Valuation Date, if a Loss Rebalancing Event occurs after 3:15 p.m. on such day, (ii) any Quarterly Reset Valuation Date, (iii) any Loss Rebalancing Valuation Date, (iv) the Index Business Day immediately preceding the first day of an applicable Measurement Period, if a Loss Rebalancing Event occurs after 3:15 p.m. on such day (v) any calendar day from and including the first day of an applicable Measurement Period, (vi) the First or Second Permanent Deleveraging Valuation Dates, (vii) any calendar day after the Second Permanent Deleveraging Valuation Date, and (ix) any calendar day on or after which a Zero Value Event has occurred

# "Loss Rebalancing Valuation Date" means:

- (a) if a Loss Rebalancing Event occurs at or prior to 3:15 p.m. on an Index Business Day, the day that such Loss Rebalancing Event occurs, subject to adjustment as described under "— Market Disruption Event"; and
- (b) if a Loss Rebalancing Event occurs after 3:15 p.m. on an Index Business Day, the first Index Business Day following the occurrence of such Loss Rebalancing Event, subject to adjustment as described under "— Market Disruption Event."

# **Permanent Deleveraging Event**

A Permanent Deleveraging Event will have the effect of deleveraging your Securities, with the aim of permanently resetting the then-current leverage to 1.0 over two Index Business Days. The leverage at the end of the First Permanent Deleveraging Valuation Date is reset to approximately 2.0 and the leverage at the end of the Second Permanent Deleveraging Valuation Date is reset to 1.0. This means that after a Permanent Deleveraging Event, a constant percentage increase in the Index Closing Level will have less of a positive effect on the value of your Securities than it would have had before the occurrence of the Permanent Deleveraging Event. If such an event were to occur, it most likely would occur only following a Loss Rebalancing Event and prior to the completion of the associated leverage reset to 2.0, which would generally occur at the end of the Index Business Day following the Index Business Day on which the Loss Rebalancing Event occurred or, if the Loss Rebalancing Event occurs 3:15 p.m. on an Index Business Day, at the end of the second Index Business Day following the Index Business Day on which the Loss Rebalancing Event occurred.

A "Permanent Deleveraging Event" occurs if, at any time on an Index Business Day (other than an Excluded Day, as defined below), the Intraday Index Value decreases by 40% or more from the Last Reset Index Closing Level. If a Permanent Deleveraging Event occurs, the Current Principal Amount of the Securities will be reset over two Index Business Days.

As used above, an "Excluded Day" means (i) the First or Second Permanent Deleveraging Valuation Dates, (ii) any calendar day after the Second Permanent Deleveraging Valuation Date, (iii) any day on or after which a Zero Value Event occurs, (iv) the day which is two Index Business Days prior to the first day of a Measurement Period, if a Permanent Deleveraging Event occurs after 3:15 p.m. on such day, and (v) any calendar day from and including the Index Business Day immediately preceding the first day of a Measurement Period.

"Permanent Deleveraging Valuation Dates" means the First Permanent Deleveraging Valuation Date and the Second Permanent Deleveraging Valuation Date, each as defined below:

- (a) The "First Permanent Deleveraging Valuation Date" means:
  - (i) any Index Business Day, which otherwise would have been a Loss Rebalancing Valuation Date, but on which a Permanent Deleveraging Event has occurred, subject to adjustment as described under "— Market Disruption Event"; or
  - (ii) if a Permanent Deleveraging Event occurs after 3:15 p.m. on any Index Business Day which would not otherwise have been a Loss Rebalancing Valuation Date, then the first Index Business Day following the occurrence of such Permanent Deleveraging Event, subject to adjustment as described under "— Market Disruption Event."

The leverage of your Securities will be reset to approximately 2.0 at the close of trading on the First Permanent Deleveraging Valuation Date.

(b) The "Second Permanent Deleveraging Valuation Date" means the Index Business Day immediately following the First Permanent Deleveraging Valuation Date, subject to adjustment as described under "— Market Disruption Event."

The leverage of your Securities will be reset to 1.0 at the close of trading on the Second Permanent Deleveraging Valuation Date.

# **Split or Reverse Split of the Securities**

We may, at any time in our sole discretion, initiate a split or reverse split of your Securities. If we decide to initiate a split or reverse split, as applicable, we will issue a press release announcing the split or reverse split and its effective date. The date of such press release shall be deemed to be the "announcement date" of the split or the reverse split, the record date for any split or reverse split will be the tenth Business Day after the announcement date, and the effective date will be the next Business Day after the record date.

If the Securities undergo a split or reverse split, we will adjust the Current Principal Amount, Closing Indicative Value, Current Indicative Value, Accrued Fees, Measurement Period Cash Amount and other relevant terms of the Securities accordingly. For example, if the Securities undergo a 4:1 split, every investor who holds a Security via The Depository Trust Company ("DTC") on the relevant record date will, after the split, hold four Securities, and adjustments will be made as described below. The Current Principal Amount on such record date will be *divided by* four to reflect the 4:1 split. The adjusted Current Principal Amount will be rounded to eight decimal places. The split or reverse split will become effective at the opening of trading of the Securities on the Index Business Day immediately following the record date. The split will not occur if we exercise our Call Right before it becomes effective.

In the case of a reverse split, the Current Principal Amount and other relevant terms of the Securities will be adjusted accordingly and we will determine in our sole discretion the manner in which we will address odd numbers of Securities (commonly referred to as "partials"). For example, if the Securities undergo a 1:4 reverse split, every investor who holds four Securities via DTC on the relevant record date will, after the reverse split, hold only one Security and the Current Principal Amount of the Securities on such record date will be multiplied by four to reflect the 1:4 reverse split. The adjusted Current Principal Amount will be rounded to eight decimal places. The reverse split will become effective at the opening of trading of the Securities on the Index Business Day immediately following the record date. The reverse split will not occur if we exercise our Call Right before it becomes effective.

Holders who own a number of Securities on the record date that is not evenly divisible by the reverse split divisor (which in the case of a 1:4 reverse split, for example, will be 4) will receive the same treatment as all other holders for the maximum number of Securities they hold that is evenly divisible by the reverse split divisor. We will determine in our sole discretion the manner in which we compensate holders for their remaining or "partial" Securities when we announce the reverse split, though our current intention is to provide holders with a cash payment for their partials on the 17th Business Day following the announcement date in an amount equal to the appropriate percentage of the Closing Indicative Value of the reverse split-adjusted Securities on the 15th Business Day following the announcement date. For example, in the case of a 1:4 reverse split, a holder who held 23 Securities via DTC on the record date would receive five post-reverse split Securities on the immediately following Business Day, and a cash payment on the 17th Business Day following the announcement date that is equal to 3/4 of the Current Principal Amount of the reverse split-adjusted Securities on the 15th Business Day following the announcement date.

## **Security Calculation Agent**

UBS Securities LLC will act as the Security Calculation Agent. The Security Calculation Agent will be solely responsible for all determinations and calculations regarding the value of the Securities, including, among other things, at maturity or upon early redemption or call, or at other times, the Current Principal

Amount, Current Indicative Value (which we also refer to as the intraday indicative value), Closing Indicative Value, Market Disruption Events, Business Days, Index Business Days, the Leverage Factor, the Index Factor, the Index Performance Ratio, the Residual Factor, the Index Closing Level, the Financing Rate, the Accrued Fees (including determining any successor to the LIBOR base rate), the Redemption Fee Amount, the Cash Settlement Amount, if any, that we will pay you at maturity, the Redemption Amount, if any, that we will pay you upon redemption, the Call Settlement Amount, that we will pay you if we call the Securities, whether a Loss Rebalancing Event has occurred, whether a Permanent Deleveraging Event has occurred and whether any day is an Index Business Day and all such other matters as may be specified elsewhere herein as matters to be determined by the Security Calculation Agent. If any Intraday Index Value as published by Bloomberg on any Index Business Day is manifestly incorrect, the Security Calculation Agent may base its determination of whether a Loss Rebalancing Event, Permanent Deleveraging Event or Zero Value Event shall have occurred on such Index Business Day on its own determination of such Intraday Index Value. In making such determination, the Security Calculation Agent may consider any relevant information, including, without limitation, relevant market data in the relevant market supplied by one or more third parties or from internal sources or affiliates. The Security Calculation Agent will also be responsible for determining whether the Index has been discontinued and whether there has been a material change in the Index. The Security Calculation Agent will make all such determinations and calculations in its sole discretion, and absent manifest error, all determinations of the Security Calculation Agent will be conclusive for all purposes and binding on us, you, and all other persons having an interest in the Securities, without liability on the part of the Security Calculation Agent. You will not be entitled to any compensation from us for any loss suffered as a result of any determinations or calculations made by the Security Calculation Agent. We may appoint a different Security Calculation Agent from time to time after the date of the prospectus supplement without your consent and without notifying you.

The Security Calculation Agent will provide written notice to the trustee at its New York office, on which notice the trustee may conclusively rely, of the amount to be paid at maturity or upon early redemption or call, on or prior to 12:00 noon on the Index Business Day immediately preceding the Maturity Date, any Redemption Date or any Call Settlement Date.

All dollar amounts related to determination of the Accrued Fees, the Current Principal Amount, and any Redemption Amount, Redemption Fee Amount, Call Settlement Amount or Cash Settlement Amount per Security will be rounded to the nearest tenthousandth, with five one hundred-thousandths rounded upward (e.g., .76545 would be rounded up to .7655); and all dollar amounts paid to any holder of Securities will be rounded to the nearest cent, with one-half cent rounded upward.

## **Market Disruption Event**

To the extent a Market Disruption Event with respect to the Index has occurred or is continuing during a four-day Measurement Period, the Index Closing Level for such day will be determined by the Security Calculation Agent or one of its affiliates on the first succeeding Index Business Day on which a Market Disruption Event does not occur or is not continuing with respect to the Index. The remaining Index Business Days in the Measurement Period will be postponed accordingly, and the remaining Index Business Days in the Measurement Period will resume again following the suspension of the Market Disruption Event. For example, if the four-day Measurement Period for purposes of calculating the Call Settlement Amount, is scheduled for June 2, June 3, June 4 and June 5, and there is a Market Disruption Event with respect to the Index on June 2, but no other Market Disruption Event during such Call Measurement Period, then June 3 will become the first Index Business Day of the Measurement Period, June 4th the second Index Business Day, June 5th the third Index Business Day and the next Index Business Day after June 5th would be the final day of the Measurement Period. The same approach would be applied if there is a Market Disruption Event during a four-day Final Measurement Period.

To the extent a Market Disruption Event with respect to the Index has occurred or is continuing on the Redemption Valuation Date, Call Valuation Date (in the event that the Call Measurement Period is the Call Valuation Date), Calculation Date (in the event that the Final Measurement Period is the Calculation Date) or any Reset Valuation Date, the Index Closing Level for such Redemption Valuation Date, Call Valuation Date, Calculation Date or Reset Valuation Date will be determined by the Security Calculation Agent or one of its affiliates on the first succeeding Index Business Day on which a Market Disruption Event does not occur or is not continuing with respect to the Index. For example, if the Redemption Valuation Date, for purposes of calculating a Redemption Amount, is based on the Index Closing Level on June 2 and there is a Market Disruption Event with respect to the Index on June 2, then the Index Closing Level on June 3 will be used to calculate the Redemption Amount, assuming that no such Market Disruption Event has occurred or is continuing on June 3.

In no event, however, will any postponement pursuant to either of the two immediately preceding paragraphs result in the affected Index Business Day of the Measurement Period or any Redemption Valuation Date, Call Valuation Date (in the event that the Call Measurement Period is the Call Valuation Date), Calculation Date (in the event that the Final Measurement Period is the Calculation Date) or Reset Valuation Date occurring more than five Index Business Days following the day originally scheduled to be such Index Business Day of the Measurement Period or such Redemption Valuation Date, Call Valuation Date, Calculation Date or Reset Valuation Date. If a Market Disruption Event has occurred or is continuing with respect to the Index on the fifth Index Business Day following the date originally scheduled to be such Index Business Day of the Measurement Period or any Redemption Valuation Date, Calculation Date or any Reset Valuation Date, the Security Calculation Agent or one of its affiliates will determine the Index Closing Level based on its good faith estimate of the Index Closing Level that would have prevailed on such fifth Index Business Day but for such Market Disruption Event.

Any of the following will be a "Market Disruption Event" with respect to the Index, in each case as determined by the Security Calculation Agent in its sole discretion:

- (a) suspension, absence or material limitation of trading in a material number of Index Constituent Securities, whether by reason of movements in price exceeding limits permitted by the Primary Exchange or otherwise;
- (b) suspension, absence or material limitation of trading in option or futures contracts relating to the Index or to a material number of Index Constituent Securities in the primary market or markets for those contracts;
- (c) the Index is not published; or
- (d) in any other event, if the Security Calculation Agent determines in its sole discretion that the event materially interferes with our ability or the ability of any of our affiliates to unwind all or a material portion of a hedge with respect to the Securities that we or our affiliates have effected or may effect as described in the section entitled "Use of Proceeds and Hedging."

The following events will not be Market Disruption Events with respect to the Index:

- (a) a limitation on the hours or numbers of days of trading, but only if the limitation results from an announced change in the regular business hours of the relevant market; and
- (b) a decision to permanently discontinue trading in the option or futures contracts relating to the Index or any Index Constituent Securities.

For this purpose, an "absence of trading" in the primary securities market on which option or futures contracts related to the Index or any Index Constituent Securities are traded will not include any time when that market is itself closed for trading under ordinary circumstances.

# **Default Amount on Acceleration**

If an event of default occurs and the maturity of the Securities is accelerated, we will pay the default amount in respect of the principal of the Securities at maturity. We describe the default amount below under "— Default Amount."

For the purpose of determining whether the holders of our Medium-Term Notes, Series B, of which the Securities are a part, are entitled to take any action under the indenture, we will treat the outstanding principal amount of the Medium-Term Notes, Series B, as constituting the outstanding principal amount of the Securities. Although the terms of the Securities may differ from those of the other Medium-Term Notes, Series B, holders of specified percentages in principal amount of all Medium-Term Notes, Series B, together in some cases with other series of our debt securities, will be able to take action affecting all the Medium-Term Notes, Series B, including the Securities. This action may involve changing some of the terms that apply to the Medium-Term Notes, Series B, accelerating the maturity of the Medium-Term Notes, Series B after a default or waiving some of our obligations under the indenture. We discuss these matters in "Medium-Term Notes, Series B" above under "Description of Debt Securities We May Offer — Default, Remedies and Waiver of Default" and "Description of Debt Securities We May Offer — Modification and Waiver of Covenants."

#### **Default Amount**

The default amount for the Securities on any day will be an amount, in U.S. dollars as determined by the Security Calculation Agent in its sole discretion, for the aggregate Stated Principal Amount of the Securities, equal to the cost of having a qualified financial institution, of the kind and selected as described below, expressly assume all our payment and other obligations with respect to the Securities as of that day and as if no default or acceleration had occurred, or to undertake other obligations providing substantially equivalent economic value to you with respect to the Securities. That cost will equal:

- the lowest amount that a qualified financial institution would charge to effect this assumption or undertaking, plus
- the reasonable expenses, including reasonable attorneys' fees, incurred by the holders of the Securities in preparing any documentation necessary for this assumption or undertaking.

During the default quotation period for the Securities, which we describe below, the holders of the Securities and/or we may request a qualified financial institution to provide a quotation of the amount it would charge to effect this assumption or undertaking. If either party obtains a quotation, it must notify the other party in writing of the quotation. The amount referred to in the first bullet point above will equal the lowest — or, if there is only one, the only — quotation obtained, and as to which notice is so given, during the default quotation period. With respect to any quotation, however, the party not obtaining the quotation may object, on reasonable and significant grounds, to the assumption or undertaking by the qualified financial institution providing the quotation and notify the other party in writing of those grounds within two Business Days after the last day of the default quotation period, in which case that quotation will be disregarded in determining the default amount.

# **Default Quotation Period**

The default quotation period is the period beginning on the day the default amount first becomes due and ending on the third Index Business Day after that day, unless:

- > no quotation of the kind referred to above is obtained, or
- > every quotation of that kind obtained is objected to within five Index Business Days after the due date as described

If either of these two events occurs, the default quotation period will continue until the third Index Business Day after the first Index Business Day on which prompt notice of a quotation is given as described above. If that quotation is objected to as described above within five Index Business Days after that first Index Business Day, however, the default quotation period will continue as described in the prior sentence and this sentence.

In any event, if the default quotation period and the subsequent two Index Business Day objection period have not ended before the Calculation Date, then the default amount will equal the Stated Principal Amount of the Securities.

# **Qualified Financial Institutions**

For the purpose of determining the default amount at any time, a qualified financial institution must be a financial institution organized under the laws of any jurisdiction in the United States of America, Europe or Japan, which at that time has outstanding debt obligations with a stated maturity of one year or less from the date of issue and rated either:

- A-1 or higher by Standard & Poor's Financial Services LLC, a subsidiary of The McGraw-Hill Companies, Inc., or any successor, or any other comparable rating then used by that rating agency, or
- ➤ P-1 or higher by Moody's Investors Service or any successor, or any other comparable rating then used by that rating agency.

# Discontinuance of or Adjustments to the Index or Termination of Our License Agreements with the Index Sponsors; Alteration of Method of Calculation

If (i) an Index Sponsor or the Index Calculation Agent announces that it intends to discontinue, or discontinues, publication of, or otherwise fails to publish, the Index, (ii) our license agreement with the Index Sponsor terminates or (iii) the Index Sponsor or Index Calculation Agent does not make the Index Constituent Securities and/or their unit weighting available to the Security Calculation Agent, and, in each case, any other person or entity publishes an index licensed to UBS that the Security Calculation Agent determines is comparable to the Index and for which the Index Constituent Securities and/or their unit weighting are available to the Security Calculation Agent (such index being referred to herein as a "successor index"), and the Security Calculation Agent approves such index as a successor index, then on and after the date determined by the Security Calculation Agent, the Security Calculation Agent will determine the Index Closing Level on the applicable dates of determination and the amount payable at maturity or upon early redemption or call and all other related payments terms by reference to such successor index.

Upon any selection by the Security Calculation Agent of a successor index, the Security Calculation Agent will cause written notice of the successor index and the date on and after which the Index Closing Level will be determined by reference thereto be furnished to the trustee, to us and to the holders of the Securities.

If an Index Sponsor or Index Calculation Agent discontinues publication of the Index, our license agreement with the Index Sponsor terminates or the Index Sponsor or Index Calculation Agent do not make the Index Constituent Securities and/or their unit weighting available to the Security Calculation Agent, prior to, and such discontinuation, termination or unavailability is continuing on the Calculation Date or any Index Business Day during a Measurement Period, or on the Redemption Valuation Date or on any Reset Valuation Date, as applicable, or on any other relevant date on which the Index Closing Level is to be determined and the Security Calculation Agent determines that no successor index is available at such time, or the Security Calculation Agent has previously selected a successor index and publication of such successor index is discontinued prior to, and such discontinuation is continuing on the Calculation Date or any Index Business Day during a Measurement Period, or on the Redemption Valuation Date or on any Reset Valuation Date, or any other relevant date on which the Index Closing Level is to be determined, then the Security Calculation Agent will determine the Index Closing Level using the Index Closing Level on the last Index Business Day immediately prior to such discontinuation or unavailability, as adjusted for certain corporate actions. In such event, the Security Calculation Agent will cause notice thereof to be furnished to the trustee, to us and to the holders of the Securities.

Notwithstanding these alternative arrangements, discontinuation of the publication of the Index or successor index, as applicable, may adversely affect the value of the Securities.

In addition, if an Index Replacement Event (as defined below) occurs at any time and the Index Sponsor or anyone else publishes an index that the Security Calculation Agent determines is comparable to the Index (the "Substitute Index"), then the Security Calculation Agent may elect, in its sole discretion, to permanently replace the original Index with the Substitute Index for all purposes under the Securities, and all provisions described in the prospectus supplement as applying to the Index will thereafter apply to the Substitute Index instead. In such event, the Security Calculation Agent will make such adjustments, if any, to any level of the Index or Substitute Index that is used for purposes of the Securities as it determines are appropriate in the circumstances. If the Security Calculation Agent elects to replace the original Index with a Substitute Index, then the Security Calculation Agent will determine all amounts hereunder, Current Principal Amount, Current Indicative Value (intraday indicative value), Closing Indicative Value, Index Factor, Index Performance Ratio, Residual Factor, Accrued Fees, Index Closing Levels on the applicable dates of determination, all other related payment terms and the amount payable at maturity or upon early redemption or call by reference to such Substitute Index. If the Security Calculation Agent so elects to replace the original Index with a Substitute Index, the Security Calculation Agent will cause written notice thereof to be furnished to the trustee, to us and to the holders of the Securities of the Securities.

## An "Index Replacement Event" means:

an amendment to or change (including any officially announced proposed change) in the laws, regulations or rules of the United States (or any political subdivision thereof), or any jurisdiction in which a Primary Exchange (as defined herein) is located that (i) makes it illegal for UBS AG or its affiliates to hold, acquire or dispose of the Index Constituent Securities included in the Index or options, futures, swaps or other derivatives on the Index or on the Index Constituent Securities included in the Index (including but not limited to exchange-imposed position limits), (ii) materially increases the cost to us, our affiliates, third parties with whom we transact or similarly situated third parties in performing our or their obligations in connection with the Securities, (iii) has a material adverse effect on any of these parties' ability to perform their obligations in connection with the Securities, or (iv) materially affects our ability to issue or transact in exchange traded notes similar to the Securities, each as determined by the Security Calculation Agent;

- (b) any official administrative decision, judicial decision, administrative action, regulatory interpretation or other official pronouncement interpreting or applying those laws, regulations or rules that is announced on or after February 4, 2021 that (i) makes it illegal for UBS AG or its affiliates to hold, acquire or dispose of the Index Constituent Securities included in the Index or options, futures, swaps or other derivatives on the Index or on the Index Constituent Securities (including but not limited to exchange-imposed position limits), (ii) materially increases the cost to us, our affiliates, third parties with whom we transact or similarly situated third parties in performing our or their obligations in connection with the Securities, (iii) has a material adverse effect on the ability of us, our affiliates, third parties with whom we transact or a similarly situated third party to perform our or their obligations in connection with the Securities, or (iv) materially affects our ability to issue or transact in exchange traded notes similar to the Securities, each as determined by the Security Calculation Agent;
- (c) any event that occurs on or after February 4, 2021 that makes it a violation of any law, regulation or rule of the United States (or any political subdivision thereof), or any jurisdiction in which a Primary Exchange (as defined herein) is located, or of any official administrative decision, judicial decision, administrative action, regulatory interpretation or other official pronouncement interpreting or applying those laws, regulations or rules, (i) for UBS AG or its affiliates to hold, acquire or dispose of the Index Constituent Securities or options, futures, swaps or other derivatives on the Index or on the Index Constituent Securities (including but not limited to exchange-imposed position limits), (ii) for us, our affiliates, third parties with whom we transact or similarly situated third parties to perform our or their obligations in connection with the Securities, or (iii) for us to issue or transact in exchange traded notes similar to the Securities, each as determined by the Security Calculation Agent;
- (d) any event, as determined by the Security Calculation Agent, as a result of which we or any of our affiliates or a similarly situated party would, after using commercially reasonable efforts, be unable to, or would incur a materially increased amount of tax, duty, expense or fee (other than brokerage commissions) to, acquire, establish, re-establish, substitute, maintain, unwind or dispose of any transaction or asset it deems necessary to hedge the risk of the Securities, or realize, recover or remit the proceeds of any such transaction or asset; or
- (e) as determined by the Security Calculation Agent, the primary exchange or market for trading for the Securities, if any, announces that pursuant to the rules of such exchange or market, as applicable, the Securities cease (or will cease) to be listed, traded or publicly quoted on such exchange or market, as applicable, for any reason and are not immediately re-listed, re-traded or re-quoted on an exchange or quotation system located in the same country as such exchange or market, as applicable.

Notwithstanding these alternative arrangements, discontinuation of the publication of the Index or successor index, as applicable, may adversely affect the value of the Securities.

If at any time the method of calculating the Index, a successor index or a Substitute Index, or the value thereof, is changed in a material respect, or if the Index or a successor or Substitute Index is in any other way modified so that the Index Closing Level of the Index or such successor or Substitute Index does not, in the opinion of the Security Calculation Agent, fairly represent the Index Closing Level of the Index or such successor or Substitute Index had such changes or modifications not been made, then the Security Calculation Agent will make such calculations and adjustments as, in the good faith judgment of the Security Calculation Agent, may be necessary in order to arrive at an Index Closing Level of an index comparable to the Index or such successor index, as the case may be, as if such changes or modifications had not been made, and the Security Calculation Agent will calculate the Index Closing Level for the Index or such successor or Substitute Index with reference to the Index or such successor or Substitute Index, as adjusted. The Security Calculation Agent will accordingly calculate the Index Closing Level, the Index Performance Ratio, the Last Reset Index Closing Level, the Accrued Fees, and any Redemption Amount, Redemption Fee Amount, Cash Settlement Amount or Call Settlement Amount, and all related payment terms based directly or indirectly on the Index Closing Level calculated by the Security Calculation Agent. Accordingly, if the method of calculating the Index or a successor or Substitute Index is modified so that the level of the Index or such successor or Substitute Index is a fraction or multiple of what it would have been if there had been no such modification (e.g., due to a rebasing of the Index), which, in turn, causes the Index Closing Level of the Index or such successor or Substitute Index to be a fraction of what it would have been if there had been no such modification, then the Security Calculation Agent will make such calculations and adjustments in order to arrive at an Index Closing Level for the Index or such successor or Substitute Index as if it had not been modified (e.g., as if such rebasing had not occurred).

In the event that the Security Calculation Agent elects to replace the Index with a successor index or a Substitute Index, UBS may, in its sole discretion, amend the title of the Securities in order to remove reference the former Index and to make such other changes to the title of the Securities as it considers necessary or desirable to reflect the name and/or characteristics of the relevant successor index or Substitute Index, as applicable.

All determinations and adjustments to be made by the Security Calculation Agent may be made in the Security Calculation Agent's sole discretion. See "Risk Factors — Risks Relating to Creditworthiness, Conflicts of Interest, Hedging Activities and Regulation of UBS — There are potential conflicts of interest between you and the Security Calculation Agent" in the prospectus supplement for a discussion of certain conflicts of interest which may arise with respect to the Security Calculation Agent.

### **Manner of Payment and Delivery**

Any payment on or delivery of the Securities at maturity or upon early redemption or call will be made to accounts designated by you and approved by us, or at the corporate trust office of the trustee in New York City, but only when the Securities are surrendered to the trustee at that office. We also may make any payment or delivery in accordance with the applicable procedures of the depositary.

# **Reissuances or Reopened Issues**

We may, at our sole discretion, "reopen" or reissue any series of Securities. We issued the Securities initially in an amount having the aggregate Stated Principal Amount specified on the cover of the prospectus supplement. We may issue additional Securities in amounts that exceed the amount on the cover at any time, without your consent and without notifying you. The Securities do not limit our ability to incur other indebtedness or to issue other securities. Also, we are not subject to financial or similar restrictions by the terms of the Securities. For more information, please refer to "Description of Debt Securities We May Offer — Amounts That We May Issue" in "Medium-Term Notes, Series B" above.

These further issuances, if any, will be consolidated to form a single class with the originally issued Securities of the same series and will have the same CUSIP number and will trade interchangeably with such Securities immediately upon settlement. Any additional issuances will increase the aggregate Stated Principal Amount of the outstanding Securities of the class. The price of any additional offering will be determined at the time of pricing of that offering.

## **Booking Branch**

The Securities will be booked through UBS AG, London Branch.

### **Clearance and Settlement**

The DTC participants that hold the Securities through DTC on behalf of investors will follow the settlement practices applicable to equity securities in DTC's settlement system with respect to the primary distribution of the Securities and secondary market trading between DTC participants.

## 24. ETRACS 2x Leveraged US Dividend Factor TR ETN due February 9, 2051

### **Specific Terms of the Securities**

In this section, references to "holders" mean those who own the Securities registered in their own names, on the books that we or the trustee maintains for this purpose, and not those who own beneficial interests in the Securities registered in street name or in the Securities issued in book-entry form through The Depository Trust Company ("DTC") or another depositary. Owners of beneficial interests in the Securities should read the section entitled "Legal Ownership and Book-Entry Issuance" under "Medium-Term Notes, Series B" above.

Each of the seven series of Securities offered by the prospectus supplement is separate and independent of each other series of Securities. Apart from the applicable Index, however, all of the terms of each series of Securities are the same. Since each series references a different Index, all calculations and adjustments and related events with respect to each series are independent of calculations and adjustments and related events for each other series of Securities, and we may exercise our call right as well as our right to initiate a split or a reverse split independently for each series. The following discussion therefore applies independently to each series of Securities offered by the prospectus supplement and, except as the context may otherwise require, the defined terms refer separately to each series. References to the "Securities" should be understood as references to a single series of Securities and the defined terms should be understood in reference only to that series of Securities.

These Securities are part of a series of debt securities entitled "Medium-Term Notes, Series B" that we may issue, from time to time, under the indenture more particularly described under "Medium-Term Notes, Series B" above. This section summarizes general financial and other terms that apply to the Securities. Terms that apply generally to all Medium-Term Notes, Series B are described in "Description of Debt Securities We May Offer" under "Medium-Term Notes, Series B" above. The terms described here supplement those described in "Medium-Term Notes, Series B" above and, if the terms described here are inconsistent with those described there, the terms described here are controlling.

The Securities are part of a single series of senior debt securities issued under our indenture, dated as of June 2, 2015 between us and U.S. Bank Trust National Association, as trustee.

We describe the terms of the Securities in more detail below. The Stated Principal Amount of each Security is \$25.00.

The Securities do not guarantee any return of principal at, or prior to, maturity or upon early redemption or call. Instead, at maturity, you will receive a cash payment per Security the amount of which will vary depending on the performance and path of the Index and will be reduced by the Accrued Fees as of the last Index Business Day in the Final Measurement Period as described under "— Cash Settlement Amount at Maturity." If the amount as calculated is equal to or less than zero, the Cash Settlement Amount will be zero and you will not receive a cash payment.

If you exercise your right to have us redeem your Securities, subject to compliance with the redemption procedures, for each Security you will receive a cash payment per Security on the relevant Redemption Date equal to the Redemption Amount as described under "— Early Redemption at the Option of the Holders." If the amount as calculated is equal to or less than zero, the Redemption Amount will be zero and you will not receive a cash payment.

#### **Cash Settlement Amount at Maturity**

The "Maturity Date" is February 9, 2051, which will be the third Index Business Day following the last Index Business Day in the Final Measurement Period, subject to adjustment as described below under "— Market Disruption Event."

For each Security, unless earlier called, redeemed or accelerated upon Zero Value Event, you will receive at maturity a cash payment equal to its Closing Indicative Value on the last Index Business Day in the applicable Measurement Period. We refer to this cash payment as the "Cash Settlement Amount." If the amount so calculated is equal to or less than zero, the payment will be zero.

The following graphic illustrates the formula to determine the Cash Settlement Amount, which has been simplified for ease of presentation:

Cash Settlement Amount = Closing Indicative Value, on last Index Business Day in Final Measurement Period

You may lose all or a substantial portion of your investment at maturity. The combined negative effect of the Accrued Fees will reduce your final payment. If the compounded leveraged quarterly return of the Index (or the unleveraged return of the Index, following a Permanent Deleveraging Event) is insufficient to offset the negative effect of the Accrued Fees, you may lose all or a substantial portion of your investment at maturity. The occurrence of Loss Rebalancing Events will result in more frequent than quarterly compounding.

UBS may call the Securities prior to the Maturity Date pursuant to its Call Right. If the Securities are called by UBS, the Call Settlement Amount may be zero and you may lose all or a substantial portion of your investment. See "Specific Terms of the Securities — UBS's Call Right".

The "Stated Principal Amount" of each Security is \$25.00. The Securities may be issued and sold over time at then-current market prices which may be significantly higher or lower than the Stated Principal Amount. If the Securities undergo a split or reverse split, the Stated Principal Amount will be adjusted accordingly.

The Closing Indicative Value represents the dollar value per Security that an investor would receive on any day if it redeemed the Security that day (without giving effect to any Redemption Fee Amount).

The "Closing Indicative Value" per Security, will be calculated as follows:

- (a) On the Initial Trade Date, \$25.00 per Security.
- (b) On any other calendar day, prior to the first day of an applicable Measurement Period, an amount per Security equal to:
  - (Current Principal Amount on the immediately preceding calendar day × Index Factor) Accrued Fees
- (c) From and including the first day of an applicable Measurement Period, an amount per Security equal to:
  - (Current Principal Amount on the calendar day immediately preceding the first day of the Measurement Period × Index Factor × Residual Factor) Accrued Fees + Measurement Period Cash Amount
  - However, if, on any day during a Measurement Period, the Current Indicative Value or the Closing Indicative Value *is less than or equal to* the Measurement Period Cash Amount from the immediately preceding calendar day, the Closing Indicative Value for that day and all subsequent days will be fixed to be equal to the Measurement Period Cash Amount from the immediately preceding calendar day.
- (d) The minimum value of the Closing Indicative Value on any calendar day will be zero.

If a Zero Value Event occurs, the Closing Indicative Value will be equal to zero on the day it occurs and on all future calendar days. Upon the occurrence of a Zero Value Event, investors will lose their entire investment. You will not benefit from any future exposure to the Index after the occurrence of a Zero Value Event. See "— Automatic Acceleration Upon Zero Value Event".

The actual trading price of the Securities in the secondary market may vary significantly from their Closing Indicative Value.

If the Securities undergo a split or reverse split, the Closing Indicative Value will be adjusted accordingly.

The "Current Principal Amount" represents the unleveraged notional investment in the Index Constituent Securities per Security at the close of trading on any Reset Valuation Date. The notional financing amount per Security in order to generate the leveraged returns would approximately equal the Current Principal Amount at the close of trading on any Reset Valuation Date. If a Permanent Deleveraging Event occurs, the leverage of your Securities will be permanently reset to 1.0 and the notional financing amount will be equal to zero for the remaining term of the Securities. If a Zero Value Event occurs prior to your Securities permanently resetting to 1.0 at the end of the Second Permanent Deleveraging Valuation Date, then your Securities will be automatically accelerated and mandatorily redeemed and you will lose your entire investment.

The Current Principal Amount per Security, will be calculated as follows:

- (a) From and including the Initial Trade Date to and excluding the first Reset Valuation Date, \$25.00 per Security.
- (b) At the close of trading on each Reset Valuation Date after the Initial Trade Date, the Current Principal Amount of the Securities will be reset as follows:

New Current Principal Amount = (Current Principal Amount on immediately preceding calendar day × Index Factor) – Accrued Fees

The Current Principal Amount will not change until the first Reset Valuation Date.

If a day that would otherwise be a Reset Valuation Date occurs on or after the first day of a Measurement Period, such day will not be a valid Reset Valuation Date.

If the Securities undergo a split or reverse split, the Current Principal Amount will be adjusted accordingly.

At the close of trading on each Reset Valuation Date, the Current Principal Amount is reset.

## The "Reset Valuation Date" means:

- (a) Any calendar day up to and including the Second Permanent Deleveraging Valuation Date, that is either: (i) the Initial Trade Date, (ii) a Quarterly Reset Valuation Date, (iii) a Loss Rebalancing Valuation Date (iv) the First Permanent Deleveraging Valuation Date; and
- (b) Any calendar day following the Second Permanent Deleveraging Valuation Date.

The valuation dates are defined below.

If a day that would otherwise be a Reset Valuation Date occurs on or after the first day of a Measurement Period, it will not be a valid Reset Valuation Date and the Last Reset Index Closing Level will remain the same.

The "Quarterly Reset Valuation Date" is the second Wednesday of January, April, July and October of each calendar year during the term of the Securities (other than an Excluded Day, as defined below), subject to adjustment as described under "—Market Disruption Event".

As used above, an "Excluded Day" means (i) the Index Business Day immediately preceding the first day of an applicable Measurement Period, and any calendar day thereafter, and (ii) any calendar day after the Second Permanent Deleveraging Valuation Date.

The "Index Factor" is: 1 + (Leverage Factor × Index Performance Ratio).

The Index Factor represents the leveraged percentage change in the Index level since the Last Reset Index Closing Level. The Index Factor *times* the applicable Current Principal Amount on the preceding calendar day represents the current value of the unleveraged notional amount per Security that is deemed invested in the Index on any calendar day. This does not reflect the Redemption Amount that an investor would receive upon early redemption on such calendar day.

The "Residual Factor" will be calculated as follows:

- (a) 1.0 on any calendar day, to but excluding the first day of an applicable Measurement Period.
- (b) From and including the first day of an applicable four-day Measurement Period, (a) the number of Index Business Days from, but excluding, the date of determination to, and including, the last Index Business Day in such four-day Measurement Period, *divided by* (b) four.
  - For example, on the first Index Business Day in an applicable four-day Measurement Period, the Residual Factor will equal 3/4, on the second Index Business Day in an applicable four-day Measurement Period, the Residual Factor will equal 2/4, on the third Index Business Day in an applicable four-day Measurement Period, the Residual Factor will equal 1/4 and on the last Index Business Day in an applicable four-day Measurement Period, the Residual Factor will equal zero.
- (c) On any calendar day from and including the last Index Business Day of an applicable Measurement Period, the Residual Factor will be equal to zero.

The Residual Factor is intended to approximate the percentage of the Current Principal Amount that is tracking the Index on any given day. The Residual Factor is relevant only during an applicable Measurement Period but otherwise is not a component of the Closing Indicative Value or Current Indicative Value formulas. At the close of trading on each Index Business Day during a four-day Measurement Period, approximately 25% of the Current Principal Amount and the corresponding amount of financing will be deemed converted to cash. In case of a one-day Measurement Period, approximately 100% of the Current Principal Amount and the corresponding amount of financing will be deemed converted to cash.

The "Leverage Factor" on any calendar day until the occurrence of a Permanent Deleveraging Event and the close of trading on the Second Permanent Deleveraging Valuation Date, will equal 2.0. If a Permanent Deleveraging Event occurs, then on any calendar day following the Second Permanent Deleveraging Valuation Date, the Leverage Factor will equal 1.0.

The "Index Performance Ratio" on any Index Business Day will be equal to:

<u>Index Closing Level – Last Reset Index Closing Level</u>
Last Reset Index Closing Level

On any calendar day that is not an Index Business Day, the Index Closing Level will be equal to the Index Closing Level on the Index Business Day immediately preceding such calendar day.

The "Last Reset Index Closing Level" is the Index Closing Level on the most recent Reset Valuation Date prior to such day. The initial Last Reset Index Closing Level is the Index Closing Level on the Initial Trade Date, as reported by Bloomberg and Reuters.

The "Index Closing Level" on any date of determination is the closing level of the Index, as reported on Bloomberg and Reuters on such day; however, if the closing level of the Index as reported on Bloomberg (or any successor) differs from the closing level of the Index as reported on Reuters (or any successor), the Index Closing Level will be the closing level of the Index as calculated by the Index Calculation Agent. The initial Index Closing Level (which is also the first Last Reset Index Closing Level) was determined on February 4, 2021 by the Security Calculation Agent. If the closing level of an Index, as reported on Bloomberg and Reuters for any Index Business Day, is manifestly incorrect, the "Index Closing Level" for such Index Business Day shall be the closing level of the Index as determined by the Security Calculation Agent. In making such determination, the Security Calculation Agent may consider any relevant information, including, without limitation, relevant market data in the relevant market supplied by one or more third parties or from internal sources or affiliates.

On any calendar day that is not an Index Business Day, the Index Closing level will be equal to the Index Closing Level on the Index Business Day immediately preceding such calendar day.

"Measurement Period" means the Final Measurement Period or, if UBS exercises its Call Right, the Call Measurement Period.

The "Current Indicative Value" or "intraday indicative value", as determined by the Security Calculation Agent, is an amount per Security, on an intraday basis on any Index Business Day, equal to:

- (a) On the Initial Trade Date, \$25.00.
- (b) On any other calendar day prior to the first day of a Measurement Period:

(Current Principal Amount on the immediately preceding calendar day × Index Factor, calculated using the Intraday Index Value) – Accrued Fees

(c) From and including the first day of a Measurement Period, an amount per Security equal to:

(Current Principal Amount on the calendar day immediately preceding the first day of the Measurement Period × Index Factor, calculated using the Intraday Index Value × Residual Factor on the immediately preceding calendar day) – Accrued Fees + Measurement Period Cash Amount, from the immediately preceding calendar day

However, if, on any day during a Measurement Period, the Current Indicative Value or the Closing Indicative Value *is less than or equal to* the Measurement Period Cash Amount from the immediately preceding calendar day, the Current Indicative Value for the remainder of that day and all subsequent days will be fixed to be equal to the Measurement Period Cash Amount from the immediately preceding calendar day.

(d) The minimum value of the Current Indicative Value on any calendar day will be zero.

The actual trading price of the Securities in the secondary market may vary significantly from their Current Indicative Value (intraday indicative value).

If a Zero Value Event occurs, the Current Indicative Value (intraday indicative value) will be equal to zero for the remainder of the day it occurs and on all future calendar days. Upon the occurrence of a Zero Value Event, investors will lose their entire investment. You will not benefit from any future exposure to the Index after the occurrence of a Zero Value Event. See "Specific Terms of the Securities — Automatic Acceleration Upon Zero Value Event".

If the Securities undergo a split or reverse split, the Current Indicative Value (intraday indicative value) will be adjusted accordingly.

The "Accrued Fees" as of any date of determination means the Accrued Tracking Fee + the Accrued Financing Fee.

If the Securities undergo a split or reverse split, the Accrued Fees will be adjusted accordingly.

The Securities are subject to an "Accrued Tracking Fee" per Security, calculated as follows:

- (a) On the Initial Trade Date, the Accrued Tracking Fee is equal to zero.
- (b) On any subsequent calendar day, the Accrued Tracking Fee is equal to: (a) the Accrued Tracking Fee as of the immediately preceding calendar day, *plus* the Daily Tracking Fee on such calendar day.
- (c) On the calendar day after each Reset Valuation Date, the Accrued Tracking Fee is reset to be equal to the Daily Tracking Fee on such calendar day.

"CME Term SOFR" means the CME Term SOFR Reference Rates published for one-, three-, six-, and 12-month tenors as administered by CME Group Benchmark Administration, Ltd. (or any successor administrator thereof).

The "Daily Tracking Fee" is an amount per Security calculated as follows:

- (a) On the Initial Trade Date, the Daily Tracking Fee is zero.
- (b) On any subsequent calendar day, the Daily Tracking Fee is equal to:
  - (1) (i) 0.95% *times* (ii) the Current Principal Amount on the immediately preceding calendar day *times* (iii) the Index Factor on such calendar day *times* (iv) the Residual Factor on the immediately preceding calendar day, *divided by* (2) 365.
- (c) The minimum value of the Daily Tracking Fee on any calendar day will be zero.

The Daily Tracking Fee represents the investor fees calculated each day on the current value of the unleveraged notional amount invested in the Index per Security. These charges accrue and compound during the applicable period, and will reduce any amount you are entitled to receive at maturity or upon early redemption or call.

If the Securities undergo a split or reverse split, the Daily Tracking Fee will be adjusted accordingly.

The Securities are subject to an "Accrued Financing Fee" per Security calculated as follows:

- (a) On the Initial Trade Date, the Accrued Financing Fee is equal to zero.
- (b) On any subsequent calendar day, the Accrued Financing Fee is equal to:

- (1) the Accrued Financing Fee as of the immediately preceding calendar day, *plus* (2) the Daily Financing Fee on such calendar day.
- (c) On the calendar day after each Reset Valuation Date, the Accrued Financing Fee is reset to be equal to the Daily Financing Fee on such calendar day.
- (d) If a Permanent Deleveraging Event occurs, then on any calendar day following the Second Permanent Deleveraging Valuation Date, the Accrued Financing Fee will be equal to zero.

# The "Daily Financing Fee" is an amount per Security calculated as follows:

- (a) On the Initial Trade Date, the Daily Financing Fee is equal to zero.
- (b) On any subsequent calendar day, the Daily Financing Fee is equal to:
  - (1) (i) the Financing Rate on such calendar day *times* (ii) the Current Principal Amount on the immediately preceding calendar day *times* (iii) the Residual Factor on the immediately preceding calendar day, *divided by* (2) 360.
- (c) If a Permanent Deleveraging Event occurs, then on any calendar day following the Second Permanent Deleveraging Valuation Date, the Daily Financing Fee will be equal to zero.
- (d) The minimum value of the Daily Financing Fee on any calendar day will be zero.

The Daily Financing Fee seeks to compensate UBS for providing investors with a leveraged participation in movements of the Index and is intended to approximate the financing costs that investors may have otherwise incurred had they sought to borrow funds at a similar rate from a third party to invest in the Index. These charges accrue and compound during the applicable period, and will reduce any amount that you will be entitled to receive at maturity or upon early redemption or call.

If the Securities undergo a split or reverse split, the Daily Financing Fee will be adjusted accordingly.

The "**Financing Rate**" will equal the sum of (a) 0.95% and (b) three-month CME Term SOFR rate plus a 0.2616% adjustment on the immediately preceding U.S. Government Securities Business Day. The minimum Financing Rate at any time will be 0.95%

For example, 5.24665% was the three-month CME Term SOFR rate on June 29, 2023. The Financing Rate (if it were based on the SOFR-Based Benchmark Replacement) on June 30, 2023 would have therefore been equal to: 0.95% + 5.24665% + 0.2616%, or 6.45825%.

# The "Measurement Period Cash Amount" is an amount per Security equal to:

- (a) \$0.00 on any calendar day, to but excluding the first day of a Measurement Period.
- (b) On the first day of a one-day Measurement Period:

At the close of trading on such Index Business Day, (Current Principal Amount on the immediately preceding calendar day × Index Factor, on such Index Business Day).

- (c) From and including the first day of a four-day Measurement Period:
  - (i) At the close of trading on each Index Business Day during the Measurement Period, the Measurement Period Cash Amount on the immediately preceding calendar day + (Current Principal Amount on the calendar day immediately preceding the first day of such Measurement Period × 0.25 × Index Factor, on such Index Business Day); and
  - (ii) On any calendar day during the Measurement Period that is not an Index Business Day, the Measurement Period Cash Amount on the immediately preceding Index Business Day.
- (d) On any calendar day after the last Index Business Day of a Measurement Period, the Measurement Period Cash Amount on the last Index Business Day of such Measurement Period.

Notwithstanding the foregoing, if, on any day during a Measurement Period, the Current Indicative Value or the Closing Indicative Value is *less than or equal to* the Measurement Period Cash Amount from the immediately preceding calendar day, then the Measurement Period Cash Amount for that day and all subsequent days will be fixed to be equal to the Measurement Period Cash amount from the immediately preceding calendar day.

The Measurement Period Cash Amount represents the portion of the Current Principal Amount that has been converted to cash on any given day of an applicable Measurement Period and is no longer tracking the Index.

At the close of trading of each Index Business Day during a four-day Measurement Period, approximately 25% of the Current Principal Amount on the calendar day immediately preceding the first day of the Measurement Period, will be deemed converted to cash and an applicable portion of the notional financing amount will separately be deemed converted to cash as well. After the close of trading on the final Index Business Day of a four-day Measurement Period, the Measurement Period Cash Amount will represent the averaged value of the Current Principal Amount that was deemed converted to cash across the four-days of such Measurement Period. In case of a one-day Measurement Period, approximately 100% of the Current Principal Amount will be deemed converted to cash and an applicable amount of financing will separately be deemed converted to cash, at the close of trading of the first day of such Measurement Period.

If the Securities undergo a split or reverse split, the Measurement Period Cash Amount will be adjusted accordingly.

#### The "Final Measurement Period" means:

- (a) if the Market Value of Securities outstanding as at the close of trading on the Index Business Day immediately preceding the Calculation Date is less than \$500,000,000, the Calculation Date, subject to adjustments as described under "— Market Disruption Event";
- (b) if the Market Value of Securities outstanding as at the close of trading on the Index Business Day immediately preceding the Calculation Date is equal to or greater than \$500,000,000, the four Index Business Days from and including the Calculation Date, subject to adjustments as described under "— Market Disruption Event."

For the purpose of determining the Final Measurement Period, the "Market Value" of the Securities outstanding as of the close of trading on the Index Business Day immediately preceding the Calculation Date, will equal:

(i) the Closing Indicative Value as of such Index Business Day *times* (ii) the number of Securities outstanding as reported on Bloomberg.

The "Index Calculation Agent" means the entity that calculates and publishes the level of the Index, which for each series of Securities is the entity set forth below:

Title of Securities	<b>Index Calculation Agent</b>
ETRACS 2x Leveraged US Dividend Factor TR ETN	S&P Dow Jones Indices
ETRACS 2x Leveraged US Growth Factor TR ETN	FTSE Russell
ETRACS 2x Leveraged US Size Factor TR ETN	FTSE Russell
ETRACS 2x Leveraged US Value Factor TR ETN	FTSE Russell
ETRACS 2x Leveraged MSCI US Minimum Volatility Factor TR ETN	MSCI, Inc.
ETRACS 2x Leveraged MSCI US Momentum Factor TR ETN	MSCI, Inc.
ETRACS 2x Leveraged MSCI US Quality Factor TR ETN	MSCI, Inc.

The "Calculation Date" means February 1, 2051, unless such day is not an Index Business Day, in which case the Calculation Date will be the next Index Business Day, subject to adjustment.

The Calculation Date represents the first Index Business Day of the Final Measurement Period.

"Index Business Day" means any day on which the Primary Exchange or market for trading of the Securities is scheduled to be open for trading.

"Primary Exchange" means, with respect to each Index Constituent Security or each constituent underlying a successor index, the primary exchange or market of trading such Index Constituent Security or such constituent underlying a successor index.

"U.S. Government Securities Business Day" means any day except for a Saturday, a Sunday or a day on which the Securities Industry and Financial Markets Association recommends that the fixed income departments of its members be closed for the entire day for purposes of trading in U.S. government securities.

# **Underlying Index**

The return of each series of Securities is based upon the performance of the applicable Index set forth on the cover page of this prospectus supplement. Each Index is designed to track the performance of a sector of the U.S. equity market and to reflect an investing style. We refer to the securities included in each Index as the "Index Constituent Securities" for such Index.

## Early Redemption at the Option of the Holders

Subject to your compliance with the procedures described below and the potential postponements and adjustments as described under "— Market Disruption Event", you may submit a request to have us redeem your Securities on any Index Business Day no later than 12:00 noon and a confirmation of redemption by no later than 5:00 p.m. on the same Index Business Day. You must request that we redeem a minimum of 50,000 Securities, although we reserve the right from time to time to waive this minimum redemption amount in our sole discretion on a case-by-case basis. You should not assume you will be entitled to the benefit of any such waiver. For any applicable redemption request, the "Redemption Valuation Date" will be the first Index Business Day following the date that the applicable redemption notice and redemption confirmation are delivered, except that we reserve the right from time to time to accelerate, in our sole discretion on a case-by-case basis, the Redemption Valuation Date to the date on which we receive the notice of redemption rather than the following Index Business Day. You should not assume you will be entitled to any such acceleration. To satisfy the minimum redemption amount, your broker or other financial intermediary may bundle your Securities for redemption with those of other investors to reach this minimum amount of 50,000 Securities; however, there can be no assurance that they can or will do so.

The Securities will be redeemed and the holders will receive payment for their Securities on the second Index Business Day following the applicable Redemption Valuation Date (the "Redemption Date"). The first Redemption Date will be the fourth Index Business Day immediately following the Initial Trade Date and the Final Redemption Date will be the fourth Index Business Day immediately preceding the Maturity Date, subject to adjustments. In addition, if we have issued a call notice, the last Redemption Valuation Date will be the fourth Index Business Day prior to the Call Settlement Date, as applicable. If a Zero Value Event occurs, the last Redemption Date will be the date on which the Zero Value Event occurred.

If a Market Disruption Event is continuing or occurs on the applicable scheduled Redemption Valuation Date with respect to any of the Index Constituent Securities, such Redemption Valuation Date may be postponed as described under "— Market Disruption Event".

As of any Redemption Valuation Date, the "Redemption Fee Amount" means an amount per Security equal to:

(0.125% × Closing Indicative Value of the Security as of the Redemption Valuation Date).

If you exercise your right to have us redeem your Securities, subject to your compliance with the procedures described under "— Redemption Procedures", for each applicable Security you will receive a cash payment on the relevant Redemption Date equal to:

Closing Indicative Value as of the Redemption Valuation Date - Redemption Fee Amount.

We refer to this cash payment as the "**Redemption Amount**." If the amount calculated above is equal to or less than zero, the payment upon early redemption will be zero. We reserve the right from time to time to waive the Redemption Fee Amount in our sole discretion and on a case-by-case basis. There can be no assurance that we will elect to waive this fee and you should not assume you will be entitled to such fee waiver.

We will inform you of such Redemption Amount on the first Index Business Day following the applicable Redemption Valuation Date.

The redemption feature is intended to induce arbitrageurs to counteract any trading of the Securities at a discount to their indicative value, though there can be no assurance that arbitrageurs will employ the redemption feature in this manner or that they will be successful in counteracting any divergence in the market price of the Securities and their indicative value.

The following graphic illustrates the formula to determine the Redemption Amount, which has been simplified for ease of presentation:

Redemption Amount = Closing Indicative Value - Redemption Fee Amount

You may lose all or a substantial portion of your investment upon early redemption. The combined negative effect of the Accrued Fees and the Redemption Fee Amount will reduce your final payment. If the compounded leveraged quarterly return of the Index (or the unleveraged return of the Index, following a Permanent Deleveraging Event) is insufficient to offset the negative effect of the Accrued Fees and the Redemption Fee Amount, if applicable, or if the compounded leveraged quarterly return of the Index (or the unleveraged return of the Index, following a Permanent Deleveraging Event) is negative, you may lose all or a substantial portion of your investment upon early redemption. Loss Rebalancing Events will cause compounding to occur more frequently than quarterly.

The Securities may be called by UBS prior to the Maturity Date pursuant to its Call Right and, upon the occurrence of a Zero Value Event, the Securities will be automatically accelerated and mandatorily redeemed by UBS. See "Specific Terms of the Securities — UBS's Call Right" and "Specific Terms of the Securities — Automatic Acceleration Upon Zero Value Event".

## **Redemption Procedures**

To redeem your Securities, you must instruct your broker or other person through whom you hold your Securities to take the following steps through normal clearing system channels:

deliver a notice of redemption, which we refer to as a "**Redemption Notice**" to UBS via email no later than 12:00 noon on the Index Business Day on which you elect to exercise your redemption right. If we receive your Redemption Notice by the time specified in the preceding sentence, we will respond by sending you a form of confirmation of redemption;

- deliver the signed confirmation of redemption, which we refer to as the "**Redemption Confirmation**", to us via email in the specified form by 5:00 p.m. on the same day. We or our affiliate must acknowledge receipt in order for your Redemption Confirmation to be effective;
- instruct your DTC custodian to book a delivery vs. payment trade with respect to your Securities on the applicable Redemption Date at a price equal to the Redemption Amount; and
- > cause your DTC custodian to deliver the trade as booked for settlement via DTC at or prior to 12:00 noon on the applicable Redemption Date.

Different brokerage firms may have different deadlines for accepting instructions from their customers. Accordingly, as a beneficial owner of the Securities, you should consult the brokerage firm through which you own your interest for the relevant deadline. If your broker delivers your Redemption Notice after 12:00 noon, or your Redemption Confirmation after 5:00 p.m., on the Index Business Day prior to the applicable Redemption Valuation Date, your Redemption Notice will not be effective, you will not be able to redeem your Securities until the following Redemption Date and your broker will need to complete all the required steps if you should wish to redeem your Securities on any subsequent Redemption Date. In addition, UBS may request a medallion signature guarantee or such assurances of delivery as it may deem necessary in its sole discretion. All instructions given to participants from beneficial owners of Securities relating to the right to redeem their Securities will be irrevocable. If your DTC custodian or your brokerage firm is not a current UBS customer, UBS will be required to on-board such DTC custodian or brokerage firm, in compliance with its internal policies and procedures, before it can accept your Redemption Notice, your Redemption Confirmation or otherwise process your redemption request. This on-boarding process may delay your Redemption Valuation Date and Redemption Date. Furthermore, in certain circumstances, UBS may be unable to on-board your DTC custodian or your brokerage firm.

We reserve the right from time to time to waive the minimum redemption amount or the Redemption Fee Amount in our sole discretion on a case-by-case basis. In addition, we reserve the right from time to time to accelerate, in our sole discretion on a case-by-case basis, the Redemption Valuation Date to the date on which we receive the Redemption Notice rather than the following Index Business Day. You should not assume you will be entitled to any such waiver or election to accelerate the Redemption Valuation Date.

## **UBS's Call Right**

UBS may at its option redeem all, but not less than all, of the issued and outstanding Securities of any series. To exercise its Call Right, UBS must provide notice to the holders of such Securities (which may be provided via press release) not less than 18 calendar days prior to the Call Settlement Date specified by UBS in such notice. If we call the Securities, you will receive a cash payment equal to the Closing Indicative Value on the last Index Business Day in the Call Measurement Period. We refer to this cash payment as the "Call Settlement Amount."

If the amount calculated above is equal to or less than zero, the payment upon UBS's exercise of its Call Right will be zero.

We will inform you of such Call Settlement Amount on the first Index Business Day following the last Index Business Day in the Call Measurement Period.

The holders will receive payment for their Securities on the third Index Business Day following the last Index Business Day in the Call Measurement Period (the "Call Settlement Date"). If a Market Disruption Event is continuing or occurs on the scheduled Call Valuation Date with respect to any of the Index Constituent Securities, such Call Valuation Date may be postponed as described under "— Market Disruption Event".

## The "Call Measurement Period" means:

- (a) if the Market Value of Securities outstanding at the close of trading on the Index Business Day immediately preceding the date we issue a notice of exercise of our Call Right is less than \$500,000,000, the Call Valuation Date, subject to adjustments as described under "— Market Disruption Event"; and
- (b) if the Market Value of Securities outstanding as at the close of trading on the Index Business Day immediately preceding the date we issue a notice of exercise of our Call Right is equal to or greater than \$500,000,000, the four Index Business Days from and including the Call Valuation Date, subject to adjustment as described under "— Market Disruption Event."

For the purpose of determining the Final Measurement Period, the "Market Value" of the Securities outstanding as of the close of trading on the Index Business Day immediately preceding the date of delivery by UBS of its notice to holders (which may be provided via press release) of its exercise of its Call Right will equal:

(i) The Closing Indicative Value as of such Index Business Day *times* (ii) the number of Securities outstanding as reported on Bloomberg.

The "Call Valuation Date" means the date we specify in our notice to holders (which may be provided via press release) of our exercise of our Call Right.

In any notice to holders exercising our Call Right, we will specify how many days are included in the Call Measurement Period.

The following graphic illustrates the formula to determine the Call Settlement Amount, which has been simplified for ease of presentation:

Cash Settlement Amount = Closing Indicative Value, on last Index Business Day in Call Measurement Period

You may lose all or a substantial portion of your investment if we exercise our Call Right. The combined negative effect of the Accrued Fees will reduce your final payment. If the compounded leveraged quarterly return of the Index (or the unleveraged return of the Index, following a Permanent Deleveraging Event) is insufficient to offset the negative effect of the Accrued Fees, or if the compounded leveraged quarterly return of the Index (or the unleveraged return of the Index, following a Permanent Deleveraging Event) is negative, you may lose all or a substantial portion of your investment upon a call. Loss Rebalancing Events will cause compounding to occur more frequently than quarterly.

In addition, upon the occurrence of a Zero Value Event, the Securities will be automatically accelerated and mandatorily redeemed by UBS. See "Specific Terms of the Securities — Automatic Acceleration Upon Zero Value Event" below.

# **Automatic Acceleration Upon Zero Value Event**

For each series of Securities, a Zero Value Event represents the first instance when the Current Indicative Value (intraday indicative value) or the Closing Indicative Value is less than or equal to zero (other than on an Excluded Day, as defined below). It will have the effect of permanently resetting the value of your Securities to zero and accelerating the Securities. You will not benefit from any future exposure to the applicable Index after the occurrence of a Zero Value Event.

A Zero Value Event can occur only if a Permanent Deleveraging Event occurs and the Current Indicative Value (intraday indicative value) or the Closing Indicative Value declines to zero before the leverage of your Securities is reset to 1.0 at the close of trading on the Index Business Day following such event (or if such event occurs after 3:15 p.m. on any Index Business Day which would not otherwise have been a Loss Rebalancing Valuation Date, the second Index Business Day following such event), as described under "Permanent Deleveraging Valuation Dates" above.

A "Zero Value Event" occurs if the Current Indicative Value (intraday indicative value) or the Closing Indicative Value on any Index Business Day (other than an Excluded Day, as defined below) is less than or equal to zero. From immediately after the Zero Value Event and on all future calendar days, the Current Indicative Value (intraday indicative value) and the Closing Indicative Value will be set equal to zero.

As used above, an "Excluded Day" means (i) any calendar day after the Second Permanent Deleveraging Valuation Date (ii) any calendar day on or after which a Zero Value Event has already occurred, and (iii) any calendar day after the last day of an applicable Measurement Period.

In the event that a Zero Value Event has occurred, UBS will issue a press release shortly after the event; provided that the failure to do so shall not affect the automatic acceleration and redemption of the Securities. The Securities will be suspended from trading intraday shortly after the event occurs and will likely not be open for trading again on NYSE Arca.

### You will lose your entire investment upon the occurrence of a Zero Value Event.

In addition, we may call the Securities prior to the Maturity Date pursuant to our Call Right. See "Specific Terms of the Securities — UBS's Call Right".

#### **Loss Rebalancing Events**

A Loss Rebalancing Event will have the effect of deleveraging your Securities with the aim of resetting the then-current leverage to approximately 2.0. This means that after a Loss Rebalancing Event, a constant percentage increase in the Index Closing Level will have less of a positive effect on the value of your Securities relative to before the occurrence of the Loss Rebalancing Event.

A "Loss Rebalancing Event" occurs if, at any time, the Intraday Index Value on such Index Business Day (other than an Excluded Day, as used below) decreases by 20% or more from the previous Last Reset Index Closing Level.

Loss Rebalancing Events may occur multiple times over the term of the Securities and may occur multiple times during a single calendar quarter. This means both that (i) the Current Principal Amount may be reset more frequently than quarterly and (ii) the cumulative effect of compounding and fees will have increased as a result of the Loss Rebalancing Event(s). Because each Loss Rebalancing Event will have the effect of deleveraging your Securities, following a Loss Rebalancing Event your Securities will have less exposure to a potential positive gain in value relative to the exposure before the occurrence of such Loss Rebalancing Event.

As used above, an "Excluded Day" means (i) the Index Business Day immediately preceding any Quarterly Reset Valuation Date, if a Loss Rebalancing Event occurs after 3:15 p.m. on such day, (ii) any Quarterly Reset Valuation Date, (iii) any Loss Rebalancing Valuation Date, (iv) the Index Business Day immediately preceding the first day of an applicable Measurement Period, if a Loss Rebalancing Event occurs after 3:15 p.m. on such day (v) any calendar day from and including the first day of an applicable Measurement Period, (vi) the First or Second Permanent Deleveraging Valuation Dates, (vii) any calendar day after the Second Permanent Deleveraging Valuation Date, and (ix) any calendar day on or after which a Zero Value Event has occurred.

### "Loss Rebalancing Valuation Date" means:

- (a) if a Loss Rebalancing Event occurs at or prior to 3:15 p.m. on an Index Business Day, the day that such Loss Rebalancing Event occurs, subject to adjustment as described under "— Market Disruption Event"; and
- (b) if a Loss Rebalancing Event occurs after 3:15 p.m. on an Index Business Day, the first Index Business Day following the occurrence of such Loss Rebalancing Event, subject to adjustment as described under "— Market Disruption Event."

## **Permanent Deleveraging Event**

A Permanent Deleveraging Event will have the effect of deleveraging your Securities, with the aim of permanently resetting the then-current leverage to 1.0 over two Index Business Days. The leverage at the end of the First Permanent Deleveraging Valuation Date is reset to approximately 2.0 and the leverage at the end of the Second Permanent Deleveraging Valuation Date is reset to 1.0. This means that after a Permanent Deleveraging Event, a constant percentage increase in the Index Closing Level will have less of a positive effect on the value of your Securities than it would have had before the occurrence of the Permanent Deleveraging Event. If such an event were to occur, it most likely would occur only following a Loss Rebalancing Event and prior to the completion of the associated leverage reset to 2.0, which would generally occur at the end of the Index Business Day following the Index Business Day on which the Loss Rebalancing Event occurred or, if the Loss Rebalancing Event occurs 3:15 p.m. on an Index Business Day, at the end of the second Index Business Day following the Index Business Day on which the Loss Rebalancing Event occurred.

A "Permanent Deleveraging Event" occurs if, at any time on an Index Business Day (other than an Excluded Day, as defined below), the Intraday Index Value decreases by 40% or more from the Last Reset Index Closing Level. If a Permanent Deleveraging Event occurs, the Current Principal Amount of the Securities will be reset over two Index Business Days.

As used above, an "Excluded Day" means (i) the First or Second Permanent Deleveraging Valuation Dates, (ii) any calendar day after the Second Permanent Deleveraging Valuation Date, (iii) any day on or after which a Zero Value Event occurs, (iv) the day which is two Index Business Days prior to the first day of a Measurement Period, if a Permanent Deleveraging Event occurs after 3:15 p.m. on such day, and (v) any calendar day from and including the Index Business Day immediately preceding the first day of a Measurement Period.

"Permanent Deleveraging Valuation Dates" means the First Permanent Deleveraging Valuation Date and the Second Permanent Deleveraging Valuation Date, each as defined below:

- (a) The "First Permanent Deleveraging Valuation Date" means:
  - (i) any Index Business Day, which otherwise would have been a Loss Rebalancing Valuation Date, but on which a Permanent Deleveraging Event has occurred, subject to adjustment as described under "— Market Disruption Event"; or
  - (ii) if a Permanent Deleveraging Event occurs after 3:15 p.m. on any Index Business Day which would not otherwise have been a Loss Rebalancing Valuation Date, then the first Index Business Day following the occurrence of such Permanent Deleveraging Event, subject to adjustment as described under "— Market Disruption Event."

The leverage of your Securities will be reset to approximately 2.0 at the close of trading on the First Permanent Deleveraging Valuation Date.

(b) The "Second Permanent Deleveraging Valuation Date" means the Index Business Day immediately following the First Permanent Deleveraging Valuation Date, subject to adjustment as described under "— Market Disruption Event."

The leverage of your Securities will be reset to 1.0 at the close of trading on the Second Permanent Deleveraging Valuation Date.

# **Split or Reverse Split of the Securities**

We may, at any time in our sole discretion, initiate a split or reverse split of your Securities. If we decide to initiate a split or reverse split, as applicable, we will issue a press release announcing the split or reverse split and its effective date. The date of such press release shall be deemed to be the "announcement date" of the split or the reverse split, the record date for any split or reverse split will be the tenth Business Day after the announcement date, and the effective date will be the next Business Day after the record date.

If the Securities undergo a split or reverse split, we will adjust the Current Principal Amount, Closing Indicative Value, Current Indicative Value, Accrued Fees, Measurement Period Cash Amount and other relevant terms of the Securities accordingly. For example, if the Securities undergo a 4:1 split, every investor who holds a Security via The Depository Trust Company ("DTC") on the relevant record date will, after the split, hold four Securities, and adjustments will be made as described below. The Current Principal Amount on such record date will be *divided by* four to reflect the 4:1 split. The adjusted Current Principal Amount will be rounded to eight decimal places. The split or reverse split will become effective at the opening of trading of the Securities on the Index Business Day immediately following the record date. The split will not occur if we exercise our Call Right before it becomes effective.

In the case of a reverse split, the Current Principal Amount and other relevant terms of the Securities will be adjusted accordingly and we will determine in our sole discretion the manner in which we will address odd numbers of Securities (commonly referred to as "partials"). For example, if the Securities undergo a 1:4 reverse split, every investor who holds four Securities via DTC on the relevant record date will, after the reverse split, hold only one Security and the Current Principal Amount of the Securities on such record date will be multiplied by four to reflect the 1:4 reverse split. The adjusted Current Principal Amount will be rounded to eight decimal places. The reverse split will become effective at the opening of trading of the Securities on the Index Business Day immediately following the record date. The reverse split will not occur if we exercise our Call Right before it becomes effective.

Holders who own a number of Securities on the record date that is not evenly divisible by the reverse split divisor (which in the case of a 1:4 reverse split, for example, will be 4) will receive the same treatment as all other holders for the maximum number of Securities they hold that is evenly divisible by the reverse split divisor. We will determine in our sole discretion the manner in which we compensate holders for their remaining or "partial" Securities when we announce the reverse split, though our current intention is to provide holders with a cash payment for their partials on the 17th Business Day following the announcement date in an amount equal to the appropriate percentage of the Closing Indicative Value of the reverse split-adjusted Securities on the 15th Business Day following the announcement date. For example, in the case of a 1:4 reverse split, a holder who held 23 Securities via DTC on the record date would receive five post-reverse split Securities on the immediately following Business Day, and a cash payment on the 17th Business Day following the announcement date that is equal to 3/4 of the Current Principal Amount of the reverse split-adjusted Securities on the 15th Business Day following the announcement date.

## **Security Calculation Agent**

UBS Securities LLC will act as the Security Calculation Agent. The Security Calculation Agent will be solely responsible for all determinations and calculations regarding the value of the Securities, including, among other things, at maturity or upon early redemption or call, or at other times, the Current Principal Amount, Current Indicative Value (which we also refer to as the intraday indicative value), Closing Indicative Value, Market Disruption Events, Business Days, Index Business Days, the Leverage Factor, the Index Factor, the Index Performance Ratio, the Residual Factor, the Index Closing Level, the Financing Rate, the Accrued Fees (including determining any successor to the LIBOR base rate), the Redemption Fee Amount, the Cash Settlement Amount, if any, that we will pay you at maturity, the Redemption Amount, if any, that we will pay you upon redemption, the Call Settlement Amount, that we will pay you if we call the Securities, whether a Loss Rebalancing Event has occurred, whether a Permanent Deleveraging Event has occurred and whether any day is an Index Business Day and all such other matters as may be specified elsewhere herein as matters to be determined by the Security Calculation Agent. If any Intraday Index Value as published by Bloomberg on any Index Business Day is manifestly incorrect, the Security Calculation Agent may base its determination of whether a Loss Rebalancing Event, Permanent Deleveraging Event or Zero Value Event shall have occurred on such Index Business Day on its own determination of such Intraday Index Value. In making such determination, the Security Calculation Agent may consider any relevant information, including, without limitation, relevant market data in the relevant market supplied by one or more third parties or from internal sources or affiliates. The Security Calculation Agent will also be responsible for determining whether the Index has been discontinued and whether there has been a material change in the Index. The Security Calculation Agent will make all such determinations and calculations in its sole discretion, and absent manifest error, all determinations of the Security Calculation Agent will be conclusive for all purposes and binding on us, you, and all other persons having an interest in the Securities, without liability on the part of the Security Calculation Agent. You will not be entitled to any compensation from us for any loss suffered as a result of any determinations or calculations made by the Security Calculation Agent. We may appoint a different Security Calculation Agent from time to time after the date of the prospectus supplement without your consent and without notifying you.

The Security Calculation Agent will provide written notice to the trustee at its New York office, on which notice the trustee may conclusively rely, of the amount to be paid at maturity or upon early redemption or call, on or prior to 12:00 noon on the Index Business Day immediately preceding the Maturity Date, any Redemption Date or any Call Settlement Date.

All dollar amounts related to determination of the Accrued Fees, the Current Principal Amount, and any Redemption Amount, Redemption Fee Amount, Call Settlement Amount or Cash Settlement Amount per Security will be rounded to the nearest tenthousandth, with five one hundred-thousandths rounded upward (e.g., .76545 would be rounded up to .7655); and all dollar amounts paid to any holder of Securities will be rounded to the nearest cent, with one-half cent rounded upward.

## **Market Disruption Event**

To the extent a Market Disruption Event with respect to the Index has occurred or is continuing during a four-day Measurement Period, the Index Closing Level for such day will be determined by the Security Calculation Agent or one of its affiliates on the first succeeding Index Business Day on which a Market Disruption Event does not occur or is not continuing with respect to the Index. The remaining Index Business Days in the Measurement Period will be postponed accordingly, and the remaining Index Business Days in the Measurement Period will resume again following the suspension of the Market Disruption Event. For example, if the four-day Measurement Period for purposes of calculating the Call Settlement Amount, is scheduled for June 2, June 3, June 4 and June 5, and there is a Market Disruption Event with respect to the Index on June 2, but no other Market Disruption Event during such Call Measurement Period, then June 3 will become the first Index Business Day of the Measurement Period, June 4th the second Index Business Day, June 5th the third Index Business Day and the next Index Business Day after June 5th would be the final day of the Measurement Period. The same approach would be applied if there is a Market Disruption Event during a four-day Final Measurement Period.

To the extent a Market Disruption Event with respect to the Index has occurred or is continuing on the Redemption Valuation Date, Call Valuation Date (in the event that the Call Measurement Period is the Call Valuation Date), Calculation Date (in the event that the Final Measurement Period is the Calculation Date) or any Reset Valuation Date, the Index Closing Level for such Redemption Valuation Date, Call Valuation Date, Calculation Date or Reset Valuation Date will be determined by the Security Calculation Agent or one of its affiliates on the first succeeding Index Business Day on which a Market Disruption Event does not occur or is not continuing with respect to the Index. For example, if the Redemption Valuation Date, for purposes of calculating a Redemption Amount, is based on the Index Closing Level on June 2 and there is a Market Disruption Event with respect to the Index on June 2, then the Index Closing Level on June 3 will be used to calculate the Redemption Amount, assuming that no such Market Disruption Event has occurred or is continuing on June 3.

In no event, however, will any postponement pursuant to either of the two immediately preceding paragraphs result in the affected Index Business Day of the Measurement Period or any Redemption Valuation Date, Call Valuation Date (in the event that the Call Measurement Period is the Call Valuation Date), Calculation Date (in the event that the Final Measurement Period is the Calculation Date) or Reset Valuation Date occurring more than five Index Business Days following the day originally scheduled to be such Index Business Day of the Measurement Period or such Redemption Valuation Date, Call Valuation Date, Calculation Date or Reset Valuation Date. If a Market Disruption Event has occurred or is continuing with respect to the Index on the fifth Index Business Day following the date originally scheduled to be such Index Business Day of the Measurement Period or any Redemption Valuation Date, Calculation Date or any Reset Valuation Date, the Security Calculation Agent or one of its affiliates will determine the Index Closing Level based on its good faith estimate of the Index Closing Level that would have prevailed on such fifth Index Business Day but for such Market Disruption Event.

Any of the following will be a "Market Disruption Event" with respect to the Index, in each case as determined by the Security Calculation Agent in its sole discretion:

- (a) suspension, absence or material limitation of trading in a material number of Index Constituent Securities, whether by reason of movements in price exceeding limits permitted by the Primary Exchange or otherwise;
- (b) suspension, absence or material limitation of trading in option or futures contracts relating to the Index or to a material number of Index Constituent Securities in the primary market or markets for those contracts;
- (c) the Index is not published; or
- (d) in any other event, if the Security Calculation Agent determines in its sole discretion that the event materially interferes with our ability or the ability of any of our affiliates to unwind all or a material portion of a hedge with respect to the Securities that we or our affiliates have effected or may effect as described in the section entitled "Use of Proceeds and Hedging."

The following events will not be Market Disruption Events with respect to the Index:

- (a) a limitation on the hours or numbers of days of trading, but only if the limitation results from an announced change in the regular business hours of the relevant market; and
- (b) a decision to permanently discontinue trading in the option or futures contracts relating to the Index or any Index Constituent Securities.

For this purpose, an "absence of trading" in the primary securities market on which option or futures contracts related to the Index or any Index Constituent Securities are traded will not include any time when that market is itself closed for trading under ordinary circumstances.

## **Default Amount on Acceleration**

If an event of default occurs and the maturity of the Securities is accelerated, we will pay the default amount in respect of the principal of the Securities at maturity. We describe the default amount below under "— Default Amount."

For the purpose of determining whether the holders of our Medium-Term Notes, Series B, of which the Securities are a part, are entitled to take any action under the indenture, we will treat the outstanding principal amount of the Medium-Term Notes, Series B, as constituting the outstanding principal amount of the Securities. Although the terms of the Securities may differ from those of the other Medium-Term Notes, Series B, holders of specified percentages in principal amount of all Medium-Term Notes, Series B, together in some cases with other series of our debt securities, will be able to take action affecting all the Medium-Term Notes, Series B, including the Securities. This action may involve changing some of the terms that apply to the Medium-Term Notes, Series B, accelerating the maturity of the Medium-Term Notes, Series B after a default or waiving some of our obligations under the indenture. We discuss these matters in "Medium-Term Notes, Series B" above under "Description of Debt Securities We May Offer — Default, Remedies and Waiver of Default" and "Description of Debt Securities We May Offer — Modification and Waiver of Covenants."

#### **Default Amount**

The default amount for the Securities on any day will be an amount, in U.S. dollars as determined by the Security Calculation Agent in its sole discretion, for the aggregate Stated Principal Amount of the Securities, equal to the cost of having a qualified financial institution, of the kind and selected as described below, expressly assume all our payment and other obligations with respect to the Securities as of that day and as if no default or acceleration had occurred, or to undertake other obligations providing substantially equivalent economic value to you with respect to the Securities. That cost will equal:

- the lowest amount that a qualified financial institution would charge to effect this assumption or undertaking, plus
- the reasonable expenses, including reasonable attorneys' fees, incurred by the holders of the Securities in preparing any documentation necessary for this assumption or undertaking.

During the default quotation period for the Securities, which we describe below, the holders of the Securities and/or we may request a qualified financial institution to provide a quotation of the amount it would charge to effect this assumption or undertaking. If either party obtains a quotation, it must notify the other party in writing of the quotation. The amount referred to in the first bullet point above will equal the lowest — or, if there is only one, the only — quotation obtained, and as to which notice is so given, during the default quotation period. With respect to any quotation, however, the party not obtaining the quotation may object, on reasonable and significant grounds, to the assumption or undertaking by the qualified financial institution providing the quotation and notify the other party in writing of those grounds within two Business Days after the last day of the default quotation period, in which case that quotation will be disregarded in determining the default amount.

### **Default Quotation Period**

The default quotation period is the period beginning on the day the default amount first becomes due and ending on the third Index Business Day after that day, unless:

- > no quotation of the kind referred to above is obtained, or
- > every quotation of that kind obtained is objected to within five Index Business Days after the due date as described above

If either of these two events occurs, the default quotation period will continue until the third Index Business Day after the first Index Business Day on which prompt notice of a quotation is given as described above. If that quotation is objected to as described above within five Index Business Days after that first Index Business Day, however, the default quotation period will continue as described in the prior sentence and this sentence.

In any event, if the default quotation period and the subsequent two Index Business Day objection period have not ended before the Calculation Date, then the default amount will equal the Stated Principal Amount of the Securities.

## **Qualified Financial Institutions**

For the purpose of determining the default amount at any time, a qualified financial institution must be a financial institution organized under the laws of any jurisdiction in the United States of America, Europe or Japan, which at that time has outstanding debt obligations with a stated maturity of one year or less from the date of issue and rated either:

- A-1 or higher by Standard & Poor's Financial Services LLC, a subsidiary of The McGraw-Hill Companies, Inc., or any successor, or any other comparable rating then used by that rating agency, or
- P-1 or higher by Moody's Investors Service or any successor, or any other comparable rating then used by that rating agency.

# Discontinuance of or Adjustments to the Index or Termination of Our License Agreements with the Index Sponsors; Alteration of Method of Calculation

If (i) an Index Sponsor or the Index Calculation Agent announces that it intends to discontinue, or discontinues, publication of, or otherwise fails to publish, the Index, (ii) our license agreement with the Index Sponsor terminates or (iii) the Index Sponsor or Index Calculation Agent does not make the Index Constituent Securities and/or their unit weighting available to the Security Calculation Agent, and, in each case, any other person or entity publishes an index licensed to UBS that the Security Calculation Agent determines is comparable to the Index and for which the Index Constituent Securities and/or their unit weighting are available to the Security Calculation Agent (such index being referred to herein as a "successor index"), and the Security Calculation Agent approves such index as a successor index, then on and after the date determined by the Security Calculation Agent, the Security Calculation Agent will determine the Index Closing Level on the applicable dates of determination and the amount payable at maturity or upon early redemption or call and all other related payments terms by reference to such successor index.

Upon any selection by the Security Calculation Agent of a successor index, the Security Calculation Agent will cause written notice of the successor index and the date on and after which the Index Closing Level will be determined by reference thereto be furnished to the trustee, to us and to the holders of the Securities.

If an Index Sponsor or Index Calculation Agent discontinues publication of the Index, our license agreement with the Index Sponsor terminates or the Index Sponsor or Index Calculation Agent do not make the Index Constituent Securities and/or their unit weighting available to the Security Calculation Agent, prior to, and such discontinuation, termination or unavailability is continuing on the Calculation Date or any Index Business Day during a Measurement Period, or on the Redemption Valuation Date or on any Reset Valuation Date, as applicable, or on any other relevant date on which the Index Closing Level is to be determined and the Security Calculation Agent determines that no successor index is available at such time, or the Security Calculation Agent has previously selected a successor index and publication of such successor index is discontinued prior to, and such discontinuation is continuing on the Calculation Date or any Index Business Day during a Measurement Period, or on the Redemption Valuation Date or on any Reset Valuation Date, or any other relevant date on which the Index Closing Level is to be determined, then the Security Calculation Agent will determine the Index Closing Level using the Index Closing Level on the last Index Business Day immediately prior to such discontinuation or unavailability, as adjusted for certain corporate actions. In such event, the Security Calculation Agent will cause notice thereof to be furnished to the trustee, to us and to the holders of the Securities.

Notwithstanding these alternative arrangements, discontinuation of the publication of the Index or successor index, as applicable, may adversely affect the value of the Securities.

In addition, if an Index Replacement Event (as defined below) occurs at any time and the Index Sponsor or anyone else publishes an index that the Security Calculation Agent determines is comparable to the Index (the "Substitute Index"), then the Security Calculation Agent may elect, in its sole discretion, to permanently replace the original Index with the Substitute Index for all purposes under the Securities, and all provisions described in the prospectus supplement as applying to the Index will thereafter apply to the Substitute Index instead. In such event, the Security Calculation Agent will make such adjustments, if any, to any level of the Index or Substitute Index that is used for purposes of the Securities as it determines are appropriate in the circumstances. If the Security Calculation Agent elects to replace the original Index with a Substitute Index, then the Security Calculation Agent will determine all amounts hereunder, Current Principal Amount, Current Indicative Value (intraday indicative value), Closing Indicative Value, Index Factor, Index Performance Ratio, Residual Factor, Accrued Fees, Index Closing Levels on the applicable dates of determination, all other related payment terms and the amount payable at maturity or upon early redemption or call by reference to such Substitute Index. If the Security Calculation Agent so elects to replace the original Index with a Substitute Index, the Security Calculation Agent will cause written notice thereof to be furnished to the trustee, to us and to the holders of the Securities of the Securities.

## An "Index Replacement Event" means:

(a) an amendment to or change (including any officially announced proposed change) in the laws, regulations or rules of the United States (or any political subdivision thereof), or any jurisdiction in which a Primary Exchange (as defined herein) is located that (i) makes it illegal for UBS AG or its affiliates to hold, acquire or dispose of the Index Constituent Securities included in the Index or options, futures, swaps or other derivatives on the Index or on the Index Constituent Securities included in the Index (including but not limited to exchange-imposed position limits), (ii) materially increases the cost to us, our affiliates, third parties with whom we transact or similarly situated third parties in performing our or their obligations in connection with the Securities, (iii) has a material adverse effect on any of these parties' ability to perform their obligations in connection with the Securities, or (iv) materially affects our ability to issue or transact in exchange traded notes similar to the Securities, each as determined by the Security Calculation Agent;

- (b) any official administrative decision, judicial decision, administrative action, regulatory interpretation or other official pronouncement interpreting or applying those laws, regulations or rules that is announced on or after February 4, 2021 that (i) makes it illegal for UBS AG or its affiliates to hold, acquire or dispose of the Index Constituent Securities included in the Index or options, futures, swaps or other derivatives on the Index or on the Index Constituent Securities (including but not limited to exchange-imposed position limits), (ii) materially increases the cost to us, our affiliates, third parties with whom we transact or similarly situated third parties in performing our or their obligations in connection with the Securities, (iii) has a material adverse effect on the ability of us, our affiliates, third parties with whom we transact or a similarly situated third party to perform our or their obligations in connection with the Securities, or (iv) materially affects our ability to issue or transact in exchange traded notes similar to the Securities, each as determined by the Security Calculation Agent;
- (c) any event that occurs on or after February 4, 2021 that makes it a violation of any law, regulation or rule of the United States (or any political subdivision thereof), or any jurisdiction in which a Primary Exchange (as defined herein) is located, or of any official administrative decision, judicial decision, administrative action, regulatory interpretation or other official pronouncement interpreting or applying those laws, regulations or rules, (i) for UBS AG or its affiliates to hold, acquire or dispose of the Index Constituent Securities or options, futures, swaps or other derivatives on the Index or on the Index Constituent Securities (including but not limited to exchange-imposed position limits), (ii) for us, our affiliates, third parties with whom we transact or similarly situated third parties to perform our or their obligations in connection with the Securities, or (iii) for us to issue or transact in exchange traded notes similar to the Securities, each as determined by the Security Calculation Agent;
- (d) any event, as determined by the Security Calculation Agent, as a result of which we or any of our affiliates or a similarly situated party would, after using commercially reasonable efforts, be unable to, or would incur a materially increased amount of tax, duty, expense or fee (other than brokerage commissions) to, acquire, establish, substitute, maintain, unwind or dispose of any transaction or asset it deems necessary to hedge the risk of the Securities, or realize, recover or remit the proceeds of any such transaction or asset; or
- (e) as determined by the Security Calculation Agent, the primary exchange or market for trading for the Securities, if any, announces that pursuant to the rules of such exchange or market, as applicable, the Securities cease (or will cease) to be listed, traded or publicly quoted on such exchange or market, as applicable, for any reason and are not immediately re-listed, re-traded or re-quoted on an exchange or quotation system located in the same country as such exchange or market, as applicable.

Notwithstanding these alternative arrangements, discontinuation of the publication of the Index or successor index, as applicable, may adversely affect the value of the Securities.

If at any time the method of calculating the Index, a successor index or a Substitute Index, or the value thereof, is changed in a material respect, or if the Index or a successor or Substitute Index is in any other way modified so that the Index Closing Level of the Index or such successor or Substitute Index does not, in the opinion of the Security Calculation Agent, fairly represent the Index Closing Level of the Index or such successor or Substitute Index had such changes or modifications not been made, then the Security Calculation Agent will make such calculations and adjustments as, in the good faith judgment of the Security Calculation Agent, may be necessary in order to arrive at an Index Closing Level of an index comparable to the Index or such successor index, as the case may be, as if such changes or modifications had not been made, and the Security Calculation Agent will calculate the Index Closing Level for the Index or such successor or Substitute Index with reference to the Index or such successor or Substitute Index, as adjusted. The Security Calculation Agent will accordingly calculate the Index Closing Level, the Index Performance Ratio, the Last Reset Index Closing Level, the Accrued Fees, and any Redemption Amount, Redemption Fee Amount, Cash Settlement Amount or Call Settlement Amount, and all related payment terms based directly or indirectly on the Index Closing Level calculated by the Security Calculation Agent. Accordingly, if the method of calculating the Index or a successor or Substitute Index is modified so that the level of the Index or such successor or Substitute Index is a fraction or multiple of what it would have been if there had been no such modification (e.g., due to a rebasing of the Index), which, in turn, causes the Index Closing Level of the Index or such successor or Substitute Index to be a fraction of what it would have been if there had been no such modification, then the Security Calculation Agent will make such calculations and adjustments in order to arrive at an Index Closing Level for the Index or such successor or Substitute Index as if it had not been modified (e.g., as if such rebasing had not occurred).

In the event that the Security Calculation Agent elects to replace the Index with a successor index or a Substitute Index, UBS may, in its sole discretion, amend the title of the Securities in order to remove reference the former Index and to make such other changes to the title of the Securities as it considers necessary or desirable to reflect the name and/or characteristics of the relevant successor index or Substitute Index, as applicable.

All determinations and adjustments to be made by the Security Calculation Agent may be made in the Security Calculation Agent's sole discretion. See "Risk Factors — Risks Relating to Creditworthiness, Conflicts of Interest, Hedging Activities and Regulation of UBS — There are potential conflicts of interest between you and the Security Calculation Agent" in the prospectus supplement for a discussion of certain conflicts of interest which may arise with respect to the Security Calculation Agent.

### **Manner of Payment and Delivery**

Any payment on or delivery of the Securities at maturity or upon early redemption or call will be made to accounts designated by you and approved by us, or at the corporate trust office of the trustee in New York City, but only when the Securities are surrendered to the trustee at that office. We also may make any payment or delivery in accordance with the applicable procedures of the depositary.

# **Reissuances or Reopened Issues**

We may, at our sole discretion, "reopen" or reissue any series of Securities. We issued the Securities initially in an amount having the aggregate Stated Principal Amount specified on the cover of the prospectus supplement. We may issue additional Securities in amounts that exceed the amount on the cover at any time, without your consent and without notifying you. The Securities do not limit our ability to incur other indebtedness or to issue other securities. Also, we are not subject to financial or similar restrictions by the terms of the Securities. For more information, please refer to "Description of Debt Securities We May Offer — Amounts That We May Issue" in "Medium-Term Notes, Series B" above.

These further issuances, if any, will be consolidated to form a single class with the originally issued Securities of the same series and will have the same CUSIP number and will trade interchangeably with such Securities immediately upon settlement. Any additional issuances will increase the aggregate Stated Principal Amount of the outstanding Securities of the class. The price of any additional offering will be determined at the time of pricing of that offering.

## **Booking Branch**

The Securities will be booked through UBS AG, London Branch.

#### **Clearance and Settlement**

The DTC participants that hold the Securities through DTC on behalf of investors will follow the settlement practices applicable to equity securities in DTC's settlement system with respect to the primary distribution of the Securities and secondary market trading between DTC participants.

## 25. ETRACS 2x Leveraged MSCI US Minimum Volatility Factor TR ETN due February 9, 2051

## **Specific Terms of the Securities**

In this section, references to "holders" mean those who own the Securities registered in their own names, on the books that we or the trustee maintains for this purpose, and not those who own beneficial interests in the Securities registered in street name or in the Securities issued in book-entry form through The Depository Trust Company ("DTC") or another depositary Owners of beneficial interests in the Securities should read the section entitled "Legal Ownership and Book-Entry Issuance" under "Medium-Term Notes, Series B" above.

Each of the seven series of Securities offered by the prospectus supplement is separate and independent of each other series of Securities. Apart from the applicable Index, however, all of the terms of each series of Securities are the same. Since each series references a different Index, all calculations and adjustments and related events with respect to each series are independent of calculations and adjustments and related events for each other series of Securities, and we may exercise our call right as well as our right to initiate a split or a reverse split independently for each series. The following discussion therefore applies independently to each series of Securities offered by the prospectus supplement and, except as the context may otherwise require, the defined terms refer separately to each series. References to the "Securities" should be understood as references to a single series of Securities and the defined terms should be understood in reference only to that series of Securities.

These Securities are part of a series of debt securities entitled "Medium-Term Notes, Series B" that we may issue, from time to time, under the indenture more particularly described under "Medium-Term Notes, Series B" above. This section summarizes general financial and other terms that apply to the Securities. Terms that apply generally to all Medium-Term Notes, Series B are described in "Description of Debt Securities We May Offer" under "Medium-Term Notes, Series B" above. The terms described here supplement those described in "Medium-Term Notes, Series B" above and, if the terms described here are inconsistent with those described there, the terms described here are controlling.

The Securities are part of a single series of senior debt securities issued under our indenture, dated as of June 2, 2015 between us and U.S. Bank Trust National Association, as trustee.

Please note that the information about the offering prices and the net proceeds to UBS on the front cover of the prospectus supplement relates only to the initial sale of the Securities. If you have purchased the Securities in a secondary market transaction after the initial sale, information about the price and date of sale to you will be provided in a separate confirmation of sale.

We describe the terms of the Securities in more detail below. The Stated Principal Amount of each Security is \$25.00.

The Securities do not guarantee any return of principal at, or prior to, maturity or upon early redemption or call. Instead, at maturity, you will receive a cash payment per Security the amount of which will vary depending on the performance and path of the Index and will be reduced by the Accrued Fees as of the last Index Business Day in the Final Measurement Period as described under "— Cash Settlement Amount at Maturity." If the amount as calculated is equal to or less than zero, the Cash Settlement Amount will be zero and you will not receive a cash payment.

If you exercise your right to have us redeem your Securities, subject to compliance with the redemption procedures, for each Security you will receive a cash payment per Security on the relevant Redemption Date equal to the Redemption Amount as described under "— Early Redemption at the Option of the Holders." If the amount as calculated is equal to or less than zero, the Redemption Amount will be zero and you will not receive a cash payment.

### **Cash Settlement Amount at Maturity**

The "Maturity Date" is February 9, 2051, which will be the third Index Business Day following the last Index Business Day in the Final Measurement Period, subject to adjustment as described below under "— Market Disruption Event."

For each Security, unless earlier called, redeemed or accelerated upon Zero Value Event, you will receive at maturity a cash payment equal to its Closing Indicative Value on the last Index Business Day in the applicable Measurement Period. We refer to this cash payment as the "Cash Settlement Amount." If the amount so calculated is equal to or less than zero, the payment will be zero.

The following graphic illustrates the formula to determine the Cash Settlement Amount, which has been simplified for ease of presentation:

Cash Settlement Amount = Closing Indicative Value, on last Index Business Day in Final Measurement Period

You may lose all or a substantial portion of your investment at maturity. The combined negative effect of the Accrued Fees will reduce your final payment. If the compounded leveraged quarterly return of the Index (or the unleveraged return of the Index, following a Permanent Deleveraging Event) is insufficient to offset the negative effect of the Accrued Fees, you may lose all or a substantial portion of your investment at maturity. The occurrence of Loss Rebalancing Events will result in more frequent than quarterly compounding.

UBS may call the Securities prior to the Maturity Date pursuant to its Call Right. If the Securities are called by UBS, the Call Settlement Amount may be zero and you may lose all or a substantial portion of your investment. See "Specific Terms of the Securities — UBS's Call Right".

The "Stated Principal Amount" of each Security is \$25.00. The Securities may be issued and sold over time at then-current market prices which may be significantly higher or lower than the Stated Principal Amount. If the Securities undergo a split or reverse split, the Stated Principal Amount will be adjusted accordingly.

The Closing Indicative Value represents the dollar value per Security that an investor would receive on any day if it redeemed the Security that day (without giving effect to any Redemption Fee Amount).

The "Closing Indicative Value" per Security, will be calculated as follows:

- (a) On the Initial Trade Date, \$25.00 per Security.
- (b) On any other calendar day, prior to the first day of an applicable Measurement Period, an amount per Security equal to:
  - (Current Principal Amount on the immediately preceding calendar day × Index Factor) Accrued Fees
- (c) From and including the first day of an applicable Measurement Period, an amount per Security equal to:
  - (Current Principal Amount on the calendar day immediately preceding the first day of the Measurement Period × Index Factor × Residual Factor) Accrued Fees + Measurement Period Cash Amount
  - However, if, on any day during a Measurement Period, the Current Indicative Value or the Closing Indicative Value *is less than or equal to* the Measurement Period Cash Amount from the immediately preceding calendar day, the Closing Indicative Value for that day and all subsequent days will be fixed to be equal to the Measurement Period Cash Amount from the immediately preceding calendar day.
- (d) The minimum value of the Closing Indicative Value on any calendar day will be zero.

If a Zero Value Event occurs, the Closing Indicative Value will be equal to zero on the day it occurs and on all future calendar days. Upon the occurrence of a Zero Value Event, investors will lose their entire investment. You will not benefit from any future exposure to the Index after the occurrence of a Zero Value Event. See "— Automatic Acceleration Upon Zero Value Event".

The actual trading price of the Securities in the secondary market may vary significantly from their Closing Indicative Value.

If the Securities undergo a split or reverse split, the Closing Indicative Value will be adjusted accordingly.

The "Current Principal Amount" represents the unleveraged notional investment in the Index Constituent Securities per Security at the close of trading on any Reset Valuation Date. The notional financing amount per Security in order to generate the leveraged returns would approximately equal the Current Principal Amount at the close of trading on any Reset Valuation Date. If a Permanent Deleveraging Event occurs, the leverage of your Securities will be permanently reset to 1.0 and the notional financing amount will be equal to zero for the remaining term of the Securities. If a Zero Value Event occurs prior to your Securities permanently resetting to 1.0 at the end of the Second Permanent Deleveraging Valuation Date, then your Securities will be automatically accelerated and mandatorily redeemed and you will lose your entire investment.

The Current Principal Amount per Security, will be calculated as follows:

- (a) From and including the Initial Trade Date to and excluding the first Reset Valuation Date, \$25.00 per Security.
- (b) At the close of trading on each Reset Valuation Date after the Initial Trade Date, the Current Principal Amount of the Securities will be reset as follows:

New Current Principal Amount = (Current Principal Amount on immediately preceding calendar day × Index Factor) – Accrued Fees

The Current Principal Amount will not change until the first Reset Valuation Date.

If a day that would otherwise be a Reset Valuation Date occurs on or after the first day of a Measurement Period, such day will not be a valid Reset Valuation Date.

If the Securities undergo a split or reverse split, the Current Principal Amount will be adjusted accordingly.

At the close of trading on each Reset Valuation Date, the Current Principal Amount is reset.

## The "Reset Valuation Date" means:

- (a) Any calendar day up to and including the Second Permanent Deleveraging Valuation Date, that is either: (i) the Initial Trade Date, (ii) a Quarterly Reset Valuation Date, (iii) a Loss Rebalancing Valuation Date (iv) the First Permanent Deleveraging Valuation Date, or (v) the Second Permanent Deleveraging Valuation Date; and
- (b) Any calendar day following the Second Permanent Deleveraging Valuation Date.

The valuation dates are defined below.

If a day that would otherwise be a Reset Valuation Date occurs on or after the first day of a Measurement Period, it will not be a valid Reset Valuation Date and the Last Reset Index Closing Level will remain the same.

The "Quarterly Reset Valuation Date" is the second Wednesday of January, April, July and October of each calendar year during the term of the Securities (other than an Excluded Day, as defined below), subject to adjustment as described under "—Market Disruption Event".

As used above, an "Excluded Day" means (i) the Index Business Day immediately preceding the first day of an applicable Measurement Period, and any calendar day thereafter, and (ii) any calendar day after the Second Permanent Deleveraging Valuation Date.

The "Index Factor" is: 1 + (Leverage Factor × Index Performance Ratio).

The Index Factor represents the leveraged percentage change in the Index level since the Last Reset Index Closing Level. The Index Factor *times* the applicable Current Principal Amount on the preceding calendar day represents the current value of the unleveraged notional amount per Security that is deemed invested in the Index on any calendar day. This does not reflect the Redemption Amount that an investor would receive upon early redemption on such calendar day.

The "Residual Factor" will be calculated as follows:

- (a) 1.0 on any calendar day, to but excluding the first day of an applicable Measurement Period.
- (b) From and including the first day of an applicable four-day Measurement Period, (a) the number of Index Business Days from, but excluding, the date of determination to, and including, the last Index Business Day in such four-day Measurement Period, *divided by* (b) four.
  - For example, on the first Index Business Day in an applicable four-day Measurement Period, the Residual Factor will equal 3/4, on the second Index Business Day in an applicable four-day Measurement Period, the Residual Factor will equal 2/4, on the third Index Business Day in an applicable four-day Measurement Period, the Residual Factor will equal 1/4 and on the last Index Business Day in an applicable four-day Measurement Period, the Residual Factor will equal zero.
- (c) On any calendar day from and including the last Index Business Day of an applicable Measurement Period, the Residual Factor will be equal to zero.

The Residual Factor is intended to approximate the percentage of the Current Principal Amount that is tracking the Index on any given day. The Residual Factor is relevant only during an applicable Measurement Period but otherwise is not a component of the Closing Indicative Value or Current Indicative Value formulas. At the close of trading on each Index Business Day during a four-day Measurement Period, approximately 25% of the Current Principal Amount and the corresponding amount of financing will be deemed converted to cash. In case of a one-day Measurement Period, approximately 100% of the Current Principal Amount and the corresponding amount of financing will be deemed converted to cash.

The "Leverage Factor" on any calendar day until the occurrence of a Permanent Deleveraging Event and the close of trading on the Second Permanent Deleveraging Valuation Date, will equal 2.0. If a Permanent Deleveraging Event occurs, then on any calendar day following the Second Permanent Deleveraging Valuation Date, the Leverage Factor will equal 1.0.

The "Index Performance Ratio" on any Index Business Day will be equal to:

<u>Index Closing Level – Last Reset Index Closing Level</u>
Last Reset Index Closing Level

On any calendar day that is not an Index Business Day, the Index Closing Level will be equal to the Index Closing Level on the Index Business Day immediately preceding such calendar day.

The "Last Reset Index Closing Level" is the Index Closing Level on the most recent Reset Valuation Date prior to such day. The initial Last Reset Index Closing Level is the Index Closing Level on the Initial Trade Date, as reported by Bloomberg and Reuters.

The "Index Closing Level" on any date of determination is the closing level of the Index, as reported on Bloomberg and Reuters on such day; however, if the closing level of the Index as reported on Bloomberg (or any successor) differs from the closing level of the Index as reported on Reuters (or any successor), the Index Closing Level will be the closing level of the Index as calculated by the Index Calculation Agent. The initial Index Closing Level (which is also the first Last Reset Index Closing Level) was determined on February 4, 2021 by the Security Calculation Agent. If the closing level of an Index, as reported on Bloomberg and Reuters for any Index Business Day, is manifestly incorrect, the "Index Closing Level" for such Index Business Day shall be the closing level of the Index as determined by the Security Calculation Agent. In making such determination, the Security Calculation Agent may consider any relevant information, including, without limitation, relevant market data in the relevant market supplied by one or more third parties or from internal sources or affiliates.

On any calendar day that is not an Index Business Day, the Index Closing level will be equal to the Index Closing Level on the Index Business Day immediately preceding such calendar day.

"Measurement Period" means the Final Measurement Period or, if UBS exercises its Call Right, the Call Measurement Period.

The "Current Indicative Value" or "intraday indicative value", as determined by the Security Calculation Agent, is an amount per Security, on an intraday basis on any Index Business Day, equal to:

- (a) On the Initial Trade Date, \$25.00.
- (b) On any other calendar day prior to the first day of a Measurement Period:

(Current Principal Amount on the immediately preceding calendar day × Index Factor, calculated using the Intraday Index Value) – Accrued Fees

(c) From and including the first day of a Measurement Period, an amount per Security equal to:

(Current Principal Amount on the calendar day immediately preceding the first day of the Measurement Period × Index Factor, calculated using the Intraday Index Value × Residual Factor on the immediately preceding calendar day) – Accrued Fees + Measurement Period Cash Amount, from the immediately preceding calendar day

However, if, on any day during a Measurement Period, the Current Indicative Value or the Closing Indicative Value *is less than or equal to* the Measurement Period Cash Amount from the immediately preceding calendar day, the Current Indicative Value for the remainder of that day and all subsequent days will be fixed to be equal to the Measurement Period Cash Amount from the immediately preceding calendar day.

(d) The minimum value of the Current Indicative Value on any calendar day will be zero.

The actual trading price of the Securities in the secondary market may vary significantly from their Current Indicative Value (intraday indicative value).

If a Zero Value Event occurs, the Current Indicative Value (intraday indicative value) will be equal to zero for the remainder of the day it occurs and on all future calendar days. Upon the occurrence of a Zero Value Event, investors will lose their entire investment. You will not benefit from any future exposure to the Index after the occurrence of a Zero Value Event. See "Specific Terms of the Securities — Automatic Acceleration Upon Zero Value Event".

If the Securities undergo a split or reverse split, the Current Indicative Value (intraday indicative value) will be adjusted accordingly.

The "Accrued Fees" as of any date of determination means the Accrued Tracking Fee + the Accrued Financing Fee.

If the Securities undergo a split or reverse split, the Accrued Fees will be adjusted accordingly. The Securities are subject to an "Accrued Tracking Fee" per Security, calculated as follows:

- (a) On the Initial Trade Date, the Accrued Tracking Fee is equal to zero.
- (b) On any subsequent calendar day, the Accrued Tracking Fee is equal to: (a) the Accrued Tracking Fee as of the immediately preceding calendar day, *plus* the Daily Tracking Fee on such calendar day.
- (c) On the calendar day after each Reset Valuation Date, the Accrued Tracking Fee is reset to be equal to the Daily Tracking Fee on such calendar day.

"CME Term SOFR" means the CME Term SOFR Reference Rates published for one-, three-, six-, and 12-month tenors as administered by CME Group Benchmark Administration, Ltd. (or any successor administrator thereof).

The "Daily Tracking Fee" is an amount per Security calculated as follows:

- (a) On the Initial Trade Date, the Daily Tracking Fee is zero.
- (b) On any subsequent calendar day, the Daily Tracking Fee is equal to:
  - (1) (i) 0.95% *times* (ii) the Current Principal Amount on the immediately preceding calendar day *times* (iii) the Index Factor on such calendar day *times* (iv) the Residual Factor on the immediately preceding calendar day, *divided by* (2) 365.
- (c) The minimum value of the Daily Tracking Fee on any calendar day will be zero.

The Daily Tracking Fee represents the investor fees calculated each day on the current value of the unleveraged notional amount invested in the Index per Security. These charges accrue and compound during the applicable period, and will reduce any amount you are entitled to receive at maturity or upon early redemption or call.

If the Securities undergo a split or reverse split, the Daily Tracking Fee will be adjusted accordingly. The Securities are subject to an "**Accrued Financing Fee**" per Security calculated as follows:

(a) On the Initial Trade Date, the Accrued Financing Fee is equal to zero.

- (b) On any subsequent calendar day, the Accrued Financing Fee is equal to:
  - (1) the Accrued Financing Fee as of the immediately preceding calendar day, *plus* (2) the Daily Financing Fee on such calendar day.
- (c) On the calendar day after each Reset Valuation Date, the Accrued Financing Fee is reset to be equal to the Daily Financing Fee on such calendar day.
- (d) If a Permanent Deleveraging Event occurs, then on any calendar day following the Second Permanent Deleveraging Valuation Date, the Accrued Financing Fee will be equal to zero.

The "Daily Financing Fee" is an amount per Security calculated as follows:

- (a) On the Initial Trade Date, the Daily Financing Fee is equal to zero.
- (b) On any subsequent calendar day, the Daily Financing Fee is equal to:
  - (1) (i) the Financing Rate on such calendar day *times* (ii) the Current Principal Amount on the immediately preceding calendar day *times* (iii) the Residual Factor on the immediately preceding calendar day, *divided by* (2) 360.
- (c) If a Permanent Deleveraging Event occurs, then on any calendar day following the Second Permanent Deleveraging Valuation Date, the Daily Financing Fee will be equal to zero.
- (d) The minimum value of the Daily Financing Fee on any calendar day will be zero.

The Daily Financing Fee seeks to compensate UBS for providing investors with a leveraged participation in movements of the Index and is intended to approximate the financing costs that investors may have otherwise incurred had they sought to borrow funds at a similar rate from a third party to invest in the Index. These charges accrue and compound during the applicable period, and will reduce any amount that you will be entitled to receive at maturity or upon early redemption or call.

If the Securities undergo a split or reverse split, the Daily Financing Fee will be adjusted accordingly.

The "Financing Rate" will equal the sum of (a) 0.95% and (b) three-month CME Term SOFR rate plus a 0.2616% adjustment on the immediately preceding U.S. Government Securities Business Day. The minimum Financing Rate at any time will be 0.95%

For example, 5.24665% was the three-month CME Term SOFR rate on June 29, 2023. The Financing Rate (if it were based on the SOFR-Based Benchmark Replacement) on June 30, 2023 would have therefore been equal to: 0.95% + 5.24665% + 0.2616%, or 6.45825%.

The "Measurement Period Cash Amount" is an amount per Security equal to:

- (a) \$0.00 on any calendar day, to but excluding the first day of a Measurement Period.
- (b) On the first day of a one-day Measurement Period:

At the close of trading on such Index Business Day, (Current Principal Amount on the immediately preceding calendar day × Index Factor, on such Index Business Day).

- (c) From and including the first day of a four-day Measurement Period:
  - (i) At the close of trading on each Index Business Day during the Measurement Period, the Measurement Period Cash Amount on the immediately preceding calendar day + (Current Principal Amount on the calendar day immediately preceding the first day of such Measurement Period × 0.25 × Index Factor, on such Index Business Day); and
  - (ii) On any calendar day during the Measurement Period that is not an Index Business Day, the Measurement Period Cash Amount on the immediately preceding Index Business Day.
- (d) On any calendar day after the last Index Business Day of a Measurement Period, the Measurement Period Cash Amount on the last Index Business Day of such Measurement Period.

Notwithstanding the foregoing, if, on any day during a Measurement Period, the Current Indicative Value or the Closing Indicative Value is *less than or equal to* the Measurement Period Cash Amount from the immediately preceding calendar day, then the Measurement Period Cash Amount for that day and all subsequent days will be fixed to be equal to the Measurement Period Cash amount from the immediately preceding calendar day.

The Measurement Period Cash Amount represents the portion of the Current Principal Amount that has been converted to cash on any given day of an applicable Measurement Period and is no longer tracking the Index.

At the close of trading of each Index Business Day during a four-day Measurement Period, approximately 25% of the Current Principal Amount on the calendar day immediately preceding the first day of the Measurement Period, will be deemed converted to cash and an applicable portion of the notional financing amount will separately be deemed converted to cash as well. After the close of trading on the final Index Business Day of a four-day Measurement Period, the Measurement Period Cash Amount will represent the averaged value of the Current Principal Amount that was deemed converted to cash across the four-days of such Measurement Period. In case of a one-day Measurement Period, approximately 100% of the Current Principal Amount will be deemed converted to cash and an applicable amount of financing will separately be deemed converted to cash, at the close of trading of the first day of such Measurement Period.

If the Securities undergo a split or reverse split, the Measurement Period Cash Amount will be adjusted accordingly.

#### The "Final Measurement Period" means:

- (a) if the Market Value of Securities outstanding as at the close of trading on the Index Business Day immediately preceding the Calculation Date is less than \$500,000,000, the Calculation Date, subject to adjustments as described under "— Market Disruption Event";
- (b) if the Market Value of Securities outstanding as at the close of trading on the Index Business Day immediately preceding the Calculation Date is equal to or greater than \$500,000,000, the four Index Business Days from and including the Calculation Date, subject to adjustments as described under "— Market Disruption Event."

For the purpose of determining the Final Measurement Period, the "Market Value" of the Securities outstanding as of the close of trading on the Index Business Day immediately preceding the Calculation Date, will equal:

(i) the Closing Indicative Value as of such Index Business Day *times* (ii) the number of Securities outstanding as reported on Bloomberg.

The "Index Calculation Agent" means the entity that calculates and publishes the level of the Index, which for each series of Securities is the entity set forth below:

Title of Securities	<b>Index Calculation Agent</b>
ETRACS 2x Leveraged US Dividend Factor TR ETN	S&P Dow Jones Indices
ETRACS 2x Leveraged US Growth Factor TR ETN	FTSE Russell
ETRACS 2x Leveraged US Size Factor TR ETN	FTSE Russell
ETRACS 2x Leveraged US Value Factor TR ETN	FTSE Russell
ETRACS 2x Leveraged MSCI US Minimum Volatility Factor TR ETN	MSCI, Inc.
ETRACS 2x Leveraged MSCI US Momentum Factor TR ETN	MSCI, Inc.
ETRACS 2x Leveraged MSCI US Quality Factor TR ETN	MSCI, Inc.

The "Calculation Date" means February 1, 2051, unless such day is not an Index Business Day, in which case the Calculation Date will be the next Index Business Day, subject to adjustment.

The Calculation Date represents the first Index Business Day of the Final Measurement Period.

"Index Business Day" means any day on which the Primary Exchange or market for trading of the Securities is scheduled to be open for trading.

"Primary Exchange" means, with respect to each Index Constituent Security or each constituent underlying a successor index, the primary exchange or market of trading such Index Constituent Security or such constituent underlying a successor index.

"U.S. Government Securities Business Day" means any day except for a Saturday, a Sunday or a day on which the Securities Industry and Financial Markets Association recommends that the fixed income departments of its members be closed for the entire day for purposes of trading in U.S. government securities.

# **Underlying Index**

The return of each series of Securities is based upon the performance of the applicable Index set forth on the cover page of the prospectus supplement. Each Index is designed to track the performance of a sector of the U.S. equity market and to reflect an investing style. We refer to the securities included in each Index as the "Index Constituent Securities" for such Index.

## Early Redemption at the Option of the Holders

Subject to your compliance with the procedures described below and the potential postponements and adjustments as described under "— Market Disruption Event", you may submit a request to have us redeem your Securities on any Index Business Day no later than 12:00 noon and a confirmation of redemption by no later than 5:00 p.m. on the same Index Business Day. You must request that we redeem a minimum of 50,000 Securities, although we reserve the right from time to time to waive this minimum redemption amount in our sole discretion on a case-by-case basis. You should not assume you will be entitled to the benefit of any such waiver. For any applicable redemption request, the "Redemption Valuation Date" will be the first Index Business Day following the date that the applicable redemption notice and redemption confirmation are delivered, except that we reserve the right from time to time to accelerate, in our sole discretion on a case-by-case basis, the Redemption Valuation Date to the date on which we receive the notice of redemption rather than the following Index Business Day. You should not assume you will be entitled to any such acceleration. To satisfy the minimum redemption amount, your broker or other financial intermediary may bundle your Securities for redemption with those of other investors to reach this minimum amount of 50,000 Securities; however, there can be no assurance that they can or will do so.

The Securities will be redeemed and the holders will receive payment for their Securities on the second Index Business Day following the applicable Redemption Valuation Date (the "Redemption Date"). The first Redemption Date will be the fourth Index Business Day immediately following the Initial Trade Date and the Final Redemption Date will be the fourth Index Business Day immediately preceding the Maturity Date, subject to adjustments. In addition, if we have issued a call notice, the last Redemption Valuation Date will be the fourth Index Business Day prior to the Call Settlement Date, as applicable. If a Zero Value Event occurs, the last Redemption Date will be the date on which the Zero Value Event occurred.

If a Market Disruption Event is continuing or occurs on the applicable scheduled Redemption Valuation Date with respect to any of the Index Constituent Securities, such Redemption Valuation Date may be postponed as described under "— Market Disruption Event".

As of any Redemption Valuation Date, the "Redemption Fee Amount" means an amount per Security equal to:

(0.125% × Closing Indicative Value of the Security as of the Redemption Valuation Date).

If you exercise your right to have us redeem your Securities, subject to your compliance with the procedures described under "— Redemption Procedures", for each applicable Security you will receive a cash payment on the relevant Redemption Date equal to:

Closing Indicative Value as of the Redemption Valuation Date - Redemption Fee Amount.

We refer to this cash payment as the "**Redemption Amount**." If the amount calculated above is equal to or less than zero, the payment upon early redemption will be zero. We reserve the right from time to time to waive the Redemption Fee Amount in our sole discretion and on a case-by-case basis. There can be no assurance that we will elect to waive this fee and you should not assume you will be entitled to such fee waiver.

We will inform you of such Redemption Amount on the first Index Business Day following the applicable Redemption Valuation Date.

The redemption feature is intended to induce arbitrageurs to counteract any trading of the Securities at a discount to their indicative value, though there can be no assurance that arbitrageurs will employ the redemption feature in this manner or that they will be successful in counteracting any divergence in the market price of the Securities and their indicative value.

The following graphic illustrates the formula to determine the Redemption Amount, which has been simplified for ease of presentation:

Redemption Amount = Closing Indicative Value - Redemption Fee Amount

You may lose all or a substantial portion of your investment upon early redemption. The combined negative effect of the Accrued Fees and the Redemption Fee Amount will reduce your final payment. If the compounded leveraged quarterly return of the Index (or the unleveraged return of the Index, following a Permanent Deleveraging Event) is insufficient to offset the negative effect of the Accrued Fees and the Redemption Fee Amount, if applicable, or if the compounded leveraged quarterly return of the Index (or the unleveraged return of the Index, following a Permanent Deleveraging Event) is negative, you may lose all or a substantial portion of your investment upon early redemption. Loss Rebalancing Events will cause compounding to occur more frequently than quarterly.

The Securities may be called by UBS prior to the Maturity Date pursuant to its Call Right and, upon the occurrence of a Zero Value Event, the Securities will be automatically accelerated and mandatorily redeemed by UBS. See "Specific Terms of the Securities — UBS's Call Right" and "Specific Terms of the Securities — Automatic Acceleration Upon Zero Value Event".

## **Redemption Procedures**

To redeem your Securities, you must instruct your broker or other person through whom you hold your Securities to take the following steps through normal clearing system channels:

deliver a notice of redemption, which we refer to as a "**Redemption Notice**" to UBS via email no later than 12:00 noon on the Index Business Day on which you elect to exercise your redemption right. If we receive your Redemption Notice by the time specified in the preceding sentence, we will respond by sending you a form of confirmation of redemption;

- deliver the signed confirmation of redemption, which we refer to as the "**Redemption Confirmation**", to us via email in the specified form by 5:00 p.m. on the same day. We or our affiliate must acknowledge receipt in order for your Redemption Confirmation to be effective;
- instruct your DTC custodian to book a delivery vs. payment trade with respect to your Securities on the applicable Redemption Date at a price equal to the Redemption Amount; and
- cause your DTC custodian to deliver the trade as booked for settlement via DTC at or prior to 12:00 noon on the applicable Redemption Date.

Different brokerage firms may have different deadlines for accepting instructions from their customers. Accordingly, as a beneficial owner of the Securities, you should consult the brokerage firm through which you own your interest for the relevant deadline. If your broker delivers your Redemption Notice after 12:00 noon, or your Redemption Confirmation after 5:00 p.m., on the Index Business Day prior to the applicable Redemption Valuation Date, your Redemption Notice will not be effective, you will not be able to redeem your Securities until the following Redemption Date and your broker will need to complete all the required steps if you should wish to redeem your Securities on any subsequent Redemption Date. In addition, UBS may request a medallion signature guarantee or such assurances of delivery as it may deem necessary in its sole discretion. All instructions given to participants from beneficial owners of Securities relating to the right to redeem their Securities will be irrevocable. If your DTC custodian or your brokerage firm is not a current UBS customer, UBS will be required to on-board such DTC custodian or brokerage firm, in compliance with its internal policies and procedures, before it can accept your Redemption Notice, your Redemption Confirmation or otherwise process your redemption request. This on-boarding process may delay your Redemption Valuation Date and Redemption Date. Furthermore, in certain circumstances, UBS may be unable to on-board your DTC custodian or your brokerage firm.

We reserve the right from time to time to waive the minimum redemption amount or the Redemption Fee Amount in our sole discretion on a case-by-case basis. In addition, we reserve the right from time to time to accelerate, in our sole discretion on a case-by-case basis, the Redemption Valuation Date to the date on which we receive the Redemption Notice rather than the following Index Business Day. You should not assume you will be entitled to any such waiver or election to accelerate the Redemption Valuation Date.

#### **UBS's Call Right**

UBS may at its option redeem all, but not less than all, of the issued and outstanding Securities of any series. To exercise its Call Right, UBS must provide notice to the holders of such Securities (which may be provided via press release) not less than 18 calendar days prior to the Call Settlement Date specified by UBS in such notice. If we call the Securities, you will receive a cash payment equal to the Closing Indicative Value on the last Index Business Day in the Call Measurement Period. We refer to this cash payment as the "Call Settlement Amount."

If the amount calculated above is equal to or less than zero, the payment upon UBS's exercise of its Call Right will be zero.

We will inform you of such Call Settlement Amount on the first Index Business Day following the last Index Business Day in the Call Measurement Period.

The holders will receive payment for their Securities on the third Index Business Day following the last Index Business Day in the Call Measurement Period (the "Call Settlement Date"). If a Market Disruption Event is continuing or occurs on the scheduled Call Valuation Date with respect to any of the Index Constituent Securities, such Call Valuation Date may be postponed as described under "— Market Disruption Event".

### The "Call Measurement Period" means:

- (a) if the Market Value of Securities outstanding at the close of trading on the Index Business Day immediately preceding the date we issue a notice of exercise of our Call Right is less than \$500,000,000, the Call Valuation Date, subject to adjustments as described under "— Market Disruption Event"; and
- (b) if the Market Value of Securities outstanding as at the close of trading on the Index Business Day immediately preceding the date we issue a notice of exercise of our Call Right is equal to or greater than \$500,000,000, the four Index Business Days from and including the Call Valuation Date, subject to adjustment as described under "— Market Disruption Event."

For the purpose of determining the Final Measurement Period, the "Market Value" of the Securities outstanding as of the close of trading on the Index Business Day immediately preceding the date of delivery by UBS of its notice to holders (which may be provided via press release) of its exercise of its Call Right will equal:

(i) The Closing Indicative Value as of such Index Business Day *times* (ii) the number of Securities outstanding as reported on Bloomberg.

The "Call Valuation Date" means the date we specify in our notice to holders (which may be provided via press release) of our exercise of our Call Right.

In any notice to holders exercising our Call Right, we will specify how many days are included in the Call Measurement Period.

The following graphic illustrates the formula to determine the Call Settlement Amount, which has been simplified for ease of presentation:

## Cash Settlement Amount = Closing Indicative Value, on last Index Business Day in Call Measurement Period

You may lose all or a substantial portion of your investment if we exercise our Call Right. The combined negative effect of the Accrued Fees will reduce your final payment. If the compounded leveraged quarterly return of the Index (or the unleveraged return of the Index, following a Permanent Deleveraging Event) is insufficient to offset the negative effect of the Accrued Fees, or if the compounded leveraged quarterly return of the Index (or the unleveraged return of the Index, following a Permanent Deleveraging Event) is negative, you may lose all or a substantial portion of your investment upon a call. Loss Rebalancing Events will cause compounding to occur more frequently than quarterly.

In addition, upon the occurrence of a Zero Value Event, the Securities will be automatically accelerated and mandatorily redeemed by UBS. See "Specific Terms of the Securities — Automatic Acceleration Upon Zero Value Event" below.

# **Automatic Acceleration Upon Zero Value Event**

For each series of Securities, a Zero Value Event represents the first instance when the Current Indicative Value (intraday indicative value) or the Closing Indicative Value is less than or equal to zero (other than on an Excluded Day, as defined below). It will have the effect of permanently resetting the value of your Securities to zero and accelerating the Securities. You will not benefit from any future exposure to the applicable Index after the occurrence of a Zero Value Event.

A Zero Value Event can occur only if a Permanent Deleveraging Event occurs and the Current Indicative Value (intraday indicative value) or the Closing Indicative Value declines to zero before the leverage of your Securities is reset to 1.0 at the close of trading on the Index Business Day following such event (or if such event occurs after 3:15 p.m. on any Index Business Day which would not otherwise have been a Loss Rebalancing Valuation Date, the second Index Business Day following such event), as described under "Permanent Deleveraging Valuation Dates" above.

A "Zero Value Event" occurs if the Current Indicative Value (intraday indicative value) or the Closing Indicative Value on any Index Business Day (other than an Excluded Day, as defined below) is less than or equal to zero. From immediately after the Zero Value Event and on all future calendar days, the Current Indicative Value (intraday indicative value) and the Closing Indicative Value will be set equal to zero.

As used above, an "Excluded Day" means (i) any calendar day after the Second Permanent Deleveraging Valuation Date (ii) any calendar day on or after which a Zero Value Event has already occurred, and (iii) any calendar day after the last day of an applicable Measurement Period.

In the event that a Zero Value Event has occurred, UBS will issue a press release shortly after the event; provided that the failure to do so shall not affect the automatic acceleration and redemption of the Securities. The Securities will be suspended from trading intraday shortly after the event occurs and will likely not be open for trading again on NYSE Arca.

You will lose your entire investment upon the occurrence of a Zero Value Event.

In addition, we may call the Securities prior to the Maturity Date pursuant to our Call Right. See "Specific Terms of the Securities — UBS's Call Right".

## **Loss Rebalancing Events**

A Loss Rebalancing Event will have the effect of deleveraging your Securities with the aim of resetting the then-current leverage to approximately 2.0. This means that after a Loss Rebalancing Event, a constant percentage increase in the Index Closing Level will have less of a positive effect on the value of your Securities relative to before the occurrence of the Loss Rebalancing Event.

A "Loss Rebalancing Event" occurs if, at any time, the Intraday Index Value on such Index Business Day (other than an Excluded Day, as used below) decreases by 20% or more from the previous Last Reset Index Closing Level.

Loss Rebalancing Events may occur multiple times over the term of the Securities and may occur multiple times during a single calendar quarter. This means both that (i) the Current Principal Amount may be reset more frequently than quarterly and (ii) the cumulative effect of compounding and fees will have increased as a result of the Loss Rebalancing Event(s). Because each Loss Rebalancing Event will have the effect of deleveraging your Securities, following a Loss Rebalancing Event your Securities will have less exposure to a potential positive gain in value relative to the exposure before the occurrence of such Loss Rebalancing Event.

As used above, an "Excluded Day" means (i) the Index Business Day immediately preceding any Quarterly Reset Valuation Date, if a Loss Rebalancing Event occurs after 3:15 p.m. on such day, (ii) any Quarterly Reset Valuation Date, (iii) any Loss Rebalancing Valuation Date, (iv) the Index Business Day immediately preceding the first day of an applicable Measurement Period, if a Loss Rebalancing Event occurs after 3:15 p.m. on such day (v) any calendar day from and including the first day of an applicable Measurement Period, (vi) the First or Second Permanent Deleveraging Valuation Dates, (vii) any calendar day after the Second Permanent Deleveraging Valuation Date, and (ix) any calendar day on or after which a Zero Value Event has occurred.

"Loss Rebalancing Valuation Date" means:

- (a) if a Loss Rebalancing Event occurs at or prior to 3:15 p.m. on an Index Business Day, the day that such Loss Rebalancing Event occurs, subject to adjustment as described under "— Market Disruption Event"; and
- (b) if a Loss Rebalancing Event occurs after 3:15 p.m. on an Index Business Day, the first Index Business Day following the occurrence of such Loss Rebalancing Event, subject to adjustment as described under "— Market Disruption Event."

## **Permanent Deleveraging Event**

A Permanent Deleveraging Event will have the effect of deleveraging your Securities, with the aim of permanently resetting the then-current leverage to 1.0 over two Index Business Days. The leverage at the end of the First Permanent Deleveraging Valuation Date is reset to approximately 2.0 and the leverage at the end of the Second Permanent Deleveraging Valuation Date is reset to 1.0. This means that after a Permanent Deleveraging Event, a constant percentage increase in the Index Closing Level will have less of a positive effect on the value of your Securities than it would have had before the occurrence of the Permanent Deleveraging Event. If such an event were to occur, it most likely would occur only following a Loss Rebalancing Event and prior to the completion of the associated leverage reset to 2.0, which would generally occur at the end of the Index Business Day following the Index Business Day on which the Loss Rebalancing Event occurred or, if the Loss Rebalancing Event occurs 3:15 p.m. on an Index Business Day, at the end of the second Index Business Day following the Index Business Day on which the Loss Rebalancing Event occurred.

A "Permanent Deleveraging Event" occurs if, at any time on an Index Business Day (other than an Excluded Day, as defined below), the Intraday Index Value decreases by 40% or more from the Last Reset Index Closing Level. If a Permanent Deleveraging Event occurs, the Current Principal Amount of the Securities will be reset over two Index Business Days.

As used above, an "Excluded Day" means (i) the First or Second Permanent Deleveraging Valuation Dates, (ii) any calendar day after the Second Permanent Deleveraging Valuation Date, (iii) any day on or after which a Zero Value Event occurs, (iv) the day which is two Index Business Days prior to the first day of a Measurement Period, if a Permanent Deleveraging Event occurs after 3:15 p.m. on such day, and (v) any calendar day from and including the Index Business Day immediately preceding the first day of a Measurement Period.

"Permanent Deleveraging Valuation Dates" means the First Permanent Deleveraging Valuation Date and the Second Permanent Deleveraging Valuation Date, each as defined below:

- (a) The "First Permanent Deleveraging Valuation Date" means:
  - (i) any Index Business Day, which otherwise would have been a Loss Rebalancing Valuation Date, but on which a Permanent Deleveraging Event has occurred, subject to adjustment as described under "— Market Disruption Event"; or
  - (ii) if a Permanent Deleveraging Event occurs after 3:15 p.m. on any Index Business Day which would not otherwise have been a Loss Rebalancing Valuation Date, then the first Index Business Day following the occurrence of such Permanent Deleveraging Event, subject to adjustment as described under "— Market Disruption Event."

The leverage of your Securities will be reset to approximately 2.0 at the close of trading on the First Permanent Deleveraging Valuation Date.

(b) The "Second Permanent Deleveraging Valuation Date" means the Index Business Day immediately following the First Permanent Deleveraging Valuation Date, subject to adjustment as described under "— Market Disruption Event"

The leverage of your Securities will be reset to 1.0 at the close of trading on the Second Permanent Deleveraging Valuation Date.

## Split or Reverse Split of the Securities

We may, at any time in our sole discretion, initiate a split or reverse split of your Securities. If we decide to initiate a split or reverse split, as applicable, we will issue a press release announcing the split or reverse split and its effective date. The date of such press release shall be deemed to be the "announcement date" of the split or the reverse split, the record date for any split or reverse split will be the tenth Business Day after the announcement date, and the effective date will be the next Business Day after the record date.

If the Securities undergo a split or reverse split, we will adjust the Current Principal Amount, Closing Indicative Value, Current Indicative Value, Accrued Fees, Measurement Period Cash Amount and other relevant terms of the Securities accordingly. For example, if the Securities undergo a 4:1 split, every investor who holds a Security via The Depository Trust Company ("DTC") on the relevant record date will, after the split, hold four Securities, and adjustments will be made as described below. The Current Principal Amount on such record date will be *divided by* four to reflect the 4:1 split. The adjusted Current Principal Amount will be rounded to eight decimal places. The split or reverse split will become effective at the opening of trading of the Securities on the Index Business Day immediately following the record date. The split will not occur if we exercise our Call Right before it becomes effective.

In the case of a reverse split, the Current Principal Amount and other relevant terms of the Securities will be adjusted accordingly and we will determine in our sole discretion the manner in which we will address odd numbers of Securities (commonly referred to as "partials"). For example, if the Securities undergo a 1:4 reverse split, every investor who holds four Securities via DTC on the relevant record date will, after the reverse split, hold only one Security and the Current Principal Amount of the Securities on such record date will be multiplied by four to reflect the 1:4 reverse split. The adjusted Current Principal Amount will be rounded to eight decimal places. The reverse split will become effective at the opening of trading of the Securities on the Index Business Day immediately following the record date. The reverse split will not occur if we exercise our Call Right before it becomes effective.

Holders who own a number of Securities on the record date that is not evenly divisible by the reverse split divisor (which in the case of a 1:4 reverse split, for example, will be 4) will receive the same treatment as all other holders for the maximum number of Securities they hold that is evenly divisible by the reverse split divisor. We will determine in our sole discretion the manner in which we compensate holders for their remaining or "partial" Securities when we announce the reverse split, though our current intention is to provide holders with a cash payment for their partials on the 17th Business Day following the announcement date in an amount equal to the appropriate percentage of the Closing Indicative Value of the reverse split-adjusted Securities on the 15th Business Day following the announcement date. For example, in the case of a 1:4 reverse split, a holder who held 23 Securities via DTC on the record date would receive five post-reverse split Securities on the immediately following Business Day, and a cash payment on the 17th Business Day following the announcement date that is equal to 3/4 of the Current Principal Amount of the reverse split-adjusted Securities on the 15th Business Day following the announcement date.

### **Security Calculation Agent**

UBS Securities LLC will act as the Security Calculation Agent. The Security Calculation Agent will be solely responsible for all determinations and calculations regarding the value of the Securities, including, among other things, at maturity or upon early redemption or call, or at other times, the Current Principal

Amount, Current Indicative Value (which we also refer to as the intraday indicative value), Closing Indicative Value, Market Disruption Events, Business Days, Index Business Days, the Leverage Factor, the Index Factor, the Index Performance Ratio, the Residual Factor, the Index Closing Level, the Financing Rate, the Accrued Fees (including determining any successor to the LIBOR base rate), the Redemption Fee Amount, the Cash Settlement Amount, if any, that we will pay you at maturity, the Redemption Amount, if any, that we will pay you upon redemption, the Call Settlement Amount, that we will pay you if we call the Securities, whether a Loss Rebalancing Event has occurred, whether a Permanent Deleveraging Event has occurred and whether any day is an Index Business Day and all such other matters as may be specified elsewhere herein as matters to be determined by the Security Calculation Agent. If any Intraday Index Value as published by Bloomberg on any Index Business Day is manifestly incorrect, the Security Calculation Agent may base its determination of whether a Loss Rebalancing Event, Permanent Deleveraging Event or Zero Value Event shall have occurred on such Index Business Day on its own determination of such Intraday Index Value. In making such determination, the Security Calculation Agent may consider any relevant information, including, without limitation, relevant market data in the relevant market supplied by one or more third parties or from internal sources or affiliates. The Security Calculation Agent will also be responsible for determining whether the Index has been discontinued and whether there has been a material change in the Index. The Security Calculation Agent will make all such determinations and calculations in its sole discretion, and absent manifest error, all determinations of the Security Calculation Agent will be conclusive for all purposes and binding on us, you, and all other persons having an interest in the Securities, without liability on the part of the Security Calculation Agent. You will not be entitled to any compensation from us for any loss suffered as a result of any determinations or calculations made by the Security Calculation Agent. We may appoint a different Security Calculation Agent from time to time after the date of the prospectus supplement without your consent and without notifying you.

The Security Calculation Agent will provide written notice to the trustee at its New York office, on which notice the trustee may conclusively rely, of the amount to be paid at maturity or upon early redemption or call, on or prior to 12:00 noon on the Index Business Day immediately preceding the Maturity Date, any Redemption Date or any Call Settlement Date.

All dollar amounts related to determination of the Accrued Fees, the Current Principal Amount, and any Redemption Amount, Redemption Fee Amount, Call Settlement Amount or Cash Settlement Amount per Security will be rounded to the nearest tenthousandth, with five one hundred-thousandths rounded upward (e.g., .76545 would be rounded up to .7655); and all dollar amounts paid to any holder of Securities will be rounded to the nearest cent, with one-half cent rounded upward.

## **Market Disruption Event**

To the extent a Market Disruption Event with respect to the Index has occurred or is continuing during a four-day Measurement Period, the Index Closing Level for such day will be determined by the Security Calculation Agent or one of its affiliates on the first succeeding Index Business Day on which a Market Disruption Event does not occur or is not continuing with respect to the Index. The remaining Index Business Days in the Measurement Period will be postponed accordingly, and the remaining Index Business Days in the Measurement Period will resume again following the suspension of the Market Disruption Event. For example, if the four-day Measurement Period for purposes of calculating the Call Settlement Amount, is scheduled for June 2, June 3, June 4 and June 5, and there is a Market Disruption Event with respect to the Index on June 2, but no other Market Disruption Event during such Call Measurement Period, then June 3 will become the first Index Business Day of the Measurement Period, June 4th the second Index Business Day, June 5th the third Index Business Day and the next Index Business Day after June 5th would be the final day of the Measurement Period. The same approach would be applied if there is a Market Disruption Event during a four-day Final Measurement Period.

To the extent a Market Disruption Event with respect to the Index has occurred or is continuing on the Redemption Valuation Date, Call Valuation Date (in the event that the Call Measurement Period is the Call Valuation Date), Calculation Date (in the event that the Final Measurement Period is the Calculation Date) or any Reset Valuation Date, the Index Closing Level for such Redemption Valuation Date, Call Valuation Date, Calculation Date or Reset Valuation Date will be determined by the Security Calculation Agent or one of its affiliates on the first succeeding Index Business Day on which a Market Disruption Event does not occur or is not continuing with respect to the Index. For example, if the Redemption Valuation Date, for purposes of calculating a Redemption Amount, is based on the Index Closing Level on June 2 and there is a Market Disruption Event with respect to the Index on June 2, then the Index Closing Level on June 3 will be used to calculate the Redemption Amount, assuming that no such Market Disruption Event has occurred or is continuing on June 3.

In no event, however, will any postponement pursuant to either of the two immediately preceding paragraphs result in the affected Index Business Day of the Measurement Period or any Redemption Valuation Date, Call Valuation Date (in the event that the Call Measurement Period is the Call Valuation Date), Calculation Date (in the event that the Final Measurement Period is the Calculation Date) or Reset Valuation Date occurring more than five Index Business Days following the day originally scheduled to be such Index Business Day of the Measurement Period or such Redemption Valuation Date, Call Valuation Date, Calculation Date or Reset Valuation Date. If a Market Disruption Event has occurred or is continuing with respect to the Index on the fifth Index Business Day following the date originally scheduled to be such Index Business Day of the Measurement Period or any Redemption Valuation Date, Call Valuation Date, Calculation Date or any Reset Valuation Date, the Security Calculation Agent or one of its affiliates will determine the Index Closing Level based on its good faith estimate of the Index Closing Level that would have prevailed on such fifth Index Business Day but for such Market Disruption Event.

Any of the following will be a "Market Disruption Event" with respect to the Index, in each case as determined by the Security Calculation Agent in its sole discretion:

- (a) suspension, absence or material limitation of trading in a material number of Index Constituent Securities, whether by reason of movements in price exceeding limits permitted by the Primary Exchange or otherwise;
- (b) suspension, absence or material limitation of trading in option or futures contracts relating to the Index or to a material number of Index Constituent Securities in the primary market or markets for those contracts;
- (c) the Index is not published; or
- (d) in any other event, if the Security Calculation Agent determines in its sole discretion that the event materially interferes with our ability or the ability of any of our affiliates to unwind all or a material portion of a hedge with respect to the Securities that we or our affiliates have effected or may effect as described in the section entitled "Use of Proceeds and Hedging."

The following events will not be Market Disruption Events with respect to the Index:

- (a) a limitation on the hours or numbers of days of trading, but only if the limitation results from an announced change in the regular business hours of the relevant market; and
- (b) a decision to permanently discontinue trading in the option or futures contracts relating to the Index or any Index Constituent Securities.

For this purpose, an "absence of trading" in the primary securities market on which option or futures contracts related to the Index or any Index Constituent Securities are traded will not include any time when that market is itself closed for trading under ordinary circumstances.

## **Default Amount on Acceleration**

If an event of default occurs and the maturity of the Securities is accelerated, we will pay the default amount in respect of the principal of the Securities at maturity. We describe the default amount below under "— Default Amount."

For the purpose of determining whether the holders of our Medium-Term Notes, Series B, of which the Securities are a part, are entitled to take any action under the indenture, we will treat the outstanding principal amount of the Medium-Term Notes, Series B, as constituting the outstanding principal amount of the Securities. Although the terms of the Securities may differ from those of the other Medium-Term Notes, Series B, holders of specified percentages in principal amount of all Medium-Term Notes, Series B, together in some cases with other series of our debt securities, will be able to take action affecting all the Medium-Term Notes, Series B, including the Securities. This action may involve changing some of the terms that apply to the Medium-Term Notes, Series B, accelerating the maturity of the Medium-Term Notes, Series B after a default or waiving some of our obligations under the indenture. We discuss these matters in "Medium-Term Notes, Series B" above under "Description of Debt Securities We May Offer — Default, Remedies and Waiver of Default" and "Description of Debt Securities We May Offer — Modification and Waiver of Covenants."

#### **Default Amount**

The default amount for the Securities on any day will be an amount, in U.S. dollars as determined by the Security Calculation Agent in its sole discretion, for the aggregate Stated Principal Amount of the Securities, equal to the cost of having a qualified financial institution, of the kind and selected as described below, expressly assume all our payment and other obligations with respect to the Securities as of that day and as if no default or acceleration had occurred, or to undertake other obligations providing substantially equivalent economic value to you with respect to the Securities. That cost will equal:

- > the lowest amount that a qualified financial institution would charge to effect this assumption or undertaking, plus
- the reasonable expenses, including reasonable attorneys' fees, incurred by the holders of the Securities in preparing any documentation necessary for this assumption or undertaking.

During the default quotation period for the Securities, which we describe below, the holders of the Securities and/or we may request a qualified financial institution to provide a quotation of the amount it would charge to effect this assumption or undertaking. If either party obtains a quotation, it must notify the other party in writing of the quotation. The amount referred to in the first bullet point above will equal the lowest — or, if there is only one, the only — quotation obtained, and as to which notice is so given, during the default quotation period. With respect to any quotation, however, the party not obtaining the quotation may object, on reasonable and significant grounds, to the assumption or undertaking by the qualified financial institution providing the quotation and notify the other party in writing of those grounds within two Business Days after the last day of the default quotation period, in which case that quotation will be disregarded in determining the default amount.

## **Default Quotation Period**

The default quotation period is the period beginning on the day the default amount first becomes due and ending on the third Index Business Day after that day, unless:

- > no quotation of the kind referred to above is obtained, or
- every quotation of that kind obtained is objected to within five Index Business Days after the due date as described above.

If either of these two events occurs, the default quotation period will continue until the third Index Business Day after the first Index Business Day on which prompt notice of a quotation is given as described above. If that quotation is objected to as described above within five Index Business Days after that first Index Business Day, however, the default quotation period will continue as described in the prior sentence and this sentence.

In any event, if the default quotation period and the subsequent two Index Business Day objection period have not ended before the Calculation Date, then the default amount will equal the Stated Principal Amount of the Securities.

#### **Qualified Financial Institutions**

For the purpose of determining the default amount at any time, a qualified financial institution must be a financial institution organized under the laws of any jurisdiction in the United States of America, Europe or Japan, which at that time has outstanding debt obligations with a stated maturity of one year or less from the date of issue and rated either:

- A-1 or higher by Standard & Poor's Financial Services LLC, a subsidiary of The McGraw-Hill Companies, Inc., or any successor, or any other comparable rating then used by that rating agency, or
- ▶ P-1 or higher by Moody's Investors Service or any successor, or any other comparable rating then used by that rating agency.

# Discontinuance of or Adjustments to the Index or Termination of Our License Agreements with the Index Sponsors; Alteration of Method of Calculation

If (i) an Index Sponsor or the Index Calculation Agent announces that it intends to discontinue, or discontinues, publication of, or otherwise fails to publish, the Index, (ii) our license agreement with the Index Sponsor terminates or (iii) the Index Sponsor or Index Calculation Agent does not make the Index Constituent Securities and/or their unit weighting available to the Security Calculation Agent, and, in each case, any other person or entity publishes an index licensed to UBS that the Security Calculation Agent determines is comparable to the Index and for which the Index Constituent Securities and/or their unit weighting are available to the Security Calculation Agent (such index being referred to herein as a "successor index"), and the Security Calculation Agent approves such index as a successor index, then on and after the date determined by the Security Calculation Agent, the Security Calculation Agent will determine the Index Closing Level on the applicable dates of determination and the amount payable at maturity or upon early redemption or call and all other related payments terms by reference to such successor index.

Upon any selection by the Security Calculation Agent of a successor index, the Security Calculation Agent will cause written notice of the successor index and the date on and after which the Index Closing Level will be determined by reference thereto be furnished to the trustee, to us and to the holders of the Securities.

If an Index Sponsor or Index Calculation Agent discontinues publication of the Index, our license agreement with the Index Sponsor terminates or the Index Sponsor or Index Calculation Agent do not make the Index Constituent Securities and/or their unit weighting available to the Security Calculation Agent, prior to, and such discontinuation, termination or unavailability is continuing on the Calculation Date or any Index Business Day during a Measurement Period, or on the Redemption Valuation Date or

on any Reset Valuation Date, as applicable, or on any other relevant date on which the Index Closing Level is to be determined and the Security Calculation Agent determines that no successor index is available at such time, or the Security Calculation Agent has previously selected a successor index and publication of such successor index is discontinued prior to, and such discontinuation is continuing on the Calculation Date or any Index Business Day during a Measurement Period, or on the Redemption Valuation Date or on any Reset Valuation Date, or any other relevant date on which the Index Closing Level is to be determined, then the Security Calculation Agent will determine the Index Closing Level using the Index Closing Level on the last Index Business Day immediately prior to such discontinuation or unavailability, as adjusted for certain corporate actions. In such event, the Security Calculation Agent will cause notice thereof to be furnished to the trustee, to us and to the holders of the Securities.

Notwithstanding these alternative arrangements, discontinuation of the publication of the Index or successor index, as applicable, may adversely affect the value of the Securities.

In addition, if an Index Replacement Event (as defined below) occurs at any time and the Index Sponsor or anyone else publishes an index that the Security Calculation Agent determines is comparable to the Index (the "Substitute Index"), then the Security Calculation Agent may elect, in its sole discretion, to permanently replace the original Index with the Substitute Index for all purposes under the Securities, and all provisions described in the prospectus supplement as applying to the Index will thereafter apply to the Substitute Index instead. In such event, the Security Calculation Agent will make such adjustments, if any, to any level of the Index or Substitute Index that is used for purposes of the Securities as it determines are appropriate in the circumstances. If the Security Calculation Agent elects to replace the original Index with a Substitute Index, then the Security Calculation Agent will determine all amounts hereunder, Current Principal Amount, Current Indicative Value (intraday indicative value), Closing Indicative Value, Index Factor, Index Performance Ratio, Residual Factor, Accrued Fees, Index Closing Levels on the applicable dates of determination, all other related payment terms and the amount payable at maturity or upon early redemption or call by reference to such Substitute Index. If the Security Calculation Agent so elects to replace the original Index with a Substitute Index, the Security Calculation Agent will cause written notice thereof to be furnished to the trustee, to us and to the holders of the Securities of the Securities.

## An "Index Replacement Event" means:

- an amendment to or change (including any officially announced proposed change) in the laws, regulations or rules of the United States (or any political subdivision thereof), or any jurisdiction in which a Primary Exchange (as defined herein) is located that (i) makes it illegal for UBS AG or its affiliates to hold, acquire or dispose of the Index Constituent Securities included in the Index or options, futures, swaps or other derivatives on the Index or on the Index Constituent Securities included in the Index (including but not limited to exchange-imposed position limits), (ii) materially increases the cost to us, our affiliates, third parties with whom we transact or similarly situated third parties in performing our or their obligations in connection with the Securities, (iii) has a material adverse effect on any of these parties' ability to perform their obligations in connection with the Securities, or (iv) materially affects our ability to issue or transact in exchange traded notes similar to the Securities, each as determined by the Security Calculation Agent;
- (b) any official administrative decision, judicial decision, administrative action, regulatory interpretation or other official pronouncement interpreting or applying those laws, regulations or rules that is announced on or after February 4, 2021 that (i) makes it illegal for UBS AG or its affiliates to hold, acquire or dispose of the Index Constituent Securities included in the Index or options, futures, swaps or other derivatives on the Index or on the Index Constituent Securities (including but not limited to exchange-imposed position limits), (ii) materially increases the cost to us, our affiliates, third parties with whom we transact or similarly situated third parties in performing our or their obligations in connection with the Securities, (iii) has a material adverse effect on the ability of us, our affiliates, third parties with whom we transact or a similarly situated third party to perform our or their obligations in connection with the Securities, or (iv) materially affects our ability to issue or transact in exchange traded notes similar to the Securities, each as determined by the Security Calculation Agent;
- (c) any event that occurs on or after February 4, 2021 that makes it a violation of any law, regulation or rule of the United States (or any political subdivision thereof), or any jurisdiction in which a Primary Exchange (as defined herein) is located, or of any official administrative decision, judicial decision, administrative action, regulatory interpretation or other official pronouncement interpreting or applying those laws, regulations or rules, (i) for UBS AG or its affiliates to hold, acquire or dispose of the Index Constituent Securities or options, futures, swaps or other derivatives on the Index or on the Index Constituent Securities (including but not limited to exchange-imposed position limits), (ii) for us, our affiliates, third parties with whom we transact or similarly situated third parties to perform our or their obligations in connection with the Securities, or (iii) for us to issue or transact in exchange traded notes similar to the Securities, each as determined by the Security Calculation Agent;
- (d) any event, as determined by the Security Calculation Agent, as a result of which we or any of our affiliates or a similarly situated party would, after using commercially reasonable efforts, be unable to, or would incur a materially increased amount of tax, duty, expense or fee (other than brokerage commissions) to, acquire, establish, substitute, maintain, unwind or dispose of any transaction or asset it deems necessary to hedge the risk of the Securities, or realize, recover or remit the proceeds of any such transaction or asset; or

(e) as determined by the Security Calculation Agent, the primary exchange or market for trading for the Securities, if any, announces that pursuant to the rules of such exchange or market, as applicable, the Securities cease (or will cease) to be listed, traded or publicly quoted on such exchange or market, as applicable, for any reason and are not immediately re-listed, re-traded or re-quoted on an exchange or quotation system located in the same country as such exchange or market, as applicable.

Notwithstanding these alternative arrangements, discontinuation of the publication of the Index or successor index, as applicable, may adversely affect the value of the Securities.

If at any time the method of calculating the Index, a successor index or a Substitute Index, or the value thereof, is changed in a material respect, or if the Index or a successor or Substitute Index is in any other way modified so that the Index Closing Level of the Index or such successor or Substitute Index does not, in the opinion of the Security Calculation Agent, fairly represent the Index Closing Level of the Index or such successor or Substitute Index had such changes or modifications not been made, then the Security Calculation Agent will make such calculations and adjustments as, in the good faith judgment of the Security Calculation Agent, may be necessary in order to arrive at an Index Closing Level of an index comparable to the Index or such successor index, as the case may be, as if such changes or modifications had not been made, and the Security Calculation Agent will calculate the Index Closing Level for the Index or such successor or Substitute Index with reference to the Index or such successor or Substitute Index, as adjusted. The Security Calculation Agent will accordingly calculate the Index Closing Level, the Index Performance Ratio, the Last Reset Index Closing Level, the Accrued Fees, and any Redemption Amount, Redemption Fee Amount, Cash Settlement Amount or Call Settlement Amount, and all related payment terms based directly or indirectly on the Index Closing Level calculated by the Security Calculation Agent. Accordingly, if the method of calculating the Index or a successor or Substitute Index is modified so that the level of the Index or such successor or Substitute Index is a fraction or multiple of what it would have been if there had been no such modification (e.g., due to a rebasing of the Index), which, in turn, causes the Index Closing Level of the Index or such successor or Substitute Index to be a fraction of what it would have been if there had been no such modification, then the Security Calculation Agent will make such calculations and adjustments in order to arrive at an Index Closing Level for the Index or such successor or Substitute Index as if it had not been modified (e.g., as if such rebasing had not occurred).

In the event that the Security Calculation Agent elects to replace the Index with a successor index or a Substitute Index, UBS may, in its sole discretion, amend the title of the Securities in order to remove reference the former Index and to make such other changes to the title of the Securities as it considers necessary or desirable to reflect the name and/or characteristics of the relevant successor index or Substitute Index, as applicable.

All determinations and adjustments to be made by the Security Calculation Agent may be made in the Security Calculation Agent's sole discretion. See "Risk Factors — Risks Relating to Creditworthiness, Conflicts of Interest, Hedging Activities and Regulation of UBS — There are potential conflicts of interest between you and the Security Calculation Agent" in the prospectus supplement for a discussion of certain conflicts of interest which may arise with respect to the Security Calculation Agent.

## Manner of Payment and Delivery

Any payment on or delivery of the Securities at maturity or upon early redemption or call will be made to accounts designated by you and approved by us, or at the corporate trust office of the trustee in New York City, but only when the Securities are surrendered to the trustee at that office. We also may make any payment or delivery in accordance with the applicable procedures of the depositary.

## Reissuances or Reopened Issues

We may, at our sole discretion, "reopen" or reissue any series of Securities. We issued the Securities initially in an amount having the aggregate Stated Principal Amount specified on the cover of the prospectus supplement. We may issue additional Securities in amounts that exceed the amount on the cover at any time, without your consent and without notifying you. The Securities do not limit our ability to incur other indebtedness or to issue other securities. Also, we are not subject to financial or similar restrictions by the terms of the Securities. For more information, please refer to "Description of Debt Securities We May Offer — Amounts That We May Issue" in "Medium-Term Notes, Series B" above.

These further issuances, if any, will be consolidated to form a single class with the originally issued Securities of the same series and will have the same CUSIP number and will trade interchangeably with such Securities immediately upon settlement. Any additional issuances will increase the aggregate Stated Principal Amount of the outstanding Securities of the class. The price of any additional offering will be determined at the time of pricing of that offering.

## **Booking Branch**

The Securities will be booked through UBS AG, London Branch.

### **Clearance and Settlement**

The DTC participants that hold the Securities through DTC on behalf of investors will follow the settlement practices applicable to equity securities in DTC's settlement system with respect to the primary distribution of the Securities and secondary market trading between DTC participants.

### 26. ETRACS Whitney US Critical Technologies ETN due March 13, 2053

### **Specific Terms of the Securities**

In this section, references to "holders" mean those who own the Securities registered in their own names, on the books that we or the trustee maintains for this purpose, and not those who own beneficial interests in the Securities registered in street name or in the Securities issued in book-entry form through The Depository Trust Company ("DTC") or another depositary. Owners of beneficial interests in the Securities should read the section entitled "Legal Ownership and Book-Entry Issuance" under "Medium-Term Notes, Series B" above.

These Securities are part of a series of debt securities entitled "Medium-Term Notes, Series B" that we may issue, from time to time, under the indenture more particularly described under "Medium-Term Notes, Series B" above. This section summarizes general financial and other terms that apply to the Securities. Terms that apply generally to all Medium-Term Notes, Series B are described in "Description of Debt Securities We May Offer" under "Medium-Term Notes, Series B" above. The terms described here supplement those described in "Medium-Term Notes, Series B" above and, if the terms described here are inconsistent with those described there, the terms described here are controlling.

The Securities are part of a single series of senior debt securities issued under our indenture, dated as of June 12, 2015 between us and U.S. Bank Trust National Association, as trustee.

We describe the terms of the Securities in more detail below.

The Stated Principal Amount of each Security is \$25.00.

The Securities do not guarantee any return of principal at, or prior to, maturity or call, or upon early redemption. Instead, at maturity, you will receive a cash payment the amount of which will vary depending on the performance and path of the Index calculated in accordance with the formula set forth below and will be reduced by the Daily Tracking Fee as of the last Index Business Day in the applicable Measurement Period or Redemption Valuation Date.

If you exercise your right to have us redeem your Securities, subject to compliance with the redemption procedures, for each Security you will receive a cash payment on the Redemption Date equal to the Redemption Amount as described below under "—Early Redemption at the Option of the Holders." If the amount so calculated is equal to or less than zero, the Redemption Amount will be zero and you will not receive a cash payment.

If we elect to exercise our call right to redeem all of the Securities, subject to compliance with the procedures set forth below, for each Security you will receive a cash payment on the Call Settlement Date equal to the Call Settlement Amount, as described below under "—UBS Call Right." If the amount so calculated is equal to or less than zero, the Call Settlement Amount will be zero and you will not receive a cash payment.

The Securities will not pay any cash coupon during their term.

## **Cash Settlement Amount at Maturity**

The "Maturity Date" is March 13, 2053, which will be the third Index Business Day following the last Index Business Day in the Final Measurement Period, subject to adjustment as described below under "— Market Disruption Event."

For each Security, unless earlier called or redeemed, you will receive at maturity a cash payment equal to the Closing Indicative Value on the last day of the Final Measurement Period. We refer to this payment as the "Cash Settlement Amount". If the amount so calculated is equal to or less than zero, the payment at maturity will be zero.

The following graphic illustrates the formula to determine the Cash Settlement Amount, which has been simplified for ease of presentation:

Cash Settlement Amount = Closing Indicative Value, on last Index Business Day in Final Measurement Period

You may lose all or a substantial portion of your investment at maturity. The Securities are fully exposed to any decline in the level of the Index. The negative effect of the Daily Tracking Fee will reduce your final payment. If the level of the Index (as measured by the Index Closing Level at the end of the Final Measurement Period, as compared to the initial Index Closing Level or the Index level at the time you purchase the Securities, as applicable) does not increase by an amount sufficient to offset the negative effect of the Daily Tracking Fee, or if the final Index level is less than the initial Index Closing Level (or the Index level at the time you purchase the Securities, as applicable), you may lose all or a substantial portion of your investment at maturity. The Daily Tracking Fee also takes into account the performance of the Index, as measured by the Closing Indicative Value.

The Securities may be called by UBS prior to the Maturity Date pursuant to UBS's Call Right. If the Securities are called by UBS, the Call Settlement Amount may be zero and you may lose all or a substantial portion of your investment. See "—UBS's Call Right".

The "Stated Principal Amount" of each Security is \$25.00. The Securities may be issued and sold over time at then-current market prices which may be significantly higher or lower than the Stated Principal Amount. If the Securities undergo a split or reverse split, the Stated Principal Amount will be adjusted accordingly.

The "Closing Indicative Value" represents the dollar value per Security that an investor would receive on any day if it redeemed the Security on such day (excluding any Redemption Fee Amount). The Closing Indicative Value per Security will be calculated as follows:

- (a) On the Initial Trade Date, \$25.00 per Security
- (b) On any subsequent calendar day, prior to but excluding the first day of an applicable Measurement Period, an amount per Security equal to:
  - (Closing Indicative Value on the previous calendar day \* Index Factor)—Daily Tracking Fee
- (c) From and including the first day of an applicable Measurement Period, an amount per Security equal to:

(Closing Indicative Value on the calendar day immediately preceding the first day of the Measurement Period  $\times$  Index Factor  $\times$  Residual Factor) + Measurement Period Cash Amount

The minimum value of the Closing Indicative Value on any calendar day will be zero.

The actual trading price of the Securities in the secondary market may vary significantly from their Closing Indicative Value.

If the Securities undergo a split or reverse split, the Closing Indicative Value will be adjusted accordingly.

The "Index Factor" on any Index Business Day prior to but excluding the first day of an applicable Measurement Period, will equal:

(i) the Index Closing Level, on such Index Business Day, *divided by*, (ii) the Index Closing Level, on the immediately preceding Index Business Day.

From and including the first day of an applicable Measurement Period, the Index Factor will equal:

(i) the Index Closing Level, on such calendar day, divided by, (ii) the Index Closing Level on the calendar day immediately preceding the first day of such Measurement Period.

On any calendar day that is not an Index Business Day, the Index Closing Level will be equal to the Index Closing Level on the immediately preceding Index Business Day. The Index Factor will therefore equal one (1) on any calendar day that is not an Index Business Day and is prior to the first Index Business Day of a five-day Measurement Period.

The "Residual Factor" will be calculated as follows:

- (a) 1.0 on any calendar day, prior to but excluding the first day of an applicable Measurement Period
- (b) From and including the first day of an applicable five-day Measurement Period, (a) the number of Index Business Days from, but excluding, the date of determination to, and including, the last Index Business Day in such five-day Measurement Period, *divided by* (b) five.

The Residual Factor is intended to approximate the percentage of the Closing Indicative Value that is tracking the Index on any given day. The Residual Factor is relevant only during an applicable Measurement Period but otherwise is not a component of the Closing Indicative Value or Current Indicative Value formulas.

For example, on the first Index Business Day in an applicable five-day Measurement Period, the Residual Factor will equal (4/5), on the second Index Business Day in an applicable five-day Measurement Period, the Residual Factor will equal (3/5), on the third Index Business Day in an applicable five-day Measurement Period, the Residual Factor will equal (2/5), on the fourth Index Business Day in an applicable five-day Measurement Period, the Residual Factor will equal (1/5) and on the last Index Business Day in an applicable five-day Measurement Period, the Residual Factor will equal zero.

On any calendar day from and including the last Index Business Day of an applicable Measurement Period, the Residual Factor will be equal to zero.

The "Index Closing Level" on any date of determination is the closing level of the Index, as reported on Bloomberg and Reuters on such day; however, if the closing level of the Index as reported on Bloomberg (or any successor) differs from the closing level of the Index as reported on Reuters (or any successor), the Index Closing Level will be the closing level of the Index as calculated by the Index Calculation Agent. If the closing level of the Index, as reported on Bloomberg and Reuters for any Index Business Day, is manifestly incorrect, the "Index Closing Level" for such Index Business Day shall be the closing level of the Index as determined by the Security Calculation Agent. In making such determination, the Security Calculation Agent may consider any relevant information, including, without limitation, relevant market data in the relevant market supplied by one or more third parties or from internal sources or affiliates. 3,239.36 is the initial Index Closing Level measured on March 24, 2023 (the Initial Trade Date), as determined by the Security Calculation Agent.

On any calendar day that is not an Index Business Day, the Index Closing Level will be equal to the Index Closing Level from the last Index Business Day prior to such calendar day.

"Measurement Period" means the Final Measurement Period or Call Measurement Period, as applicable.

The "Current Indicative Value" or "intraday indicative value", as determined by the Security Calculation Agent, means the Closing Indicative Value per Security calculated on an intraday basis on any Index Business Day.

For the purposes of calculating the Current Indicative Value, the Index Factor will be determined using the Intraday Index Value. Additionally, from and including the first day of an applicable Measurement Period, the Current Indicative Value will be calculated using (i) the Measurement Period Cash Amount from the immediately preceding calendar day, and (ii) the Residual Factor from the immediately preceding calendar day.

The minimum value of the Current Indicative Value (or intraday indicative value) on any calendar day will be zero.

The actual trading price of the Securities in the secondary market may vary significantly from their Current Indicative Value (or intraday indicative value).

If the Securities undergo a split or reverse split, the Current Indicative Value (or intraday indicative value) will be adjusted accordingly.

The "Daily Tracking Fee" means, as of any date of determination, an amount per Security equal to 0.55% per annum, calculated as follows:

- (a) On the Initial Trade Date, \$0.00 per Security;
- (b) On any subsequent calendar day, prior to but excluding the first day of an applicable Measurement Period, an amount per Security equal to:
  - $(0.55\% \, / \, 365) \times \text{Closing Indicative Value on the immediately preceding calendar day} \times \text{Index Factor}$
- (c) From and including the first day of an applicable Measurement Period, an amount per Security equal to:

(0.55% / 365) × Closing Indicative Value on the calendar day immediately preceding the first day of the Measurement Period × Index Factor × Residual Factor on the immediately preceding calendar day

The minimum value of the Daily Tracking Fee on any calendar day will be zero.

If the Securities undergo a split or reverse split, the Daily Tracking Fee will be adjusted accordingly.

The "Measurement Period Cash Amount" is an amount per Security equal to:

- (a) \$0.00, on any calendar day prior to but excluding the first day of an applicable Measurement Period
- (b) On the first day of an applicable one-day Measurement Period:
  - (i) At the close of trading on such Index Business Day, the (Closing Indicative Value, on the immediately preceding calendar day, *times* Index Factor, on such Index Business Day), *minus* Daily Tracking Fee
- (c) From and including the first day of an applicable five-day Measurement Period:
  - (i) At the close of trading on each Index Business Day, will equal:
    - (A) Measurement Period Cash Amount on the immediately preceding calendar day, *plus* (B) ( (I) Closing Indicative Value, on the calendar day immediately preceding the first day of such Measurement Period, *times* (II) Index Factor, *divided by* (III) five), *minus* (C) Daily Tracking Fee
  - (ii) On any calendar day that is not an Index Business Day, will equal the Measurement Period Cash Amount on the immediately preceding Index Business Day, *minus* Daily Tracking Fee
- (d) On any calendar day after the last Index Business Day of an applicable Measurement Period, the Measurement Period Cash Amount on the last Index Business Day of such Measurement Period.

The minimum value of the Measurement Period Cash Amount on any calendar day will be zero.

The Measurement Period Cash Amount represents the portion of the Closing Indicative Value that has been converted to cash on any given day of an applicable Measurement Period and is no longer tracking the Index.

At the close of trading of each Index Business day during a five-day Measurement Period, approximately 20% of the Closing Indicative Value, on the calendar day immediately preceding the first day of the Measurement Period, will be deemed converted to cash. After the close of trading on the final Index Business Day of an applicable five-day Measurement Period, the Measurement Period Cash Amount will represent the averaged value of the Closing Indicative Value that was deemed converted to cash across the five-days of such Measurement Period. In case of a one-day Measurement Period, approximately 100% of the Closing Indicative Value will be deemed converted to cash, at the close of trading of the first day of such Measurement Period.

If the Securities undergo a split or reverse split, the Measurement Period Cash Amount will be adjusted accordingly.

#### The "Final Measurement Period" means:

- (a) the Calculation Date, subject to adjustments as described under "—Market Disruption Event", if the Market Value of Securities outstanding at the close of trading on the Index Business Day immediately preceding the Calculation Date is less than \$250,000,000;
- (b) the five (5) Index Business Days from and including the Calculation Date, subject to adjustments as described under "— Market Disruption Event," if the Market Value of Securities outstanding at the close of trading on the Index Business Day immediately preceding the Calculation Date is equal to or greater than \$250,000,000.

For the purpose of determining the Final Measurement Period, the "Market Value" of the Securities as of the close of trading on the Index Business Day immediately preceding the Calculation Date, will equal:

(i) the Closing Indicative Value as of such Index Business Day, *times* (ii) the number of Securities outstanding as reported by WUCTSO <Index> on Bloomberg (or another source in the event that Bloomberg is unavailable).

The "Index Calculation Agent" means the entity that calculates and publishes the level of the Index, which is currently Solactive AG.

The "Calculation Date" means March 4, 2053 unless such day is not an Index Business Day, in which case the Calculation Date will be the next Index Business Day, subject to adjustments.

The Calculation Date represents the first Index Business Day of the Final Measurement Period.

- "Index Business Day" means any day on which the Primary Exchange or market for trading of the Securities is scheduled to be open for trading.
- "Business Day" means any day that is not a Saturday, a Sunday or a day on which banking institutions in The City of New York, generally, are authorized or obligated by law, regulation or executive order to close.
- "Primary Exchange" means, with respect to each Index Constituent Security or each constituent underlying a successor index, the primary exchange or market of trading such Index Constituent Security or such constituent underlying a successor index.

#### Early Redemption at the Option of the Holders

Subject to your compliance with the procedures described below and the potential postponements and adjustments as described under "—Market Disruption Event," you may submit a request to have us redeem your Securities on any Index Business Day no later than 12:00 noon, and a confirmation of redemption by no later than 5:00 p.m., on the same Index Business Day. You must request that we redeem a minimum of 50,000 Securities, although we reserve the right from time to time to waive this minimum redemption amount in our sole discretion on a case-by-case basis. You should not assume you will be entitled to the benefit of any such waiver. For any applicable redemption request, the "Redemption Valuation Date" will be the first Index Business Day following the date that the applicable redemption notice and redemption confirmation are delivered, except that we reserve the right from time to time to accelerate, in our sole discretion on a case-by-case basis, the Redemption Valuation Date to the date on which we receive the notice of redemption rather than the following Index Business Day. You should not assume that you will be entitled to any such acceleration. To satisfy the minimum redemption amount, your broker or other financial intermediary may bundle your Securities for redemption with those of other investors to reach this minimum amount of 50,000 Securities; however, there can be no assurance that they can or will do so.

The Securities will be redeemed and the holders will receive payment for their Securities on the second Index Business Day following the applicable Redemption Valuation Date (the "Redemption Date"). The First Redemption Date will be the fourth Index Business Day immediately following the Initial Trade Date and the Final Redemption Date will be the fourth Index Business Day immediately preceding the Maturity Date, subject to adjustments. In addition, if we have issued a call notice, the last Redemption Valuation Date will be the fourth Index Business Day prior to the Call Settlement Date, as applicable.

If a Market Disruption Event is continuing or occurs on the applicable scheduled Redemption Valuation Date with respect to any of the Index Constituent Securities, such Redemption Valuation Date may be postponed as described under "—Market Disruption Event".

If you exercise your right to have us redeem your Securities, subject to your compliance with the procedures described under "—Redemption Procedures," for each applicable Security you will receive a cash payment on the relevant Redemption Date equal to:

Closing Indicative Value as of the Redemption Valuation Date - Redemption Fee Amount.

We refer to this cash payment as the "Redemption Amount."

If the amount calculated above is equal to or less than zero, the payment upon early redemption will be zero.

As of any Redemption Valuation Date, the "Redemption Fee Amount" means an amount per Security equal to:

(0.125% × Closing Indicative Value of the Security as of such Redemption Valuation Date).

We reserve the right from time to time to reduce or waive the Redemption Fee Amount in our sole discretion and on a case-bycase basis. There can be no assurance that we will elect to waive this fee and you should not assume you will be entitled to such fee waiver.

We will inform you of such Redemption Amount on the first Index Business Day following the applicable Redemption Valuation Date.

The redemption feature is intended to induce arbitrageurs to counteract any trading of the Securities at a discount to their indicative value, though there can be no assurance that arbitrageurs will employ the redemption feature in this manner or that they will be successful in counteracting any divergence in the market price of the Securities and their indicative value.

The following graphic illustrates the formula to determine the Redemption Amount, which has been simplified for ease of presentation:

#### Redemption Amount = Closing Indicative Value - Redemption Fee Amount

You may lose all or a substantial portion of your investment upon early redemption. The combined negative effect of the Daily Tracking Fee and the Redemption Fee Amount will reduce your Redemption Amount. If the level of the Index does not increase by an amount sufficient to offset the combined negative effect of the Daily Tracking Fee and the Redemption Fee Amount, or if the final Index level is less than the initial Index Closing Level (or the Index level at the time you purchase the Securities, as applicable), you may lose some or all of your investment upon early redemption.

The Securities may be called by UBS prior to the Maturity Date pursuant to the UBS Call Right. See "—UBS Call Right".

#### **Redemption Procedures**

To redeem your Securities, you must instruct your broker or other person through whom you hold your Securities to take the following steps through normal clearing system channels:

- > deliver a notice of redemption, which we refer to as a "**Redemption Notice**," in the form attached to this prospectus supplement as Annex A, to UBS via e-mail no later than 12:00 noon on the Index Business Day on which you elect to exercise your redemption right. If we receive your Redemption Notice by the time specified in the preceding sentence, we will respond by sending you a form of confirmation of redemption, which is attached to this prospectus supplement as Annex B;
- ➤ deliver the signed confirmation of redemption, which we refer to as the "**Redemption Confirmation**," to us via e-mail in the specified form by 5:00 p.m. on the same day. We or our affiliate must acknowledge receipt in order for your Redemption Confirmation to be effective;
- ➤ instruct your DTC custodian to book a delivery vs. payment trade with respect to your Securities on the applicable Redemption Date at a price equal to the Redemption Amount; and
- > cause your DTC custodian to deliver the trade as booked for settlement via DTC at or prior to 12:00 noon on the applicable Redemption Date.

Different brokerage firms may have different deadlines for accepting instructions from their customers. Accordingly, as a beneficial owner of the Securities, you should consult the brokerage firm through which you own your interest for the relevant deadline. If your broker delivers your Redemption Notice after 12:00 noon, or your Redemption Confirmation after 5:00 p.m., on the Index Business Day prior to the applicable Redemption Valuation Date, your Redemption Notice will not be effective, you will not be able to redeem your Securities until the following Redemption Date and your broker will need to complete all the required steps if you should wish to redeem your Securities on any subsequent Redemption Date. In addition, UBS may request a medallion signature guarantee or such assurances of delivery as it may deem necessary in its sole discretion. All instructions given to participants from beneficial owners of Securities relating to the right to redeem their Securities will be irrevocable. If your DTC custodian or your brokerage firm is not a current UBS customer, UBS will be required to on-board such DTC custodian or brokerage firm, in compliance with its internal policies and procedures, before it can accept your Redemption Notice, your Redemption Confirmation or otherwise process your redemption request. This on-boarding process may delay your Redemption Valuation Date and Redemption Date. Furthermore, in certain circumstances, UBS may be unable to on-board your DTC custodian or your brokerage firm.

We reserve the right from time to time to reduce or waive the minimum redemption amount or the Redemption Fee Amount in our sole discretion on a case-by-case basis. In addition, we reserve the right from time to time to accelerate, in our sole discretion on a case-by-case basis, the Redemption Valuation Date to the date on which we receive the Redemption Notice rather than the following Index Business Day. You should not assume you will be entitled to any such waiver or election to accelerate the Redemption Valuation Date.

#### **UBS's Call Right**

UBS may at its option redeem all, but not less than all, of the issued and outstanding Securities. To exercise its call right, UBS must provide notice to the holders of such Securities (which notice may be provided via press release), not less than 18 calendar days prior to the Call Settlement Date specified by UBS in such notice. If we call the Securities, you will receive a cash payment equal to the Closing Indicative Value on the last Index Business Day in the Call Measurement Period. We refer to this cash payment as the "Call Settlement Amount."

If the amount calculated above is equal to or less than zero, the payment upon UBS's exercise of its call right will be zero.

We will inform you of such Call Settlement Amount on the first Index Business Day following the last Index Business Day in the Call Measurement Period.

The holders will receive payment for their Securities on the third Index Business Day following the last Index Business Day in the Call Measurement Period (the "Call Settlement Date"). If a Market Disruption Event is continuing or occurs on the scheduled Call Valuation Date with respect to any of the Index Constituent Securities, such Call Valuation Date may be postponed as described under "—Market Disruption Event."

#### The "Call Measurement Period" means:

- (a) the Call Valuation Date, subject to adjustments as described under "—Market Disruption Event." If the Market Value of Securities outstanding at the close of trading on the Index Business Day immediately preceding the date we issue a notice of exercise of our call right is less than \$250,000,000; or
- (b) the five (5) Index Business Days from and including the Call Valuation Date, subject to adjustment as described under "—Market Disruption Event," if the Market Value of Securities outstanding at the close of trading on the Index Business Day immediately preceding the date we issue a notice of exercise of our call right is equal to or greater than \$250,000,000.

Accordingly, unless the notional value of the Securities is equal to or greater than \$250,000,000, the Call Measurement Period will be option (a). For the purpose of determining the Call Measurement Period, the "Market Value" of the Securities outstanding as of the close of trading on the Index Business Day immediately preceding the date of delivery by UBS of its notice to holders (which may be provided via press release) of its exercise of its call right, will equal:

(i) the Closing Indicative Value as of such Index Business Day, *times* (ii) the number of Securities outstanding as reported by WUCTSO <Index> on Bloomberg (or another source in the event that Bloomberg is unavailable).

The "Call Valuation Date" means the date we specify in our notice to holders (which may be provided via press release) of our exercise of our call right.

In any notice to holders exercising our call right, we will specify how many days are included in the Call Measurement Period.

The following graphic illustrates the formula to determine the Call Settlement Amount, which has been simplified for ease of presentation:

Call Settlement Amount = Closing Indicative Value on Last Index Business Day in Call Measurement Period

You may lose all or a substantial portion of your investment upon a call. The negative effect of the Daily Tracking Fee will reduce your final payment. If the level of the Index does not increase by an amount sufficient to offset the negative effect of the Daily Tracking Fee, or if the final Index level is less than the initial Index Closing Level (or the Index level at the time you purchase the Securities, as applicable), you may lose some or all of your investment upon UBS's exercise of its call right.

#### Split or Reverse Split of the Securities

We may, at any time in our sole discretion, without your consent, initiate a split or reverse split of your Securities. If we decide to initiate a split or reverse split, as applicable, we will issue a press release announcing the split or reverse split, and its effective date. The date of such press release shall be deemed to be the "announcement date" of the split or the reverse split. The record date for any split or reverse split will be the tenth Business Day after the announcement date, and the effective date will be the next Business Day after the record date.

If the Securities undergo a split or reverse split, we will adjust the Closing Indicative Value and other relevant terms of the Securities accordingly. For example, if the Securities undergo a 4:1 split, every investor who holds a Security via the DTC on the relevant record date will, after the split, hold four Securities, and adjustments will be made as described below. The Closing Indicative Value on such record date will be divided by four to reflect the 4:1 split. The adjusted Closing Indicative Value will be rounded to eight decimal places. The split or reverse split will become effective at the opening of trading of the Securities on the Index Business Day immediately following the record date. The split will not occur if we exercise our call right before it becomes effective.

In the case of a reverse split, the Closing Indicative Value and other relevant terms of the Securities will be adjusted accordingly, and we will determine in our sole discretion the manner in which we will address odd numbers of Securities (commonly referred to as "partials"). For example, if the Securities undergo a 1:4 reverse split, every investor who holds four Securities via DTC on the relevant record date will, after the reverse split, hold only one Security and the Closing Indicative Value of the Securities on such record date will be multiplied by four to reflect the 1:4 reverse split. The adjusted Closing Indicative Value will be rounded to eight decimal places. The reverse split will become effective at the opening of trading of the Securities on the Index Business Day immediately following the record date. The reverse split will not occur if we exercise our call right before it becomes effective.

Holders who own a number of Securities on the record date that is not evenly divisible by the reverse split divisor (which in the case of a 1:4 reverse split, for example, will be 4) will receive the same treatment as all other holders for the maximum number of Securities they hold that is evenly divisible by the reverse split divisor. We will determine in our sole discretion the manner in which we compensate holders for their remaining or "partial" Securities when we announce the reverse split, though our current intention is to provide holders with a cash payment for their partials on the 17th Business Day following the announcement date in an amount equal to the appropriate percentage of the Closing Indicative Value of the reverse split-adjusted Securities on the 15th Business Day following the announcement date. For example, in the case of a 1:4 reverse split, a holder who held 23 Securities via DTC on the record date would receive five post-reverse split Securities on the immediately following Business Day, and a cash payment on the 17th Business Day following the announcement date that is equal to 3/4 of the Closing Indicative Value of the reverse split-adjusted Securities on the 15th Business Day following the announcement date.

#### **Security Calculation Agent**

UBS Securities LLC will act as the Security Calculation Agent. The Security Calculation Agent will be solely responsible for all determinations and calculations regarding the value of the Securities, including, among other things, at maturity or upon early redemption or call, or at other times, Current Indicative Value (which we also refer to as the "intraday indicative value"), Closing Indicative Value, Market Disruption Events, Business Days, Index Business Days, the Index Factor, the Residual Factor, the Index Closing Level, the Daily Tracking Fee, the Redemption Fee Amount, the Cash Settlement Amount, if any, that we will pay you at maturity, the Redemption Amount, if any, that we will pay you upon redemption, if applicable and the Call Settlement Amount, if any, that we will pay you in the event that UBS calls the Securities, and whether any day is a Business Day or an Index Business Day and all such other matters as may be specified elsewhere herein as matters to be determined by the Security Calculation Agent. The Security Calculation Agent will also be responsible for determining whether the Index has been discontinued and whether there has been a material change in the Index. The Security Calculation Agent will make all such determinations and calculations in its sole discretion, and absent manifest error, all determinations of the Security Calculation Agent will be conclusive for all purposes and binding on us, you and all other persons having an interest in the Securities, without liability on the part of the Security Calculation Agent. You will not be entitled to any compensation from us for any loss suffered as a result of any determinations or calculations made by the Security Calculation Agent. We may appoint a different Security Calculation Agent from time to time after the date of this prospectus supplement without your consent and without notifying you.

The Security Calculation Agent will provide written notice to the trustee at its New York office, on which notice the trustee may conclusively rely, of the amount to be paid at maturity or upon early redemption or call, on or prior to 12:00 noon on the Index Business Day immediately preceding the Maturity Date, any Redemption Date, or any Call Settlement Date.

All dollar amounts related to determination of the Daily Tracking Fee, the Redemption Amount and Redemption Fee Amount, if any, per security, the Call Settlement Amount, if any, per security, and the Cash Settlement Amount, if any, per security, will be rounded to the nearest ten-thousandth, with five one hundred-thousandths rounded upward (e.g., .76545 would be rounded up to .7655); and all dollar amounts paid to any holder of Securities will be rounded to the nearest cent, with one-half cent rounded upward.

#### **Market Disruption Event**

To the extent a Market Disruption Event with respect to the Index has occurred or is continuing during a five-day Measurement Period, the Index Closing Level for such day will be determined by the Security Calculation Agent or one of its affiliates on the first succeeding Index Business Day on which a Market Disruption Event does not occur or is not continuing with respect to the Index. The remaining Index Business Days in the Measurement Period will be postponed accordingly, and the remaining Index Business Days in the Measurement Period will resume again following the suspension of the Market Disruption Event. For example, if the five-day Measurement Period for purposes of calculating the Call Settlement Amount is scheduled for June 2, June 3, June 4, June 5 and June 6, and there is a Market Disruption Event with respect to the Index on June 2, but no other Market Disruption Event during such Call Measurement Period, then June 3 will become the first Index Business Day of the Measurement Period, June 4th the second Index Business Day, June 5th the third Index Business Day, June 6th the fourth Index Business Day and the next Index Business Day after June 6th would be the final day of the Measurement Period. The same approach would be applied if there is a Market Disruption Event during a five-day Final Measurement Period.

To the extent a Market Disruption Event with respect to the Index has occurred or is continuing on the Redemption Valuation Date, Call Valuation Date (in the event that the Call Measurement Period is the Call Valuation Date) or the Calculation Date (in the event that the Final Measurement Period is the Calculation Date), the Index Closing Level for such Redemption Valuation Date, Call Valuation Date or Calculation Date will be determined by the Security Calculation Agent or one of its affiliates on the first succeeding Index Business Day on which a Market Disruption Event does not occur or is not continuing with respect to the Index. For example, if the Redemption Valuation Date, for purposes of calculating a Redemption Amount, is based on the Index Closing Level on June 2 and there is a Market Disruption Event with respect to the Index on June 2, then the Index Closing Level on June 3 will be used to calculate the Redemption Amount, assuming that no such Market Disruption Event has occurred or is continuing on June 3.

In no event, however, will any postponement pursuant to either of the two immediately preceding paragraphs result in the affected Index Business Day of the Measurement Period or any Redemption Valuation Date, Call Valuation Date (in the event that the Call Measurement Period is the Call Valuation Date) or Calculation Date (in the event that the Final Measurement Period is the Calculation Date) occurring more than five Index Business Days following the day originally scheduled to be such Index Business Day of the Measurement Period or such Redemption Valuation Date, Call Valuation Date or Calculation Date. If a Market Disruption Event has occurred or is continuing with respect to the Index on the fifth Index Business Day following the date originally scheduled to be such Index Business Day of the Measurement Period or any Redemption Valuation Date, Call Valuation Date or Calculation Date, the Security Calculation Agent or one of its affiliates will determine the Index Closing Level based on its good-faith estimate of the Index Closing Level that would have prevailed on such fifth Index Business Day but for such Market Disruption Event.

Any of the following will be a "Market Disruption Event" with respect to the Index, in each case as determined by the Security Calculation Agent in its sole discretion:

- (a) suspension, absence or material limitation of trading in a material number of Index Constituent Securities, whether by reason of movements in price exceeding limits permitted by the Primary Exchange or otherwise;
- (b) suspension, absence or material limitation of trading in option or futures contracts relating to the Index or to a material number of Index Constituent Securities in the primary market or markets for those contracts;
- (c) the Index is not published; or
- (d) in any other event, if the Security Calculation Agent determines in its sole discretion that the event materially interferes with our ability or the ability of any of our affiliates to unwind all or a material portion of a hedge with respect to the Securities that we or our affiliates have effected or may effect as described in the section entitled "Use of Proceeds and Hedging".

The following events will not be Market Disruption Events with respect to the Index:

- (a) a limitation on the hours or numbers of days of trading, but only if the limitation results from an announced change in the regular business hours of the relevant market; or
- (b) a decision to permanently discontinue trading in the option or futures contracts relating to the Index or any Index Constituent Securities.

For this purpose, an "absence of trading" in the primary securities market on which option or futures contracts related to the Index or any Index Constituent Securities are traded will not include any time when that market is itself closed for trading under ordinary circumstances.

#### **Default Amount on Acceleration**

If an event of default occurs and the maturity of the Securities is accelerated, we will pay the default amount in respect of the principal of the Securities at maturity. We describe the default amount below under "—Default Amount."

For the purpose of determining whether the holders of our Medium-Term Notes, Series B, of which the Securities are a part, are entitled to take any action under the indenture, we will treat the outstanding principal amount of the Medium-Term Notes, Series B, as constituting the outstanding principal amount of the Securities. Although the terms of the Securities may differ from those of the other Medium-Term Notes, Series B, holders of specified percentages in principal amount of all Medium-Term Notes, Series B, together in some cases with other series of our debt securities, will be able to take action affecting all the Medium-Term Notes, Series B, including the Securities. This action may involve changing some of the terms that apply to the Medium-Term Notes, Series B, accelerating the maturity of the Medium-Term Notes, Series B after a default or waiving some of our obligations under the indenture. We discuss these matters in the accompanying prospectus under "Description of Debt Securities We May Offer—Default, Remedies and Waiver of Default" and "Description of Debt Securities We May Offer—Modification and Waiver of Covenants."

#### **Default Amount**

The default amount for the Securities on any day will be an amount, in U.S. dollars as determined by the Security Calculation Agent, in its sole discretion, for the aggregate Stated Principal Amount of the Securities, equal to the cost of having a qualified financial institution, of the kind and selected as described below, expressly assume all our payment and other obligations with respect to the Securities as of that day and as if no default or acceleration had occurred, or to undertake other obligations providing substantially equivalent economic value to you with respect to the Securities. That cost will equal:

- > the lowest amount that a qualified financial institution would charge to effect this assumption or undertaking; plus
- > the reasonable expenses, including reasonable attorneys' fees, incurred by the holders of the Securities in preparing any documentation necessary for this assumption or undertaking.

During the default quotation period for the Securities, which we describe below, the holders of the Securities and/or we may request a qualified financial institution to provide a quotation of the amount it would charge to effect this assumption or undertaking. If either party obtains a quotation, it must notify the other party in writing of the quotation. The amount referred to in the first bullet point above will equal the lowest – or, if there is only one, the only – quotation obtained, and as to which notice is so given, during the default quotation period. With respect to any quotation, however, the party not obtaining the quotation may object, on reasonable and significant grounds, to the assumption or undertaking by the qualified financial institution providing the quotation and notify the other party in writing of those grounds within two Business Days after the last day of the default quotation period, in which case that quotation will be disregarded in determining the default amount.

#### **Default Quotation Period**

- > no quotation of the kind referred to above is obtained; or
- > every quotation of that kind obtained is objected to within five (5) Index Business Days after the due date as described above.

If either of these two events occurs, the default quotation period will continue until the third Index Business Day after the first Index Business Day on which prompt notice of a quotation is given as described above. If that quotation is objected to as described above within five (5) Index Business Days after that first Index Business Day, however, the default quotation period will continue as described in the prior sentence and this sentence.

In any event, if the default quotation period and the subsequent two (2) Index Business Day objection period have not ended before the Calculation Date, then the default amount will equal the Stated Principal Amount of the Securities.

#### **Qualified Financial Institutions**

For the purpose of determining the default amount at any time, a qualified financial institution must be a financial institution organized under the laws of any jurisdiction in the United States of America, Europe or Japan, which at that time has outstanding debt obligations with a stated maturity of one year or less from the date of issue and rated either:

- ➤ A-1 or higher by Standard & Poor's Financial Services LLC, a subsidiary of The McGraw-Hill Companies, Inc., or any successor, or any other comparable rating then used by that rating agency; or
- > P-1 or higher by Moody's Investors Service or any successor, or any other comparable rating then used by that rating agency.

# Discontinuance of, Adjustments to or Benchmark Event Affecting the Index or Termination of Our License Agreement with the Index Sponsor; Alteration of Method of Calculation

If (i) the Index Sponsor or the Index Calculation Agent announces that it intends to discontinue, or discontinues, publication of, or otherwise fails to publish, the Index, (ii) a Benchmark Event (as described below) under the EU Benchmark Regulation or UK Benchmark Regulation (each as described under "Risk Factors— Risks Relating to the Index and the Calculation of the Index—The Securities are linked to the Index and are subject to certain regulatory risks") occurs with respect to the Index or the Index Sponsor, if applicable, (iii) our license agreement with the Index Sponsor terminates or (iv) the Index Sponsor or Index Calculation Agent does not make the Index Constituent Securities and/or their unit weighting available to the Security Calculation Agent, and, in each case, any other person or entity publishes an EU Benchmark Regulation compliant index licensed to UBS that the Security Calculation Agent determines is comparable to the Index and for which the Index Constituent Securities and/or their unit weighting are available to the Security Calculation Agent (such index being referred to herein as a "successor index"), and the Security Calculation Agent approves such index as a successor index, then on and after the date determined by the Security Calculation Agent, the Security Calculation Agent will determine the Index Closing Level on the applicable dates of determination, and the amount payable at maturity or upon early redemption or call and all other related payment terms by reference to such successor index.

Upon any selection by the Security Calculation Agent of a successor index, the Security Calculation Agent will cause written notice of the successor index and the date on and after which the Index Closing Level will be determined by reference thereto to be furnished to the trustee, to us and to the holders of the Securities.

If (i) the Index Sponsor or Index Calculation Agent discontinues publication of the Index, (ii) a Benchmark Event (as described below) under the EU Benchmark Regulation or UK Benchmark Regulation (each as described under "Risk Factors—Risks Relating to the Index and the Calculation of the Index—The Securities are linked to the Index and are subject to certain regulatory risks") occurs with respect to the Index or the Index Sponsor, if applicable, (iii) our license agreement with the Index Sponsor terminates or (iv) the Index Sponsor or Index Calculation Agent do not make the Index Constituent Securities and/or their unit weighting available to the Security Calculation Agent, prior to, and such discontinuation, termination or unavailability is continuing on the Calculation Date or any Index Business Day during a Measurement Period, or on the Redemption Valuation Date, as applicable, or on any other relevant date on which the Index Closing Level is to be determined and the Security Calculation Agent determines that no successor index is available at such time, or the Security Calculation Agent has previously selected a successor index and publication of such successor index is discontinued prior to, and such discontinuation is continuing on the Calculation Date or any Index Business Day during a Measurement Period, or on the Redemption Valuation Date or any other relevant date on which the Index Closing Level is to be determined, then the Security Calculation Agent will determine the Index Closing Level using the Index Closing Level on the last Index Business Day immediately prior to such discontinuation or unavailability, as adjusted for certain corporate actions. In such event, the Security Calculation Agent will cause notice thereof to be furnished to the trustee, to us and to the holders of the Securities.

Notwithstanding these alternative arrangements, discontinuation of the publication of the Index or successor index, as applicable, may adversely affect the value of the Securities.

For purposes of the above, a "Benchmark Event" may occur if the EU Benchmark Regulation and/or UK Benchmark Regulation, as applicable, applies to this issuance of Securities, and the applicable registration for the Index or Index Sponsor is not effective or has been suspended or withdrawn by the relevant authority with the effect that the use of the Index or the Index Sponsor is not permitted under the EU Benchmark Regulation or UK Benchmark Regulation, as applicable.

In addition, if an Index Replacement Event (as defined below) occurs at any time and the Index Sponsor or anyone else publishes an index that the Security Calculation Agent determines is comparable to the Index (the "Substitute Index"), then the Security Calculation Agent may elect, in its sole discretion, to permanently replace the original Index with the Substitute Index for all purposes under the Securities, and all provisions described in this prospectus supplement as applying to the Index will thereafter apply to the Substitute Index instead. In such event, the Security Calculation Agent will make such adjustments, if any, to any level of the Index or Substitute Index that is used for purposes of the Securities as it determines are appropriate in the circumstances. If the Security Calculation Agent elects to replace the original Index with a Substitute Index, then the Security Calculation Agent will determine all amounts hereunder, including the Current Indicative Value (or "intraday indicative value"), Closing Indicative Value, Index Factor, Residual Factor, Daily Tracking Fee, Index Closing Levels on the applicable dates of determination, all other related payment terms and the amount payable at maturity, call, upon early redemption by reference to such Substitute Index. If the Security Calculation Agent so elects to replace the original Index with a Substitute Index, the Security Calculation Agent will cause written notice thereof to be furnished to the trustee, to us and to the holders of the Securities.

#### An "Index Replacement Event" means:

- (a) an amendment to or change (including any officially announced proposed change) in the laws, regulations or rules of the United States (or any political subdivision thereof), the European Union, Switzerland, the United Kingdom or any jurisdiction in which a Primary Exchange (as defined herein) is located that (i) makes it illegal for UBS AG or its affiliates to hold, acquire or dispose of the Index Constituent Securities included in the Index or options, futures, swaps or other derivatives on the Index or on the Index Constituent Securities included in the Index (including but not limited to exchange-imposed position limits), (ii) materially increases the cost to us, our affiliates, third parties with whom we transact or similarly situated third parties in performing our or their obligations in connection with the Securities or (iv) materially affects our ability to issue or transact in exchange traded notes similar to the Securities, each as determined by the Security Calculation Agent;
- (b) any official administrative decision, judicial decision, administrative action, regulatory interpretation or other official pronouncement interpreting or applying those laws, regulations or rules that is announced on or after March 24, 2023 that (i) makes it illegal for UBS AG or its affiliates to hold, acquire or dispose of the Index Constituent Securities included in the Index or options, futures, swaps or other derivatives on the Index or on the Index Constituent Securities (including but not limited to exchange-imposed position limits), (ii) materially increases the cost to us, our affiliates, third parties with whom we transact or similarly situated third parties in performing our or their obligations in connection with the Securities, (iii) has a material adverse effect on the ability of us, our affiliates, third parties with whom we transact or a similarly situated third party to perform our or their obligations in connection with the Securities or (iv) materially affects our ability to issue or transact in exchange traded notes similar to the Securities, each as determined by the Security Calculation Agent;
- (c) any event that occurs on or after March 24, 2023 that makes it a violation of any law, regulation or rule of the United States (or any political subdivision thereof), the European Union, Switzerland, the United Kingdom or any jurisdiction in which a Primary Exchange (as defined herein) is located, or of any official administrative decision, judicial decision, administrative action, regulatory interpretation or other official pronouncement interpreting or applying those laws, regulations or rules, (i) for UBS AG or its affiliates to hold, acquire or dispose of the Index Constituent Securities or options, futures, swaps or other derivatives on the Index or on the Index Constituent Securities (including but not limited to exchange-imposed position limits), (ii) for us, our affiliates, third parties with whom we transact or similarly situated third parties to perform our or their obligations in connection with the Securities or (iii) for us to issue or transact in exchange traded notes similar to the Securities, each as determined by the Security Calculation Agent;
- (d) any event, as determined by the Security Calculation Agent, as a result of which we or any of our affiliates or a similarly situated party would, after using commercially reasonable efforts, be unable to, or would incur a materially increased amount of tax, duty, expense or fee (other than brokerage commissions) to, acquire, establish, re-establish, substitute, maintain, unwind or dispose of any transaction or asset it deems necessary to hedge the risk of the Securities, or realize, recover or remit the proceeds of any such transaction or asset;
- (e) as determined by the Security Calculation Agent, the primary exchange or market for trading for the Securities, if any, announces that pursuant to the rules of such exchange or market, as applicable, the Securities cease (or will cease) to be listed, traded or publicly quoted on such exchange or market, as applicable, for any reason and are not (or will not be) immediately re-listed, re-traded or re-quoted on an exchange or quotation system located in the same country as such exchange or market, as applicable; or
- (f) any event, as determined by the Security Calculation Agent, as a result of which the Index or any of the Index Constituent Securities do not meet the criteria or are no longer eligible for listing on the exchange where the Securities are listed, or the Security Calculation Agent becomes aware that the Index Sponsor no longer intends to comply with any such listing criteria (whether as a result of actual or proposed Index methodological changes or otherwise).

Notwithstanding these alternative arrangements, discontinuation of the publication of the Index or successor index, as applicable, may adversely affect the value of the Securities.

If at any time the method of calculating the Index, a successor index or a Substitute Index, or the value thereof, is changed in a material respect, or if the Index or a successor or Substitute Index is in any other way modified so that the Index Closing Level of the Index or such successor or Substitute Index does not, in the opinion of the Security Calculation Agent, fairly represent the Index Closing Level of the Index or such successor or Substitute Index had such changes or modifications not been made, then the Security Calculation Agent will make such calculations and adjustments as, in the good-faith judgment of the Security Calculation Agent, may be necessary in order to arrive at an Index Closing Level of an index comparable to the Index or such successor index, as the case may be, as if such changes or modifications had not been made, and the Security Calculation Agent will calculate the Index Closing Level for the Index or such successor or Substitute Index with reference to the Index or such successor Substitute Index, as adjusted. The Security Calculation Agent will accordingly calculate the Index Closing Level, the Daily Tracking Fee, the Redemption Fee Amount, if any, the Cash Settlement Amount, if any, that we will pay you at maturity, the Redemption Amount, if any, upon early redemption, if applicable, the Call Settlement Amount, if any, that we will pay you in the event UBS calls the Securities, and all related payment terms based directly or indirectly on the Index Closing Level calculated by the Security Calculation Agent. Accordingly, if the method of calculating the Index or a successor or Substitute Index is modified so that the level of the Index or such successor index is a fraction of what it would have been if there had been no such modification (e.g., due to a rebasing of the Index), which, in turn, causes the Index Closing Level of the Index or such successor or Substitute Index to be a fraction of what it would have been if there had been no such modification, then the Security Calculation Agent will make such calculations and adjustments in order to arrive at an Index Closing Level for the Index or such successor or Substitute Index as if it had not been modified (e.g., as if such rebasing had not occurred).

In the event that the Security Calculation Agent elects to replace the Index with a successor index or a Substitute Index, UBS may, in its sole discretion, amend the title of the Securities in order to remove references to the former Index and to make such other changes to the title of the Securities as it considers necessary or desirable to reflect the name and/or characteristics of the relevant successor index or Substitute Index, as applicable.

All determinations and adjustments to be made by the Security Calculation Agent may be made in the Security Calculation Agent's sole discretion. See "Risk Factors—Risks Relating to Creditworthiness, Conflicts of Interest, Hedging Activities and Regulation of UBS—There are potential conflicts of interest between you and the Security Calculation Agent" for a discussion of certain conflicts of interest that may arise with respect to the Security Calculation Agent.

#### Manner of Payment and Delivery

Any payment on or delivery of the Securities at maturity or call, or upon early redemption will be made to accounts designated by you and approved by us, or at the corporate trust office of the trustee in New York City, but only when the Securities are surrendered to the trustee at that office. We also may make any payment or delivery in accordance with the applicable procedures of the depositary.

#### Reissuances or Reopened Issues

We may, at our sole discretion, "reopen" or reissue the Securities. We issued the Securities initially in an amount having the aggregate Stated Principal Amount specified on the cover of the prospectus supplement. We may issue additional Securities in amounts that exceed the amount on the cover any time, without your consent and without notifying you. The Securities do not limit our ability to incur other indebtedness or to issue other securities. Also, we are not subject to financial or similar restrictions by the terms of the Securities. For more information, please refer to "Description of Debt Securities We May Offer — Amounts That We May Issue" in the accompanying prospectus.

These further issuances, if any, will be consolidated to form a single class with the originally issued Securities and will have the same CUSIP number and will trade interchangeably with the Securities immediately upon settlement. Any additional issuances will increase the aggregate Stated Principal Amount of the outstanding Securities of the class. The price of any additional offering will be determined at the time of pricing of that offering.

#### **Booking Branch**

The Securities will be booked through UBS AG, London Branch.

#### **Clearance and Settlement**

The DTC participants that hold the Securities through DTC on behalf of investors will follow the settlement practices applicable to equity securities in DTC's settlement system with respect to the primary distribution of the Securities and secondary market trading between DTC participants.

## Merger Agreement Fusionsvertrag

dated 7 December 2023

vom 7. Dezember 2023

between **UBS AG** 

zwischen Bahnhofstrasse 45

8001 Zürich

Aeschenvorstadt 1

4051 Basel

(hereinafter "UBS AG")

(nachfolgend "UBS AG")

and Credit Suisse AG

und Paradeplatz 8

8001 Zürich

(hereinafter "Credit Suisse AG")

(nachfolgend "CREDIT SUISSE AG")

(together referred to as the "Parties" and each as a "Party")

(zusammen die "PARTEIEN" und einzeln die "PARTEI")

Merger Agreement dated 7 December 2023 / Fusionsvertrag vom 7. Dezember 2023										

Die englische Version dieses Fusionsvertrags geht vor.

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## Exhibits / Anhänge

Exhibit 1 Merger balance sheet of Credit Suisse AG (balance sheet

per 30 June 2023)

Anhang 1 Fusionsbilanz der CREDIT SUISSE AG (Bilanz per 30. Juni 2023)

#### Recitals / Erwägungsgründe

A) UBS AG is a company limited by shares pursuant to art. 620 ff. of the Swiss Code of Obligations ("**CO**") with its registered offices in Zurich and Basel. Its share capital amounts to USD 385,840,846.60 and is divided into 3,858,408,466 registered shares with a par value of USD 0.10 per share.

UBS AG ist eine Aktiengesellschaft i.S.v. Art. 620 ff. des Schweizer Obligationenrechts ("**OR**") mit Sitz in Zürich und Basel. Das Aktienkapital beträgt USD 385'840'846.60 und ist unterteilt in 3'858'408'466 Namenaktien mit einem Nennwert von USD 0.10 pro Aktie.

B) Credit Suisse AG is a company limited by shares pursuant to art. 620 ff. CO with its registered office in Zurich. Its share capital amounts to CHF 4,399,680,200.00 and is divided into 4,399,680,200 registered shares with a par value of CHF 1.00 per share.

CREDIT SUISSE AG ist eine Aktiengesellschaft i.S.v. Art. 620 ff. OR mit Sitz in Zürich. Das Aktienkapital beträgt CHF 4'399'680'200.00 und ist unterteilt in 4'399'680'200 Namenaktien mit einem Nennwert von CHF 1.00 pro Aktie.

C) UBS AG and Credit Suisse AG are both direct wholly-owned subsidiaries of UBS Group AG.

UBS AG und CREDIT SUISSE AG, sind beides direkte hundertprozentige Tochtergesellschaften der UBS Group AG.

D) In order to facilitate the further integration of the UBS banking business and the Credit Suisse banking business following the merger between UBS Group AG and Credit Suisse Group AG which completed on 12 June 2023, it is intended to merge Credit Suisse AG into UBS AG.

Um nach der am 12. Juni 2023 vollzogenen Fusion zwischen der UBS Group AG und der Credit Suisse Group AG die weitere Integration des UBS Bankengeschäftes und des Credit Suisse Bankengeschäftes zu erleichtern, soll die CREDIT SUISSE AG in die UBS AG fusioniert werden.

#### THEREFORE, THE PARTIES AGREE TO THE FOLLOWING:

DIE PARTEIEN VEREINBAREN DAHER DAS FOLGENDE:

### 1 Merger / Fusion

The Parties hereby agree to merge with each other pursuant to art. 3 para. 1 lit. a in combination with art. 4 para. 1 lit. a of the Federal Act on Mergers, Demergers, Conversion and Transfer of Assets and Liabilities ("Merger Act") and in accordance with this merger agreement (merger by absorption between two companies limited by shares; the "Merger"). UBS AG is the surviving company, and Credit Suisse AG is the transferring company.

Die Parteien vereinbaren hiermit im Sinne von Art. 3 Abs. 1 lit. a in Verbindung mit Art. 4 Abs. 1 lit. a des Bundesgesetzes über Fusion, Spaltung, Umwandlung und Vermögensübertragung ("FusG") nach Massgabe dieses Fusionsvertrages zu fusionieren (Absorptionsfusion zwischen zwei Aktiengesellschaften; die "Fusion"). UBS AG ist die übernehmende Gesellschaft und Credit Suisse AG ist die übertragende Gesellschaft.

Credit Suisse AG will transfer to UBS AG all its assets and liabilities, as evidenced on the merger balance sheet attached as <a href="Exhibit 1">Exhibit 1</a> (statutory balance sheet of Credit Suisse AG as per 30 June 2023), as well as its contracts by universal succession, with legal effect as per the time of entry in the commercial register. The Parties agree that this merger balance sheet shall be superseded and replaced for the purposes of this merger agreement with an audited statutory balance sheet of Credit Suisse AG as per 31 December 2023, which – upon completion of the audit of such balance sheet – shall become the applicable merger balance sheet (and thus the new <a href="Exhibit 1">Exhibit 1</a>) for the purposes of this merger agreement. Without any prejudice to the merger of branches in other jurisdictions as an effect of the Merger, the Parties hereby agree that the Merger shall also include the merger of the following branches, including the transfer, or the allocation, as the case may be, of their assets and liabilities, as well as their contracts in totality as follows:

CREDIT SUISSE AG wird sämtliche Aktiven und Passiven gemäss der als <u>Anhang 1</u> beigefügten Fusionsbilanz (handelsrechtliche Bilanz der CREDIT SUISSE AG per 30. Juni 2023) sowie ihre Verträge durch Universalsukzession mit Wirkung per Eintragung ins Handelsregister auf UBS AG übertragen. Die Parteien vereinbaren, dass diese Fusionsbilanz für die Zwecke dieses Fusionsvertrages durch eine handelsrechtliche, geprüfte Bilanz der CREDIT SUISSE AG per 31. Dezember 2023 ersetzt wird, welche – nach Abschluss der Prüfung dieser Bilanz – für die Zwecke dieses Fusionsvertrages als anwendbare Fusionsbilanz (und somit als neuer <u>Anhang 1</u>) gelten soll. Ohne Auswirkung auf die Fusion der Zweigniederlassungen in anderen Jurisdiktionen als Folge der Fusion, vereinbaren die Parteien hiermit, dass die Fusion auch die Fusion der folgenden Zweigniederlassungen der Parteien umfasst, einschliesslich des Übergangs oder der Allokation, von Fall zu Fall, sämtlicher ihrer Aktiven und Passiven sowie Verträge:

- Credit Suisse AG's London branch which shall merge into UBS AG's London branch with UBS AG's London branch being the surviving branch and constituting the universal legal successor to Credit Suisse AG's London branch; and
  - die Zweigniederlassung der CREDIT SUISSE AG in London, die auf die Zweigniederlassung der UBS AG in London übergehen soll, wobei die Zweigniederlassung der UBS AG in London die übernehmende Zweigniederlassung und Rechtsnachfolgerin der Zweigniederlassung der CREDIT SUISSE AG in London sein soll; und
- ii) Credit Suisse AG (DIFC Branch) (DIFC registration number 20) which shall merge into UBS AG (DIFC Branch) (DIFC registration number 249) with UBS AG (DIFC Branch) (DIFC registration number 249) being the surviving branch and constituting universal legal successor to Credit Suisse AG (DIFC Branch) (DIFC registration number 20).

die Zweigniederlassung der Credit Suisse AG (DIFC Branch) (DIFC registration number 20), die auf die Zweigniederlassung der UBS AG (DIFC Branch) (DIFC registration number 249) übergehen soll wobei die Zweigniederlassung der UBS AG (DIFC Branch) (DIFC

registration number 249) die übernehmende Zweigniederlassung und Rechtsnachfolgerin der Zweigniederlassung der Credit Suisse AG (DIFC Branch) (DIFC registration number 20) sein soll.

iii) all assets, liabilities and contracts allocated to the Credit Suisse AG's Milan branch (VAT code and registration number with the Companies' Register of Milan-Monza-Brianza-Lodi 10087790159) shall be allocated to a UBS AG branch to be established in Milan (Italy) before effectiveness of the Merger.

alle zur Zweigniederlassung Credit Suisse AG Mailand (UmSt. Nr. und Registrierungsnummer beim Gesellschaftsregister von Milan-Monza-Brianza-Lodi 10087790159) allozierten Aktiven, Passiven und Verträge sollen einer vor Wirksamkeit der Fusion zu gründenden Zweigniederlassung in Mailand (Italien) zugeordnet werden.

UBS AG will record these assets and liabilities in its statutory balance sheet at their present statutory book values in accordance with <a href="Exhibit 1">Exhibit 1</a> with effect as per the balance sheet date of 1 January 2024. Therefore, all relevant acts and transactions as of and from 1 January 2024 onwards are deemed to be made on behalf of UBS AG and will be booked in the accounts accordingly with the profits and losses generated in Credit Suisse AG from such date being recorded in the profit and loss statement of UBS AG. UBS AG knows and accepts all legal transactions entered into and all movements in assets and liabilities, as against the merger balance sheet, incurred since that date. For the avoidance of doubt, the Parties acknowledge that the transfer of the assets and liabilities of Credit Suisse AG's London branch to UBS AG's London branch and Credit Suisse AG (DIFC Branch) (DIFC registration number 20) to UBS AG (DIFC Branch) (DIFC registration number 249) shall be at the book value.

UBS AG wird diese Aktiven und Passiven zu bisherigen statutarischen Buchwerten gemäss <u>Anhang</u> 1 mit Wirkung per Bilanzstichtag 1. Januar 2024 in ihre handelsrechtliche Bilanz übernehmen. Demnach gelten alle Handlungen am und ab dem 1. Januar 2024 als für Rechnung der UBS AG vorgenommen und werden entsprechend verbucht. Die von der Credit Suisse AG ab diesem Datum generierten Gewinne und Verluste werden in der Erfolgsrechnung der UBS AG erfasst. UBS AG kennt und akzeptiert sämtliche seit diesem Datum eingegangenen Rechtsgeschäfte und gegenüber der Fusionsbilanz eingetretenen Veränderungen von Aktiven und Passiven. Die PARTEIEN stellen klar, dass der Übergang der Aktiven und Passiven der Zweigniederlassung der CREDIT Suisse AG in London auf die Zweigniederlassung der UBS AG in London und der Zweigniederlassung der Credit Suisse AG (DIFC Branch) (DIFC registration number 20) auf die Zweigniederlassung der UBS AG (DIFC Branch) (DIFC registration number 249) zum Buchwert erfolgt.

#### 2 Use of exemptions / Anwendung von Ausnahmen

4 Since UBS Group AG owns 100% of the shares in UBS AG and 100% of the shares in Credit Suisse AG, the Merger can be carried out under simplified conditions pursuant to art. 23 para. 1 lit. b Merger Act. The Parties agree to make use of the exemptions pursuant to art. 24 para. 1 Merger Act, i.e., Da sich 100% der Aktien der UBS AG und 100% der Aktien der CREDIT SUISSE AG im Eigentum der UBS Group AG befinden, kann die Fusion gemäss Art. 23 Abs. 1 lit. b FusG unter erleichterten Voraussetzungen durchgeführt werden. Die Parteien vereinbaren, von den Erleichterungen gemäss Art. 24 Abs. 1 FusG Gebrauch zu machen, d.h.

not to include in the merger agreement the particulars required by art.
 13 para. 1 lit. b-e Merger Act;

im Fusionsvertrag auf die Angaben nach Art. 13 Abs. 1 lit. b-e FusG zu verzichten;

 neither to establish a merger report (art. 14 Merger Act), nor to commission a merger review (art. 15 Merger Act);

weder einen Fusionsbericht zu erstellen (Art. 14 FusG), noch eine Fusionsprüfung durchzuführen (Art. 15 FusG);

- to waive the statutory procedure for inspection (art. 16 Merger Act); and auf die Durchführung eines Einsichtsverfahrens (Art. 16 FusG) zu verzichten; und
- not to submit the merger agreement to the shareholders' meetings of UBS AG and Credit Suisse AG for resolution (art. 18 Merger Act).

den Fusionsvertrag den Generalversammlungen der UBS AG und der Credit Suisse AG nicht zur Beschlussfassung zu unterbreiten (Art. 18 FusG).

# 3 Share capital, compensation, special benefits / Aktienkapital, Abfindungen, besondere Vorteile

#### 3.1 Share capital and contributions / Aktienkapital und Einlagen

The share capital of UBS AG will not be modified in relation with the Merger. Since UBS Group AG owns 100% of the shares in UBS AG and 100% of the shares in Credit Suisse AG, the shares of Credit Suisse AG will become null and void upon the closing of the Merger.

Das Aktienkapital der UBS AG bleibt im Rahmen der Fusion unverändert. Da sich 100% der Aktien der UBS AG und 100% der Aktien der CREDIT Suisse AG im Eigentum der UBS Group AG befinden, werden die Aktien der CREDIT Suisse AG mit dem Vollzug der Fusion ungültig.

#### 3.2 Compensation / Abfindung

6 The Parties agree that no compensation pursuant to art. 8 Merger Act will be paid.

Die Parteien sind sich einig, dass keine Abfindung im Sinne von Art. 8 FUSG ausgerichtet wird.

#### 3.3 Special benefits / Besondere Vorteile

7 The Parties agree that no special benefits will be granted to members of a managing or administrative body pursuant to art. 13 para. 1 lit. h Merger Act.

Die Parteien sind sich einig, dass keine besonderen Vorteile im Sinne von Art. 13 Abs. 1 lit. h FusG an Mitglieder von Leitungs- oder Verwaltungsorganen gewährt werden.

#### 4 Information to creditors / Information der Gläubiger

8 The Parties will publish a creditors' call pursuant to art. 25 para. 2 Merger Act.

Die Parteien werden einen Schuldenruf gemäss Art. 25 Abs. 2 FusG publizieren.

## 5 Publication and information of employees / Publikation und Information der Arbeitnehmer

9 The Parties shall coordinate any information of the public, of UBS AG's shareholder (*i.e.*, UBS Group AG) and the authorities.

Die Parteien koordinieren die Information der Öffentlichkeit, der Aktionärin der UBS AG (d.h. UBS Group AG) und der Behörden.

10 Both Parties have employees and will (and if required, will procure that their subsidiaries will) (i) inform the employees and/or their representatives of the Merger in compliance with the requirements of the applicable laws (such as art. 27 and 28 Merger Act in connection with art. 333 and 333a CO and including, e.g., applicable foreign laws) and of any applicable collective bargaining or other applicable agreements and in due time before the filing of the Merger with the commercial registry, and (ii) if required under applicable laws (such as art. 27 and 28 Merger Act in connection with art. 333 and 333a CO and including, e.g., applicable foreign laws) and applicable collective bargaining or other applicable agreements, consult with the employees and/or their representatives in compliance with the requirements of such laws and agreements in due time before the filing of the Merger with the commercial registry. Both Parties will cooperate in good faith and provide prompt and reasonable assistance to the other Party to enable each Party to comply with the obligations described in this section 5, and shall share such information as may reasonably be required in order to discharge applicable information and consultation obligations.

Beide Parteien beschäftigen Mitarbeiter und werden (und soweit erforderlich, werden gewährleisten, dass ihre Tochtergesellschaften) (i) die Mitarbeiter und/oder ihre Vertreter rechtzeitig vor der Anmeldung der FUSION beim Handelsregister unter Beachtung der anwendbaren gesetzlichen Vorschriften (wie z.B. von Art. 27 und 28 FuSG in Verbindung mit Art. 333 und 333a OR und inklusive z.B. anwendbaren ausländischen Vorschriften) und der Vorschriften der anwendbaren Gesamtarbeits- oder anderen Verträge informieren, und (ii) sofern gemäss den anwendbaren gesetzlichen Vorschriften (wie z.B. Art. 27 und 28 FuSG in Verbindung mit Art. 333 und 333a OR und inklusive z.B. anwendbaren ausländischen Vorschriften) und den Vorschriften der anwendbaren Gesamtarbeits- oder anderen Verträge erforderlich, die Mitarbeiter und/oder ihre Vertreter unter Beachtung dieser gesetzlichen und vertraglichen Vorschriften rechtzeitig vor der Anmeldung der FUSION beim Handelsregister konsultieren. Die PARTEIEN werden nach den Grundsätzen von Treu und Glauben zusammenarbeiten und unverzüglich und angemessen einander unterstützen, um die jeweils andere PARTEI in die Lage zu versetzen, ihren Pflichten nachzukommen, wie sie in dieser Ziff. 5 beschrieben sind, und werden darüber hinaus einander Informationen zur Verfügung stellen, soweit dies angemessen und erforderlich ist, um die anwendbaren Informations- und Konsultationspflichten zu erfüllen.

#### 6 Validity of the merger agreement / Gültigkeit des Fusionsvertrages

#### 6.1 Entry into force / Inkrafttreten

11 This merger agreement will enter into force upon its execution.

Dieser Fusionsvertrag tritt mit seiner Unterzeichnung in Kraft.

#### 6.2 Conditions precedent to the Merger / Bedingungen für die Fusion

The closing of the Merger shall be subject to the satisfaction of the following conditions precedent:

Der Vollzug der Fusion untersteht folgenden aufschiebenden Bedingungen:

i) receipt of all licenses, amendments of licenses, approvals, non-objections or confirmations required to be obtained for the closing of the Merger and subsequent continuation of the business by UBS AG under applicable laws, rules or regulations from the relevant competent regulatory (including selfregulatory) and governmental authorities (each a "Regulatory Approval") and all such Regulatory Approvals being in full force and effect and not having been revoked until closing of the Merger;

Änderungen Erhalt aller Bewilligungen, von Bewilligungen, Genehmigungen, Nichtbeanstandungen oder Bestätigungen, die für den Vollzug der Fusion und die anschließende Weiterführung der Geschäftstätigkeit der UBS AG gemäss den geltenden Gesetzen, Regeln oder Regulierungen von den jeweils zuständigen Aufsichtsbehörden (einschließlich der Selbstregulierungsbehörden) und Regierungsbehörden ("AUFSICHTSBEHÖRDLICHE GENEHMIGUNGEN") erforderlich sind, und dass alle diese AUFSICHTSBEHÖRDLICHEN GENEHMIGUNGEN bis zum Vollzug der Fusion in vollem Umfang in Kraft sind und nicht widerrufen wurden;

ii) expiration or termination of any statutory, court or official prohibitions to close, where such prohibitions are legally enforceable in Switzerland or where failure to comply would, in the judgment of UBS AG and Credit Suisse AG, have unacceptable consequences for one or both Parties;

Ablauf oder Beseitigung allfälliger gesetzlicher, gerichtlicher oder behördlicher Vollzugsverbote, soweit diese rechtskräftig in der Schweiz vollstreckt werden können oder deren Nichtbefolgung nach Ansicht der UBS AG und der Credit Suisse AG für eine oder beide Parteien mit untragbaren Folgen verbunden wäre;

iii) if required under applicable laws (such as art. 27 and 28 Merger Act in connection with art. 333 and 333a CO and including, e.g., applicable foreign laws), applicable collective bargaining or other applicable agreements: implementation and completion of the information and/or consultation procedure with the employees and/or the employee representatives of the Parties in compliance with the requirements of such laws and/or agreements.

sofern gemäss den anwendbaren gesetzlichen Vorschriften (wie z.B. Art. 27 und 28 FusG in Verbindung mit Art. 333 und 333a OR und inklusive z.B. anwendbaren ausländischen Vorschriften), den Vorschriften der anwendbaren Gesamtarbeits- oder anderen Verträge erforderlich: Durchführung und Abschluss des Informations- und/oder Konsultationsverfahrens mit den Mitarbeitern und/oder Arbeitnehmervertretern der Parteien unter Beachtung dieser gesetzlichen und/oder vertraglichen Vorschriften.

The chairmen of the boards of directors of UBS AG and Credit Suisse AG may, by joint decision, waive the fulfillment of the mentioned conditions (either in whole or in part, provided that any part that is not waived is otherwise satisfied) and direct that the merger agreement be closed despite non-fulfillment of one or more of the conditions.

Die Präsidenten des Verwaltungsrates der UBS AG und der CREDIT SUISSE AG können durch gemeinsamen Beschluss auf den Eintritt der genannten Bedingungen verzichten (entweder gänzlich oder teilweise, sofern diejenigen Teile der Bedingungen, auf die nicht verzichtet wurde, erfüllt sind) und bestimmen, dass der Fusionsvertrag trotz fehlenden Eintritts einer oder mehrerer Bedingungen vollzogen wird.

## 7 Closing / Vollzug

Unless otherwise mutually agreed, the boards of directors of the Parties will file this merger agreement or procure that this merger agreement is filed with the commercial register as soon as (i) the audited statutory balance sheet of Credit Suisse AG as per 31 December 2023 is available and has replaced the attached current merger balance sheet as per 30 June 2023, and (ii) all conditions precedent to the Merger set forth in section 6.2 have been fulfilled (or waived in accordance with paragraph 13).

Sofern nichts anderes vereinbart wird, werden die Verwaltungsräte der Parteien diesen Fusionsvertrag beim Handelsregister anmelden oder dafür sorgen, dass dieser Fusionsvertrag beim Handelsregister angemeldet wird, sobald (i) die handelsrechtliche, geprüfte Bilanz der Credit Suisse AG per 31. Dezember 2023 verfügbar ist und die beigefügte aktuelle Fusionsbilanz per 30. Juni 2023 ersetzt hat, und (ii) sämtliche aufschiebenden Bedingungen, die in Ziff. 6.2 aufgeführt sind, erfüllt sind (oder auf deren Eintritt in Übereinstimmung mit Paragraphen 13 verzichtet wurde).

This merger agreement (and, consequently, the Merger) will be deemed closed as soon as the entries in the commercial register in respect of both Parties have been made.

Dieser Fusionsvertrag (und damit die FUSION) gilt als vollzogen, sobald die Eintragungen im Handelsregister bei beiden PARTEIEN durchgeführt worden sind.

The Parties undertake to use their best efforts to do everything, not to forbear anything and to cooperate with each other to ensure that the closing can occur as quickly as possible.

Die Parteien verpflichten sich, alles Erforderliche zu unternehmen, nichts zu unterlassen und sich gegenseitig zu unterstützen, damit der Vollzug so rasch als möglich erfolgen kann.

The Parties undertake, at the closing and, if necessary, before or thereafter, to execute any instruments, declarations, powers of attorney or other documents, in any form, including but not limited to before the notary (public or private), and to do any acts, and enter into any contracts, required for the full closing of this merger agreement.

Die Parteien verpflichten sich, beim – oder wenn notwendig vor oder nach dem – Vollzug alle Urkunden zu unterzeichnen, Erklärungen abzugeben, Vollmachten auszustellen oder Dokumente zu unterzeichnen, in jeder möglichen Form, einschliesslich vor einem öffentlichen oder privaten Notar, alle Handlungen vorzunehmen, sowie Verträge einzugehen, die der vollständige Vollzug dieses Fusionsvertrages erfordert.

To the extent the transfer by Credit Suisse AG of all its assets and liabilities, as well as its contracts (and UBS AG's succession to the same), for the avoidance of doubt, including all rights and obligations, its position in any judicial, arbitral or administrative procedures, the powers of attorney it has granted, as well as the licenses, authorizations and registrations it has obtained, by universal succession by way of this merger agreement and the Merger Act is not recognized and / or given full effect under the laws of a foreign jurisdiction which apply to the transfer ("Relevant Jurisdiction"),

Soweit die Übertragung durch CREDIT SUISSE AG von ihren sämtlichen Aktiven und Passiven, sowie ihren Verträgen (und der Rechtsnachfolge der UBS AG in diese), wozu klarstellend alle ihre Rechte und Pflichten, ihre Stellung in Gerichts-, Schieds- oder Verwaltungsverfahren, von ihr erteilte Vollmachten sowie die von ihr gehaltenen Lizenzen, Bewilligungen und Registereintragungen gehören, durch Universalsukzession mittels dieses Fusionsvertrages und des FusG nach dem Recht einer Rechtsordnung, das für die Übertragung relevant ist, ("Relevante Rechtsordnung") nicht anerkannt wird und / oder nicht vollständig wirksam ist,

i) Credit Suisse AG herewith transfers, conveys and assigns all of its assets and liabilities, as well as contracts, including the title and possession of assets or the claims to return the title and possession of assets and any other rights or obligations in respect of Credit Suisse AG's assets and liabilities, as well as contracts, which are governed by the laws of such Relevant Jurisdiction to UBS AG with effect as of completion of the Merger and UBS AG herewith accepts this transfer; in the case of any power of attorney granted by Credit Suisse AG, UBS AG herewith grants to the corresponding representative powers of attorney in the same extent;

überträgt, übereignet und zediert die CREDIT SUISSE AG zum Zeitpunkt der Wirksamkeit der FUSION hiermit alle Aktiven und Passiven sowie Verträge, einschliesslich des Eigentums und Besitzes an Sachen oder der Ansprüche auf Rückübertragung des Eigentums oder Besitzverschaffung und alle anderen Rechte oder Pflichten in Bezug auf alle Aktiven und Passiven sowie Verträge der CREDIT SUISSE AG, die dem Recht der Relevanten Rechtsordnung unterliegen, an die UBS AG, und die UBS AG nimmt diese Übertragung hiermit an; hinsichtlich einer von der CREDIT SUISSE AG erteilten Vollmacht erteilt die UBS AG dem entsprechenden Bevollmächtigten hiermit im gleichen Umfang Vollmacht;

ii) the Parties undertake to execute and deliver (or cause to execute and deliver) any instruments, declarations, powers of attorney or other documents

in any form, including but not limited to before the notary (public or private), and to do any acts (or cause to do any acts), including but not limited to making any applications, filings or reports, and enter into any contracts, deeds or other arrangements that are required and/or expedient to evidence, implement, perfect or effect such transfer of such assets and liabilities, as well as contracts in accordance with the laws of such Relevant Jurisdiction to achieve the transfer as contemplated by this merger agreement, to be completed prior to, upon or as soon as possible following the closing of the Merger (as applicable);

verpflichten sich die Parteien, Urkunden und Vollmachten auszustellen, Erklärungen abzugeben und Dokumente zu unterzeichnen, in jeder möglichen Form, einschliesslich vor einem öffentlichen oder privaten Notar, und jeweils zuzustellen (oder die Ausstellung, Abgabe, Unterzeichnung und jeweilige Zustellung zu veranlassen), alle Handlungen vorzunehmen (oder zu veranlassen), einschliesslich von Anträgen, Anmeldungen und Berichten, sowie Verträge einzugehen, Urkunden auszustellen oder sonstigen Vorkehrungen zu treffen, die erforderlich oder förderlich sind, um solche Aktiven und Passiven sowie Verträge vor, zum Zeitpunkt oder unmittelbar nach dem Vollzug der Fusion (soweit zutreffend) nach den Bestimmungen dieser Relevanten Rechtsordnung zu übertragen, die Übertragung zu verstollständigen, nachzuweisen oder umzusetzen, um die nach diesem Fusionsvertrag angestrebte Übertragung zu erreichen;

iii) in any event, the assets and liabilities, as well as contracts of Credit Suisse AG, which are governed by the laws of such Relevant Jurisdiction shall be deemed as transferred, conveyed or assigned to and accepted by UBS AG from an economic perspective, and UBS AG and Credit Suisse AG will use commercially reasonable best efforts to request, procure, obtain and complete also the legal transfer and acceptance, conveyance or assignment of such assets and liabilities, as well as contracts in in accordance with the laws of such Relevant Jurisdiction as soon as possible following the closing of the Merger; and

in jedem Falle sollen die Aktiven und Passiven sowie Verträge DER CREDIT SUISSE AG, die dem Recht der Relevanten Rechtsordnung unterliegen, wirtschaftlich als auf UBS AG übertragen, übereignet oder abgetreten und angenommen gelten, und UBS AG und CREDIT SUISSE AG werden sämtliche wirtschaftlich vertretbaren Anstrengungen unternehmen, um die rechtliche Übertragung und Annahme, Übereignung oder Abtretung dieser Aktiven und Passiven sowie Verträge nach den Bestimmungen dieser Relevanten Rechtsordnung so rasch als möglich nach dem Vollzug der FUSION zu beantragen, besorgen, einzuholen und erreichen; und

iv) the Parties, for the avoidance of doubt, agree that the inclusion of the foregoing clauses (i) through (iii) in this merger agreement is not intended in any manner to, and shall not be construed to, limit the effectiveness of the universal succession effected by way of the Merger.

die Parteien stellen klar, dass die Aufnahme der vorstehenden Klauseln (i) bis (iii) in diesem Fusionsvertrag in keiner Weise die Wirksamkeit der durch die Fusion herbeigeführten Universalsukzession beinträchtigen soll und auch nicht in diesem Sinne zur Auslegung herangezogen werden soll.

#### 8 Miscellaneous / Verschiedenes

#### 8.1 Taxes / Steuern

Provided that UBS AG and Credit Suisse AG belong to the same VAT group at the time of the consummation of the Merger, the Merger contemplated by this agreement will not be subject to Swiss value added tax ("VAT"). Otherwise, the transfer of assets and liabilities as part of the Merger is subject to Swiss VAT in whole or in part. The Swiss VAT obligation shall be fulfilled by application of the notification procedure pursuant to Art. 38 para. 1 of the Swiss Federal Act on Value Added Tax. No Swiss VAT will be paid on the transfer of the assets and liabilities. UBS AG assumes the tax base for the transferring assets and liabilities and the degree of use for the input VAT deduction of the transferring company. For the avoidance of doubt, should the Merger be recognized as being subject to any non-Swiss VAT the Parties undertake to and cooperate with, if necessary, execute any action, not limited to file any VAT declarations, required under the respective VAT law of such relevant jurisdiction.

Bilden die UBS AG und Credit Suisse AG zum Zeitpunkt des Vollzugs der Fusion Teil der gleichen Mehrwertsteuergruppe für Schweizer Mehrwertsteuerzwecke ("MWST"), unterliegt die vorliegende Fusion nicht der Schweizer MWST. Andernfalls unterliegt die Übertragung der Vermögenswerte im Rahmen der Fusion ganz oder teilweise der Schweizer MWST. Die Steuerpflicht wird im Meldeverfahren gemäss Art. 38 Abs. 1 des Bundesgesetzes über die Mehrwertsteuer erfüllt. Für die Übertragung der Vermögenswerte wird keine Schweizer MWST entrichtet. Die UBS AG übernimmt für die veräusserten Vermögenswerte die Bemessungsgrundlage und den zum Vorsteuerabzug berechtigenden Verwendungsgrad der übertragenden Gesellschaft. Die Parteien verpflichten sich, sollte die Fusion einer nichtschweizerischen Mehrwertsteuer unterliegen, zusammenzuarbeiten und alle Massnahmen zu ergreifen, die nach dem jeweiligen Mehrwertsteuerrecht der relevanten Jurisdiktion erforderlich sind, insbesondere zur Einreichung von Mehrwertsteuerereklärungen.

# 8.2 Modifications and amendments of the agreement / Vertragsänderung und Vertragsanpassung

Any modifications to this merger agreement (including this paragraph) must be made in writing.

Dieser Fusionsvertrag (inklusive dieser Paragraph) kann nur schriftlich abgeändert werden.

To the extent possible, each provision of this merger agreement is to be construed so that it is valid and enforceable under applicable law. Should a provision of this merger agreement be unenforceable or invalid, it shall only lapse to the extent that it is unenforceable or invalid and shall otherwise be replaced by a valid and enforceable provision which a party acting in good faith would regard as a commercially adequate replacement for the provision which is invalid or unenforceable. The other provisions of this merger agreement will remain binding and in force under all circumstances.

Wann immer möglich, ist jede Bestimmung dieses Fusionsvertrages so auszulegen, dass sie unter dem anwendbaren Recht gültig und durchsetzbar ist. Sollte eine Bestimmung dieses Fusionsvertrages nicht vollstreckbar oder ungültig sein, so fällt sie nur im Ausmass ihrer Unvollstreckbarkeit oder Ungültigkeit dahin und ist im Übrigen durch eine gültige und vollstreckbare Bestimmung zu ersetzen, die eine gutgläubige Partei als ausreichenden wirtschaftlichen Ersatz für die ungültige und unvollstreckbare Bestimmung ansehen würde. Die übrigen Bestimmungen dieses Fusionsvertrages bleiben unter allen Umständen bindend und in Kraft.

#### 8.3 Applicable law and jurisdiction / Anwendbares Recht und Gerichtsstand

This merger agreement shall be governed by and construed in accordance with Swiss substantive law, excluding its rules on conflict of laws and excluding international treaties (in particular the Vienna Convention on the International Sale of Goods dated 11 April 1980; CISG).

Dieser Fusionsvertrag untersteht materiellem Schweizer Recht unter Ausschluss der Kollisionsnormen und unter Ausschluss internationaler Verträge (insbesondere des Wiener Kaufrechtsübereinkommens vom 11. April 1980; CISG).

Any disputes arising out of or in connection with this merger agreement, including disputes about its conclusion, validity, modification or dissolution, shall be submitted to the exclusive jurisdiction of the courts of the city of Zurich (Zurich 1), Switzerland.

Für sämtliche Streitigkeiten, die aus oder im Zusammenhang mit diesem Fusionsvertrag entstehen, einschliesslich solcher über sein gültiges Zustandekommen, seine Rechtswirksamkeit, Abänderung oder Auflösung, sind die Gerichte der Stadt Zürich (Zürich 1), Schweiz, ausschliesslich zuständig.

(Signatures on the following page)
(Unterschriften auf der nächsten Seite)

# Exhibit 1 Merger Balance Sheet of Credit Suisse AG (balance sheet per 30 June 2023)

Anhang 1
Fusionsbilanz der Credit Suisse AG (Bilanz per 30. Juni 2023)

Credit Suisse AG Parent Balance Sheets		2022	2023
	End of	Dec	Jun
Assets (CHF million)			
Cash and other liquid assets		38,566	50,459
Due from banks		62,363	52,123
Securities borrowing and reverse repurchase agreements		52,380	37,805
Due from customers		117,543	91,474
Mortgage loans		5,033	4,928
Trading assets		26,072	13,540
Positive replacement values of derivative financial instruments		7,390	3,574
Financial investments		28,396	27,106
Accrued income and prepaid expenses		3,067	2,441
Participations		30,357	24,394
Tangible fixed assets		1,672	931
Other assets		5,524	6,734
Total assets		378,363	315,509
Liabilities and shareholder's equity (CHF million)			
Due to banks		54,307	63,329
Securities lending and repurchase agreements		52,646	33,205
Customer deposits		87,383	67,342
Trading liabilities		2,857	2,014
Negative replacement values of derivative financial instruments		4,994	3,231
Liabilities from other financial instruments held at fair value		43,725	36,781
Bonds and mortgage-backed bonds		111,770	83,496
Accrued expenses and deferred income		3,338	2,862
Other liabilities		525	, 551
Provisions		563	1,375
Total liabilities		362,108	294,186
Share capital		4,400	4,400
Legal capital reserves		34,790	42,290
of which: tax-exempt capital contribution reserves		34,790	42,290
Free reserves		7,500	0
of which: capital contribution reserves		7,500	0
Retained earnings		(17,870)	(30,435)
		(12,565)	5,068
Net profit/(loss)		<b>16,255</b>	
Total shareholder's equity		· · · · · · · · · · · · · · · · · · ·	21,323
Total liabilities and shareholder's equity		378,363	315,509

dated

# Merger Agreement Fusionsvertrag

9 February 2024

vom	9. Februar 2024
between	UBS Switzerland AG
zwischen	Bahnhofstrasse 45
	8001 Zurich
	(hereinafter "UBS Switzerland AG")
	(nachfolgend " <b>UBS SWITZERLAND AG</b> ")
and	Credit Suisse (Schweiz) AG
und	Paradeplatz 8 8001 Zurich

(together referred to as the "Parties" and each as a "Party")

(zusammen die "PARTEIEN" und einzeln die "PARTEI")

(hereinafter "Credit Suisse (Schweiz) AG")

(nachfolgend "CREDIT SUISSE (SCHWEIZ) AG")



The English version of this merger agreement prevails.

Die englische Version dieses Fusionsvertrags geht vor.

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## Exhibits / Anhänge

Exhibit 1 Merger balance sheet of Credit Suisse (Schweiz) AG

(balance sheet per 30 September 2023)

Anhang 1 Fusionsbilanz der CREDIT SUISSE (SCHWEIZ) AG (Bilanz per 30.

September 2023)

#### Recitals / Erwägungsgründe

A) UBS Switzerland AG is a company limited by shares pursuant to art. 620 *et seqq*. of the Swiss Code of Obligations ("**CO**") with its registered office in Zurich. Its share capital amounts to CHF 10,000,000.00 and is divided into 100,000,000 registered shares with a par value of CHF 0.10 per share.

UBS SWITZERLAND AG ist eine Aktiengesellschaft im Sinne von Art. 620 ff. des Schweizer Obligationenrechts ("**OR**") mit Sitz in Zürich. Das Aktienkapital beträgt CHF 10'000'000.00 und ist unterteilt in 100'000'000 Namenaktien mit einem Nennwert von CHF 0.10 pro Aktie.

B) Credit Suisse (Schweiz) AG is a company limited by shares pursuant to art. 620 *et seqq*. CO with its registered office in Zurich. Its share capital amounts to CHF 100,000,000.00 and is divided into 100,000,000 registered shares with a par value of CHF 1.00 per share.

CREDIT SUISSE (SCHWEIZ) AG ist eine Aktiengesellschaft im Sinne von Art. 620 ff. OR mit Sitz in Zürich. Das Aktienkapital beträgt CHF 100'000'000.00 und ist unterteilt in 100'000'000 Namenaktien mit einem Nennwert von CHF 1.00 pro Aktie.

C) UBS Switzerland AG is a direct wholly owned subsidiary of UBS AG and Credit Suisse (Schweiz) AG is a direct wholly owned subsidiary of Credit Suisse AG.

UBS SWITZERLAND AG ist eine direkte hundertprozentige Tochtergesellschaft der UBS AG und CREDIT SUISSE (SCHWEIZ) AG ist eine direkte hundertprozentige Tochtergesellschaft der Credit Suisse AG.

D) In order to facilitate the further integration of the UBS banking business and the Credit Suisse banking business following the merger between UBS Group AG and Credit Suisse Group AG which completed on 12 June 2023, it is intended to merge Credit Suisse AG into UBS AG ("Parent Bank Merger") and subsequent to the completion of the Parent Bank Merger, upon which UBS Switzerland AG and Credit Suisse (Schweiz) AG will both be direct wholly owned subsidiaries of UBS AG, to merge Credit Suisse (Schweiz) AG into UBS Switzerland AG.

Um nach der am 12. Juni 2023 vollzogenen Fusion zwischen der UBS Group AG und der Credit Suisse Group AG die weitere Integration des UBS Bankengeschäfts und des Credit Suisse Bankengeschäfts zu erleichtern, soll die Credit Suisse AG in die UBS AG fusioniert werden ("PARENT BANK MERGER"), und nach dem Vollzug des PARENT BANK MERGERS, nach welchem die UBS SWITZERLAND AG und CREDIT SUISSE (SCHWEIZ) AG beide direkte hundertprozentige Tochtergesellschaften der UBS AG sein werden, soll die CREDIT SUISSE (SCHWEIZ) AG in die UBS SWITZERLAND AG fusioniert werden.

#### THEREFORE, THE PARTIES AGREE TO THE FOLLOWING:

DIE PARTEIEN VEREINBAREN DAHER DAS FOLGENDE:

#### 1 Merger / Fusion

The Parties hereby agree to merge with each other pursuant to art. 3 para. 1 lit. a in combination with art. 4 para. 1 lit. a of the Federal Act on Mergers, Demergers, Conversion and Transfer of Assets and Liabilities ("Merger Act") and in accordance with this merger agreement (merger by absorption between two companies limited by shares; the "Merger"). UBS Switzerland AG is the surviving company, and Credit Suisse (Schweiz) AG is the transferring company.

Die Parteien vereinbaren hiermit im Sinne von Art. 3 Abs. 1 lit. a in Verbindung mit Art. 4 Abs. 1 lit. a des Bundesgesetzes über Fusion, Spaltung, Umwandlung und Vermögensübertragung ("FusG") nach Massgabe dieses Fusionsvertrages zu fusionieren (Absorptionsfusion zwischen zwei Aktiengesellschaften; die "Fusion"). UBS SWITZERLAND AG ist die übernehmende Gesellschaft und Credit Suisse (Schweiz) AG ist die übertragende Gesellschaft.

Credit Suisse (Schweiz) AG will transfer to UBS Switzerland AG all its assets and liabilities, as evidenced on the merger balance sheet attached as <a href="Exhibit 1">Exhibit 1</a> (statutory balance sheet of Credit Suisse (Schweiz) AG as per 30 September 2023), as well as its contracts by universal succession, with legal effect as per the time of entry in the commercial register. The Parties agree that this merger balance sheet shall be superseded and replaced for the purposes of this merger agreement with an audited statutory balance sheet of Credit Suisse (Schweiz) AG as per 31 March 2024, which – upon completion of the audit of such balance sheet – shall become the applicable merger balance sheet (and thus the new <a href="Exhibit 1">Exhibit 1</a>) for the purposes of this merger agreement.

CREDIT SUISSE (SCHWEIZ) AG wird sämtliche Aktiven und Passiven gemäss der als Anhang 1 beigefügten Fusionsbilanz (handelsrechtliche Bilanz der CREDIT SUISSE (SCHWEIZ) AG per 30. September 2023) sowie ihre Verträge durch Universalsukzession mit Wirkung per Eintragung ins Handelsregister auf UBS SWITZERLAND AG übertragen. Die Parteien vereinbaren, dass diese Fusionsbilanz für die Zwecke dieses Fusionsvertrages durch eine handelsrechtliche, geprüfte Bilanz der CREDIT SUISSE (SCHWEIZ) AG per 31. März 2024 ersetzt wird, welche – nach Abschluss der Prüfung dieser Bilanz – für die Zwecke dieses Fusionsvertrages als anwendbare Fusionsbilanz (und somit als neuer Anhang 1) gelten soll.

UBS Switzerland AG will record these assets and liabilities in its statutory balance sheet at their present statutory book values in accordance with <a href="Exhibit 1">Exhibit 1</a> with effect as per the balance sheet date of 1 April 2024. Therefore, all relevant acts and transactions as of and from 1 April 2024 onwards are deemed to be made on behalf of UBS Switzerland AG and will be booked in the accounts accordingly with the profits and losses generated in Credit Suisse (Schweiz) AG from such date being recorded in the profit and loss statement of UBS Switzerland AG. UBS Switzerland AG knows and accepts all legal transactions entered into and all movements in assets and liabilities, as against the merger balance sheet, incurred since that date.

UBS SWITZERLAND AG wird diese Aktiven und Passiven zu bisherigen statutarischen Buchwerten gemäss <u>Anhang 1</u> mit Wirkung per Bilanzstichtag 1. April 2024 in ihre handelsrechtliche Bilanz übernehmen. Demnach gelten alle Handlungen am und ab dem 1. April 2024 als für Rechnung der UBS SWITZERLAND AG vorgenommen und werden entsprechend verbucht. Die von der CREDIT

SUISSE (SCHWEIZ) AG ab diesem Datum generierten Gewinne und Verluste werden in der Erfolgsrechnung der UBS SWITZERLAND AG erfasst. UBS SWITZERLAND AG kennt und akzeptiert sämtliche seit diesem Datum eingegangenen Rechtsgeschäfte und gegenüber der Fusionsbilanz eingetretenen Veränderungen von Aktiven und Passiven.

#### 2 Use of exemptions / Anwendung von Ausnahmen

4 Since UBS AG will own 100% of the shares in UBS Switzerland AG and 100% of the shares in Credit Suisse (Schweiz) AG at the time of the filing of this merger agreement with the commercial register in accordance with section 7, the Merger can be carried out under simplified conditions pursuant to art. 23 para. 1 lit. b Merger Act. The Parties agree to make use of the exemptions pursuant to art. 24 para. 1 Merger Act, i.e.,

Da sich 100% der Aktien der UBS SWITZERLAND AG und 100% der Aktien der CREDIT SUISSE (SCHWEIZ) AG im Zeitpunkt der Anmeldung dieses Fusionsvertrages beim Handelsregister gemäss Ziff. 7 im Eigentum der UBS AG befinden werden, kann die FUSION gemäss Art. 23 Abs. 1 lit. b FUSG unter erleichterten Voraussetzungen durchgeführt werden. Die PARTEIEN vereinbaren, von den Erleichterungen gemäss Art. 24 Abs. 1 FUSG Gebrauch zu machen, d.h.

 not to include in the merger agreement the particulars required by art. 13 para. 1 lit. b-e Merger Act;

im Fusionsvertrag auf die Angaben nach Art. 13 Abs. 1 lit. b-e FusG zu verzichten;

• neither to establish a merger report (art. 14 Merger Act), nor to commission a merger review (art. 15 Merger Act);

weder einen Fusionsbericht zu erstellen (Art. 14 FUSG), noch eine Fusionsprüfung durchzuführen (Art. 15 FUSG);

- to waive the statutory procedure for inspection (art. 16 Merger Act); and auf die Durchführung eines Einsichtsverfahrens (Art. 16 FUSG) zu verzichten; und
- not to submit the merger agreement to the shareholders' meetings of UBS Switzerland AG and Credit Suisse (Schweiz) AG for resolution (art. 18 Merger Act).

den Fusionsvertrag den Generalversammlungen der UBS SWITZERLAND AG und der CREDIT SUISSE (SCHWEIZ) AG nicht zur Beschlussfassung zu unterbreiten (Art. 18 FUSG).

# 3 Share capital, compensation, special benefits / Aktienkapital, Abfindungen, besondere Vorteile

#### 3.1 Share capital and contributions / Aktienkapital und Einlagen

The share capital of UBS Switzerland AG will not be modified in relation with the Merger. Since UBS AG will own 100% of the shares in UBS Switzerland AG and

100% of the shares in Credit Suisse (Schweiz) AG at the time of the filing of this merger agreement with the commercial register in accordance with section 7, the shares of Credit Suisse (Schweiz) AG will become null and void upon the closing of the Merger.

Das Aktienkapital der UBS SWITZERLAND AG bleibt im Rahmen der FUSION unverändert. Da sich 100% der Aktien der UBS SWITZERLAND AG und 100% der Aktien der CREDIT SUISSE (SCHWEIZ) AG im Zeitpunkt der Anmeldung dieses Fusionsvertrages beim Handelsregister gemäss Ziff. 7 im Eigentum der UBS AG befinden werden, werden die Aktien der CREDIT SUISSE (SCHWEIZ) AG mit dem Vollzug der FUSION ungültig.

#### 3.2 Compensation / Abfindung

6 The Parties agree that no compensation pursuant to art. 8 Merger Act will be paid.

Die Parteien sind sich einig, dass keine Abfindung im Sinne von Art. 8 FUSG ausgerichtet wird.

#### 3.3 Special benefits / Besondere Vorteile

7 The Parties agree that no special benefits will be granted to members of a managing or administrative body pursuant to art. 13 para. 1 lit. h Merger Act.

Die Parteien sind sich einig, dass keine besonderen Vorteile im Sinne von Art. 13 Abs. 1 lit. h FusG an Mitglieder von Leitungs- oder Verwaltungsorganen gewährt werden.

#### 4 Information to creditors / Information der Gläubiger

8 The Parties will publish a creditors' call pursuant to art. 25 para. 2 Merger Act.

Die Parteien werden einen Schuldenruf gemäss Art. 25 Abs. 2 FusG publizieren.

# 5 Publication and information of employees / Publikation und Information der Arbeitnehmer

9 The Parties shall coordinate any information of the public, of UBS Switzerland AG's shareholder (*i.e.*, UBS AG) and of the authorities.

Die Parteien koordinieren die Information der Öffentlichkeit, der Aktionärin der UBS Switzerland AG (d.h. UBS AG) und der Behörden.

Both Parties have employees and will (and if required, will procure that their subsidiaries will) (i) inform the employees and/or their representatives of the Merger in compliance with the requirements of the applicable laws (specifically art. 27 and 28 Merger Act in connection with art. 333 and 333a CO) and of any applicable collective bargaining or other applicable agreements and in due time before the filing of the Merger with the commercial registry, and (ii) if required under applicable laws (specifically art. 27 and 28 Merger Act in connection with art. 333 and 333a CO) and applicable collective bargaining or other applicable agreements,

consult with the employees and/or their representatives in compliance with the requirements of such laws and agreements in due time before the filing of the Merger with the commercial registry. Both Parties will cooperate in good faith and provide prompt and reasonable assistance to the other Party to enable each Party to comply with the obligations described in this section 5, and shall share such information as may reasonably be required in order to discharge applicable information and consultation obligations.

Beide Parteien beschäftigen Mitarbeiter und werden (und soweit erforderlich, werden gewährleisten, dass ihre Tochtergesellschaften) (i) die Mitarbeiter und/oder ihre Vertreter rechtzeitig vor der Anmeldung der Fusion beim Handelsregister unter Beachtung der anwendbaren gesetzlichen Vorschriften (namentlich Art. 27 und 28 FusG in Verbindung mit Art. 333 und 333a OR) und der Vorschriften der anwendbaren Gesamtarbeits- oder anderen Verträge informieren, und (ii) sofern gemäss den anwendbaren gesetzlichen Vorschriften (namentlich Art. 27 und 28 FusG in Verbindung mit Art. 333 und 333a OR) und den Vorschriften der anwendbaren Gesamtarbeits- oder anderen Verträge erforderlich, die Mitarbeiter und/oder ihre Vertreter unter Beachtung dieser gesetzlichen und vertraglichen Vorschriften rechtzeitig vor der Anmeldung der Fusion beim Handelsregister konsultieren. Die Parteien werden nach den Grundsätzen von Treu und Glauben zusammenarbeiten und unverzüglich und angemessen einander unterstützen, um die jeweils andere Partei in die Lage zu versetzen, ihren Pflichten nachzukommen, wie sie in dieser Ziff. 5 beschrieben sind, und werden darüber hinaus einander Informationen zur Verfügung stellen, soweit dies angemessen und erforderlich ist, um die anwendbaren Informations- und Konsultationspflichten zu erfüllen.

#### 6 Validity of the merger agreement / Gültigkeit des Fusionsvertrages

#### 6.1 Entry into force / Inkrafttreten

11 This merger agreement will enter into force upon its execution.

Dieser Fusionsvertrag tritt mit seiner Unterzeichnung in Kraft.

#### 6.2 Conditions precedent to the Merger / Bedingungen für die Fusion

The closing of the Merger shall be subject to the satisfaction of the following conditions precedent:

Der Vollzug der Fusion untersteht folgenden aufschiebenden Bedingungen:

i) receipt of all licenses, amendments of licenses, approvals, exemptions, non-objections or confirmations required to be obtained for the closing of the Merger and subsequent continuation of the business by UBS Switzerland AG under applicable laws, rules or regulations from the relevant competent regulatory (including self-regulatory) and governmental authorities (each a "Regulatory Approval") and all such Regulatory Approvals being in full force and effect and not having been revoked until closing of the Merger;

Erhalt aller Bewilligungen, Änderungen von Bewilligungen, Genehmigungen, Ausnahmen, Nichtbeanstandungen oder Bestätigungen, die für den Vollzug der Fusion und die anschliessende Weiterführung der Geschäftstätigkeit der UBS Switzerland AG gemäss den

geltenden Gesetzen, Regeln oder Regulierungen von den jeweils zuständigen Aufsichtsbehörden (einschliesslich der Selbstregulierungsbehörden) und Regierungsbehörden ("AUFSICHTSBEHÖRDLICHE GENEHMIGUNGEN") erforderlich sind, und dass alle diese AUFSICHTSBEHÖRDLICHEN GENEHMIGUNGEN bis zum Vollzug der Fusion in vollem Umfang in Kraft sind und nicht widerrufen wurden;

ii) expiration or termination of any statutory, court or official prohibitions to close, where such prohibitions are legally enforceable in Switzerland or where failure to comply would, in the judgment of UBS Switzerland AG and Credit Suisse (Schweiz) AG, have unacceptable consequences for one or both Parties;

Ablauf oder Beseitigung allfälliger gesetzlicher, gerichtlicher oder behördlicher Vollzugsverbote, soweit diese rechtskräftig in der Schweiz vollstreckt werden können oder deren Nichtbefolgung nach Ansicht der UBS SWITZERLAND AG und der CREDIT SUISSE (SCHWEIZ) AG für eine oder beide PARTEIEN mit untragbaren Folgen verbunden wäre;

iii) if required under applicable laws (specifically art. 27 and 28 Merger Act in connection with art. 333 and 333a CO), applicable collective bargaining or other applicable agreements: implementation and completion of the information and/or consultation procedure with the employees and/or the employee representatives of the Parties in compliance with the requirements of such laws and/or agreements; and

sofern gemäss den anwendbaren gesetzlichen Vorschriften (namentlich Art. 27 und 28 FusG in Verbindung mit Art. 333 und 333a OR), den Vorschriften der anwendbaren Gesamtarbeits- oder anderen Verträge erforderlich: Durchführung und Abschluss des Informations- und/oder Konsultationsverfahrens mit den Mitarbeitern und/oder Arbeitnehmervertretern der Parteien unter Beachtung dieser gesetzlichen und/oder vertraglichen Vorschriften; und

iv) registration of the Parent Bank Merger with the competent commercial registers.

Eintragung des Parent Bank Merger in den zuständigen Handelsregistern.

The chairman or the vice chairman of the board of directors of UBS Switzerland AG and the chairman or the vice chairman of the board of directors of Credit Suisse (Schweiz) AG may, by joint decision, waive the fulfillment of the mentioned conditions (either in whole or in part, provided that any part that is not waived is otherwise satisfied) and direct that the merger agreement be closed despite nonfulfillment of one or more of the conditions.

Der Präsident oder der Vizepräsident des Verwaltungsrates der UBS SWITZERLAND AG und der Präsident oder der Vizepräsident des Verwaltungsrates der CREDIT SUISSE (SCHWEIZ) AG können durch gemeinsamen Beschluss auf den Eintritt der genannten Bedingungen verzichten (entweder gänzlich oder teilweise, sofern diejenigen Teile der Bedingungen, auf die nicht verzichtet wurde, erfüllt sind) und bestimmen, dass der Fusionsvertrag trotz fehlenden Eintritts einer oder mehrerer Bedingungen vollzogen wird.

#### 7 Closing / Vollzug

Unless otherwise mutually agreed between the chairmen of the boards of directors of UBS Switzerland AG and Credit Suisse (Schweiz) AG, the boards of directors of the Parties will file this merger agreement or procure that this merger agreement is filed with the commercial register as soon as (i) the audited statutory balance sheet of Credit Suisse (Schweiz) AG as per 31 March 2024 is available and has replaced the attached current merger balance sheet as per 30 September 2023, and (ii) all conditions precedent to the Merger set forth in section 6.2 have been fulfilled (or waived in accordance with paragraph 13).

Sofern nichts anderes zwischen den Präsidenten des Verwaltungsrates der UBS SWITZERLAND AG und der CREDIT SUISSE (SCHWEIZ) AG vereinbart wird, werden die Verwaltungsräte der PARTEIEN diesen Fusionsvertrag beim Handelsregister anmelden oder dafür sorgen, dass dieser Fusionsvertrag beim Handelsregister angemeldet wird, sobald (i) die handelsrechtliche, geprüfte Bilanz der CREDIT SUISSE (SCHWEIZ) AG per 31. März 2024 verfügbar ist und die beigefügte aktuelle Fusionsbilanz per 30. September 2023 ersetzt hat, und (ii) sämtliche aufschiebenden Bedingungen, die in Ziff. 6.2 aufgeführt sind, erfüllt sind (oder auf deren Eintritt in Übereinstimmung mit Paragraphen 13 verzichtet wurde).

This merger agreement (and, consequently, the Merger) will be deemed closed as soon as the entries in the commercial register in respect of both Parties have been made.

Dieser Fusionsvertrag (und damit die FUSION) gilt als vollzogen, sobald die Eintragungen im Handelsregister bei beiden PARTEIEN durchgeführt worden sind.

The Parties undertake to use their best efforts to do everything, not to forbear anything and to cooperate with each other to ensure that the closing can occur as quickly as possible.

Die Parteien verpflichten sich, alles Erforderliche zu unternehmen, nichts zu unterlassen und sich gegenseitig zu unterstützen, damit der Vollzug so rasch als möglich erfolgen kann.

The Parties undertake, at the closing of this merger agreement and, if necessary, before or thereafter, to execute any instruments, declarations, powers of attorney or other documents, in any form, including but not limited to before the notary (public or private), to do any acts, including but not limited to making any applications, filings or reports, and to enter into any contracts, deeds or other arrangements that are required for the full closing of this merger agreement.

Die Parteien verpflichten sich, beim – oder wenn notwendig vor oder nach dem – Vollzug dieses Fusionsvertrages alle Urkunden zu unterzeichnen, Erklärungen abzugeben, Vollmachten auszustellen oder Dokumente zu unterzeichnen, in jeder möglichen Form, einschliesslich vor einem (öffentlichen oder privaten) Notar, alle Handlungen vorzunehmen, einschliesslich von Anträgen, Anmeldungen und Berichten, sowie Verträge einzugehen, Urkunden auszustellen oder sonstige Vereinbarungen zu treffen, die der vollständige Vollzug dieses Fusionsvertrages erfordert.

To the extent the transfer by Credit Suisse (Schweiz) AG of all its assets and liabilities, as well as its contracts (and UBS Switzerland AG's succession to the same), for the avoidance of doubt, including all rights and obligations, its position in any judicial, arbitral or administrative procedures, the powers of attorney it has granted, as well as the licenses, authorizations and registrations it has obtained, by universal succession by way of this merger agreement and the Merger Act is not recognized and / or given full effect under the laws of a foreign jurisdiction which apply to the transfer ("**Relevant Jurisdiction**"),

Soweit die Übertragung durch CREDIT SUISSE (SCHWEIZ) AG von ihren sämtlichen Aktiven und Passiven, sowie ihren Verträgen (und der Rechtsnachfolge der UBS SWITZERLAND AG in diese), wozu klarstellend alle ihre Rechte und Pflichten, ihre Stellung in Gerichts-, Schieds- oder Verwaltungsverfahren, von ihr erteilte Vollmachten sowie die von ihr gehaltenen Lizenzen, Bewilligungen und Registereintragungen gehören, durch Universalsukzession mittels dieses Fusionsvertrages und des FusG nach dem Recht einer Rechtsordnung, das für die Übertragung relevant ist, ("Relevante Rechtsordnung") nicht anerkannt wird und / oder nicht vollständig wirksam ist,

i) Credit Suisse (Schweiz) AG herewith transfers, conveys and assigns all of its assets and liabilities, as well as contracts, including the title and possession of assets or the claims to return the title and possession of assets and any other rights or obligations in respect of Credit Suisse (Schweiz) AG's assets and liabilities, as well as contracts, which are governed by the laws of such Relevant Jurisdiction to UBS Switzerland AG with effect as of completion of the Merger and UBS Switzerland AG herewith accepts this transfer; in the case of any power of attorney granted by Credit Suisse (Schweiz) AG, UBS Switzerland AG herewith grants to the corresponding representative powers of attorney in the same extent;

überträgt, übereignet und zediert die Credit Suisse (Schweiz) AG zum Zeitpunkt der Wirksamkeit der Fusion hiermit alle Aktiven und Passiven sowie Verträge, einschliesslich des Eigentums und Besitzes an Sachen oder der Ansprüche auf Rückübertragung des Eigentums oder Besitzverschaffung und alle anderen Rechte und Pflichten in Bezug auf alle Aktiven und Passiven sowie Verträge der Credit Suisse (Schweiz) AG, die dem Recht der Relevanten Rechtsordnung unterliegen, an die UBS Switzerland AG, und die UBS Switzerland AG nimmt diese Übertragung hiermit an; hinsichtlich einer von der Credit Suisse (Schweiz) AG erteilten Vollmacht erteilt die UBS Switzerland AG dem entsprechenden Bevollmächtigten hiermit im gleichen Umfang Vollmacht;

the Parties undertake to execute and deliver (or cause to execute and deliver) any instruments, declarations, powers of attorney or other documents in any form, including but not limited to before the notary (public or private), and to do any acts (or cause to do any acts), including but not limited to making any applications, filings or reports, and enter into any contracts, deeds or other arrangements that are required and/or expedient to evidence, implement, perfect or effect such transfer of such assets and liabilities, as well as contracts in accordance with the laws of such Relevant Jurisdiction to achieve the transfer as contemplated by this merger agreement, to be completed prior to, upon or as soon as possible following the closing of the Merger (as applicable);

verpflichten sich die Parteien, sämtliche Urkunden und Vollmachten auszustellen, Erklärungen abzugeben und Dokumente zu unterzeichnen, in jeder möglichen Form, einschliesslich vor einem (öffentlichen oder privaten) Notar, und jeweils zuzustellen (oder die Ausstellung, Abgabe, Unterzeichnung und jeweilige Zustellung zu veranlassen), alle Handlungen vorzunehmen (oder zu veranlassen), einschliesslich von Anträgen, Anmeldungen und Berichten, sowie Verträge einzugehen, Urkunden auszustellen oder sonstige Vorkehrungen zu treffen, die erforderlich oder förderlich sind, um solche Aktiven und Passiven sowie Verträge vor, zum Zeitpunkt oder unmittelbar nach dem Vollzug der FUSION (soweit zutreffend) nach den Bestimmungen dieser Relevanten Rechtsordnung zu übertragen, die Übertragung zu verstollständigen, nachzuweisen oder umzusetzen, um die nach diesem Fusionsvertrag angestrebte Übertragung zu erreichen;

iii) in any event, the assets and liabilities, as well as contracts of Credit Suisse (Schweiz) AG, which are governed by the laws of such Relevant Jurisdiction shall be deemed as transferred, conveyed or assigned to and accepted by UBS Switzerland AG from an economic perspective, and UBS Switzerland AG and Credit Suisse (Schweiz) AG will use commercially reasonable best efforts to request, procure, obtain and complete also the legal transfer and acceptance, conveyance or assignment of such assets and liabilities, as well as contracts in accordance with the laws of such Relevant Jurisdiction as soon as possible following the closing of the Merger; and

in jedem Falle sollen die Aktiven und Passiven sowie Verträge der Credit Suisse (Schweiz) AG, die dem Recht der Relevanten Rechtsordnung unterliegen, wirtschaftlich als auf UBS AG übertragen, übereignet oder abgetreten und angenommen gelten, und UBS SWITZERLAND AG und Credit Suisse (Schweiz) AG werden sämtliche wirtschaftlich vertretbaren Anstrengungen unternehmen, um die rechtliche Übertragung und Annahme, Übereignung oder Abtretung dieser Aktiven und Passiven sowie Verträge nach den Bestimmungen dieser Relevanten Rechtsordnung so rasch als möglich nach dem Vollzug der Fusion zu beantragen, zu besorgen, einzuholen und zu erreichen; und

iv) the Parties, for the avoidance of doubt, agree that the inclusion of the foregoing clauses (i) through (iii) in this merger agreement is not intended in any manner to, and shall not be construed to, limit the effectiveness of the universal succession effected by way of the Merger.

die Parteien stellen klar, dass die Aufnahme der vorstehenden Klauseln (i) bis (iii) in diesem Fusionsvertrag in keiner Weise die Wirksamkeit der durch die Fusion herbeigeführten Universalsukzession beinträchtigen soll und auch nicht in diesem Sinne zur Auslegung herangezogen werden soll.

#### 8 Miscellaneous / Verschiedenes

#### 8.1 Taxes / Steuern

19 Provided that UBS Switzerland AG and Credit Suisse (Schweiz) AG belong to the same VAT group at the time of the consummation of the Merger, the Merger contemplated by this agreement will not be subject to Swiss value added tax ("VAT"). Otherwise, the transfer of assets and liabilities as part of the Merger is subject to VAT in whole or in part. The VAT obligation shall be fulfilled by application of the

notification procedure pursuant to art. 38 para. 1 of the Swiss Federal Act on Value Added Tax. No VAT will be paid on the transfer of the assets and liabilities. UBS Switzerland AG assumes the tax base for the transferring assets and liabilities and the degree of use of the transferring company that entitles Credit Suisse (Schweiz) AG to deduct input tax.

Bilden die UBS SWITZERLAND AG und CREDIT SUISSE (SCHWEIZ) AG zum Zeitpunkt des Vollzugs der FUSION Teil der gleichen Mehrwertsteuergruppe für Schweizer Mehrwertsteuerzwecke ("MWST"), unterliegt die vorliegende FUSION nicht der MWST. Andernfalls unterliegt die Übertragung der Vermögenswerte im Rahmen der FUSION ganz oder teilweise der MWST. Die Steuerpflicht wird im Meldeverfahren gemäss Art. 38 Abs. 1 des Bundesgesetzes über die Mehrwertsteuer erfüllt. Für die Übertragung der Vermögenswerte wird keine MWST entrichtet. Die UBS SWITZERLAND AG übernimmt für die übertragenden Vermögenswerte die Bemessungsgrundlage und den zum Vorsteuerabzug berechtigenden Verwendungsgrad der übertragenden Gesellschaft CREDIT SUISSE (SCHWEIZ) AG.

# 8.2 Modifications and amendments of the agreement / Vertragsänderung und Vertragsanpassung

Any modifications to this merger agreement (including this paragraph) must be made in writing.

Dieser Fusionsvertrag (inklusive dieser Paragraph) kann nur schriftlich abgeändert werden.

To the extent possible, each provision of this merger agreement is to be construed so that it is valid and enforceable under applicable law. Should a provision of this merger agreement be unenforceable or invalid, it shall only lapse to the extent that it is unenforceable or invalid and shall otherwise be replaced by a valid and enforceable provision which a party acting in good faith would regard as a commercially adequate replacement for the provision which is invalid or unenforceable. The other provisions of this merger agreement will remain binding and in force under all circumstances.

Wann immer möglich, ist jede Bestimmung dieses Fusionsvertrages so auszulegen, dass sie unter dem anwendbaren Recht gültig und durchsetzbar ist. Sollte eine Bestimmung dieses Fusionsvertrages nicht vollstreckbar oder ungültig sein, so fällt sie nur im Ausmass ihrer Unvollstreckbarkeit oder Ungültigkeit dahin und ist im Übrigen durch eine gültige und vollstreckbare Bestimmung zu ersetzen, die eine gutgläubige Partei als ausreichenden wirtschaftlichen Ersatz für die ungültige und unvollstreckbare Bestimmung ansehen würde. Die übrigen Bestimmungen dieses Fusionsvertrages bleiben unter allen Umständen bindend und in Kraft.

#### 8.3 Applicable law and jurisdiction / Anwendbares Recht und Gerichtsstand

This merger agreement shall be governed by and construed in accordance with Swiss substantive law, excluding its rules on conflict of laws and excluding international treaties (in particular the Vienna Convention on the International Sale of Goods dated 11 April 1980; CISG).

Dieser Fusionsvertrag untersteht materiellem Schweizer Recht unter Ausschluss der Kollisionsnormen und unter Ausschluss internationaler Verträge (insbesondere des Wiener Kaufrechtsübereinkommens vom 11. April 1980; CISG).

Any disputes arising out of or in connection with this merger agreement, including disputes about its conclusion, validity, modification or dissolution, shall be submitted to the exclusive jurisdiction of the courts of the city of Zurich (Zurich 1), Switzerland.

Für sämtliche Streitigkeiten, die aus oder im Zusammenhang mit diesem Fusionsvertrag entstehen, einschliesslich solcher über sein gültiges Zustandekommen, seine Rechtswirksamkeit, Abänderung oder Auflösung, sind die Gerichte der Stadt Zürich (Zürich 1), Schweiz, ausschliesslich zuständig.

(Signatures on the following page)
(Unterschriften auf der nächsten Seite)

## **Exhibit 1**

Merger Balance Sheet of Credit Suisse (Schweiz) AG (balance sheet per 30 September 2023)

# Anhang 1

Fusionsbilanz der Credit Suisse (Schweiz) AG (Bilanz per 30. September 2023)

Credit Suisse (Schweiz) AG Standalone Swiss GAAP, in CHF million	30 September 2023
Assets	
Cash and other liquid assets	43,726
o/w SNB Cash	43,318
o/w Cash Other	408
Due from banks	10,512
Securities borrowing and reverse REPO	10,313
Loans	160,404
o/w Due from customers	33,215
o/w Mortgage loans	127,189
Trading assets	1,016
Positive RV of derivatives	1,332
Other assets	2,157
Total assets	229,461
Liabilities and equity	
Due to banks	55,826
Securities lending and repurchase agreements	9,355
Customer deposits	109,856
Trading liabilities	0
Negative RV of derivatives	307
Bonds and mortgage-backed bonds	38,706
Other liabilities	3,062
Total liabilities	217,112
Share capital	100
Legal capital reserves	11,544
Retained earnings	185
Net profit	519
Total shareholders' equity	12,348
Total liabilities and shareholders' equity	229,461

# CERTIFICATION UNDER SECTION 302 OF THE SARBANES-OXLEY ACT OF 2002

#### I, Sergio Ermotti, certify that:

- 1. I have reviewed this annual report on Form 20-F of UBS AG;
- 2. Based on my knowledge, this report does not contain any untrue statement of a material fact or omit to state a material fact necessary to make the statements made, in light of the circumstances under which such statements were made, not misleading with respect to the period covered by this report;
- 3. Based on my knowledge, the financial statements, and other financial information included in this report, fairly present in all material respects the financial condition, results of operations and cash flows of the company as of, and for, the periods presented in this report;
- 4. The company's other certifying officer(s) and I are responsible for establishing and maintaining disclosure controls and procedures (as defined in Exchange Act Rules 13a-15(e) and 15d-15(e)) and internal control over financial reporting (as defined in Exchange Act Rules 13a-15(f) and 15d-15(f)) for the company and have:
  - a. Designed such disclosure controls and procedures, or caused such disclosure controls and procedures to be designed under our supervision, to ensure that material information relating to the company, including its consolidated subsidiaries, is made known to us by others within those entities, particularly during the period in which this report is being prepared;
  - b. Designed such internal control over financial reporting, or caused such internal control over financial reporting to be designed under our supervision, to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with generally accepted accounting principles;
  - c. Evaluated the effectiveness of the company's disclosure controls and procedures and presented in this report our conclusions about the effectiveness of the disclosure controls and procedures, as of the end of the period covered by this report based on such evaluation; and
  - d. Disclosed in this report any change in the company's internal control over financial reporting that occurred during the period covered by the annual report that has materially affected, or is reasonably likely to materially affect, the company's internal control over financial reporting; and
- 5. The company's other certifying officer(s) and I have disclosed, based on our most recent evaluation of internal control over financial reporting, to the company's auditors and the audit committee of the company's board of directors (or persons performing the equivalent functions):
  - a. All significant deficiencies and material weaknesses in the design or operation of internal control over financial reporting which are reasonably likely to adversely affect the company's ability to record, process, summarize and report financial information; and
  - b. Any fraud, whether or not material, that involves management or other employees who have a significant role in the company's internal control over financial reporting.

Date: March 28, 2024

/s/ Sergio Ermotti

Name: Sergio Ermotti

Title: President of the Executive Board

# CERTIFICATION UNDER SECTION 302 OF THE SARBANES-OXLEY ACT OF 2002

#### I, Todd Tuckner, certify that:

- 1. I have reviewed this annual report on Form 20-F of UBS AG;
- 2. Based on my knowledge, this report does not contain any untrue statement of a material fact or omit to state a material fact necessary to make the statements made, in light of the circumstances under which such statements were made, not misleading with respect to the period covered by this report;
- 3. Based on my knowledge, the financial statements, and other financial information included in this report, fairly present in all material respects the financial condition, results of operations and cash flows of the company as of, and for, the periods presented in this report;
- 4. The company's other certifying officer(s) and I are responsible for establishing and maintaining disclosure controls and procedures (as defined in Exchange Act Rules 13a-15(e) and 15d-15(e)) and internal control over financial reporting (as defined in Exchange Act Rules 13a-15(f) and 15d-15(f)) for the company and have:
  - a. Designed such disclosure controls and procedures, or caused such disclosure controls and procedures to be designed under our supervision, to ensure that material information relating to the company, including its consolidated subsidiaries, is made known to us by others within those entities, particularly during the period in which this report is being prepared;
  - b. Designed such internal control over financial reporting, or caused such internal control over financial reporting to be designed under our supervision, to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with generally accepted accounting principles;
  - c. Evaluated the effectiveness of the company's disclosure controls and procedures and presented in this report our conclusions about the effectiveness of the disclosure controls and procedures, as of the end of the period covered by this report based on such evaluation; and
  - d. Disclosed in this report any change in the company's internal control over financial reporting that occurred during the period covered by the annual report that has materially affected, or is reasonably likely to materially affect, the company's internal control over financial reporting; and
- 5. The company's other certifying officer(s) and I have disclosed, based on our most recent evaluation of internal control over financial reporting, to the company's auditors and the audit committee of the company's board of directors (or persons performing the equivalent functions):
  - a. All significant deficiencies and material weaknesses in the design or operation of internal control over financial reporting which are reasonably likely to adversely affect the company's ability to record, process, summarize and report financial information; and
  - b. Any fraud, whether or not material, that involves management or other employees who have a significant role in the company's internal control over financial reporting.

Date: March 28, 2024

/s/ Todd Tuckner

Name: Todd Tuckner

Title: Chief Financial Officer

#### CERTIFICATION PURSUANT TO SECTION 906 OF THE SARBANES-OXLEY ACT OF 2002

(Subsections (a) and (b) of Section 1350, Chapter 63 of Title 18, United States Code)

Pursuant to Section 906 of the Sarbanes-Oxley Act of 2002 (subsections (a) and (b) of section 1350, Chapter 63 of Title 18, United States Code), the undersigned officer of UBS AG, a Swiss banking corporation (the "Company"), hereby certifies, to such officer's knowledge, that:

The Annual Report on Form 20-F for the year ended December 31, 2023 (the "Report") of the Company fully complies with the requirements of Section 13(a) or 15(d) of the Securities Exchange Act of 1934 (15 U.S.C. §§ 78m or 78o(d)) and information contained in the Report fairly presents, in all material respects, the financial condition and results of operations of the Company.

Date: March 28, 2024

/s/ Sergio Ermotti

Name: Sergio Ermotti

Title: President of the Executive Board

The foregoing certification is being furnished solely pursuant to section 906 of the Sarbanes-Oxley Act of 2002 (subsections (a) and (b) of section 1350, Chapter 63 of Title 18, United States Code) and is not being filed as part of the Report or as a separate disclosure document.

#### CERTIFICATION PURSUANT TO SECTION 906 OF THE SARBANES-OXLEY ACT OF 2002

(Subsections (a) and (b) of Section 1350, Chapter 63 of Title 18, United States Code)

Pursuant to Section 906 of the Sarbanes-Oxley Act of 2002 (subsections (a) and (b) of section 1350, Chapter 63 of Title 18, United States Code), the undersigned officer of UBS AG, a Swiss banking corporation (the "Company"), hereby certifies, to such officer's knowledge, that:

The Annual Report on Form 20-F for the year ended December 31, 2023 (the "Report") of the Company fully complies with the requirements of Section 13(a) or 15(d) of the Securities Exchange Act of 1934 (15 U.S.C. §§ 78m or 78o(d)) and information contained in the Report fairly presents, in all material respects, the financial condition and results of operations of the Company.

Date: March 28, 2024

/s/ Todd Tuckner

Name: Todd Tuckner

Title: Chief Financial Officer

The foregoing certification is being furnished solely pursuant to section 906 of the Sarbanes-Oxley Act of 2002 (subsections (a) and (b) of section 1350, Chapter 63 of Title 18, United States Code) and is not being filed as part of the Report or as a separate disclosure document.

#### **Consent of Independent Registered Public Accounting Firm**

We consent to the incorporation by reference in each of the following registration statements of UBS AG:

- (1) on Form F-3 (Registration Number 333-263376), and each related prospectus currently outstanding under such registration statement,
- (2) the base prospectus of Corporate Asset Backed Corporation (CABCO) dated 23 June 2004 (Registration Number 333-111572),
- (3) the Form 8-K of CABCO dated 23 June 2004 (SEC File Number 001-13444), and
- (4) the Prospectus Supplements relating to the CABCO Series 2004-101 Trust dated 10 May 2004 (Registration Number 033-91744) and 17 May 2004 (Registration Number 033-91744-05),

of our reports dated 27 March 2024, with respect to the consolidated financial statements of UBS AG and the effectiveness of internal control over financial reporting of UBS AG, included in this Annual Report (Form 20-F) for the year ended 31 December 2023, filed with the Securities and Exchange Commission.

/s/ Ernst & Young Ltd



# Group U.S. Listing Standards Clawback Policy

Recovering Incentive-Based Compensation from Covered Executives of entities listed on U.S. national securities exchanges / associations in case of an Accounting Restatement



#### WHY

U.S. national securities exchanges and associations that list securities (including the NYSE, Nasdaq and NYSE Arca, Inc.) maintain listing standards that require each issuer of a listed security to adopt and comply with a compensation recovery ("clawback") policy that imposes recovery of certain incentive-based compensation received by current or former covered executive officers in the event an issuer's material noncompliance with financial reporting requirements results in an accounting restatement.



#### **WHO**

UBS Group AG, UBS AG and Credit Suisse AG are listed issuers on the referenced national exchanges and have each adopted this policy to comply with the listing standards applicable to each issuer.

The Covered Executives of each Issuer are as follows:

- For UBS Group AG and UBS AG:
  - current and former UBS Group Executive Board members of UBS Group AG ("UBS GEB members"); and
- For Credit Suisse AG:
  - o Current and former UBS GEB members,
  - current and former Credit Suisse AG Executive Board members, and
  - former Executive Board members of Credit Suisse Group AG ("Credit Suisse ExB members").

This policy will also apply to Covered Executives of any Group entities that may later become subject to one or more of the Listing Standards.



#### WHAT to know about HOW to comply

If an Issuer experiences a triggering event, then the Issuer is required to recover a certain amount of incentive-based compensation during a three-year lookback period, as follows:

#### TRIGGERING EVENT:

The clawback is triggered if an Issuer is required to prepare an Accounting Restatement due to material noncompliance with any financial reporting requirement, including any restatement

that corrects a material error in previously issued financial statements.

#### **REQUIRED ACTIONS:**

The Issuer must recover Incentive-Based Compensation that any Covered Executive "received" (as defined in the policy) during the three completed fiscal years immediately preceding the date on which the Issuer is required to prepare the Accounting Restatement. Only Incentive-Based Compensation "received" on and after 2 October 2023 is subject to clawback.

#### WHO IS IMPACTED:

Covered Executives are impacted under the policy. The Listing Standards require recovery of Incentive-Based Compensation received by a person (1) after beginning service as a Covered Executive of the Issuer, and (2) if that person served as a Covered Executive of the Issuer at any time during the recovery period.

#### WHAT IS SUBJECT TO CLAWBACK:

The Issuer must recover the received amount (on a pretax basis) that exceeds the amount which would have been received if the Incentive-Based Compensation had been determined based on the restated financial statements. The final amount, if any, will be determined at the sole discretion of the Administrator and based on the rules detailed in the Appendix.<sup>1</sup>

#### RECOVERING THE CLAWBACK AMOUNT:

The Issuer is required to pursue recovery unless it is determined that recovery would be impracticable for the specific reasons set forth in the policy. The attempt at recovery and any eventual decision not to recover must be fully documented as set forth in the Appendix.

#### Important Information

This page is a general high-level overview of the Group U.S. Listing Standards Clawback Policy, which is set forth in its entirety in the attached Appendix. If there is a conflict between this summary page and the Appendix, the Appendix prevails.

<sup>&</sup>lt;sup>1</sup> For 2023, there is a recognition and consideration of the accounting implications of the Credit Suisse integration.

# Appendix to Group U.S. Listing Standards Clawback Policy



# Why we have this Appendix

The correctness and compliance of Financial Reporting is essential for our organization. The Clawback Policy set forth in this Appendix is designed to comply with, and shall be interpreted consistent with, Section 10D of the Securities Exchange Act of 1934, as amended (the "Exchange Act"), Rule 10D-1 promulgated under the Exchange Act ("Rule 10D-1"), and, as applicable to an Issuer, Section 303A.14 of the New York Stock Exchange Listed Company Manual, Nasdaq Listing Rule 5608, Rule 5.3-E(p) of the Rules of the NYSE Arca, Inc. and any other listing standard of any national securities exchange or association that becomes applicable to an Issuer (each, as applicable to an Issuer, the "Listing Standards"). The Appendix sets forth the full text of the Group U.S. Listing Standards Clawback Policy ("Policy").



## **Applicability**

The Policy applies globally to all Covered Executives of each Issuer regardless of primary work location. The Covered Executives of each Issuer are as follows:

- For UBS Group AG and UBS AG:
  - o current and former UBS GEB members; and
- For Credit Suisse AG:
  - o current and former UBS GEB members.
  - current and former Credit Suisse AG Executive Board members, and
  - former Credit Suisse ExB members".

The Policy will also apply to Covered Executives of Group entities that may later become subject to one or more of the Listing Standards.



### Policy content

Below you can find the controlling terms and conditions of the Policy.

#### 1. Administration

Except as specifically set forth herein, this Policy shall be administered by the UBS Group AG Board of Directors Compensation Committee (the "Administrator") on behalf of each Issuer subject to the Policy. The Administrator is authorized to interpret and construe this Policy and to make all determinations necessary, appropriate, or advisable for the administration of this Policy. Any determinations made by the Administrator shall be final and binding on the Issuers, all affected individuals and need not be uniform with respect to each individual covered by the Policy. In the administration of this Policy, the Administrator is authorized and directed to consult with the full UBS Group AG Board of Directors ("Board") or such other committees of the Board, such as the Audit Committee, as may be necessary or appropriate as to matters within the scope of such other committee's responsibility and authority. Subject to any limitation at applicable law, the Administrator may authorize and empower any officer or employee of UBS Group to take any and all actions necessary or appropriate to carry out the purpose and intent of this Policy (other than with respect to any recovery under this Policy involving such officer or employee).

#### 2. Defined Terms; Covered Executives; Incentive-Based Compensation

Defined terms of this Policy are set forth below in the "Glossary" Section. This Policy applies to Incentive-Based Compensation received by a Covered Executive of an Issuer (a) after beginning services as a Covered Executive of an Issuer; (b) if that person served as a Covered Executive of an Issuer at any time during the performance period for such Incentive-Based Compensation; and (c) while the Issuer had a listed class of securities on a national securities exchange or association.

# 3. Required Recoupment of Erroneously Awarded Compensation in the event of an Accounting Restatement

In the event an Issuer is required to prepare an Accounting Restatement, the Issuer shall promptly recoup the amount of any Erroneously Awarded Compensation received by any Covered Executive, as determined in the sole discretion of the Administrator and calculated pursuant to Section 4 hereof, during the Applicable Period.

#### 4. Erroneously Awarded Compensation: Amount Subject to Recovery

The amount of "Erroneously Awarded Compensation" subject to recovery under the Policy, as determined by the Administrator, is the amount of Incentive-Based Compensation received by the Covered Executive that exceeds the amount of Incentive-Based Compensation that would have been received by the Covered Executive had it been determined based on the restated amounts, if any.

Erroneously Awarded Compensation shall be computed by the Administrator without regard to any taxes paid by the Covered Executive in respect of the Erroneously Awarded Compensation.

By way of example, with respect to any compensation plans or programs that take into account Incentive-Based Compensation, the amount of Erroneously Awarded Compensation subject to recovery hereunder, if any, includes, but is not limited to, the amount contributed to any notional account based on Erroneously Awarded Compensation and any earnings accrued to date on that notional amount.

For Incentive-Based Compensation based on stock price or TSR: (a) the Administrator shall determine the amount of Erroneously Awarded Compensation based on a reasonable estimate of the effect of the Accounting Restatement on the stock price or TSR upon which the Incentive-Based Compensation was received; and (b) the Issuer shall maintain documentation of the determination of that reasonable estimate and provide such documentation to the national exchange and/or association on which the Issuer lists securities.

#### 5. Method of Recoupment

The Administrator shall determine, in its sole discretion, the timing and method for promptly recouping Erroneously Awarded Compensation hereunder, which may include without limitation (a) seeking reimbursement of all or part of any cash, notional fund/bond or equity-based award, (b) cancelling prior cash, notional fund/bond or equity-based awards, whether vested or unvested or paid or unpaid, (c) canceling or offsetting against any planned future cash, notional fund/bond or equity-based awards, (d) forfeiture of deferred compensation, subject to compliance with applicable tax laws, rules and regulations, (e) any other method authorized by applicable law or contract, and (f) determining that there is no Erroneously Awarded Compensation. Subject to compliance with any applicable law, the Administrator may affect recovery under this Policy from any amount otherwise payable to the Covered Executive, including amounts payable to such individual under any otherwise applicable UBS Group plan or program, including base salary, bonuses or commissions and compensation previously deferred by the Covered Executive.

The Issuer shall recoup Erroneously Awarded Compensation from a Covered Executive in compliance with this Policy unless the Administrator or, in the case of an Issuer other than UBS, the Issuer's committee of independent directors responsible for executive compensation decisions, or in the absence of such a committee, a majority of the independent directors serving on the Issuer's board of directors, has determined that recovery would be impracticable solely for the following limited reasons, and subject to the following procedural and disclosure requirements:

- The direct expense paid to a third party to assist in enforcing the Policy would exceed the amount to be recovered. Before concluding that it would be impracticable to recover any amount of Erroneously Awarded Compensation based on expense of enforcement, the Issuer must make a reasonable attempt to recover such erroneously awarded compensation, document such reasonable attempt(s) to recover, and provide that documentation to the national exchange and/or association on which the Issuer lists securities.
- Recovery would violate the laws of the country of incorporation of the Issuer where that law was adopted prior to 28 November 2022. Before concluding that it would be impracticable to recover any amount of Erroneously Awarded Compensation based on violation of such law, the Issuer must satisfy the applicable opinion and disclosure requirements of Rule 10D-1 and the applicable Listing Standards; or
- Recovery would likely cause an otherwise tax-qualified retirement plan, under which benefits are broadly available
  to employees of UBS Group, to fail to meet the requirements of 26 U.S.C. 401(a)(13) or 26 U.S.C. 411(a) and
  regulations thereunder.

#### 6. No Indemnification of Covered Executives

Notwithstanding the terms of any indemnification or insurance policy or any contractual arrangement with any Covered Executive that may be interpreted to the contrary, no Issuer shall indemnify any Covered Executives against

the loss of any Erroneously Awarded Compensation, including through any payment or reimbursement for the cost of third-party insurance purchased by any Covered Executives to fund potential clawback obligations under this Policy.

#### 7. Administrator Indemnification

Any members of the Administrator, and any other members of the Board who assist in the administration of this Policy, shall not be personally liable for any action, determination or interpretation made with respect to this Policy and shall be fully indemnified by UBS Group to the fullest extent under applicable law and UBS Group policy with respect to any such action, determination or interpretation. The foregoing sentence shall not limit any other rights to indemnification of the members of the Board under applicable law or UBS Group policy.

#### 8. Effective Date; Retroactive Application

This Policy shall be effective as of 2 October 2023 (the "Effective Date"). The terms of this Policy shall apply to any Incentive-Based Compensation that is received by Covered Executives on or after the Effective Date, even if such Incentive-Based Compensation was approved, awarded, granted or paid to Covered Executives prior to the Effective Date. Without limiting the generality of Section 5 hereof, and subject to applicable law, the Administrator may affect recovery under this Policy from any amount of compensation approved, awarded, granted, payable or paid to the Covered Executive prior to, on or after the Effective Date.

#### 9. Amendment; Termination

The Administrator may amend, modify, supplement, rescind or replace all or any portion of this Policy at any time and from time to time in its discretion, and shall amend this Policy as it deems necessary to comply with applicable law or any rules or standards adopted by a national securities exchange or association on which the Issuer's securities are listed.

#### 10. Other Recoupment Rights; Claims

The Administrator intends that this Policy shall be applied to the fullest extent of the law. Any right of recoupment under this Policy is in addition to, and not in lieu of, any other remedies or rights of recoupment that may be available to UBS Group pursuant to applicable law or pursuant to the terms of any similar policy or provisions in any employment-related agreement, deferred compensation plan (including, without limitation, notional fund/bond and equity-based), award agreement, or similar agreement and any other legal remedies available to UBS Group.

Nothing contained in this Policy, and no recoupment or recovery as contemplated by this Policy, shall limit any claims, damages or other legal remedies UBS Group may have against a Covered Executive arising out of or resulting from any actions or omissions by the Covered Executive.

#### 11. Successors

This Policy shall be binding and enforceable against all Covered Executives and their beneficiaries, heirs, executors, administrators or other legal representatives.

#### 12. Exhibit Filing Requirement

A copy of this Policy and any amendments thereto shall be filed as an exhibit to each Issuer's annual report on Form 20-F.



### Glossary

"Accounting Restatement" means an accounting restatement of the Issuer's financial statements due to the Issuer's material noncompliance with any financial reporting requirement under the securities laws, including any required accounting restatement to correct an error in previously issued financial statements that is material to the previously issued financial statements, or that would result in a material misstatement if the error were corrected in the current period or left uncorrected in the current period.

"Administrator" has the meaning set forth in Section 1 of this Policy.

"Applicable Period" means the three completed fiscal years immediately preceding the date on which the Issuer is required to prepare an Accounting Restatement, as well as any transition period (that results from a change in the Issuer's fiscal year) within or immediately following those three completed fiscal years (except that a transition period that comprises a period of at least nine months shall count as a completed fiscal year). The "date on which the Issuer is required to prepare an Accounting Restatement" is the earlier to occur of (a) the date the Board or the Issuer's board of directors, as applicable, concludes, or reasonably should have concluded, that the Issuer is required to prepare an Accounting Restatement, or (b) the date a court, regulator, or other legally authorized body directs the Issuer to prepare an Accounting Restatement, in each case regardless of if or when the restated financial statements are filed.

"Board" has the meaning set forth in Section 1 of this Policy.

"Covered Executives" means an Issuer's current and former executive officers, as determined by the Administrator in accordance with the definition of executive officer set forth in Rule 10D-1 and the Listing Standards.

"Erroneously Awarded Compensation" has the meaning set forth in Section 4 of this Policy.

A "Financial Reporting Measure" is any measure that is determined and presented in accordance with the accounting principles used in preparing the Issuer's financial statements, and any measure that is derived wholly or in part from such measure. Financial Reporting Measures include but are not limited to the following (and any measures derived from the following): stock price; total shareholder return ("TSR"); return measures (e.g., return on equity ("RoE"), return on tangible equity ("RoTE"), return on common equity tier 1 capital ("RoCET1")); total revenues; divisional and Group PBT; Group net profit; diluted earnings per share ("EPS"); cost income ratio; resources (e.g., CET1 capital ratio, CET1 leverage ratio) and liquidity measures (e.g., liquidity coverage ratio, net stable funding ratio). A Financial Reporting Measure need not be presented within the Issuer's financial statements or included in a filing with the Securities Exchange Commission.

"Incentive-Based Compensation" means any compensation that is granted, earned, or vested based wholly or in part upon the attainment of a Financial Reporting Measure. Incentive-Based Compensation is "received" for purposes of this Policy in the Issuer's fiscal period during which the Financial Reporting Measure specified in the Incentive-Based Compensation award is attained, even if the payment or grant of such Incentive-Based Compensation occurs after the end of that period.

"Issuer" means UBS, UBS AG and Credit Suisse AG, each in its capacity as an issuer subject to the Listing Standards (as applicable to each entity as an issuer.) Any UBS Group entity that hereinafter lists any security on a U.S. national securities exchange or association and becomes subject to one or more of the Listing Standards shall be considered an Issuer under this Policy.

"UBS" means UBS Group AG.

"UBS Group" means UBS and its subsidiaries (including, without limitation, UBS AG and Credit Suisse AG).



# Key procedural controls

KPC ID	KPC title	
CTRL-0000041802	Proper implementation and completeness of Clawback Policy requirements	



# Further references and links

ID	Туре	Title
n/a	n/a	n/a



# Policy ownership and review

Owner: Head HR Performance & Reward

NFR Taxonomy: 1. Employment or Licensing Practices

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