

UBS House View

Detailed asset allocation tables

18 July 2019

CIO Global Wealth Management

These are the Detailed asset allocation tables that were included in the UBS CIO GWM *House View: Investment Strategy Guide (ISG)* and *Ultra High Net Worth (UHNW) House View* publications.

Each table illustrates the recommended Strategic Asset Allocation (SAA) and Tactical Asset Allocation (TAA) for a given portfolio as of the most recent CIO *House View* report. We also note any changes to the recommended tactical deviation since the publication of the previous *House View Investment Strategy Guide* or *House View Update* report.

Altered versions of these tables may not be attributed to CIO Global Wealth Management.

Asset allocation models

[Taxable investor investor with nontraditional assets](#)

[Taxable investor without nontraditional assets](#)

[Taxable investor yield-focused](#)

[Taxable investor sustainable investing](#)

[Non-Taxable investor with nontraditional assets](#)

[Non-Taxable investor without nontraditional assets](#)

[Non-Taxable investor yield-focused](#)

[Non-Taxable investor sustainable investing](#)

[All equity and all fixed income](#)

[All equity and all income, yield-focused](#)

[All equity and all fixed income, sustainable investing](#)

[Ultra high net worth investor](#)

[Institutional investor](#)

[US equity sector allocation module](#)

[International module](#)

This report has been prepared by UBS Financial Services Inc. ("UBS FS").

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CIO Global Wealth Management

Detailed asset allocation, taxable investor with non-traditional assets

Investor risk profile		Conservative			Moderate conservative			Moderate			Moderate aggressive			Aggressive		
Directional change	All figures in %															
	Strategic asset allocation	Tactical deviation	Change ¹	Tactical asset allocation ²	Strategic asset allocation	Tactical deviation	Change ¹	Tactical asset allocation ²	Strategic asset allocation	Tactical deviation	Change ¹	Tactical asset allocation ²	Strategic asset allocation	Tactical deviation	Change ¹	Tactical asset allocation ²
Cash	5.0	+3.0		8.0	5.0	+2.5		7.5	5.0	+2.0		7.0	5.0	+2.0		7.0
Fixed Income	69.0	-4.0		65.0	50.0	-4.0		46.0	33.0	-4.0		29.0	17.0	-4.0		13.0
US Fixed Income	67.0	-4.0		63.0	48.0	-4.0		44.0	31.0	-4.0		27.0	15.0	-4.0		11.0
US Gov't FI	17.0	-6.0	-1.0	11.0	2.0	-2.0		0.0	2.0	-2.0		0.0	2.0	-2.0		0.0
▲ US TIPS	0.0	+1.0	+1.0	1.0	0.0	+1.5	+1.5	1.5	0.0	+2.0	+2.0	2.0	0.0	+2.0	+2.0	2.0
US Treasuries (long)	0.0	+1.0		1.0	0.0	+1.5		1.5	0.0	+2.0		2.0	0.0	+2.0		2.0
▼ US Municipal FI	46.0	+0.0		46.0	42.0	-5.0	-1.5	37.0	27.0	-6.0	-2.0	21.0	11.0	-6.0	-2.0	5.0
US IG Corp FI	4.0	+0.0		4.0	2.0	+0.0		2.0	0.0	+0.0		0.0	0.0	+0.0		0.0
US HY Corp FI	0.0	+0.0		0.0	2.0	+0.0		2.0	2.0	+0.0		2.0	2.0	+0.0		2.0
Int'l Fixed Income	2.0	+0.0		2.0	2.0	+0.0		2.0	2.0	+0.0		2.0	2.0	+0.0		2.0
EM FI ³	2.0	+0.0		2.0	2.0	+0.0		2.0	2.0	+0.0		2.0	2.0	+0.0		2.0
Equity	13.0	+1.0		14.0	27.0	+1.5		28.5	44.0	+2.0		46.0	64.0	+2.0		66.0
US Equity	8.0	+1.0		9.0	16.0	+1.5		17.5	25.0	+2.0		27.0	37.0	+2.0		39.0
US All cap	0.0	+1.0		1.0	0.0	+1.5		1.5	0.0	+2.0		2.0	0.0	+2.0		2.0
US Large cap Growth	2.5	+0.0		2.5	5.5	+0.0		5.5	8.5	+0.0		8.5	13.0	+0.0		13.0
US Large cap Value	2.5	+0.0		2.5	5.5	+0.0		5.5	8.5	+0.0		8.5	13.0	+0.0		13.0
US Mid cap	2.0	+0.0		2.0	3.0	+0.0		3.0	5.0	+0.0		5.0	7.0	+0.0		7.0
US Small cap	1.0	+0.0		1.0	2.0	+0.0		2.0	3.0	+0.0		3.0	4.0	+0.0		4.0
International Equity	5.0	+0.0		5.0	11.0	+0.0		11.0	19.0	+0.0		19.0	27.0	+0.0		27.0
Int'l Developed Markets	5.0	-1.0		4.0	8.0	-1.5		6.5	13.0	-2.0		11.0	19.0	-2.0		17.0
Japan	0.0	+1.0		1.0	0.0	+1.0		1.0	0.0	+1.0		1.0	0.0	+1.0		1.0
Emerging Markets	0.0	+0.0		0.0	3.0	+0.5		3.5	6.0	+1.0		7.0	8.0	+1.0		9.0
Non-traditional	13.0	+0.0		13.0	18.0	+0.0		18.0	18.0	+0.0		18.0	14.0	+0.0		14.0
Hedge Funds	13.0	+0.0		13.0	18.0	+0.0		18.0	18.0	+0.0		18.0	14.0	+0.0		14.0
Private Equity	0.0	+0.0		0.0	0.0	+0.0		0.0	0.0	+0.0		0.0	0.0	+0.0		0.0
Private Real Estate	0.0	+0.0		0.0	0.0	+0.0		0.0	0.0	+0.0		0.0	0.0	+0.0		0.0

CIO GWM tactical deviation legend: **Overweight** **Underweight** Neutral. Change legend: ▲ Upgrade ▼ Downgrade for moderate risk profile

¹ The change in the tactical deviation since our previous report.

² The sum of the strategic asset allocation and the tactical deviation columns.

³ A 50% / 50% blend of local currency and hard currency indexes

Source: UBS and WMA AAC, 18 July 2019. See the Performance Measurement and Appendix sections of the UBS House View Investment Strategy Guide for performance measurement details and information regarding sources of strategic asset allocations and their suitability, investor risk profiles, and the interpretation of the suggested tactical deviations from the strategic asset allocations.

CIO Global Wealth Management

Detailed asset allocation, taxable without non-traditional assets

Investor risk profile	Conservative			Moderate conservative			Moderate			Moderate aggressive			Aggressive			
	Strategic asset allocation	Tactical deviation	Change ¹	Tactical asset allocation ²	Strategic asset allocation	Tactical deviation	Change ¹	Tactical asset allocation ²	Strategic asset allocation	Tactical deviation	Change ¹	Tactical asset allocation ²	Strategic asset allocation	Tactical deviation	Change ¹	Tactical asset allocation ²
Cash	5.0	+3.0		8.0	5.0	+2.5		7.5	5.0	+2.0		7.0	5.0	+2.0		7.0
Fixed Income	79.0	-4.0		75.0	63.0	-4.0		59.0	46.0	-4.0		42.0	27.0	-4.0		23.0
US Fixed Income	77.0	-4.0		73.0	61.0	-4.0		57.0	44.0	-4.0		40.0	25.0	-4.0		21.0
US Gov't FI	17.0	-6.0	-1.0	11.0	2.0	-2.0		0.0	2.0	-2.0		0.0	2.0	-2.0		0.0
▲ US TIPS	0.0	+1.0	+1.0	1.0	0.0	+1.5	+1.5	1.5	0.0	+2.0	+2.0	2.0	0.0	+2.0	+2.0	2.0
US Treasuries (long)	0.0	+1.0		1.0	0.0	+1.5		1.5	0.0	+2.0		2.0	0.0	+2.0		2.0
▼ US Municipal FI	56.0	+0.0		56.0	55.0	-5.0	-1.5	50.0	40.0	-6.0	-2.0	34.0	21.0	-6.0	-2.0	15.0
US IG Corp FI	4.0	+0.0		4.0	2.0	+0.0		2.0	0.0	+0.0		0.0	0.0	+0.0		0.0
US HY Corp FI	0.0	+0.0		0.0	2.0	+0.0		2.0	2.0	+0.0		2.0	2.0	+0.0		2.0
Int'l Fixed Income	2.0	+0.0		2.0	2.0	+0.0		2.0	2.0	+0.0		2.0	2.0	+0.0		2.0
EM FI ³	2.0	+0.0		2.0	2.0	+0.0		2.0	2.0	+0.0		2.0	2.0	+0.0		2.0
Equity	16.0	+1.0		17.0	32.0	+1.5		33.5	49.0	+2.0		51.0	68.0	+2.0		70.0
US Equity	10.0	+1.0		11.0	20.0	+1.5		21.5	28.0	+2.0		30.0	40.0	+2.0		42.0
US All cap	0.0	+1.0		1.0	0.0	+1.5		1.5	0.0	+2.0		2.0	0.0	+2.0		2.0
US Large cap Growth	3.5	+0.0		3.5	7.0	+0.0		7.0	10.0	+0.0		10.0	14.0	+0.0		14.0
US Large cap Value	3.5	+0.0		3.5	7.0	+0.0		7.0	10.0	+0.0		10.0	14.0	+0.0		14.0
US Mid cap	2.0	+0.0		2.0	4.0	+0.0		4.0	5.0	+0.0		5.0	8.0	+0.0		8.0
US Small cap	1.0	+0.0		1.0	2.0	+0.0		2.0	3.0	+0.0		3.0	4.0	+0.0		4.0
International Equity	6.0	+0.0		6.0	12.0	+0.0		12.0	21.0	+0.0		21.0	28.0	+0.0		28.0
Int'l Developed Markets	6.0	-1.0		5.0	9.0	-1.5		7.5	15.0	-2.0		13.0	20.0	-2.0		18.0
Japan	0.0	+1.0		1.0	0.0	+1.0		1.0	0.0	+1.0		1.0	0.0	+1.0		1.0
Emerging Markets	0.0	+0.0		0.0	3.0	+0.5		3.5	6.0	+1.0		7.0	8.0	+1.0		9.0

CIO GWM tactical deviation legend: **Overweight** **Underweight** Neutral. Change legend: ▲ Upgrade ▼ Downgrade for moderate risk profile

¹ The change in the tactical deviation since our previous report.

² The sum of the strategic asset allocation and the tactical deviation columns.

³ A 50% / 50% blend of local currency and hard currency indexes

Source: UBS and WMA AAC, 18 July 2019. See the Performance Measurement and Appendix sections of the UBS House View Investment Strategy Guide for performance measurement details and information regarding sources of strategic asset allocations and their suitability, investor risk profiles, and the interpretation of the suggested tactical deviations from the strategic asset allocations.

CIO Global Wealth Management

Detailed asset allocation, taxable, yield-focused

Investor risk profile	Conservative				Moderate conservative				Moderate				Moderate aggressive				Aggressive			
	Strategic asset allocation	Tactical deviation	Change ¹	Tactical asset allocation ²	Strategic asset allocation	Tactical deviation	Change ¹	Tactical asset allocation ²	Strategic asset allocation	Tactical deviation	Change ¹	Tactical asset allocation ²	Strategic asset allocation	Tactical deviation	Change ¹	Tactical asset allocation ²	Strategic asset allocation	Tactical deviation	Change ¹	Tactical asset allocation ²
All figures in %																				
Directional change																				
Cash	3.0	+3.0		6.0	3.0	+3.0		6.0	3.0	+3.0		6.0	3.0	+0.0		3.0	3.0	+0.0		3.0
Fixed Income	65.0	-4.0		61.0	56.0	-4.5		51.5	43.0	-5.0		38.0	30.0	-2.0		28.0	12.0	-2.0		10.0
US Fixed Income	61.0	-4.0		57.0	48.0	-4.5		43.5	32.0	-5.0		27.0	22.0	-2.0		20.0	10.0	-2.0		8.0
US Gov't FI	25.0	-6.0	-1.0	19.0	15.0	-7.5	-1.5	7.5	6.0	-6.0		0.0	3.0	-3.0		0.0	3.0	-3.0		0.0
▲ US TIPS	0.0	+1.0	+1.0	1.0	0.0	+1.5	+1.5	1.5	0.0	+2.0	+2.0	2.0	0.0	+0.0		0.0	0.0	+0.0		0.0
US Treasuries (long)	0.0	+1.0		1.0	0.0	+1.5		1.5	0.0	+2.0		2.0	0.0	+2.0		2.0	0.0	+2.0		2.0
▼ US Municipal FI	23.0	+0.0		23.0	14.0	+0.0		14.0	6.0	-3.0	-2.0	3.0	3.0	-1.0		2.0	3.0	-1.0		2.0
US IG Corp FI	4.0	+0.0		4.0	4.0	+0.0		4.0	4.0	+0.0		4.0	0.0	+0.0		0.0	0.0	+0.0		0.0
US HY Corp FI	9.0	+0.0		9.0	15.0	+0.0		15.0	16.0	+0.0		16.0	16.0	+0.0		16.0	4.0	+0.0		4.0
Int'l Fixed Income	4.0	+0.0		4.0	8.0	+0.0		8.0	11.0	+0.0		11.0	8.0	+0.0		8.0	2.0	+0.0		2.0
EM FI - Local Currency	0.0	+0.0		0.0	3.0	+0.0		3.0	6.0	+0.0		6.0	6.0	+0.0		6.0	2.0	+0.0		2.0
EM FI - Hard Currency	4.0	+0.0		4.0	5.0	+0.0		5.0	5.0	+0.0		5.0	2.0	+0.0		2.0	0.0	+0.0		0.0
Equity	12.0	+1.0		13.0	21.0	+1.5		22.5	34.0	+2.0		36.0	47.0	+2.0		49.0	62.0	+2.0		64.0
US Equity	6.0	+1.0		7.0	11.0	+1.5		12.5	16.0	+2.0		18.0	21.0	+2.0		23.0	24.0	+2.0		26.0
US All cap	0.0	+1.0		1.0	0.0	+1.5		1.5	0.0	+2.0		2.0	0.0	+2.0		2.0	0.0	+2.0		2.0
US Large cap Growth	2.0	+0.0		2.0	3.0	+0.0		3.0	4.0	+0.0		4.0	6.0	+0.0		6.0	6.0	+0.0		6.0
US Large cap Value	4.0	+0.0		4.0	8.0	+0.0		8.0	12.0	+0.0		12.0	15.0	+0.0		15.0	18.0	+0.0		18.0
International Equity	6.0	+0.0		6.0	10.0	+0.0		10.0	18.0	+0.0		18.0	26.0	+0.0		26.0	38.0	+0.0		38.0
Int'l Developed Markets Value	6.0	-1.0		5.0	10.0	-1.5		8.5	15.0	-2.0		13.0	21.0	-2.0		19.0	29.0	-2.0		27.0
Japan	0.0	+1.0		1.0	0.0	+1.0		1.0	0.0	+1.0		1.0	0.0	+1.0		1.0	0.0	+1.0		1.0
Emerging Markets	0.0	+0.0		0.0	0.0	+0.5		0.5	3.0	+1.0		4.0	5.0	+1.0		6.0	9.0	+1.0		10.0
Yield Assets	20.0	+0.0		20.0	20.0	+0.0		20.0	20.0	+0.0		20.0	20.0	+0.0		20.0	23.0	+0.0		23.0
Senior Loans	6.0	+0.0		6.0	4.0	+0.0		4.0	2.0	+0.0		2.0	0.0	+0.0		0.0	0.0	+0.0		0.0
Preferreds	10.0	+0.0		10.0	7.0	+0.0		7.0	7.0	+0.0		7.0	5.0	+0.0		5.0	2.0	+0.0		2.0
MLPs	4.0	+0.0		4.0	7.0	+0.0		7.0	9.0	+0.0		9.0	12.0	+0.0		12.0	16.0	+0.0		16.0
US Real Estate	0.0	+0.0		0.0	2.0	+0.0		2.0	2.0	+0.0		2.0	3.0	+0.0		3.0	5.0	+0.0		5.0

CIO GWM tactical deviation legend: **Overweight** **Underweight** **Neutral**. Change legend: ▲ Upgrade ▼ Downgrade for moderate risk profile

¹ The change in the tactical deviation since our previous report.

² The sum of the strategic asset allocation and the tactical deviation columns.

Source: UBS and WMA AAC, 18 July 2019. See the Performance Measurement and Appendix sections of the UBS House View Investment Strategy Guide for performance measurement details and information regarding sources of strategic asset allocations and their suitability, investor risk profiles, and the interpretation of the suggested tactical deviations from the strategic asset allocations.

CIO Global Wealth Management

Detailed asset allocation, taxable, sustainable investment

Investor risk profile	Conservative			Moderate conservative			Moderate			Moderate aggressive			Aggressive			
	Strategic asset allocation	Tactical deviation	Change ¹	Tactical asset allocation ²	Strategic asset allocation	Tactical deviation	Change ¹	Tactical asset allocation ²	Strategic asset allocation	Tactical deviation	Change ¹	Tactical asset allocation ²	Strategic asset allocation	Tactical deviation	Change ¹	Tactical asset allocation ²
Cash	5.0	-1.0		4.0	5.0	-1.5		3.5	5.0	-2.0		3.0	5.0	-2.0		3.0
Fixed Income	79.0	+0.0		79.0	57.0	+0.0		57.0	41.0	+0.0		41.0	22.0	+0.0		10.0
MDB bonds	25.0	+0.0		25.0	10.0	+0.0		10.0	10.0	+0.0		10.0	8.0	+0.0		5.0
Sustainable munis	40.0	+0.0		40.0	31.0	+0.0		31.0	21.0	+0.0		21.0	9.0	+0.0		5.0
Green bonds	4.0	+1.5		5.5	6.0	+2.5		8.5	4.0	+3.0		7.0	2.0	+3.0		0.0
ESG corporate bonds	10.0	-1.5		8.5	10.0	-2.5		7.5	6.0	-3.0		3.0	3.0	-3.0		0.0
Equity	16.0	+1.0		17.0	38.0	+1.5		39.5	54.0	+2.0		56.0	73.0	+2.0		87.0
ESG thematic equities	6.0	+0.0		6.0	12.0	+0.0		12.0	18.0	+0.0		18.0	23.0	+0.0		24.0
ESG leaders equities (US)	5.0	+0.5		5.5	8.0	+0.5		8.5	11.0	+1.0		12.0	15.0	+1.0		20.0
ESG leaders equities (ex-US)	5.0	+0.5		5.5	6.0	+1.0		7.0	9.0	+1.0		10.0	14.0	+1.0		18.0
ESG improvers equities	0.0	+0.0		0.0	4.0	+0.0		4.0	6.0	+0.0		6.0	8.0	+0.0		9.0
ESG engagement equities	0.0	+0.0		0.0	8.0	+0.0		8.0	10.0	+0.0		10.0	13.0	+0.0		16.0

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For more information on the sustainable investment asset allocation tables, read the CIO publication *Sustainable Investing Portfolios: Investing for returns and for good*, or the Wealth Management US Asset Allocation Committee report *Introducing the House View Sustainable Investing Strategic Asset Allocations*.

CIO Global Wealth Management

Detailed asset allocation, non-taxable with non-traditional assets

Investor risk profile		Conservative				Moderate conservative				Moderate				Moderate aggressive				Aggressive			
Directional change	All figures in %	Strategic asset allocation	Tactical deviation	Change ¹	Tactical asset allocation ²	Strategic asset allocation	Tactical deviation	Change ¹	Tactical asset allocation ²	Strategic asset allocation	Tactical deviation	Change ¹	Tactical asset allocation ²	Strategic asset allocation	Tactical deviation	Change ¹	Tactical asset allocation ²	Strategic asset allocation	Tactical deviation	Change ¹	Tactical asset allocation ²
		Cash		5.0	+3.0		8.0	5.0	+2.5		7.5	5.0	+2.0		7.0	5.0	+2.0		7.0	5.0	-1.0
Fixed Income		69.0	-4.0		65.0	50.0	-4.0		46.0	33.0	-4.0		29.0	17.0	-4.0		13.0	5.0	-1.0		4.0
US Fixed Income		64.0	-4.0		60.0	45.0	-4.0		41.0	29.0	-4.0		25.0	14.0	-4.0		10.0	5.0	-1.0		4.0
▼ US Gov't FI		35.0	-6.0	-1.0	29.0	25.0	-7.0	-1.5	18.0	16.0	-8.0	-2.0	8.0	7.0	-6.0		1.0	5.0	-3.0		2.0
▲ US TIPS		0.0	+1.0	+1.0	1.0	0.0	+1.5	+1.5	1.5	0.0	+2.0	+2.0	2.0	0.0	+0.0		0.0	0.0	+0.0		0.0
US Treasuries (long)		0.0	+1.0		1.0	0.0	+1.5		1.5	0.0	+2.0		2.0	0.0	+2.0		2.0	0.0	+2.0		2.0
US Municipal FI		0.0	+0.0		0.0	0.0	+0.0		0.0	0.0	+0.0		0.0	0.0	+0.0		0.0	0.0	+0.0		0.0
US IG Corp FI		24.0	+0.0		24.0	15.0	+0.0		15.0	8.0	+0.0		8.0	2.0	+0.0		2.0	0.0	+0.0		0.0
US HY Corp FI		5.0	+0.0		5.0	5.0	+0.0		5.0	5.0	+0.0		5.0	5.0	+0.0		5.0	0.0	+0.0		0.0
Int'l Fixed Income		5.0	+0.0		5.0	5.0	+0.0		5.0	4.0	+0.0		4.0	3.0	+0.0		3.0	0.0	+0.0		0.0
EM FI ³		5.0	+0.0		5.0	5.0	+0.0		5.0	4.0	+0.0		4.0	3.0	+0.0		3.0	0.0	+0.0		0.0
Equity		10.0	+1.0		11.0	25.0	+1.5		26.5	42.0	+2.0		44.0	62.0	+2.0		64.0	85.0	+2.0		87.0
US Equity		6.0	+1.0		7.0	14.0	+1.5		15.5	22.0	+2.0		24.0	33.0	+2.0		35.0	45.0	+2.0		47.0
US All cap		0.0	+1.0		1.0	0.0	+1.5		1.5	0.0	+2.0		2.0	0.0	+2.0		2.0	0.0	+2.0		2.0
US Large cap Growth		2.0	+0.0		2.0	5.0	+0.0		5.0	8.0	+0.0		8.0	12.0	+0.0		12.0	16.0	+0.0		16.0
US Large cap Value		2.0	+0.0		2.0	5.0	+0.0		5.0	8.0	+0.0		8.0	12.0	+0.0		12.0	16.0	+0.0		16.0
US Mid cap		1.0	+0.0		1.0	3.0	+0.0		3.0	4.0	+0.0		4.0	6.0	+0.0		6.0	8.0	+0.0		8.0
US Small cap		1.0	+0.0		1.0	1.0	+0.0		1.0	2.0	+0.0		2.0	3.0	+0.0		3.0	5.0	+0.0		5.0
International Equity		4.0	+0.0		4.0	11.0	+0.0		11.0	20.0	+0.0		20.0	29.0	+0.0		29.0	40.0	+0.0		40.0
Int'l Developed Markets		4.0	-1.0		3.0	8.0	-1.5		6.5	14.0	-2.0		12.0	21.0	-2.0		19.0	29.0	-2.0		27.0
Japan		0.0	+1.0		1.0	0.0	+1.0		1.0	0.0	+1.0		1.0	0.0	+1.0		1.0	0.0	+1.0		1.0
Emerging Markets		0.0	+0.0		0.0	3.0	+0.5		3.5	6.0	+1.0		7.0	8.0	+1.0		9.0	11.0	+1.0		12.0
Non-traditional		16.0	+0.0		16.0	20.0	+0.0		20.0	20.0	+0.0		20.0	16.0	+0.0		16.0	5.0	+0.0		5.0
Hedge Funds		16.0	+0.0		16.0	20.0	+0.0		20.0	20.0	+0.0		20.0	16.0	+0.0		16.0	5.0	+0.0		5.0
Private Equity		0.0	+0.0		0.0	0.0	+0.0		0.0	0.0	+0.0		0.0	0.0	+0.0		0.0	0.0	+0.0		0.0
Private Real Estate		0.0	+0.0		0.0	0.0	+0.0		0.0	0.0	+0.0		0.0	0.0	+0.0		0.0	0.0	+0.0		0.0

CIO GWM tactical deviation legend: **Overweight** **Underweight** Neutral. Change legend: ▲ Upgrade ▼ Downgrade for moderate risk profile

¹ The change in the tactical deviation since our previous report.

² The sum of the strategic asset allocation and the tactical deviation columns.

³ A 50% / 50% blend of local currency and hard currency indexes

Source: UBS and WMA AAC, 18 July 2019. See the Performance Measurement and Appendix sections of the UBS House View Investment Strategy Guide for performance measurement details and information regarding sources of strategic asset allocations and their suitability, investor risk profiles, and the interpretation of the suggested tactical deviations from the strategic asset allocations.

CIO Global Wealth Management

Detailed asset allocation, non-taxable without non-traditional assets

Investor risk profile	Conservative				Moderate conservative				Moderate				Moderate aggressive				Aggressive			
	Strategic asset allocation	Tactical deviation	Change ¹	Tactical asset allocation ²	Strategic asset allocation	Tactical deviation	Change ¹	Tactical asset allocation ²	Strategic asset allocation	Tactical deviation	Change ¹	Tactical asset allocation ²	Strategic asset allocation	Tactical deviation	Change ¹	Tactical asset allocation ²	Strategic asset allocation	Tactical deviation	Change ¹	Tactical asset allocation ²
Cash	5.0	+3.0		8.0	5.0	+2.5		7.5	5.0	+2.0		7.0	5.0	+2.0		7.0	5.0	+1.0		6.0
Fixed Income	79.0	-4.0		75.0	63.0	-4.0		59.0	46.0	-4.0		42.0	27.0	-4.0		23.0	10.0	-3.0		7.0
US Fixed Income	74.0	-4.0		70.0	58.0	-4.0		54.0	42.0	-4.0		38.0	24.0	-4.0		20.0	10.0	-3.0		7.0
▼ US Gov't FI	35.0	-6.0	-1.0	29.0	25.0	-7.0	-1.5	18.0	16.0	-8.0	-2.0	8.0	7.0	-6.0		1.0	5.0	-5.0		0.0
▲ US TIPS	0.0	+1.0	+1.0	1.0	0.0	+1.5	+1.5	1.5	0.0	+2.0	+2.0	2.0	0.0	+0.0		0.0	0.0	+0.0		0.0
US Treasuries (long)	0.0	+1.0		1.0	0.0	+1.5		1.5	0.0	+2.0		2.0	0.0	+2.0		2.0	0.0	+2.0		2.0
US Municipal FI	0.0	+0.0		0.0	0.0	+0.0		0.0	0.0	+0.0		0.0	0.0	+0.0		0.0	0.0	+0.0		0.0
US IG Corp FI	34.0	+0.0		34.0	28.0	+0.0		28.0	21.0	+0.0		21.0	12.0	+0.0		12.0	5.0	+0.0		5.0
US HY Corp FI	5.0	+0.0		5.0	5.0	+0.0		5.0	5.0	+0.0		5.0	5.0	+0.0		5.0	0.0	+0.0		0.0
Int'l Fixed Income	5.0	+0.0		5.0	5.0	+0.0		5.0	4.0	+0.0		4.0	3.0	+0.0		3.0	0.0	+0.0		0.0
EM FI ³	5.0	+0.0		5.0	5.0	+0.0		5.0	4.0	+0.0		4.0	3.0	+0.0		3.0	0.0	+0.0		0.0
Equity	16.0	+1.0		17.0	32.0	+1.5		33.5	49.0	+2.0		51.0	68.0	+2.0		70.0	85.0	+2.0		87.0
US Equity	10.0	+1.0		11.0	18.0	+1.5		19.5	26.0	+2.0		28.0	35.0	+2.0		37.0	45.0	+2.0		47.0
US All cap	0.0	+1.0		1.0	0.0	+1.5		1.5	0.0	+2.0		2.0	0.0	+2.0		2.0	0.0	+2.0		2.0
US Large cap Growth	3.5	+0.0		3.5	6.5	+0.0		6.5	9.0	+0.0		9.0	12.0	+0.0		12.0	16.0	+0.0		16.0
US Large cap Value	3.5	+0.0		3.5	6.5	+0.0		6.5	9.0	+0.0		9.0	12.0	+0.0		12.0	16.0	+0.0		16.0
US Mid cap	2.0	+0.0		2.0	3.0	+0.0		3.0	5.0	+0.0		5.0	7.0	+0.0		7.0	8.0	+0.0		8.0
US Small cap	1.0	+0.0		1.0	2.0	+0.0		2.0	3.0	+0.0		3.0	4.0	+0.0		4.0	5.0	+0.0		5.0
International Equity	6.0	+0.0		6.0	14.0	+0.0		14.0	23.0	+0.0		23.0	33.0	+0.0		33.0	40.0	+0.0		40.0
Int'l Developed Markets	6.0	-1.0		5.0	10.0	-1.5		8.5	17.0	-2.0		15.0	24.0	-2.0		22.0	29.0	-2.0		27.0
Japan	0.0	+1.0		1.0	0.0	+1.0		1.0	0.0	+1.0		1.0	0.0	+1.0		1.0	0.0	+1.0		1.0
Emerging Markets	0.0	+0.0		0.0	4.0	+0.5		4.5	6.0	+1.0		7.0	9.0	+1.0		10.0	11.0	+1.0		12.0

CIO GWM tactical deviation legend: **Overweight** **Underweight** Neutral. Change legend: ▲ Upgrade ▼ Downgrade for moderate risk profile

¹ The change in the tactical deviation since our previous report.

² The sum of the strategic asset allocation and the tactical deviation columns.

³ A 50% / 50% blend of local currency and hard currency indexes

Source: UBS and WMA AAC, 18 July 2019. See the Performance Measurement and Appendix sections of the UBS House View Investment Strategy Guide for performance measurement details and information regarding sources of strategic asset allocations and their suitability, investor risk profiles, and the interpretation of the suggested tactical deviations from the strategic asset allocations.

CIO Global Wealth Management

Detailed asset allocation, tax-exempt, yield-focused

Investor risk profile	Conservative				Moderate conservative				Moderate				Moderate aggressive				Aggressive			
	Strategic asset allocation	Tactical deviation	Change ¹	Tactical asset allocation ²	Strategic asset allocation	Tactical deviation	Change ¹	Tactical asset allocation ²	Strategic asset allocation	Tactical deviation	Change ¹	Tactical asset allocation ²	Strategic asset allocation	Tactical deviation	Change ¹	Tactical asset allocation ²	Strategic asset allocation	Tactical deviation	Change ¹	Tactical asset allocation ²
All figures in %																				
Cash	3.0	+3.0		6.0	3.0	+3.0		6.0	3.0	+3.0		6.0	3.0	+1.0		4.0	3.0	+1.0		4.0
Fixed Income	65.0	-4.0		61.0	56.0	-4.5		51.5	43.0	-5.0		38.0	30.0	-3.0		27.0	12.0	-3.0		9.0
US Fixed Income	60.0	-4.0		56.0	46.0	-4.5		41.5	32.0	-5.0		27.0	22.0	-3.0		19.0	10.0	-3.0		7.0
▼ US Gov't FI	30.0	-6.0	-1.0	24.0	16.0	-7.5	-1.5	8.5	10.0	-9.0	-2.0	1.0	5.0	-5.0		0.0	5.0	-5.0		0.0
▲ US TIPS	0.0	+1.0	+1.0	1.0	0.0	+1.5	+1.5	1.5	0.0	+2.0	+2.0	2.0	0.0	+0.0		0.0	0.0	+0.0		0.0
US Treasuries (long)	0.0	+1.0		1.0	0.0	+1.5		1.5	0.0	+2.0		2.0	0.0	+2.0		2.0	0.0	+2.0		2.0
US Municipal FI	0.0	+0.0		0.0	0.0	+0.0		0.0	0.0	+0.0		0.0	0.0	+0.0		0.0	0.0	+0.0		0.0
US IG Corp FI	18.0	+0.0		18.0	16.0	+0.0		16.0	6.0	+0.0		6.0	2.0	+0.0		2.0	0.0	+0.0		0.0
US HY Corp FI	12.0	+0.0		12.0	14.0	+0.0		14.0	16.0	+0.0		16.0	15.0	+0.0		15.0	5.0	+0.0		5.0
Int'l Fixed Income	5.0	+0.0		5.0	10.0	+0.0		10.0	11.0	+0.0		11.0	8.0	+0.0		8.0	2.0	+0.0		2.0
EM FI - Local Currency	2.0	+0.0		2.0	5.0	+0.0		5.0	6.0	+0.0		6.0	6.0	+0.0		6.0	2.0	+0.0		2.0
EM FI - Hard Currency	3.0	+0.0		3.0	5.0	+0.0		5.0	5.0	+0.0		5.0	2.0	+0.0		2.0	0.0	+0.0		0.0
Equity	12.0	+1.0		13.0	21.0	+1.5		22.5	34.0	+2.0		36.0	47.0	+2.0		49.0	62.0	+2.0		64.0
US Equity	6.0	+1.0		7.0	10.0	+1.5		11.5	15.0	+2.0		17.0	19.0	+2.0		21.0	24.0	+2.0		26.0
US All cap	0.0	+1.0		1.0	0.0	+1.5		1.5	0.0	+2.0		2.0	0.0	+2.0		2.0	0.0	+2.0		2.0
US Large cap Growth	2.0	+0.0		2.0	3.0	+0.0		3.0	4.0	+0.0		4.0	5.0	+0.0		5.0	6.0	+0.0		6.0
US Large cap Value	4.0	+0.0		4.0	7.0	+0.0		7.0	11.0	+0.0		11.0	14.0	+0.0		14.0	18.0	+0.0		18.0
International Equity	6.0	+0.0		6.0	11.0	+0.0		11.0	19.0	+0.0		19.0	28.0	+0.0		28.0	38.0	+0.0		38.0
Int'l Developed Markets Value	6.0	-1.0		5.0	11.0	-1.5		9.5	16.0	-2.0		14.0	22.0	-2.0		20.0	29.0	-2.0		27.0
Japan	0.0	+1.0		1.0	0.0	+1.0		1.0	0.0	+1.0		1.0	0.0	+1.0		1.0	0.0	+1.0		1.0
Emerging Markets	0.0	+0.0		0.0	0.0	+0.5		0.5	3.0	+1.0		4.0	6.0	+1.0		7.0	9.0	+1.0		10.0
Yield Assets	20.0	+0.0		20.0	20.0	+0.0		20.0	20.0	+0.0		20.0	20.0	+0.0		20.0	23.0	+0.0		23.0
Senior Loans	6.0	+0.0		6.0	4.0	+0.0		4.0	2.0	+0.0		2.0	0.0	+0.0		0.0	0.0	+0.0		0.0
Preferreds	10.0	+0.0		10.0	7.0	+0.0		7.0	6.0	+0.0		6.0	4.0	+0.0		4.0	2.0	+0.0		2.0
MLPs	4.0	+0.0		4.0	7.0	+0.0		7.0	10.0	+0.0		10.0	13.0	+0.0		13.0	16.0	+0.0		16.0
US Real Estate	0.0	+0.0		0.0	2.0	+0.0		2.0	2.0	+0.0		2.0	3.0	+0.0		3.0	5.0	+0.0		5.0

CIO GWM tactical deviation legend: **Overweight** **Underweight** **Neutral**. Change legend: ▲ Upgrade ▼ Downgrade for moderate risk profile

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² The sum of the strategic asset allocation and the tactical deviation columns.

Source: UBS and WMA AAC, 18 July 2019. See the Performance Measurement and Appendix sections of the UBS House View Investment Strategy Guide for performance measurement details and information regarding sources of strategic asset allocations and their suitability, investor risk profiles, and the interpretation of the suggested tactical deviations from the strategic asset allocations.

CIO Global Wealth Management

Detailed asset allocation, tax-exempt, sustainable investment

Investor risk profile	Conservative			Moderate conservative			Moderate			Moderate aggressive			Aggressive			
	Strategic asset allocation	Tactical deviation	Change ¹	Strategic asset allocation ²	Tactical deviation	Change ¹	Strategic asset allocation ²	Tactical deviation	Change ¹	Strategic asset allocation ²	Tactical deviation	Change ¹	Strategic asset allocation ²	Tactical deviation	Change ¹	Strategic asset allocation ²
Cash	5.0	-1.0		4.0	5.0	-1.5		3.5	5.0	-2.0		3.0	5.0	-2.0		3.0
Fixed Income	79.0	+0.0		79.0	57.0	+0.0		57.0	41.0	+0.0		41.0	22.0	+0.0		22.0
MDB bonds	40.0	+0.0		40.0	21.0	+0.0		21.0	13.0	+0.0		13.0	8.0	+0.0		8.0
Sustainable munis	0.0	+0.0		0.0	0.0	+0.0		0.0	0.0	+0.0		0.0	0.0	+0.0		0.0
Green bonds	14.0	+1.5		15.5	13.0	+2.5		15.5	10.0	+3.0		13.0	6.0	+3.0		9.0
ESG corporate bonds	25.0	-1.5		23.5	23.0	-2.5		20.5	18.0	-3.0		15.0	8.0	-3.0		5.0
Equity	16.0	+1.0		17.0	38.0	+1.5		39.5	54.0	+2.0		56.0	73.0	+2.0		75.0
ESG thematic equities	6.0	+0.0		6.0	12.0	+0.0		12.0	18.0	+0.0		18.0	23.0	+0.0		23.0
ESG leaders equities (US)	5.0	+0.5		5.5	8.0	+0.5		8.5	11.0	+1.0		12.0	15.0	+1.0		16.0
ESG leaders equities (ex-US)	5.0	+0.5		5.5	6.0	+1.0		7.0	9.0	+1.0		10.0	14.0	+1.0		15.0
ESG improvers equities	0.0	+0.0		0.0	4.0	+0.0		4.0	6.0	+0.0		6.0	8.0	+0.0		8.0
ESG engagement equities	0.0	+0.0		0.0	8.0	+0.0		8.0	10.0	+0.0		10.0	13.0	+0.0		13.0

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For more information on the sustainable investment asset allocation tables, read the CIO publication *Sustainable Investing Portfolios: Investing for returns and for good*, or the Wealth Management US Asset Allocation Committee report *Introducing the House View Sustainable Investing Strategic Asset Allocations*.

CIO Global Wealth Management

Detailed asset allocation, all-equity and all-fixed income

All figures in %	All equity				All fixed income, taxable				All fixed income, non-taxable			
	Strategic asset allocation	Tactical deviation	Change ¹	Tactical asset allocation ²	Strategic asset allocation	Tactical deviation	Change ¹	Tactical asset allocation ²	Strategic asset allocation	Tactical deviation	Change ¹	Tactical asset allocation ²
Cash	5.0	-2.0		3.0	5.0	+5.0		10.0	5.0	+5.0		10.0
Fixed Income	0.0	+0.0		0.0	95.0	-5.0		90.0	95.0	-5.0		90.0
US Fixed Income	0.0	+0.0		0.0	92.5	-5.0		87.5	89.0	-5.0		84.0
US Gov't FI	0.0	+0.0		0.0	19.0	-13.0	-4.0	6.0	33.0	-13.0	-4.0	20.0
US MBS	0.0	+0.0		0.0	0.0	+0.0		0.0	9.0	+0.0		9.0
US TIPS	0.0	+0.0		0.0	0.0	+4.0	+4.0	4.0	0.0	+4.0	+4.0	4.0
US Treasuries (long)	0.0	+0.0		0.0	0.0	+4.0		4.0	0.0	+4.0		4.0
US Municipal FI	0.0	+0.0		0.0	71.0	+0.0		71.0	0.0	+0.0		0.0
US IG Corp FI	0.0	+0.0		0.0	0.0	+0.0		0.0	41.0	+0.0		41.0
US HY Corp FI	0.0	+0.0		0.0	2.5	+0.0		2.5	6.0	+0.0		6.0
Int'l Fixed Income	0.0	+0.0		0.0	2.5	+0.0		2.5	6.0	+0.0		6.0
EM FI ³	0.0	+0.0		0.0	2.5	+0.0		2.5	6.0	+0.0		6.0
Equity	95.0	+2.0		97.0	0.0	+0.0		0.0	0.0	+0.0		0.0
US Equity	53.0	+2.0		55.0	0.0	+0.0		0.0	0.0	+0.0		0.0
US All cap	0.0	+2.0		2.0	0.0	+0.0		0.0	0.0	+0.0		0.0
US Large cap Growth	7.0	+0.0		7.0	0.0	+0.0		0.0	0.0	+0.0		0.0
US Large cap Value	7.0	+0.0		7.0	0.0	+0.0		0.0	0.0	+0.0		0.0
US Large-cap total market	23.0	+0.0		23.0	0.0	+0.0		0.0	0.0	+0.0		0.0
US Mid cap	10.0	+0.0		10.0	0.0	+0.0		0.0	0.0	+0.0		0.0
US Small cap	6.0	+0.0		6.0	0.0	+0.0		0.0	0.0	+0.0		0.0
International Equity	42.0	+0.0		42.0	0.0	+0.0		0.0	0.0	+0.0		0.0
Int'l Developed Markets	30.0	-4.0		26.0	0.0	+0.0		0.0	0.0	+0.0		0.0
Japan	0.0	+3.0		3.0	0.0	+0.0		0.0	0.0	+0.0		0.0
Emerging Markets	12.0	-3.0	-1.0	9.0	0.0	+0.0		0.0	0.0	+0.0		0.0
China	0.0	+2.0	-1.0	2.0	0.0	+0.0		0.0	0.0	+0.0		0.0
Brazil	0.0	+2.0	+2.0	2.0	0.0	+0.0		0.0	0.0	+0.0		0.0

CIO GWM tactical deviation legend: **Overweight** **Underweight** **Neutral**. Change legend: **▲** Upgrade **▼** Downgrade for moderate risk profile

¹ The change in the tactical deviation since our previous report.

² The sum of the strategic asset allocation and the tactical deviation columns.

³ A 50% / 50% blend of local currency and hard currency indexes

Source: UBS and WMA AAC, 18 July 2019. See the Performance Measurement and Appendix sections of the *UBS House View Investment Strategy Guide* for performance measurement details and information regarding sources of strategic asset allocations and their suitability, investor risk profiles, and the interpretation of the suggested tactical deviations from the strategic asset allocations.

Publication note

The All Equity and All Fixed Income portfolios complement our balanced portfolios and offer more granular implementation of our House View. While we generally do not recommend that investors hold portfolios consisting of only stocks or only bonds, the All Equity and All Fixed Income portfolios can be used by investors who want to complement their existing holdings.

In the All Equity portfolio, tactical tilts will be based on the corresponding tilts to the Equity asset classes in our balanced portfolio (moderate risk profile, taxable without alternative investments). The amount of cash in the All Equity portfolio will vary one-for-one with the overall overweight/underweight on equities in the balanced portfolio, subject to a 3% maximum tilt from the 5% cash allocation. This allows us to use the cash allocation to express a tactical preference between stocks and fixed income. A special feature of the All Equity portfolio is that it includes "carveouts": 3% allocations to our preferred sectors within US large-caps as well as our preferred countries within both international developed markets and the emerging markets. A maximum of two sectors/countries of each type may be selected for carve-outs.

The All Fixed Income portfolios include both taxable and non-taxable versions. In addition to the fixed income asset classes in the balanced portfolios, the non-taxable version incorporates an additional allocation to Mortgage Backed Securities. Tactical tilts will be based on the corresponding tilts to the Fixed Income asset classes in our balanced portfolios (moderate risk profile without alternative investments, taxable or non-taxable respectively), but only when there is a preference between the fixed income asset classes. For example, an overweight on high yield corporate bonds offset by an underweight on government bonds in the balanced portfolio would be applied to the All Fixed Income portfolios. However, an overweight on US equities versus US government bonds in the balanced portfolio would not be reflected in the All Fixed Income portfolios. Further, the tilts in the All Fixed Income portfolios will typically be scaled up to twice the size of the tilts in the balanced portfolio.

CIO Global Wealth Management

Detailed asset allocation, all equity and all income, yield-focused

All figures in %	All equity			All fixed income, taxable				All fixed income, non-taxable				
	Strategic asset allocation	Tactical deviation	Change ¹	Tactical asset allocation ²	Strategic asset allocation	Tactical deviation	Change ¹	Tactical asset allocation ²	Strategic asset allocation	Tactical deviation	Change ¹	Tactical asset allocation ²
Cash	3.0	-1.0		2.0	3.0	+7.0		10.0	3.0	+7.0		10.0
Fixed Income	0.0	+0.0		0.0	77.0	-7.0		70.0	77.0	-7.0		70.0
US Fixed Income	0.0	+0.0		0.0	58.0	-7.0		51.0	58.0	-7.0		51.0
US Gov't FI	0.0	+0.0		0.0	13.0	-11.0		2.0	18.0	-15.0	-4.0	3.0
US MBS	0.0	+0.0		0.0	0.0	+0.0		0.0	5.0	+0.0		5.0
US TIPS	0.0	+0.0		0.0	0.0	+4.0	+4.0	4.0	0.0	+4.0	+4.0	4.0
US Treasuries (long)	0.0	+0.0		0.0	0.0	+4.0		4.0	0.0	+4.0		4.0
US Municipal FI	0.0	+0.0		0.0	30.0	-4.0	-4.0	26.0	0.0	+0.0		0.0
US IG Corp FI	0.0	+0.0		0.0	0.0	+0.0		0.0	20.0	+0.0		20.0
US HY Corp FI	0.0	+0.0		0.0	15.0	+0.0		15.0	15.0	+0.0		15.0
Int'l Fixed Income	0.0	+0.0		0.0	19.0	+0.0		19.0	19.0	+0.0		19.0
EM FI - Local Currency	0.0	+0.0		0.0	10.0	+0.0		10.0	11.0	+0.0		11.0
EM FI - Hard Currency	0.0	+0.0		0.0	9.0	+0.0		9.0	8.0	+0.0		8.0
Equity	77.0	+1.0		78.0	0.0	+0.0		0.0	0.0	+0.0		0.0
US Equity	39.0	+2.0		41.0	0.0	+0.0		0.0	0.0	+0.0		0.0
US All cap	0.0	+2.0		2.0	0.0	+0.0		0.0	0.0	+0.0		0.0
US Large cap Growth	7.0	+0.0		7.0	0.0	+0.0		0.0	0.0	+0.0		0.0
US Large cap Value	32.0	+0.0		32.0	0.0	+0.0		0.0	0.0	+0.0		0.0
International Equity	38.0	-1.0		37.0	0.0	+0.0		0.0	0.0	+0.0		0.0
Int'l Developed Markets Value	28.0	-5.0		23.0	0.0	+0.0		0.0	0.0	+0.0		0.0
Japan	0.0	+3.0		3.0	0.0	+0.0		0.0	0.0	+0.0		0.0
Emerging Markets	10.0	-3.0	-1.0	7.0	0.0	+0.0		0.0	0.0	+0.0		0.0
China	0.0	+2.0	-1.0	2.0	0.0	+0.0		0.0	0.0	+0.0		0.0
Brazil	0.0	+2.0	+2.0	2.0	0.0	+0.0		0.0	0.0	+0.0		0.0
Yield Assets	20.0	+0.0		20.0	20.0	+0.0		20.0	20.0	+0.0		20.0
Senior Loans	0.0	+0.0		0.0	15.0	+0.0		15.0	15.0	+0.0		15.0
Preferreds	0.0	+0.0		0.0	5.0	+0.0		5.0	5.0	+0.0		5.0
MLPs	16.0	+0.0		16.0	0.0	+0.0		0.0	0.0	+0.0		0.0
US Real Estate	4.0	+0.0		4.0	0.0	+0.0		0.0	0.0	+0.0		0.0

Publication note

The All Equity and All Income portfolios complement our balanced portfolios and offer more granular implementation of our House View yield-focused portfolios. While we generally do not recommend that investors hold portfolios consisting of only stocks or only bonds, the All Equity and All Income portfolios can be used by investors who want to complement their existing holdings.

In the All Equity portfolio, tactical tilts will be based on the corresponding tilts to the Equity asset classes in our balanced portfolio (moderate risk profile, taxable yield-focused). The amount of cash in the All Equity portfolio will vary one-for-one with the overall overweight/underweight on equities in the balanced portfolio, subject to a 1% maximum tilt from the 3% cash allocation. This allows us to use the cash allocation to express a tactical preference between stocks and fixed income. A special feature of the All Equity portfolio is that it includes "carveouts": 3% allocations to our preferred sectors within US large-caps as well as our preferred countries within both international developed markets and the emerging markets. A maximum of two sectors/countries of each type may be selected for carve-outs.

The All Income portfolios include both taxable and non-taxable versions. In addition to the fixed income asset classes in the balanced portfolios, the non-taxable version incorporates an additional allocation to Mortgage Backed Securities. Tactical tilts will be based on the corresponding tilts to the Fixed Income asset classes in our balanced portfolios (moderate risk profile yield-focused, taxable or non-taxable respectively), but only when there is a preference between the fixed income asset classes. For example, an overweight on high yield corporate bonds offset by an underweight on government bonds in the balanced portfolio would be applied to the All Income portfolios. However, an overweight on US equities versus US government bonds in the balanced portfolio would not be reflected in the All Income portfolios. Further, the tilts in the All Income portfolios will typically be scaled up to twice the size of the tilts in the balanced portfolio.

CIO GWM tactical deviation legend: **Overweight** **Underweight** Neutral. Change legend: ▲ Upgrade ▼ Downgrade for moderate risk profile

¹ The change in the tactical deviation since our previous report.

² The sum of the strategic asset allocation and the tactical deviation columns.

Source: UBS and WMA AAC, 18 July 2019. See the Performance Measurement and Appendix sections of the *UBS House View Investment Strategy Guide* for performance measurement details and information regarding sources of strategic asset allocations and their suitability, investor risk profiles, and the interpretation of the suggested tactical deviations from the strategic asset allocations.

CIO Global Wealth Management

Detailed asset allocation, all equity and all fixed income, sustainable investing

All figures in %	All equity				All fixed income, taxable				All fixed income, non-taxable			
	Strategic asset allocation	Tactical deviation	Change ¹	Tactical asset allocation ²	Strategic asset allocation	Tactical deviation	Change ¹	Tactical asset allocation ²	Strategic asset allocation	Tactical deviation	Change ¹	Tactical asset allocation ²
Cash	5.0	-2.0		3.0	5.0	+0.0		5.0	5.0	+0.0		5.0
Fixed Income	0.0	+0.0		0.0	95.0	+0.0		95.0	95.0	+0.0		95.0
MDB bonds	0.0	+0.0		0.0	30.0	+0.0		30.0	25.0	+0.0		25.0
Sustainable munis	0.0	+0.0		0.0	0.0	+0.0		0.0	45.0	+0.0		45.0
Green bonds	0.0	+0.0		0.0	25.0	+3.0		28.0	10.0	+3.0		13.0
ESG corporate bonds	0.0	+0.0		0.0	40.0	-3.0		37.0	15.0	-3.0		12.0
Equity	95.0	+2.0		97.0	0.0	+0.0		0.0	0.0	+0.0		0.0
ESG thematic equities	28.0	+0.0		28.0	0.0	+0.0		0.0	0.0	+0.0		0.0
ESG leaders equities (US)	20.0	+1.0		21.0	0.0	+0.0		0.0	0.0	+0.0		0.0
ESG leaders equities (ex-US)	18.0	+1.0		19.0	0.0	+0.0		0.0	0.0	+0.0		0.0
ESG improvers equities	9.0	+0.0		9.0	0.0	+0.0		0.0	0.0	+0.0		0.0
ESG engagement equities	20.0	+0.0		20.0	0.0	+0.0		0.0	0.0	+0.0		0.0

Publication note

The All Equity and All Fixed Income portfolios complement our balanced portfolios and offer more granular implementation of our House View. While we generally do not recommend that investors hold portfolios consisting of only stocks or only bonds, the All Equity and All Fixed Income portfolios can be used by investors who want to complement their existing holdings.

In the All Equity portfolio, tactical tilts will be based on the corresponding tilts to the Equity asset classes in our balanced portfolio (moderate risk profile, taxable without alternative investments). The amount of cash in the All Equity portfolio will vary one-for-one with the overall overweight/underweight on equities in the balanced portfolio, subject to a 3% maximum tilt from the 5% cash allocation. This allows us to use the cash allocation to express a tactical preference between stocks and fixed income.

The All Fixed Income portfolios include both taxable and non-taxable versions. Tactical tilts will be based on the corresponding tilts to the Fixed Income asset classes in our balanced portfolios (moderate risk profile without alternative investments, taxable or non-taxable respectively), but only when there is a preference between the fixed income asset classes. For example, an overweight on high yield corporate bonds offset by an underweight on government bonds in the balanced portfolio would be applied to the All Fixed Income portfolios. However, an overweight on US equities versus US government bonds in the balanced portfolio would not be reflected in the All Fixed Income portfolios. Further, the tilts in the All Fixed Income portfolios will typically be scaled up to twice the size of the tilts in the balanced portfolio.

CIO GWM tactical deviation legend: **Overweight** **Underweight** **Neutral**. Change legend: ▲ Upgrade ▼ Downgrade for moderate risk profile

¹ The change in the tactical deviation since our previous report.

² The sum of the strategic asset allocation and the tactical deviation columns.

Source: UBS and WMA AAC, 18 July 2019. See the Performance Measurement and Appendix sections of the *UBS House View Investment Strategy Guide* for performance measurement details and information regarding sources of strategic asset allocations and their suitability, investor risk profiles, and the interpretation of the suggested tactical deviations from the strategic asset allocations.

For more information on the sustainable investment asset allocation tables, read the CIO publication *Sustainable Investing Portfolios: Investing for returns and for good*, or the Wealth Management US Asset Allocation Committee report *Introducing the House View Sustainable Investing Strategic Asset Allocations*.

CIO Global Wealth Management

Detailed asset allocation, taxable ultra high net worth with non-traditional assets

Investor risk profile All figures in %	Conservative				Moderate conservative				Moderate				Moderate aggressive				Aggressive			
	Strategic asset allocation	Tactical deviation	Change ¹	Tactical asset allocation ²	Strategic asset allocation	Tactical deviation	Change ¹	Tactical asset allocation ²	Strategic asset allocation	Tactical deviation	Change ¹	Tactical asset allocation ²	Strategic asset allocation	Tactical deviation	Change ¹	Tactical asset allocation ²	Strategic asset allocation	Tactical deviation	Change ¹	Tactical asset allocation ²
Cash	3.0	+3.0		6.0	3.0	+2.5		5.5	3.0	+2.0		5.0	3.0	+2.0		5.0	3.0	-1.0		2.0
Fixed Income	56.0	-4.0		52.0	47.0	-4.0		43.0	30.0	-4.0		26.0	19.0	-4.0		15.0	5.0	-1.0		4.0
US Fixed Income	54.0	-4.0		50.0	45.0	-4.0		41.0	28.0	-4.0		24.0	17.0	-4.0		13.0	5.0	-1.0		4.0
US Gov't FI	2.0	-2.0		0.0	2.0	-2.0		0.0	2.0	-2.0		0.0	2.0	-2.0		0.0	0.0	+0.0		0.0
▲ US TIPS	0.0	+1.0	+1.0	1.0	0.0	+1.5	+1.5	1.5	0.0	+2.0	+2.0	2.0	0.0	+2.0	+2.0	2.0	0.0	+0.0		0.0
US Treasuries (long)	0.0	+1.0		1.0	0.0	+1.5		1.5	0.0	+2.0		2.0	0.0	+2.0		2.0	0.0	+2.0		2.0
▼ US Municipal FI	48.0	-4.0	-1.0	44.0	39.0	-5.0	-1.5	34.0	24.0	-6.0	-2.0	18.0	13.0	-6.0	-2.0	7.0	5.0	-3.0		2.0
US IG Corp FI	4.0	+0.0		4.0	2.0	+0.0		2.0	0.0	+0.0		0.0	0.0	+0.0		0.0	0.0	+0.0		0.0
US HY Corp FI	0.0	+0.0		0.0	2.0	+0.0		2.0	2.0	+0.0		2.0	2.0	+0.0		2.0	0.0	+0.0		0.0
Int'l Fixed Income	2.0	+0.0		2.0	2.0	+0.0		2.0	2.0	+0.0		2.0	2.0	+0.0		2.0	0.0	+0.0		0.0
EM FI ³	2.0	+0.0		2.0	2.0	+0.0		2.0	2.0	+0.0		2.0	2.0	+0.0		2.0	0.0	+0.0		0.0
Equity	16.0	+1.0		17.0	25.0	+1.5		26.5	37.0	+2.0		39.0	48.0	+2.0		50.0	62.0	+2.0		64.0
US Equity	10.0	+1.0		11.0	14.0	+1.5		15.5	20.0	+2.0		22.0	27.0	+2.0		29.0	35.0	+2.0		37.0
US All cap	0.0	+1.0		1.0	0.0	+1.5		1.5	0.0	+2.0		2.0	0.0	+2.0		2.0	0.0	+2.0		2.0
US Large cap Growth	3.5	+0.0		3.5	5.0	+0.0		5.0	7.0	+0.0		7.0	9.5	+0.0		9.5	12.0	+0.0		12.0
US Large cap Value	3.5	+0.0		3.5	5.0	+0.0		5.0	7.0	+0.0		7.0	9.5	+0.0		9.5	12.0	+0.0		12.0
US Mid cap	2.0	+0.0		2.0	2.0	+0.0		2.0	4.0	+0.0		4.0	5.0	+0.0		5.0	7.0	+0.0		7.0
US Small cap	1.0	+0.0		1.0	2.0	+0.0		2.0	2.0	+0.0		2.0	3.0	+0.0		3.0	4.0	+0.0		4.0
International Equity	6.0	+0.0		6.0	11.0	+0.0		11.0	17.0	+0.0		17.0	21.0	+0.0		21.0	27.0	+0.0		27.0
Int'l Developed Markets	6.0	-1.0		5.0	8.0	-1.5		6.5	12.0	-2.0		10.0	15.0	-2.0		13.0	19.0	-2.0		17.0
Japan	0.0	+1.0		1.0	0.0	+1.0		1.0	0.0	+1.0		1.0	0.0	+1.0		1.0	0.0	+1.0		1.0
Emerging Markets	0.0	+0.0		0.0	3.0	+0.5		3.5	5.0	+1.0		6.0	6.0	+1.0		7.0	8.0	+1.0		9.0
Non-traditional	25.0	+0.0		25.0	25.0	+0.0		25.0	30.0	+0.0		30.0	30.0	+0.0		30.0	30.0	+0.0		30.0
Hedge Funds	10.0	+0.0		10.0	10.0	+0.0		10.0	10.0	+0.0		10.0	5.0	+0.0		5.0	0.0	+0.0		0.0
Private Equity	10.0	+0.0		10.0	10.0	+0.0		10.0	15.0	+0.0		15.0	20.0	+0.0		20.0	25.0	+0.0		25.0
Private Real Estate	5.0	+0.0		5.0	5.0	+0.0		5.0	5.0	+0.0		5.0	5.0	+0.0		5.0	5.0	+0.0		5.0

CIO GWM tactical deviation legend: **Overweight** **Underweight** Neutral. Change legend: ▲ Upgrade ▼ Downgrade for moderate risk profile

¹ The change in the tactical deviation since our previous report.

² The sum of the strategic asset allocation and the tactical deviation columns.

³ A 50% / 50% blend of local currency and hard currency indexes

Source: UBS and WMA AAC, 18 July 2019. See the Performance Measurement and Appendix sections of the UBS House View Investment Strategy Guide for performance measurement details and information regarding sources of strategic asset allocations and their suitability, investor risk profiles, and the interpretation of the suggested tactical deviations from the strategic asset allocations.

CIO Global Wealth Management

Detailed asset allocation, tax-exempt institutional investor with non-traditional assets

Investor risk profile	Conservative				Moderate conservative				Moderate				Moderate aggressive				Aggressive			
	Strategic asset allocation	Tactical deviation	Change ¹	Tactical asset allocation ²	Strategic asset allocation	Tactical deviation	Change ¹	Tactical asset allocation ²	Strategic asset allocation	Tactical deviation	Change ¹	Tactical asset allocation ²	Strategic asset allocation	Tactical deviation	Change ¹	Tactical asset allocation ²	Strategic asset allocation	Tactical deviation	Change ¹	Tactical asset allocation ²
Cash	3.0	+3.0		6.0	3.0	+2.5		5.5	3.0	+2.0		5.0	3.0	+2.0		5.0	3.0	+2.0		5.0
Fixed Income	55.0	-4.0		51.0	41.0	-4.0		37.0	29.0	-4.0		25.0	16.0	-4.0		12.0	9.0	-4.0		5.0
US Fixed Income	50.0	-4.0		46.0	39.0	-4.0		35.0	27.0	-4.0		23.0	14.0	-4.0		10.0	9.0	-4.0		5.0
▼ US Gov't FI	36.0	-6.0	-1.0	30.0	28.0	-7.0	-1.5	21.0	18.0	-8.0	-2.0	10.0	11.0	-8.0	-2.0	3.0	9.0	-8.0	-2.0	1.0
▲ US TIPS	0.0	+1.0	+1.0	1.0	0.0	+1.5	+1.5	1.5	0.0	+2.0	+2.0	2.0	0.0	+2.0	+2.0	2.0	0.0	+2.0	+2.0	2.0
US Treasuries (long)	0.0	+1.0		1.0	0.0	+1.5		1.5	0.0	+2.0		2.0	0.0	+2.0		2.0	0.0	+2.0		2.0
US Municipal FI	0.0	+0.0		0.0	0.0	+0.0		0.0	0.0	+0.0		0.0	0.0	+0.0		0.0	0.0	+0.0		0.0
US IG Corp FI	9.0	+0.0		9.0	7.0	+0.0		7.0	6.0	+0.0		6.0	0.0	+0.0		0.0	0.0	+0.0		0.0
US HY Corp FI	5.0	+0.0		5.0	4.0	+0.0		4.0	3.0	+0.0		3.0	3.0	+0.0		3.0	0.0	+0.0		0.0
Int'l Fixed Income	5.0	+0.0		5.0	2.0	+0.0		2.0	2.0	+0.0		2.0	2.0	+0.0		2.0	0.0	+0.0		0.0
EM FI ³	5.0	+0.0		5.0	2.0	+0.0		2.0	2.0	+0.0		2.0	2.0	+0.0		2.0	0.0	+0.0		0.0
Equity	12.0	+1.0		13.0	26.0	+1.5		27.5	38.0	+2.0		40.0	51.0	+2.0		53.0	58.0	+2.0		60.0
US Equity	8.0	+1.0		9.0	13.0	+1.5		14.5	19.0	+2.0		21.0	25.0	+2.0		27.0	28.0	+2.0		30.0
US All cap	0.0	+1.0		1.0	0.0	+1.5		1.5	0.0	+2.0		2.0	0.0	+2.0		2.0	0.0	+2.0		2.0
US Large cap Growth	3.0	+0.0		3.0	4.5	+0.0		4.5	6.5	+0.0		6.5	8.5	+0.0		8.5	9.5	+0.0		9.5
US Large cap Value	3.0	+0.0		3.0	4.5	+0.0		4.5	6.5	+0.0		6.5	8.5	+0.0		8.5	9.5	+0.0		9.5
US Mid cap	2.0	+0.0		2.0	3.0	+0.0		3.0	4.0	+0.0		4.0	5.0	+0.0		5.0	6.0	+0.0		6.0
US Small cap	0.0	+0.0		0.0	1.0	+0.0		1.0	2.0	+0.0		2.0	3.0	+0.0		3.0	3.0	+0.0		3.0
International Equity	4.0	+0.0		4.0	13.0	+0.0		13.0	19.0	+0.0		19.0	26.0	+0.0		26.0	30.0	+0.0		30.0
Int'l Developed Markets	4.0	-1.0		3.0	9.0	-1.5		7.5	13.0	-2.0		11.0	18.0	-2.0		16.0	21.0	-2.0		19.0
Japan	0.0	+1.0		1.0	0.0	+1.0		1.0	0.0	+1.0		1.0	0.0	+1.0		1.0	0.0	+1.0		1.0
Emerging Markets	0.0	+0.0		0.0	4.0	+0.5		4.5	6.0	+1.0		7.0	8.0	+1.0		9.0	9.0	+1.0		10.0
Non-traditional	30.0	+0.0		30.0	30.0	+0.0		30.0	30.0	+0.0		30.0	30.0	+0.0		30.0	30.0	+0.0		30.0
Hedge Funds	13.0	+0.0		13.0	13.0	+0.0		13.0	13.0	+0.0		13.0	10.0	+0.0		10.0	0.0	+0.0		0.0
Private Equity	10.0	+0.0		10.0	11.0	+0.0		11.0	12.0	+0.0		12.0	15.0	+0.0		15.0	25.0	+0.0		25.0
Private Real Estate	7.0	+0.0		7.0	6.0	+0.0		6.0	5.0	+0.0		5.0	5.0	+0.0		5.0	5.0	+0.0		5.0

CIO GWM tactical deviation legend: **Overweight** **Underweight** **Neutral**. Change legend: ▲ Upgrade ▼ Downgrade for moderate risk profile

¹ The change in the tactical deviation since our previous report.

² The sum of the strategic asset allocation and the tactical deviation columns.

³ A 50% / 50% blend of local currency and hard currency indexes

Source: UBS and WMA AAC, 18 July 2019. See the Performance Measurement and Appendix sections of the UBS House View Investment Strategy Guide for performance measurement details and information regarding sources of strategic asset allocations and their suitability, investor risk profiles, and the interpretation of the suggested tactical deviations from the strategic asset allocations.

Additional asset allocation models

US equity sector allocation, in %

	S&P 500 Benchmark allocation ¹	CIO GWM tactical deviation ²				Tactical asset allocation ³
		Numeric		Symbol		
		Previous	Current	Previous	Current	
Communication Services	10.5	+1.0	+1.0	+	+	11.5
Consumer Discretionary	10.4	+1.0	+1.0	+	+	11.4
Consumer Staples	7.4	+0.0	+0.0	n	n	7.4
Energy	4.9	+0.0	+0.0	n	n	4.9
Financials	13.1	+0.0	+0.0	n	n	13.1
Health Care	13.8	+0.0	+0.0	n	n	13.8
Industrials	9.3	-1.0	-1.0	-	-	8.3
Information Technology	21.6	+0.0	+0.0	n	n	21.6
Materials	2.7	+0.0	+0.0	n	n	2.7
Real Estate	3.1	-1.0	-1.0	-	-	2.1
Utilities	3.3	+0.0	+0.0	n	n	3.3

Source: UBS, as of 18 July 2019.

Notes

For US equity sub-sector recommendations please see the "Equity Preference List" for each sector. These reports are published on a monthly basis and can be found on the Online Services website in the Research > Equities section.

The benchmark allocation, as well as the tactical deviations, are intended to be applicable to the US equity portion of a portfolio across investor risk profiles.

1 The benchmark allocation is based on S&P 500 weights.

2 See "Deviations from strategic asset allocation" in the Appendix of UBS House View for an explanation regarding the interpretation of the suggested tactical deviations from benchmark. The "current" column refers to the tactical deviation that applies as of the date of this publication. The "previous" column refers to the tactical deviation that was in place at the date of the previous edition of the previous edition of UBS House View or the last UBS House View Update.

3 The sum of the S&P 500 benchmark allocation and CIO GWM tactical deviation columns.

Scale for Investment Strategy charts

Symbol	Description/Definition	Symbol	Description/Definition
+	moderate overweight vs. benchmark	-	moderate underweight vs. benchmark
++	overweight vs. benchmark	--	underweight vs. benchmark
+++	strong overweight vs. benchmark	---	strong underweight vs. benchmark
n	Neutral, i.e. on benchmark	n/a	not applicable

International developed markets (non-US) equity module, in %

	Benchmark allocation ¹	CIO GWM tactical deviation ²		Current allocation ²
		Previous	Current	
EMU / Eurozone	30.0	-20.0	-20.0	10.0
UK	14.0	-14.0	-14.0	0.0
Japan	22.0	+15.0	+15.0	37.0
Australia	6.0	+4.0	+4.0	10.0
Canada	9.0	+5.0	+5.0	14.0
Switzerland	9.0	+5.0	+5.0	14.0
Other	10.0	+5.0	+5.0	15.0

Source: UBS, as of 18 July 2019

International developed markets (non-US) fixed income module, in %

	Benchmark allocation ¹	CIO GWM tactical deviation ²		Current allocation ²
		Previous	Current	
EMU / Eurozone	38.0	+0.0	-4.0	34.0
UK	8.0	+0.0	+10.0	18.0
Japan	31.0	+0.0	-3.0	28.0
Other	23.0	+0.0	-3.0	20.0

Source: UBS, as of 18 July 2019

Footnotes

¹ For the first table on this page, the benchmark allocation is based on S&P 500 weights. For the second and third tables on this page, the benchmark allocation refers to a moderate risk profile and represents the relative market capitalization weights of each country or region.

² See "Deviations from strategic asset allocation or benchmark allocation" in the appendix for an explanation regarding the interpretation of the suggested tactical deviations from benchmark. The "current" column refers to the tactical deviation that applies as of the date of this publication. The "previous" column refers to the tactical deviation that was in place at the date of the previous edition of UBS House View or the last UBS House View Update.

³ The sum of the CIO GWM tactical deviation columns and (the S&P 500 benchmark allocation for the first table on this page) (the benchmark allocation for the second and third tables on this page).

Portfolio analytics

The portfolio analytics shown for each risk profile's benchmark allocations are based on estimated forward-looking return and standard deviation assumptions (capital market assumptions), which are based on UBS proprietary research. The development process includes a review of a variety of factors, including the return, risk, correlations and historical performance of various asset classes, inflation, and risk premium. These capital market assumptions do not assume any particular investment time horizon. Please note that these assumptions are not guarantees and are subject to change.

UBS has changed its risk and return assumptions in the past and may do so in the future. Neither UBS nor your Financial Advisor is required to provide you with an updated analysis based upon changes to these or other underlying assumptions.

In order to create the analysis shown, the rates of return for each asset class are combined in the same proportion as the asset allocations illustrated (e.g., if the asset allocation indicates 40% equities, then 40% of the results shown for the allocation will be based upon the estimated hypothetical return and standard deviation assumptions shown below).

You should understand that the analysis shown and assumptions used are hypothetical estimates provided for your general information. The results are not guarantees and pertain to the asset allocation and/or asset class in general, not the performance of specific securities or investments. Your actual results may vary significantly from the results shown in this report, as can the performance of any individual security or investment.

Risk Profile	Conservative	Moderately Conservative	Moderate	Moderately Aggressive	Aggressive	All-Equity	All-Fixed Income / All-Income
Taxable with non-traditional assets							
Return	3.7%	4.4%	5.1%	5.8%	6.3%	N/A	N/A
Estimate Risk	3.5%	5.7%	8.2%	11.0%	13.5%	N/A	N/A
Taxable without non-traditional assets							
Return	3.4%	4.0%	4.8%	5.5%	6.2%	6.6%	2.8%
Estimate Risk	3.5%	5.7%	8.1%	11.0%	13.3%	14.9%	2.6%
Taxable yield-focused							
Return	4.3%	5.0%	5.6%	6.2%	6.8%	7.1%	4.1%
Estimate Risk	4.3%	6.3%	8.4%	10.4%	12.3%	14.0%	4.1%
Taxable sustainable investing							
Return	3.8%	4.5%	5.0%	5.6%	5.9%	6.2%	3.5%
Estimate Risk	4.1%	6.4%	8.4%	11.0%	12.8%	14.2%	4.2%
Non-taxable with non-traditional assets							
Return	4.2%	4.8%	5.4%	5.9%	6.4%	N/A	N/A
Estimate Risk	4.2%	6.0%	8.3%	11.0%	13.5%	N/A	N/A
Non-taxable without non-traditional assets							
Return	4.1%	4.7%	5.3%	5.9%	6.3%	6.6%	3.7%
Estimate Risk	4.7%	6.5%	8.7%	11.4%	13.3%	14.9%	4.1%
Non-taxable yield-focused							
Return	3.9%	5.2%	5.8%	6.3%	6.9%	7.1%	4.4%
Estimate Risk	4.0%	6.5%	8.5%	10.5%	12.3%	14.0%	4.3%
Non-taxable sustainable investing							
Return	4.0%	4.6%	5.1%	5.6%	6.0%	6.2%	3.3%
Estimate Risk	4.4%	6.5%	8.5%	11.1%	12.8%	14.2%	3.7%
Ultra High Net Worth (taxable)							
Return	4.4%	4.8%	5.6%	6.2%	6.9%	N/A	N/A
Estimate Risk	4.9%	6.3%	8.6%	10.5%	12.7%	N/A	N/A
Institutional (non-taxable)							
Return	4.8%	5.3%	5.8%	6.4%	6.9%	N/A	N/A
Estimate Risk	5.1%	6.9%	8.6%	10.7%	12.1%	N/A	N/A

Asset Class Capital Market Assumptions	Annual total return	Annual risk
US Cash	3.0%	0.2%
US Government Fixed Income	3.1%	4.0%
US Municipal Fixed Income	2.6%	2.8%
US Corporate Investment-Grade Fixed Income	3.9%	5.6%
US Corporate High-Yield Fixed Income	5.1%	9.1%
International Dev. Markets Fixed Income	3.3%	8.1%
Emerging Markets Fixed Income	5.2%	9.1%
US Large-cap Equity	5.7%	15.8%
US Mid-cap Equity	6.1%	18.2%
US Small-cap Equity	6.3%	20.3%
International Developed Markets Equity	7.6%	16.3%
Emerging Markets Equity	8.9%	21.8%
Hedge Funds	5.4%	6.2%
Private Equity	8.7%	12.9%
Private Real Estate	6.0%	11.6%

Tactical asset allocation performance measurement

The performance calculations shown in Table A commence on 25 January 2013, the first date upon which the Investment Strategy Guide was published following the release of the new UBS WMA strategic asset allocation (SAA) models. The performance is based on the SAA without non-traditional assets for a moderate risk profile investor, and the SAA with the tactical shift (see detailed asset allocation tables where the SAA with the tactical shift is referred to as "current allocation"). Performance is calculated utilizing the returns of the indices identified in Table B as applied to the respective allocations in the SAA and the SAA with the tactical shift. For example, if US mid-cap equity allocated 10% in the SAA and 12% in the SAA with the tactical shift, the US mid-cap equity index respectively contributed to 10% and 12% of the results shown. Prior to 25 January 2013, CIO Wealth Management published tactical asset allocation recommendations in the *Investment Strategy Guide* using a different set of asset classes and sectors. The performance of these tactical recommendations is reflected in Table C of the February 2017 House View *Investment Strategy Guide*.

The performance attributable to the CIO GWM tactical deviations is reflected in the column in Table A labeled "Excess return," which shows the difference between the performance of the SAA and the performance of the SAA with the tactical shift. The "Information ratio" is a risk-adjusted performance measure, which adjusts the excess returns for the tracking error risk of the tactical deviations.

Specifically, the information ratio is calculated as the ratio of the annualized excess return over a given time period and the annualized standard deviation of daily excess returns over the same period. Additional background information regarding the computation of the information ratio figures provided below are available upon request.

The calculations assume that the portfolios are rebalanced upon publication of the models in the CIO Letter or House View Update. The computations assume portfolio rebalancing upon such intra-month changes as well. Performance shown is based on total returns, but does not include transaction costs, such as commissions, fees, margin interest, and interest charge. Actual total returns adjusted for such transaction costs will be reduced. A complete record of all the recommendations upon which this performance report is based is available from UBS Financial Services Inc. upon written request. Past performance is not an indication of future results.

Table A: Moderate-risk taxable investor performance measurement (25 January 2013 to present) – See "Table A NOTE"

	SAA	SAA with tactical shift	Excess return	Information ratio (annualized)	MSCI ACWI Index (total return)	Barclays Capital US Aggregate bond index (total return)
25 January 2013 to 31 March 2013	0.79%	0.83%	0.04%	0.9	2.39%	0.11%
2Q 2013	-2.18%	-2.14%	0.04%	0.3	-0.42%	-2.33%
3Q 2013	3.60%	3.86%	0.26%	2.4	7.90%	0.57%
4Q 2013	3.05%	3.23%	0.18%	2.9	7.31%	-0.14%
1Q 2014	2.56%	2.53%	-0.03%	-0.2	1.08%	1.84%
2Q 2014	3.44%	3.49%	0.05%	0.3	5.04%	2.04%
3Q 2014	-1.54%	-1.71%	-0.16%	-1.2	-2.31%	0.17%
4Q 2014	0.47%	0.73%	0.26%	1.3	0.41%	1.79%
1Q 2015	1.38%	1.69%	0.31%	2.1	2.31%	1.61%
2Q 2015	-0.18%	-0.19%	-0.01%	-0.1	0.35%	-1.68%
3Q 2015	-4.67%	-5.08%	-0.41%	-2.4	-9.45%	1.23%
4Q 2015	1.61%	1.67%	0.06%	0.5	5.03%	-0.57%
1Q 2016	2.11%	1.72%	-0.39%	-3.7	0.24%	3.03%
2Q 2016	2.81%	2.88%	0.08%	1.1	0.99%	2.21%
3Q 2016	2.50%	2.60%	0.10%	1.5	5.30%	0.46%
4Q 2016	-1.33%	-1.13%	0.21%	3.4	1.19%	-2.98%
1Q 2017	3.93%	4.07%	0.14%	2.5	6.91%	0.82%
2Q 2017	3.01%	3.11%	0.10%	1.6	4.27%	1.45%
3Q 2017	3.07%	3.18%	0.11%	2.1	5.18%	0.85%
4Q 2017	3.14%	3.25%	0.12%	3.3	5.73%	0.39%
1Q 2018	-0.71%	-0.74%	-0.03%	-0.2	-0.96%	-1.46%
2Q 2018	0.68%	0.47%	-0.21%	-2.5	0.53%	-0.16%
3Q 2018	1.97%	2.03%	0.06%	1.5	4.28%	0.02%
4Q 2018	-5.98%	-6.27%	-0.29%	-3.1	-12.75%	1.64%
1Q 2019	7.49%	7.95%	0.46%	7.1	12.18%	2.94%
2Q 2019	10.52%	11.02%	0.50%	4.3	16.23%	6.11%
2019 year to date	11.32%	11.85%	0.53%	4.2	17.78%	5.69%
Since inception (25 January 2013)	39.56%	40.93%	1.37%	0.5	71.30%	17.55%

Source: UBS, as of 16 July 2019, Performance after 27 February 2017 based on updated SAA weights as shown in Table B

Tactical asset allocation performance measurement

Table B: SAA for moderate risk profile investor, and underlying indices (all figures in %)

	Previous SAA weights (25 Jan 2013 - 27 Feb 2017)	New SAA weights (27 Feb 2017 onward)
25 Jan 2013 to present		
US Cash (Barclays Capital US Treasury - Bills [1-3 M])	0.0	5.0
US Large-Cap Growth (Russell 1000 Growth)	7.0	10.0
US Large-Cap Value (Russell 1000 Value)	7.0	10.0
US Mid-Cap (Russell Mid Cap)	6.0	5.0
US Small-Cap (Russell 2000)	3.0	3.0
International Dev. Equities (MSCI EAFE)	10.0	15.0
Emerging Markets Equities (MSCI EMF)	7.5	6.0
US Government Fixed Income (Bloomberg Barclays US Agg Government)	5.0	2.0
US Municipal Fixed Income (Bloomberg Barclays Municipal Bond)	35.0	40.0
US Investment-Grade Fixed Income (Bloomberg Barclays US Agg Credit)	3.0	0.0
US Corporate High-Yield Fixed Income (Bloomberg Barclays US Agg Corp HY)	4.0	2.0
International Dev. Fixed Income (Bloomberg Barclays Global Agg xUS)	4.0	0.0
Emerging Markets Fixed Income (50% Bloomberg Barclays EM Gov and 50% BarCap Global EM (USD))	3.5	2.0
Commodities (Bloomberg Commodity Index Total Return)	5.0	0.0

Additional indices

US Gov't 10 year (Bloomberg Barclays US Treasury Bellwethers 10 Year)
US Treasuries (long) (ICE U.S. Treasury 20+ Years Bond Index)
US TIPS (Bloomberg Barclays US Treasury Inflation-Linked Bond Index)
US MBS (Bloomberg Barclays US MBS)
EM Local Currency FI (Bloomberg Barclays Emerging Markets Local Currency)
EM Hard Currency FI (Bloomberg Barclays EM Hard Currency Aggregate)
Global Equity (MSCI All Country World)
Int'l Developed Value (MSCI EAFE Value)
Senior Loans (S&P/LSTA U.S. Leveraged Loan 100)
Preferreds (BofA Merrill Lynch Fixed Rate Preferred Securities)
MLPs (Alerian MLP)
US Real Estate (FTSE NAREIT Equity REIT)
International Dev. Fixed Income (Bloomberg Barclays Global Agg xUS)
Emerging Markets Fixed Income (50% Bloomberg Barclays EM Gov and 50% Bloomberg Barclays Global EM (USD))
Commodities (Dow Jones-UBS Commodity Index)
ESG Thematic Equities (MSCI All Country World)
ESG Engagement Equities (MSCI All Country World)
ESG Improvers Equities (MSCI All Country World)
ESG Leaders Equities (US) (Russell 1000)
ESG Leaders Equities (ex-US) (MSCI All Country World ex USA)
MDB Bonds (Bloomberg Barclays US Agg Government)
Sustainable Municipal Fixed Income (Bloomberg Barclays Municipal Bond)
Green Bonds (80% Bloomberg Barclays US Agg Government and 20% Bloomberg Barclays US Agg Credit)
ESG Corporate Bonds (Bloomberg Barclays US Agg Credit)

Table A NOTE Historical performance measurement

Prior to 25 January 2013, CIO GWM published tactical asset allocation recommendations in the *Investment Strategy Guide* using a different set of asset classes and sectors. The performance of these tactical recommendations is reflected in Table C of the February 2017 House View *Investment Strategy Guide*. You can obtain a copy of the February 2017 House View from Online Services, or from your UBS Financial Advisor.

Asset Allocation Models

Appendix

End notes

Table labeled detailed asset allocations without non-traditional assets (NTAs)

- 1 See "Sources of Benchmark Allocations and Investor Risk Profiles" on "Additional disclosure 1" tab regarding the source of investor risk profiles.
- 2 See "Sources of Benchmark Allocations and Investor Risk Profiles" on "Additional disclosure 1" tab regarding the source of benchmark allocations and their suitability.
- 3 See "Deviations from Benchmark Allocation" on "Additional disclosure 2" tab regarding the interpretation of the suggested tactical deviations from benchmark.
- 4 The current allocation column is the sum of the benchmark allocation and the tactical deviation column.
- 5 The MSCI All Country World Index will be used as the benchmark for global equity.

Table labeled detailed asset allocations with non-traditional assets (NTAs)

- 1 See "Sources of Benchmark Allocations and Investor Risk Profiles" on "Additional disclosure 1" tab regarding the source of investor risk profiles.
- 2 See "Sources of Benchmark Allocations and Investor Risk Profiles" on "Additional disclosure 1" tab regarding the source of benchmark allocations and their suitability.
- 3 See "Deviations from Benchmark Allocation" on "Additional disclosure 2" tab regarding the interpretation of the suggested tactical deviations from benchmark.
- 4 The current allocation column is the sum of the benchmark allocation and the tactical deviation column.
- 5 WMA Asset Allocation Committee considers that maintaining the benchmark allocation is appropriate for alternative investments. The recommended tactical deviation is therefore structurally set at 0. See "Sources of Benchmark Allocations and Investor Risk Profiles" on "Additional disclosure 1" tab regarding the types of alternative investments and their suitability.

Appendix

Explanations about asset classes

Sources of strategic asset allocations and investor risk profiles

Strategic asset allocations represent the longer-term allocation of assets that is deemed suitable for a particular investor. The strategic asset allocation models discussed in this publication, and the capital market assumptions used for the strategic asset allocations, were developed and approved by the WMA AAC.

The strategic asset allocations are provided for illustrative purposes only and were designed by the WMA AAC for hypothetical US investors with a total return objective under five different Investor Risk Profiles ranging from conservative to aggressive. In general, strategic asset allocations will differ among investors according to their individual circumstances, risk tolerance, return objectives and time horizon. Therefore, the strategic asset allocations in this publication may not be suitable for all investors or investment goals and should not be used as the sole basis of any investment decision. Minimum net worth requirements may apply to allocations to non-traditional assets. As always, please consult your UBS Financial Advisor to see how these weightings should be applied or modified according to your individual profile and investment goals.

The process by which the strategic asset allocations were derived is described in detail in the publication entitled "Strategic Asset Allocation (SAA) Methodology and Portfolios," published on 26 February 2017. Your Financial Advisor can provide you with a copy.

Deviations from strategic asset allocation or benchmark allocation

The recommended tactical deviations from the strategic asset allocation or benchmark allocation are provided by the Global Investment Committee and the Investment Strategy Group within CIO Global Wealth Management. They reflect the short- to medium-term assessment of market opportunities and risks in the respective asset classes and market segments. Positive/zero/negative tactical deviations correspond to an overweight/neutral/underweight stance for each respective asset class and market segment relative to their strategic allocation. The current allocation is the sum of the strategic asset allocation and the tactical deviation.

Note that the regional allocations on the Equities and Bonds pages in UBS House View are provided on an unhedged basis (i.e., it is assumed that investors carry the underlying currency risk of such investments) unless otherwise stated. Thus, the deviations from the strategic asset allocation reflect the views of the underlying equity and bond markets in combination with the assessment of the associated currencies. The detailed asset allocation tables integrate the country preferences within each asset class with the asset class preferences in UBS House View.

Asset allocation does not assure profits or prevent against losses from an investment portfolio or accounts in a declining market.

Appendix

Emerging Market Investments

Investors should be aware that Emerging Market assets are subject to, amongst others, potential risks linked to currency volatility, abrupt changes in the cost of capital and the economic growth outlook, as well as regulatory and socio-political risk, interest rate risk and higher credit risk. Assets can sometimes be very illiquid and liquidity conditions can abruptly worsen. CIO GWM generally recommends only those securities it believes have been registered under Federal U.S. registration rules (Section 12 of the Securities Exchange Act of 1934) and individual State registration rules (commonly known as "Blue Sky" laws). Prospective investors should be aware that to the extent permitted under US law, CIO GWM may from time to time recommend bonds that are not registered under US or State securities laws. These bonds may be issued in jurisdictions where the level of required disclosures to be made by issuers is not as frequent or complete as that required by US laws.

For more background on emerging markets generally, see the CIO GWM Education Notes, Emerging Market Bonds: Understanding Emerging Market Bonds, 12 August 2009 and Emerging Markets Bonds: Understanding Sovereign Risk, 17 December 2009.

Investors interested in holding bonds for a longer period are advised to select the bonds of those sovereigns with the highest credit ratings (in the investment grade band). Such an approach should decrease the risk that an investor could end up holding bonds on which the sovereign has defaulted. Sub-investment grade bonds are recommended only for clients with a higher risk tolerance and who seek to hold higher yielding bonds for shorter periods only.

Non-Traditional Assets

Non-traditional asset classes are alternative investments that include hedge funds, private equity, real estate, and managed futures (collectively, alternative investments). Interests of alternative investment funds are sold only to qualified investors, and only by means of offering documents that include information about the risks, performance and expenses of alternative investment funds, and which clients are urged to read carefully before subscribing and retain. An investment in an alternative investment fund is speculative and involves significant risks. Specifically, these investments (1) are not mutual funds and are not subject to the same regulatory requirements as mutual funds; (2) may have performance that is volatile, and investors may lose all or a substantial amount of their investment; (3) may engage in leverage and other speculative investment practices that may increase the risk of investment loss; (4) are long-term, illiquid investments, there is generally no secondary market for the interests of a fund, and none is expected to develop; (5) interests of alternative investment funds typically will be illiquid and subject to restrictions on transfer; (6) may not be required to provide periodic pricing or valuation information to investors; (7) generally involve complex tax strategies and there may be delays in distributing tax information to investors; (8) are subject to high fees, including management fees and other fees and expenses, all of which will reduce profits.

Interests in alternative investment funds are not deposits or obligations of, or guaranteed or endorsed by, any bank or other insured depository institution, and are not federally insured by the Federal Deposit Insurance Corporation, the Federal Reserve Board, or any other governmental agency. Prospective investors should understand these risks and have the financial ability and willingness to accept them for an extended period of time before making an investment in an alternative investment fund and should consider an alternative investment fund as a supplement to an overall investment program.

Investment Strategy Guide - Asset Allocation Models

Appendix

Disclaimer

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