

UBS ATS Monthly Volume Summary

August 2019

UBS ATS facilitates interaction among equity orders received from a broad range of clients and market participants, including institutional clients using UBS algorithms, broker-dealers, UBS trading desks, market makers, retail brokers, and active traders (sometimes referred to as High Frequency Traders or "HFT").

Key Performance Metrics¹

Average daily matched shares:	175,574,442
Average daily matched notional:	\$7,890,726,956
Total Symbols Active:	8,849
Total Symbols Traded:	8,031
Peak daily matched shares:	253,134,200
Average Price Improvement Per Share ² :	\$0.0134
Percentage of shares that received price improvement ² :	82.11%
Average Trade Size:	140
Average Total executed shares per order:	168
Executed share percentage at midpoint ³ :	64.79%
Percentage of volume executed versus UBS Principal orders ⁴ :	3.18%

Executed Block Metrics⁵

Average daily volume block % >=10k shares:	2.13%
Average daily value block %>=200k notional:	2.77%
Average daily volume demi-block % >=2k-9,999 shares:	7.93%
Average daily value demi-block % >=\$100k-200k:	2.51%
Peak executed shares in a single print:	197,100
Peak executed notional in a single print:	\$13,722,000

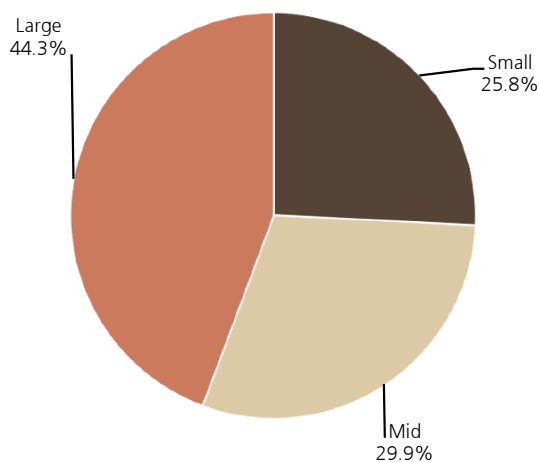
Order Block Metrics⁶

Average daily Order block % >=10k shares:	22.80%
Average daily Order block %>=200k notional:	24.81%
Average daily Order demi-block % >=2k-9,999 shares:	20.59%
Average daily Order demi-block % >=\$100k -200k:	11.24%

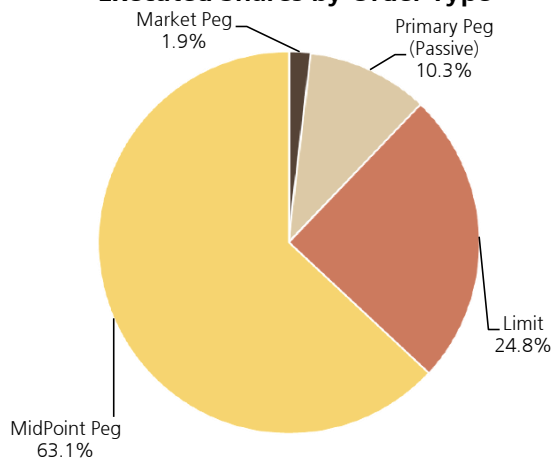
Conditional Indication Metrics

Average Conditional Indication Quantity:	6,735
Average Conditional Indication Minimum Quantity:	815
Average Conditional Indication Notional Value:	\$251,471
Average Firm Up Quantity:	5,911
Average Firm Up Minimum Quantity:	365
Average Executed Quantity:	797
Average Executed Notional:	\$31,591

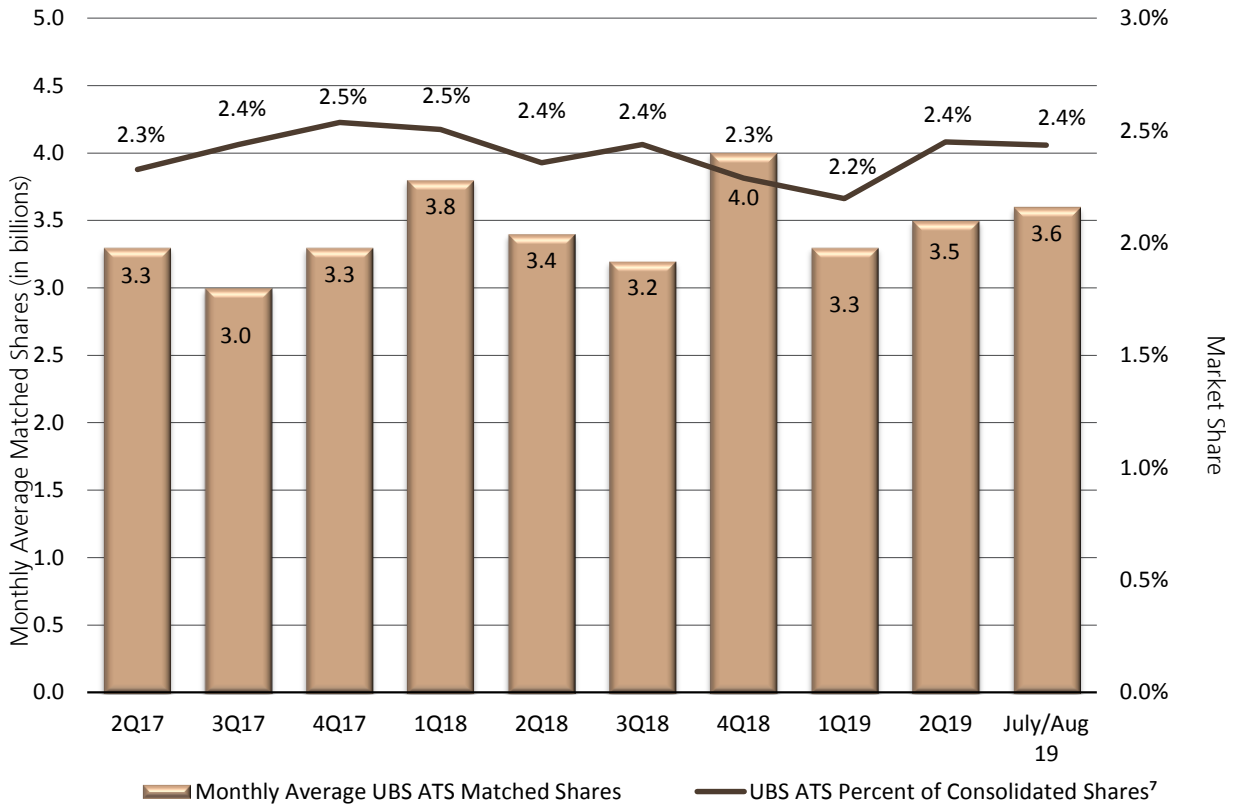
Executed Shares by Market Cap



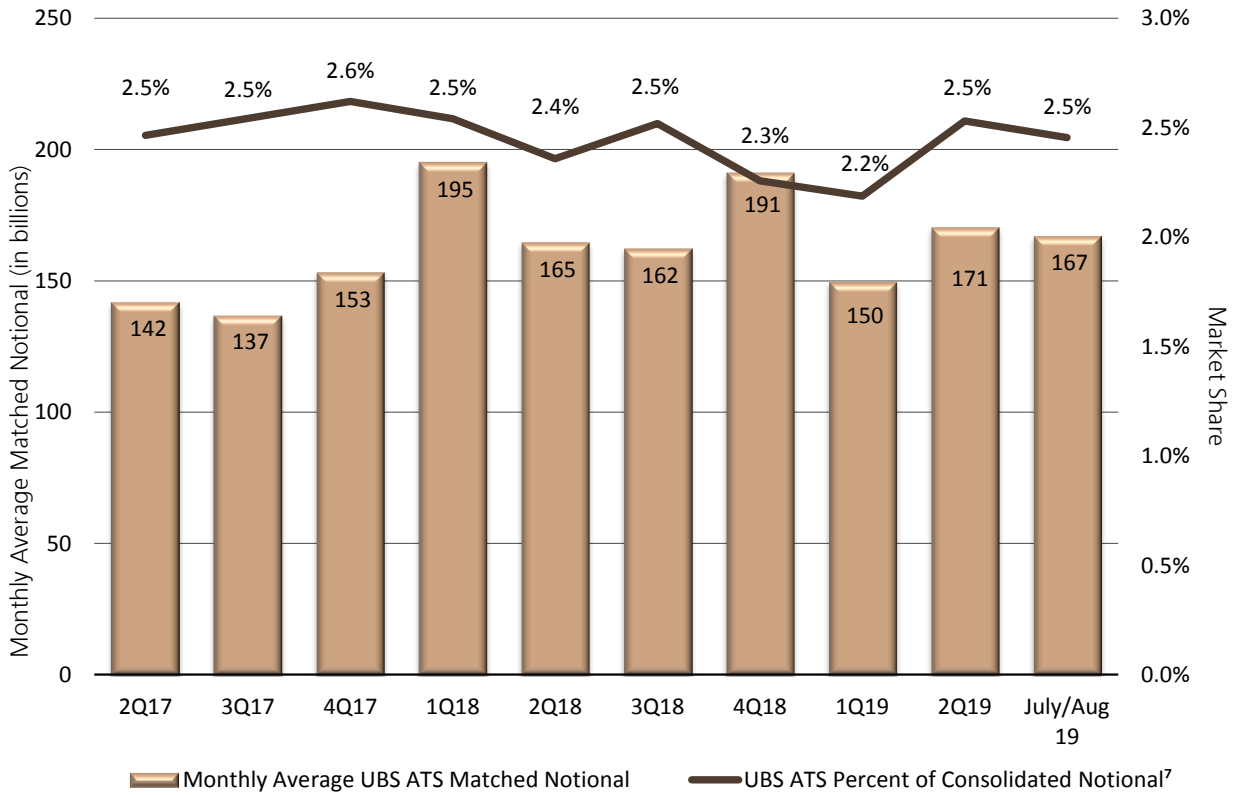
Executed Shares by Order Type



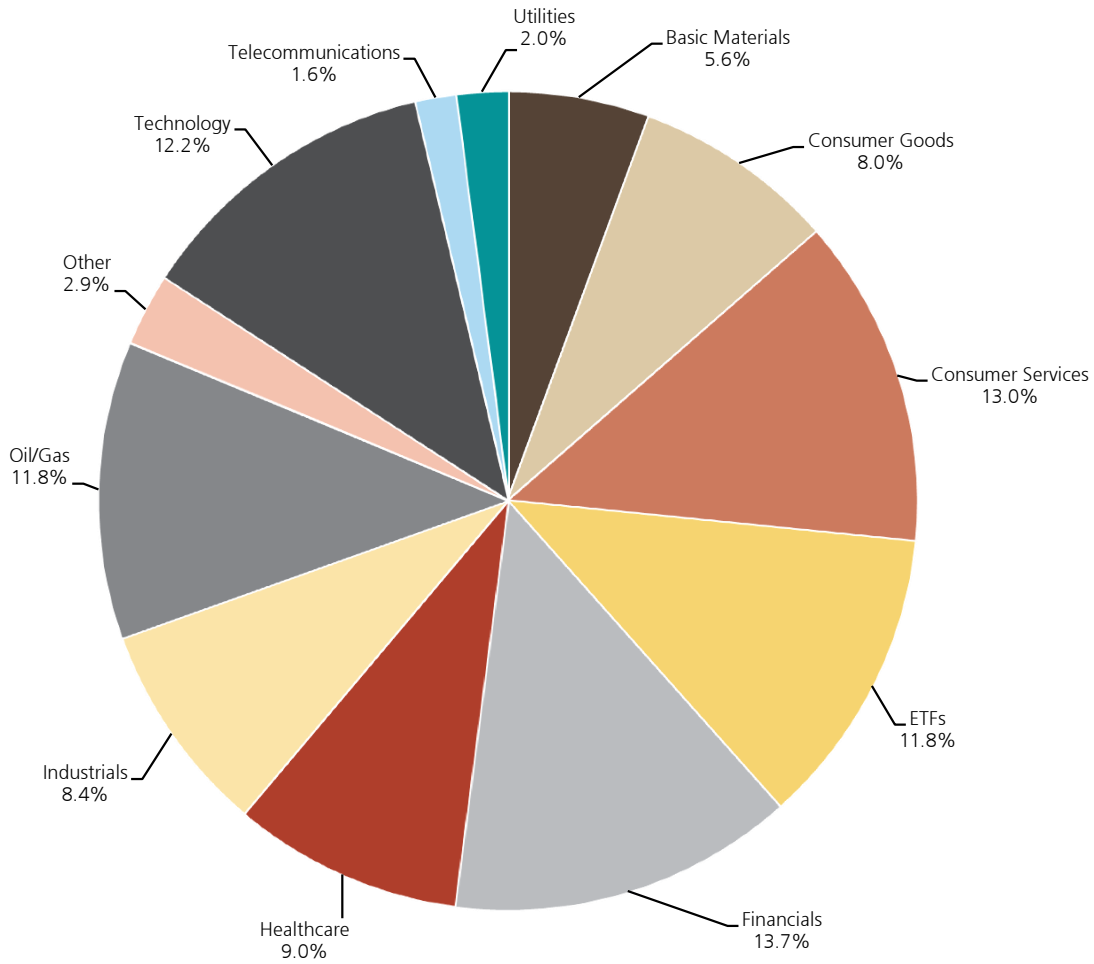
UBS ATS Monthly Average Matched Shares, Q2 2017 - Aug 2019



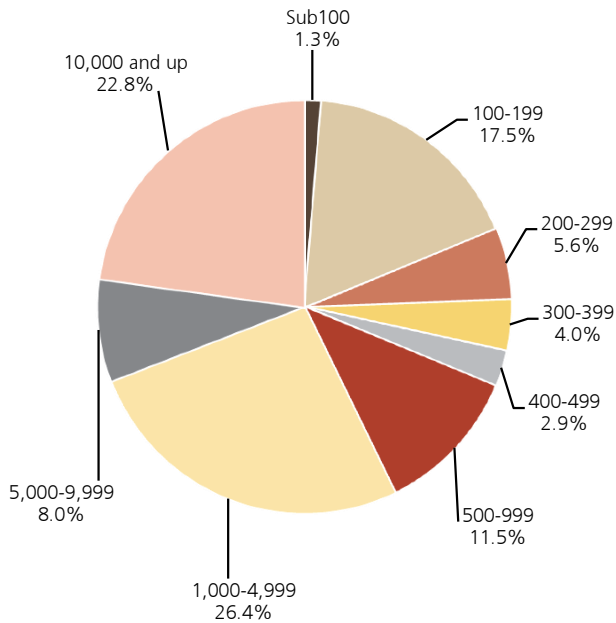
UBS ATS Monthly Average Matched Notional, Q2 2017 - Aug 2019



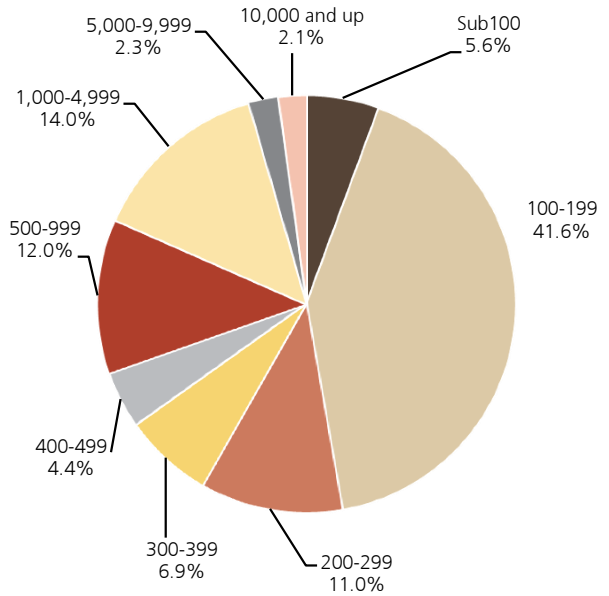
Executed Shares by Sector



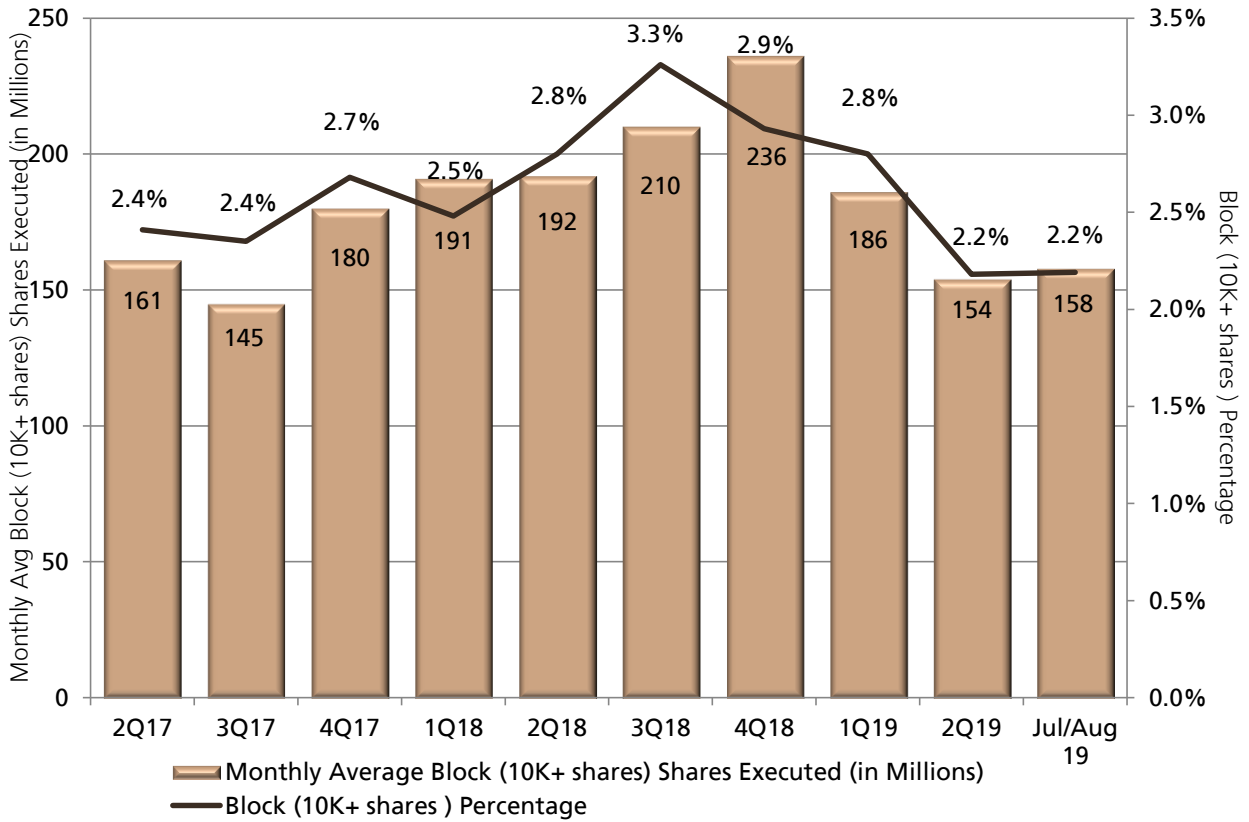
Ordered Shares by Size Bucket



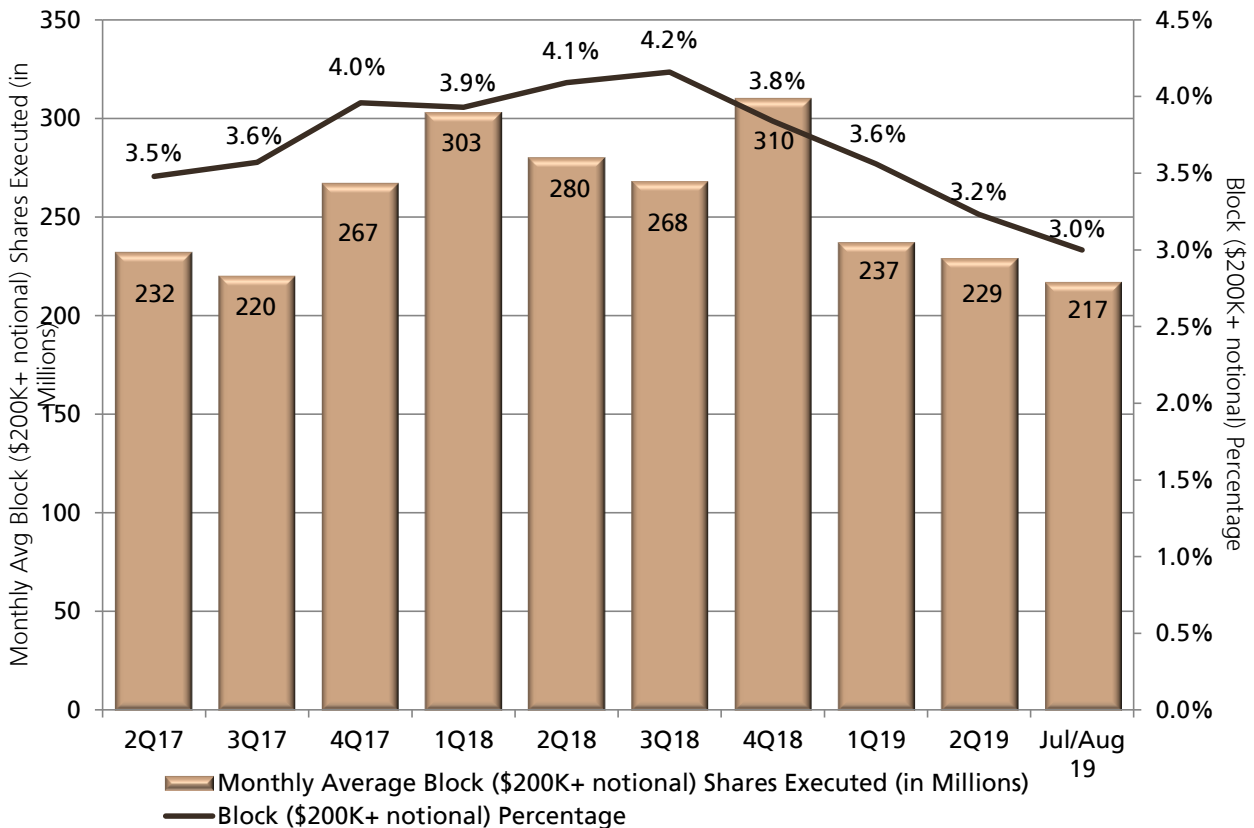
Executed Shares by Size Bucket



Monthly Average Block (10K+ shares) Shares Executed, Q2 2017 - Aug 2019



Monthly Average Block (\$200K+ notional) Shares Executed, Q2 2017 - Aug 2019



Endnotes:

1. All share and notional numbers disclosed reflect a single count methodology
2. Price Improvement is an execution at any price less than the NBO for buy orders and greater than the NBB for sell orders
3. Includes executed shares in locked markets
4. For purposes of these statistics, the term "UBS Principal orders" means any order for an account that is owned by an entity within the UBS Investment Bank Division
5. **ADV Block Execution Calculations**
 - ADV Block % ($\geq 10,000$ shares) = total shares executed where the share quantity of the execution is $\geq 10,000$ shares, divided by the total shares executed in UBS ATS
 - ADV Block % ($\geq \$200k$ notional) = total shares executed where the notional of the execution is $\geq \$200k$ notional, divided by the total shares executed in UBS ATS
 - ADV Demi-Block % ($\geq 2,000$ – $9,999$ shares) = total shares executed where the share quantity of the execution is $\geq 2,000$ shares, and $< 10,000$ shares, divided by the total shares executed in UBS ATS
 - ADV Demi-Block % ($\geq \$100k$ – $\$200k$ notional) = total shares executed where the notional of the execution is $\geq \$100k$ notional, and $< \$200k$ notional, divided by the total shares executed in UBS ATS
6. **ADV Block Order Calculations**
 - ADV Block % ($\geq 10,000$ shares) = total shares ordered where the share quantity of the order is $\geq 10,000$ shares, divided by the total shares ordered in UBS ATS
 - ADV Block % ($\geq \$200k$ notional) = total shares ordered where the notional of the order is $\geq \$200k$ notional, divided by the total shares ordered in UBS ATS
 - ADV Demi-Block % ($\geq 2,000$ – $9,999$ shares) = total shares ordered where the share quantity of the order is $\geq 2,000$ shares, and $< 10,000$ shares, divided by the total shares ordered in UBS ATS
 - ADV Demi-Block % ($\geq \$100k$ – $\$200k$ notional) = total shares ordered where the notional of the order is $\geq \$100k$ notional, and $< \$200k$ notional, divided by the total shares ordered in UBS ATS
7. Consolidated Shares and Consolidated Notional information sourced from Bloomberg using MVOL and MVAL functions

Stated percentages may not sum to 100% due to rounding practices. Average daily statistics are rounded down to the nearest whole number.

Issued in the US by UBS Securities LLC, member NYSE, FINRA, SIPC.

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