

# September 2024

## US Market Structure Monthly

### MICROSTRUCTURE OBSERVATIONS

- The average daily volume in US equities was 11.9B shares in September 2024, up 3% month over month (MoM) and up 15% year over year (YoY).
  - Volume in sub \$1 stocks, as a percent of total consolidated share volume, was 11% in September 2024, down 1% from 12% in August 2024 and down 3% from September 2023.
- Trade reporting facility (TRF) share volume as a percent of total consolidated share volume was to 47.5% in September 2024, the third consecutive month where the TRF was at or above 47%.
- Quoted spreads in both S&P 500 and Russell 2000 stocks narrowed in September 2024 compared to the year-to-date high levels observed in August 2024. Excluding the first and last half hour of the trading day, the median S&P 500 stock's spread narrowed to 5.9bps in September, from 6.4bps the prior month, while the median Russell 2000 stock's spread narrowed to 21.3bps in September from 23.1bps the prior month.

### US MARKET STRUCTURE NEWS

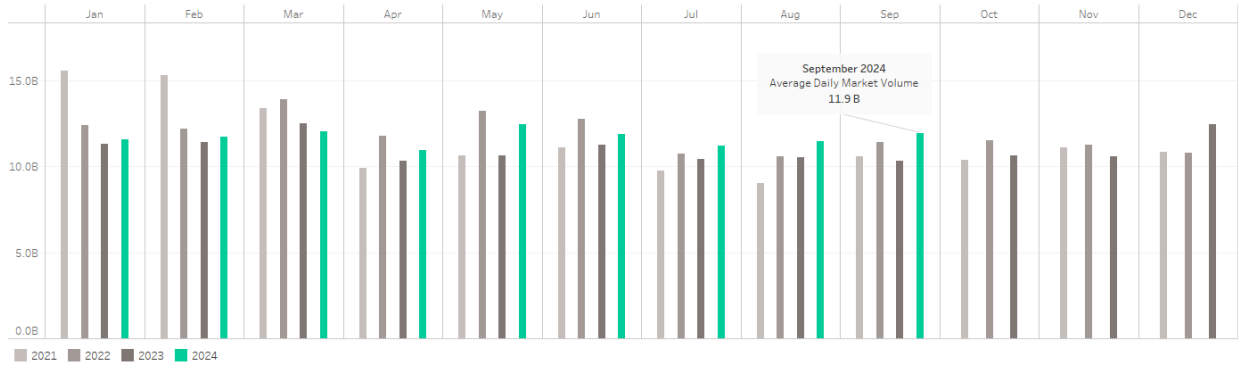
#### **SEC Adopts Rules to Amend Minimum Pricing Increments and Access Fee Caps**

The Securities and Exchange Commission (SEC) adopted amendments to Regulation NMS to introduce a new 'tick size' increment of half a penny for certain stocks, reduce the access fee for protected quotes, enhance transparency of exchange fees and rebates, and accelerate the implementation of rules to publish better priced odd lot quotes to more participants. The SEC will amend Rule 612 to establish a new minimum pricing incremental of \$0.005 for quotations and orders in 'tick constrained' NMS stocks that have a stock price greater than or equal to \$1.00. The SEC will make the 'tick constrained' designation by measuring stocks' time weighted quoted spread during a specified three-month period, and thereafter assign stocks a tick size of either \$0.01 or \$0.005 for a six-month period. On access fees, the SEC will amend Rule 610 to reduce the access fee cap for protected quotation from \$0.003 per share to \$0.001 per share for NMS stocks priced at \$1.00 or above. The amendments to Rule 610 will also require exchanges to make the amount of fees and rebates known at the time of execution. Finally, the Commission will accelerate the implementation of previously adopted definitions related to round lot and odd lot information.

<https://www.sec.gov/newsroom/press-releases/2024-137>

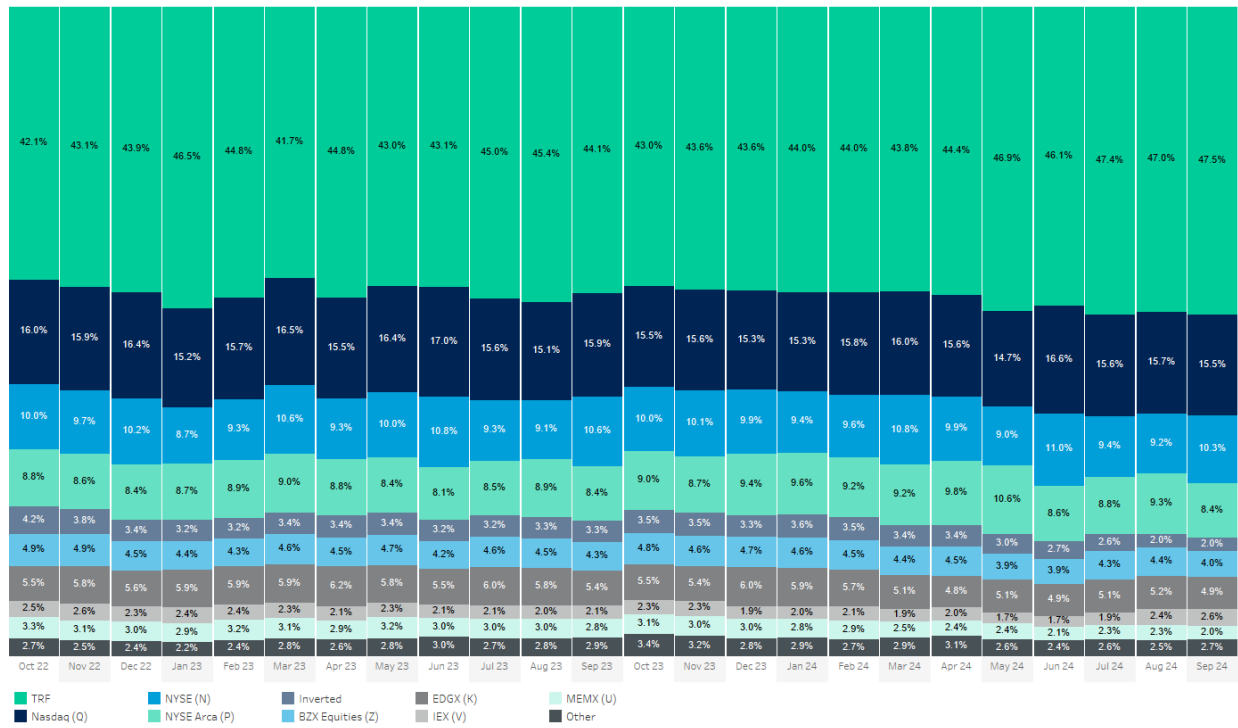
<https://www.wsj.com/finance/regulation/get-ready-to-see-stock-prices-in-half-pennies-1f18321b>

### Average Daily Market Volume



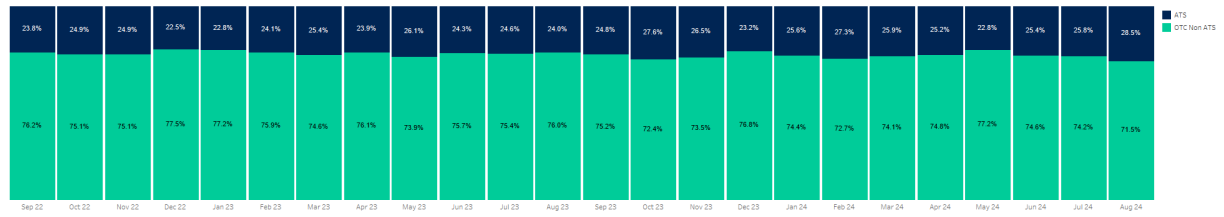
Source: Cboe Global Markets

### Venue Market Share



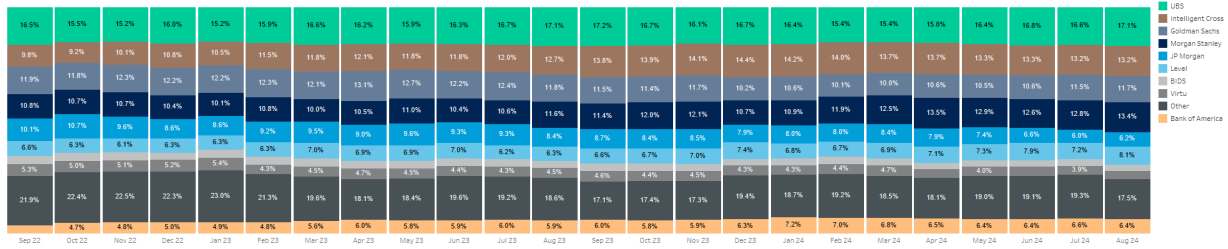
Source: Cboe Global Markets

### TRF Volume Breakdown



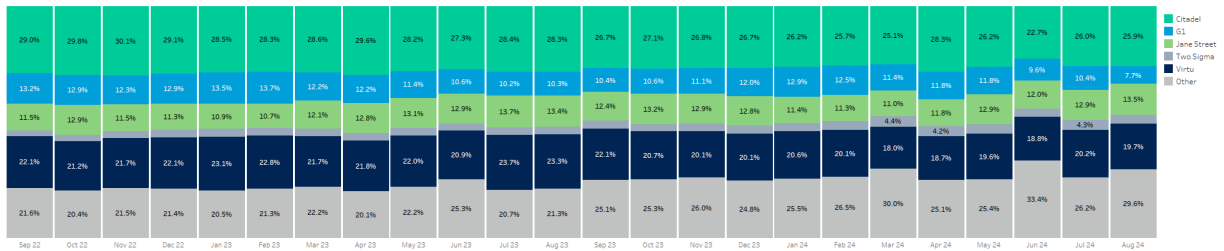
NMS Tier 1 & 2 Securities, Excludes Dealerweb  
Source: FINRA

### ATS Market Share



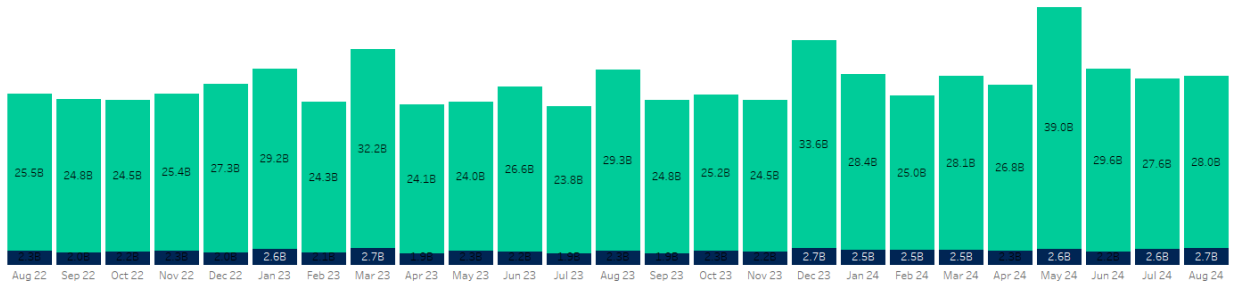
Excludes Dealerweb and OTC; Venues rolled up to firm level  
Source: FINRA

### OTC Non-ATS Market Share



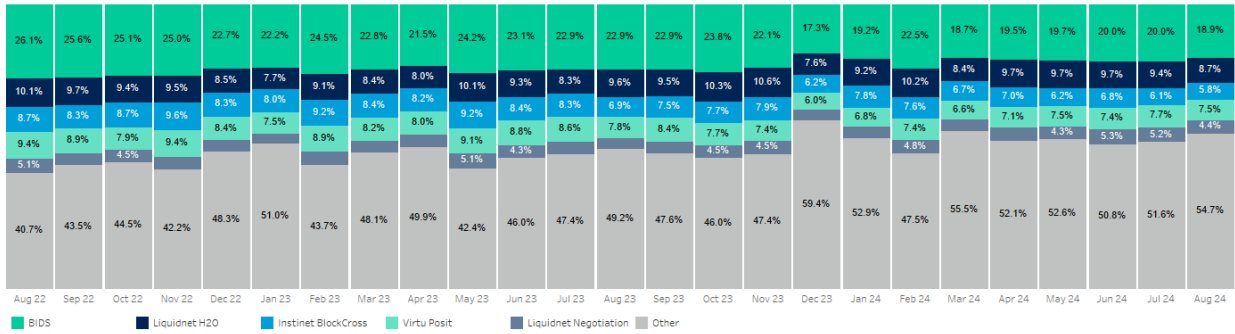
NMS Tier 1 & 2 Securities  
Source: FINRA

### TRF Block Volume Breakdown (Shares)



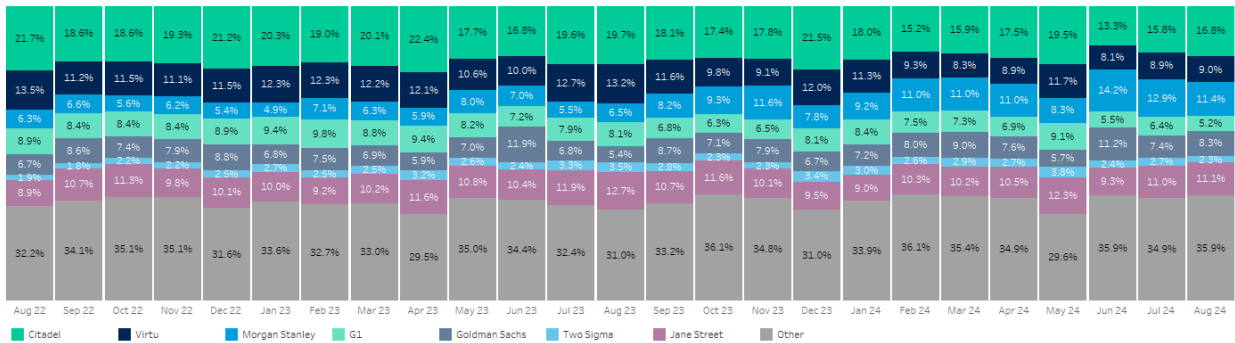
■ OTC Block Quantity ■ ATS Block Quantity

### ATS Block Volume Market Share



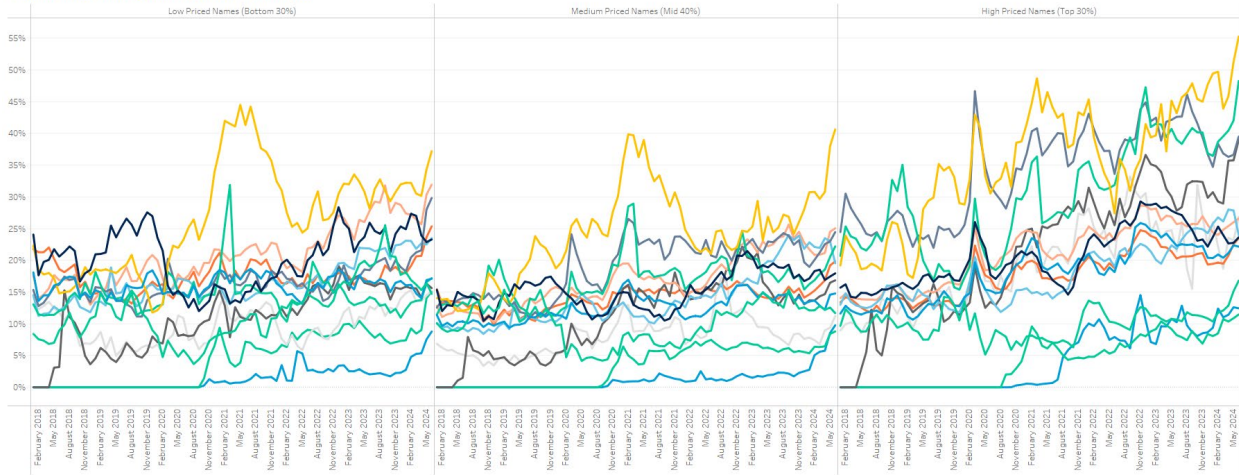
Excludes Dealerweb; Blocks defined as >10K shares  
Source: FINRA

### OTC (Non-ATS) Block Volume Market Share

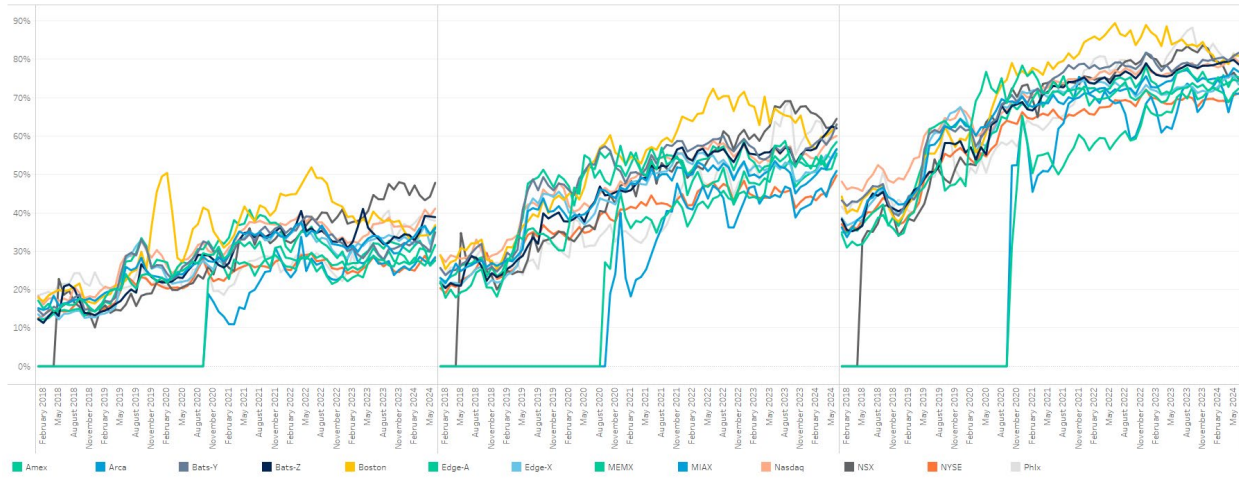


Blocks defined as >10K shares  
Source: FINRA

### Hidden Trades Proportion by Price and Venue



### Oddlot Trades Proportion by Price and Venue



Source: SEC

Amex Arca Bats-Y Bats-Z Boston Edge-A Edge-X MEMX MIAX Nasdaq NSX NYSE Phlx

### Quotesize in Shares

	4Q 22			1Q 23			2Q 23			3Q 23			4Q 23			1Q 24			2Q 24			3Q 24		
	Oct 22	Nov 22	Dec 22	Jan 23	Feb 23	Mar 23	Apr 23	May 23	Jun 23	Jul 23	Aug 23	Sep 23	Oct 23	Nov 23	Dec 23	Jan 24	Feb 24	Mar 24	Apr 24	May 24	Jun 24	Jul 24	Aug 24	Sep 24
First 30 Min																								
SP500	187	186	189	194	218	235	229	227	226	222	224	222	230	236	243	247	240	241	239	236	240	244	245	236
RUS2000	232	226	231	250	271	300	300	298	290	278	288	288	300	301	307	306	300	298	293	285	293	289	283	278
Mid Day																								
SP500	189	192	194	199	214	228	224	217	216	213	212	211	211	220	224	221	218	219	219	221	223	222	215	211
RUS2000	245	248	250	257	262	279	283	280	275	270	275	283	286	300	300	294	283	291	288	292	300	288	269	253
Last 30 Min																								
SP500	212	210	210	216	222	230	231	222	226	222	212	217	212	226	227	222	221	220	217	221	222	221	210	207
RUS2000	274	279	291	289	283	300	309	300	304	289	288	303	315	331	318	314	304	307	308	314	317	304	278	260

### Spread Bps

First 30 Min																								
SP500	12.5	12.9	12.3	11.7	11.4	10.7	9.6	10.7	10.9	10.1	10.8	10.3	12.4	11.7	10.8	11.6	11.6	11.3	11.8	11.7	13.1	14.7	16.9	14.9
RUS2000	49.2	51.1	49.8	47.8	47.1	48.9	44.7	47.7	45.4	40.3	40.8	39.4	45.6	48.1	44.8	43.6	43.9	43.3	43.2	44.0	50.7	51.8	57.9	49.9
Mid Day																								
SP500	5.4	5.5	5.1	4.9	5.0	5.1	4.4	5.0	4.6	4.2	4.8	4.6	5.4	5.0	4.4	4.2	4.4	4.3	5.0	4.7	5.2	5.6	6.4	5.9
RUS2000	19.9	21.2	18.6	18.1	18.3	19.6	18.0	19.6	17.8	16.3	17.2	17.4	20.4	20.6	19.2	18.1	18.7	18.4	19.0	19.2	20.5	21.9	23.1	21.3
Last 30 Min																								
SP500	3.4	3.2	3.2	3.1	3.2	3.2	3.0	3.3	3.0	2.8	3.1	3.1	3.3	3.1	2.9	2.8	2.9	3.0	3.2	3.1	3.4	3.5	4.1	4.1
RUS2000	14.7	15.5	14.2	13.6	14.1	14.7	14.2	15.2	13.8	13.0	13.3	13.2	14.4	14.7	13.9	13.0	13.5	13.9	14.6	14.4	15.5	16.1	17.0	16.5

### One Minute Volatility Bps

First 30 Min																								
SP500	20.4	17.7	14.4	14.5	13.9	14.9	12.9	13.8	14.8	14.6	12.7	12.3	16.4	13.7	12.0	13.5	13.7	12.1	12.6	11.0	11.8	13.3	12.8	12.8
RUS2000	23.1	21.4	16.2	16.2	17.0	17.2	14.6	15.9	16.5	16.2	15.1	14.0	17.6	17.6	16.3	16.1	15.4	14.3	12.0	11.1	10.2	13.5	12.7	11.5
Mid Day																								
SP500	8.1	6.8	5.8	5.7	5.9	6.7	4.9	5.4	4.8	4.6	4.9	4.1	6.2	4.9	4.3	4.6	4.8	4.2	4.9	3.5	3.5	4.0	4.4	4.4
RUS2000	6.7	5.4	4.1	3.8	4.5	5.5	2.9	3.6	3.3	3.0	2.8	1.5	3.2	2.4	2.8	2.9	3.6	2.3	2.4	1.5	1.0	2.4	2.7	2.7
Last 30 Min																								
SP500	8.8	7.1	6.5	6.3	6.9	7.4	5.9	6.0	5.5	5.4	5.7	5.1	6.3	5.3	5.0	5.3	5.7	5.6	6.3	5.0	5.1	5.5	6.5	6.4
RUS2000	7.2	6.8	5.7	5.4	6.9	7.9	5.4	5.9	5.2	4.9	5.0	3.8	4.5	4.5	5.6	5.0	5.8	5.9	5.8	5.0	4.3	6.5	7.1	7.2

### Percent ADV by Time of Day

Open																								
SP500	0.9%	0.9%	1.1%	0.9%	1.0%	0.9%	1.1%	1.0%	1.0%	1.0%	0.9%	0.9%	0.9%	0.9%	0.9%	1.0%	1.0%	0.9%	1.0%	1.0%	1.0%	1.0%	1.0%	0.8%
RUS2000	0.7%	0.7%	0.7%	0.7%	0.7%	0.7%	0.8%	0.7%	0.6%	0.7%	0.7%	0.6%	0.6%	0.7%	0.7%	0.9%	0.8%	0.8%	0.7%	0.8%	0.8%	0.8%	0.8%	0.6%
First 30 Min																								
SP500	9.0%	9.2%	8.6%	8.7%	8.6%	8.5%	8.7%	8.8%	8.7%	9.1%	8.4%	8.1%	8.1%	8.5%	8.0%	8.3%	8.6%	7.9%	7.9%	8.1%	7.7%	7.8%	7.8%	8.1%
RUS2000	7.6%	7.5%	7.2%	7.5%	7.5%	7.2%	7.3%	7.5%	7.3%	7.5%	7.3%	6.9%	6.4%	7.0%	6.9%	7.7%	7.5%	7.4%	6.6%	6.7%	6.4%	7.0%	6.5%	6.2%
Last 30 Min																								
SP500	18.8%	18.7%	19.0%	19.3%	19.3%	18.7%	19.4%	18.9%	18.8%	19.2%	20.3%	20.1%	19.5%	19.1%	19.2%	19.1%	19.0%	19.2%	19.8%	20.2%	19.7%	19.7%	20.1%	19.6%
RUS2000	20.0%	21.0%	20.0%	20.3%	20.6%	19.9%	20.4%	19.9%	20.1%	20.3%	20.8%	21.3%	20.9%	20.6%	20.1%	19.6%	20.3%	20.0%	20.7%	21.0%	21.3%	20.9%	21.3%	21.9%
Close																								
SP500	11.9%	11.6%	14.7%	12.9%	12.2%	13.4%	13.6%	12.9%	14.1%	13.4%	13.8%	16.3%	13.7%	14.7%	16.2%	15.3%	14.2%	16.3%	15.1%	15.7%	17.0%	15.5%	17.1%	17.9%
RUS2000	11.6%	10.4%	11.9%	10.7%	11.0%	11.4%	11.8%	11.0%	11.7%	11.6%	11.7%	14.5%	14.5%	13.3%	14.2%	13.8%	13.8%	12.7%	14.9%	14.0%	13.8%	14.3%	13.8%	13.3%

Median used for all metrics; One minute volatility is calculated using the difference between the high and low price within a one minute time bin, divided by that bin's VWAP  
Source: Virtu Financial



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**APAC** +852.2846.3592 | **CAN** +1.416.874.0800 | **EMEA** +44.20.7670.4066 | **US**  
+1.646.682.6199

[info@virtu.com](mailto:info@virtu.com) | [www.virtu.com](http://www.virtu.com)

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