

Jul 2023

US Market Structure Monthly

MICROSTRUCTURE OBSERVATIONS

- The average daily share volume in US equities was 10.4B shares in July 2023, down 3% month over month (MoM) and down 8% year over year (YoY).
- Trade reporting facility (TRF) share volume as a percent of total consolidated share volume was 45.0% in July 2023, compared to 43.1% the prior month.
- Spreads in S&P 500 and Russell 2000 stocks narrowed to their lowest levels this year in July 2023. Excluding the first and last half hour of the trading day, the median S&P 500 stock's spread narrowed 9% to 4.2bps in July 2023 from 4.6bps in June 2023, while the median Russell 2000 stock's spread narrowed 8% to 16.3bps in July 2023 from 17.8bps the prior month.

US MARKET STRUCTURE NEWS

SEC Adopts New Rules for Money Market Funds

The Securities and Exchange Commission (SEC) in mid-June announced amendments to rules that govern money market funds that are aimed at protecting fund shareholders from dilution in times of heightened redemptions. Specifically, the new rules will require institutional prime and tax-exempt money market funds to impose a liquidity fee when a fund experiences a daily net redemption that exceeds 5% of total net assets. Additionally, non-government money market funds will be required to impose a discretionary liquidity fee if the fund's board determines that a fee is in the best interest of the fund. The final rule though did not include the imposition of swing pricing, a mechanism where funds adjust the net asset value of a fund under certain conditions. The swing pricing rule in the original proposal was strongly criticized by many large asset managers, with these firms citing that swing pricing would make money market funds less attractive, as well as being operationally challenging to implement.

<https://www.sec.gov/news/press-release/2023-129>

<https://www.reuters.com/markets/us/us-sec-finalize-money-market-fund-reforms-aimed-boosting-resilience-2023-07-12/>

SEC Adopts Rules on Cybersecurity Disclosures

At the end of June, the SEC voted to adopt new rules requiring public companies to disclose material cybersecurity incidents as well as disclose on an annual basis their cybersecurity risk management and governance process. The new rules will require companies to disclose material cybersecurity incidents and the material aspects of the incident's nature within four business days via a new item in Form 8-K. The only exception to the four-day disclosure window is if the U.S. Attorney General determines that the disclosure would pose a substantial risk. Companies generally opposed the new rules during the comment period, citing that the four-day window is too short, and that the premature release of sensitive information could harm companies. Virtu opposed this proposal in its comment letter.

<https://www.sec.gov/news/press-release/2023-139>

<https://www.cnbc.com/2023/07/26/sec-wants-to-know-whats-being-done-to-fight-cybersecurity-breaches.html>

UBS to Close Credit Suisse Crossfinder ATS

UBS Group will cease operations of Credit Suisse's Crossfinder ATS on August 31, 2023. A notice of cessation of operations was filed with the SEC on August 1st.

<https://www.bloomberg.com/news/articles/2023-08-02/ubs-to-close-credit-suisse-dark-pool-crossfinder-in-latest-cuts#xj4y7vzkg>

<https://www.sec.gov/cgi-bin/browse-edgar?action=getcompany&filenum=013-00106&owner=exclude&count=40>

IEX to Begin Offering Rebates

In July 2023, IEX made a fee filing describing its plans to rebate market participants \$0.0004 (4mils) per executed share for displayed orders that add liquidity. In conjunction with the new rebate, IEX will also increase its access fee to \$0.001 (10 mils) per share for orders that remove displayed liquidity. Non-displayed liquidity adding orders will continue to pay a fee.

<https://www.wsj.com/livecoverage/fed-meeting-interest-rate-decision-today-july-2023/card/-flash-boys-exchange-iex-has-criticized-rebates-now-it-s-adopting-them--f1OqAkiTZCdf2Yixrxt8>

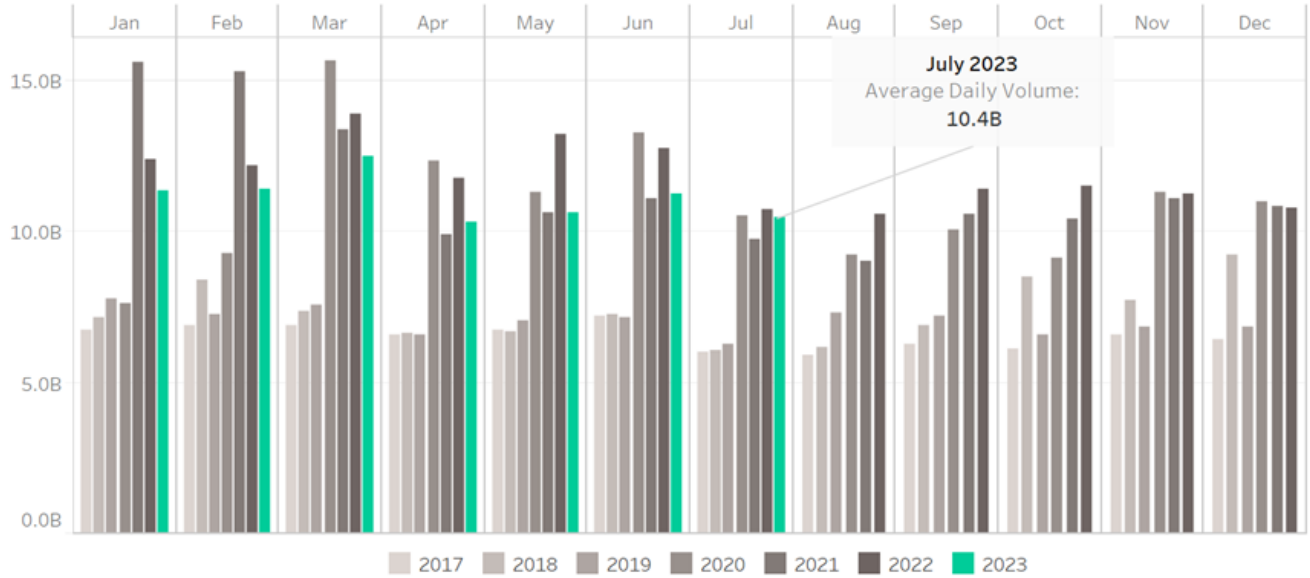
<https://www.iexexchange.io/resources/trading/fee-schedule>

Nasdaq Halts Plan to Launch Crypto Custodian Business

Nasdaq announced that it has halted plans to launch a cryptocurrency custody service, citing shifting business and regulatory environment in the U.S. as the reason. Nasdaq had originally planned to custody client holdings in bitcoin and ether by the end of June 2023.

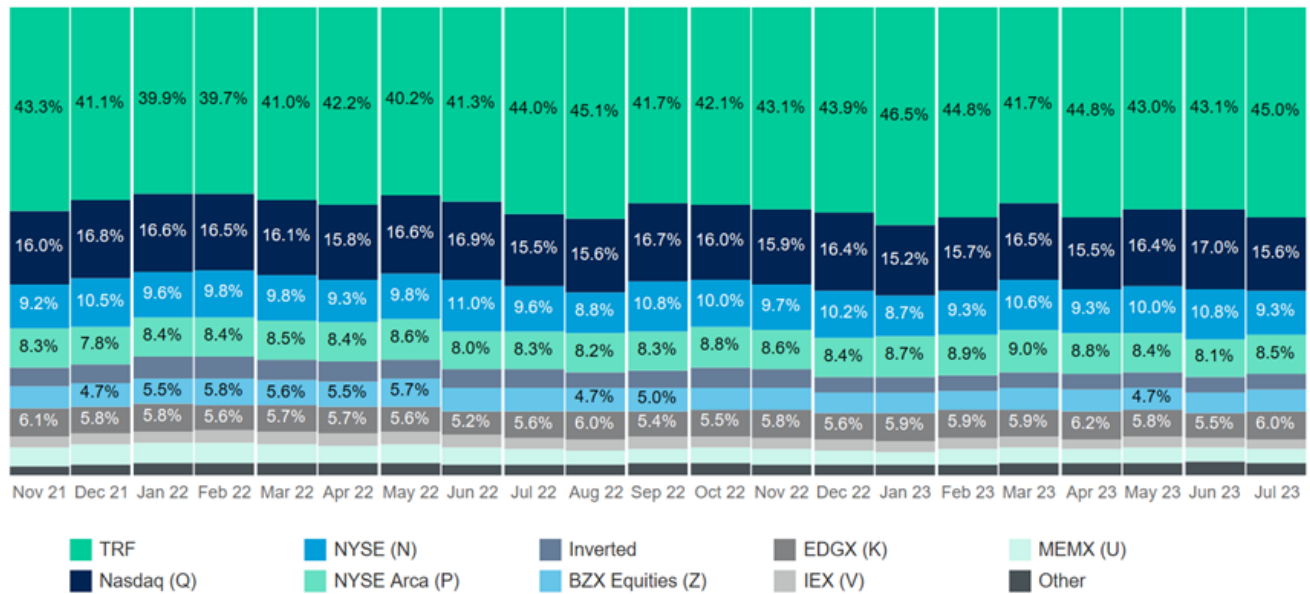
<https://www.ft.com/content/e7c3fa57-f12d-43f1-94e4-3dcc535fbc06>

Average Daily Market Volume



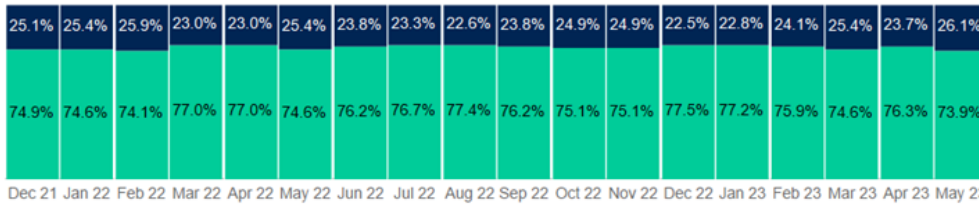
Source data: Cboe Global Markets

Venue Market Share



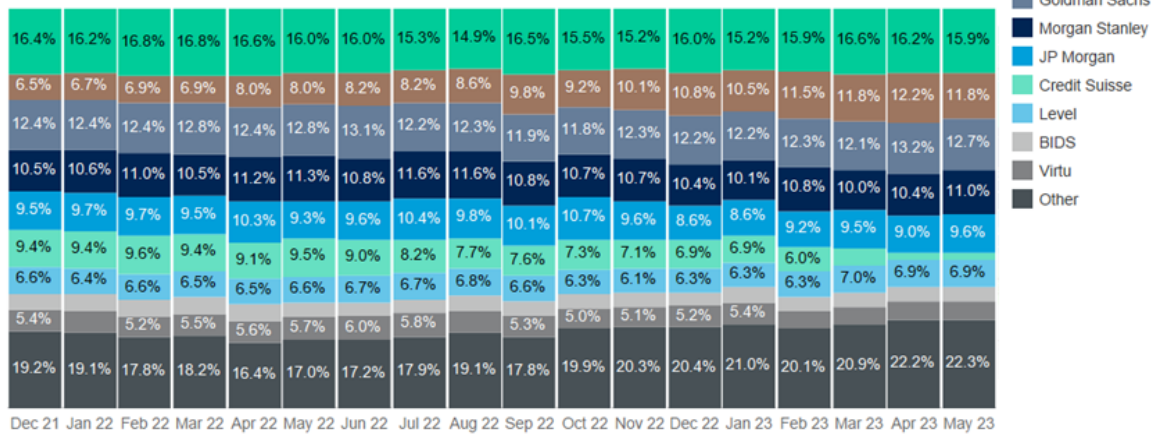
Source data: Cboe Global Markets

TRF Volume Breakdown



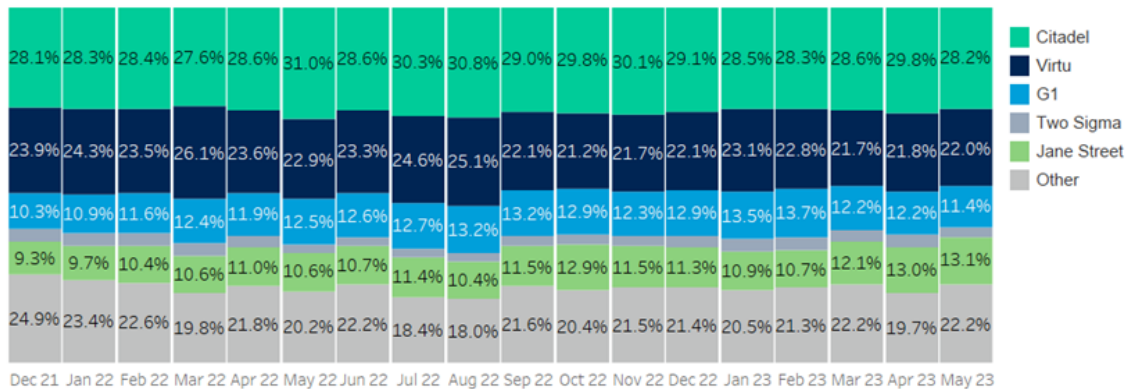
Tier1 and Tier2 only; Excludes Dealerweb, Source data: FINRA

ATS Market Share



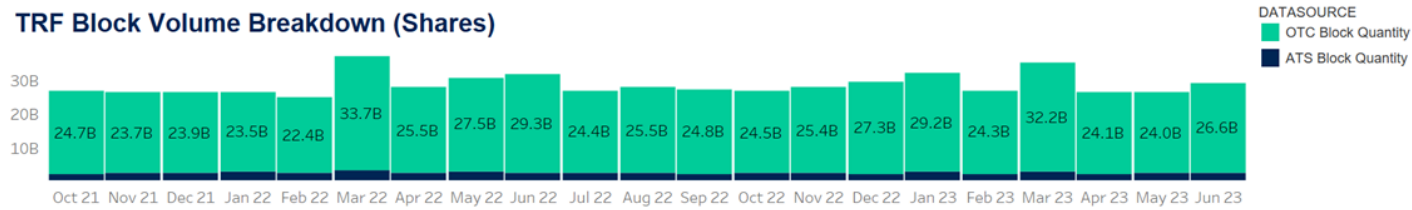
Excludes Dealerweb, OTC; Venues rolled up to firm level; Source data: FINRA

OTC Non-ATS Market Share

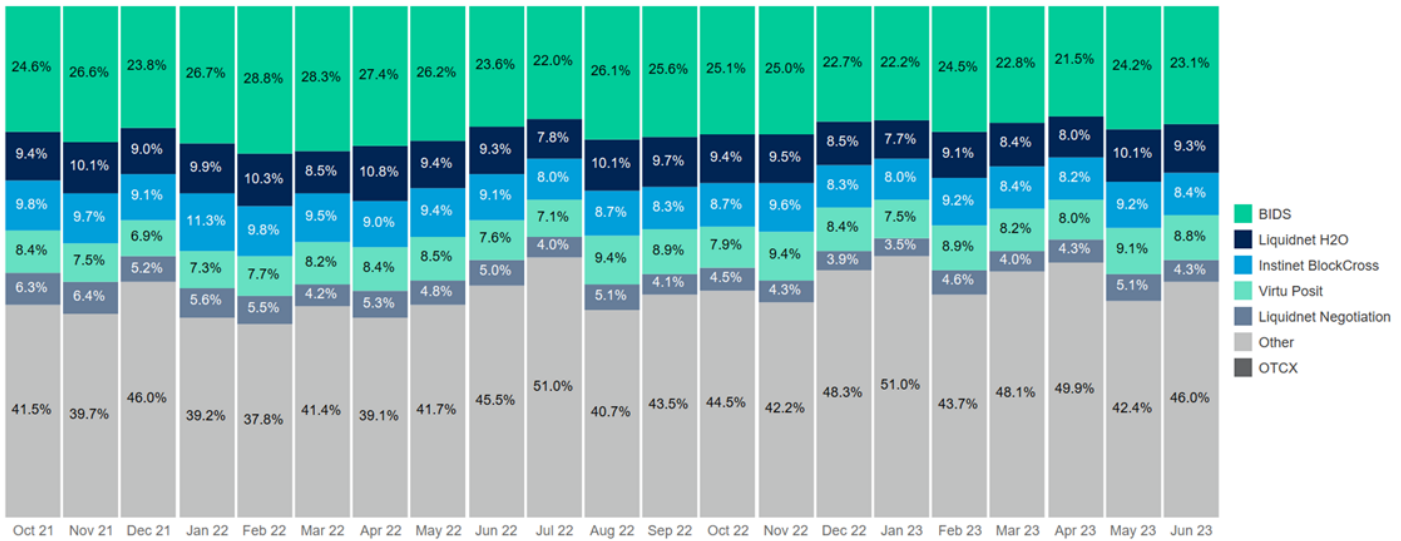


Source: FINRA, NMS Tier 1 & 2 Securities

TRF Block Volume Breakdown (Shares)

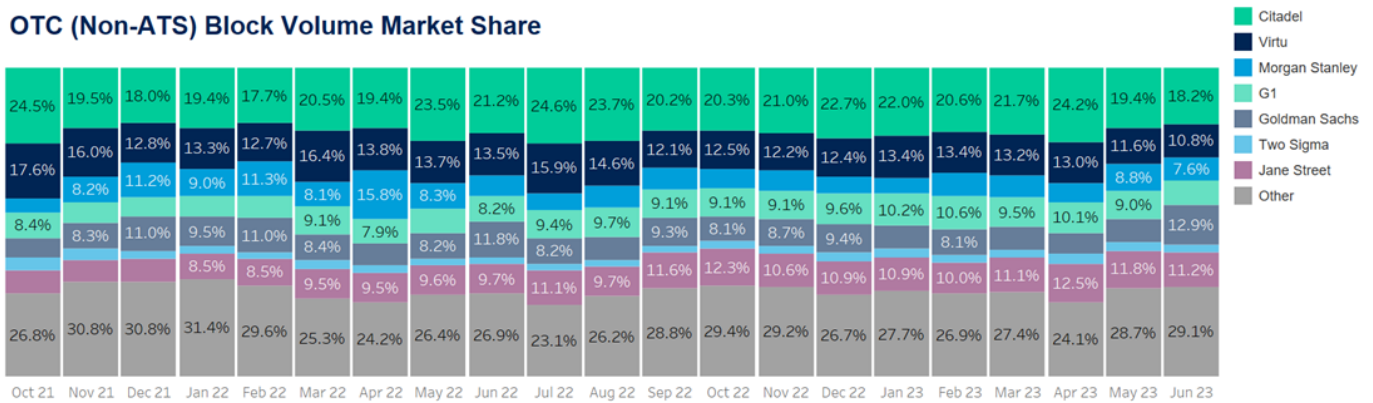


ATS Block Volume Market Share



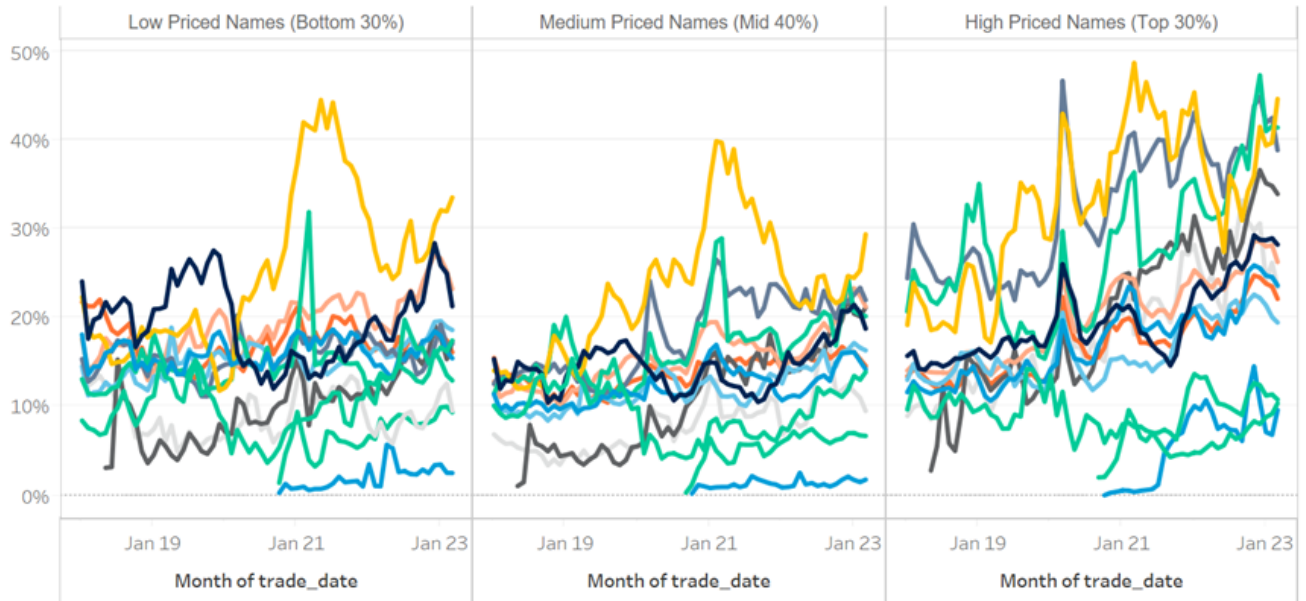
Excludes Dealerweb; Blocks defined as >10K shares; Source data: FINRA

OTC (Non-ATS) Block Volume Market Share

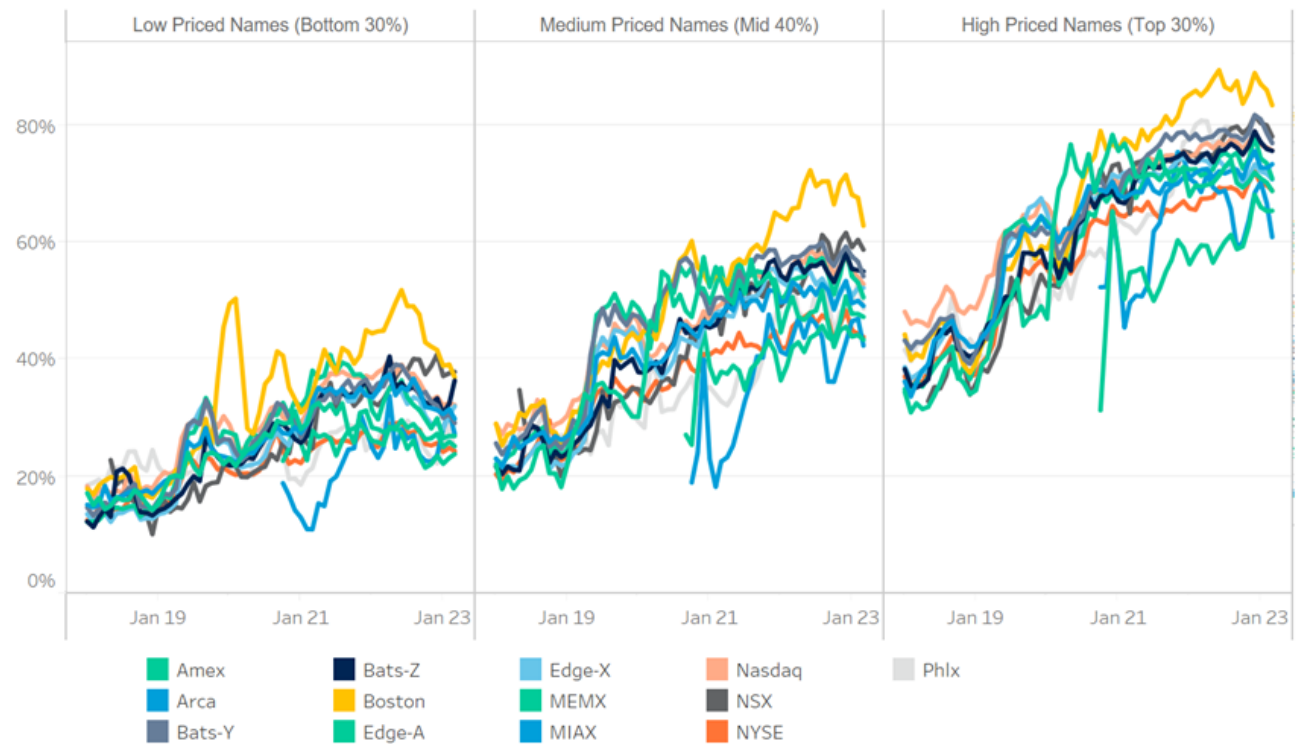


Blocks defined as >10K shares; Source data: FINRA

Hidden Trades Proportion by Price and Venue



Oddlot Trades Proportion by Price and Venue



Source data: SEC

Quotesize in Shares

	2Q 22			3Q 22			4Q 22			1Q 23			2Q 23			3Q 23	
	Apr 22	May 22	Jun 22	Jul 22	Aug 22	Sep 22	Oct 22	Nov 22	Dec 22	Jan 23	Feb 23	Mar 23	Apr 23	May ..	Jun 23	Jul 23	
First 30 Min	SP500	180	196	195	188	185	183	187	186	189	194	218	235	229	227	226	222
	RUS2000	236	250	243	232	228	225	232	226	231	250	271	300	300	298	290	278
Mid Day	SP500	176	186	190	181	179	184	189	192	194	199	214	228	224	217	216	213
	RUS2000	232	234	246	237	234	235	245	248	250	257	262	279	283	280	275	270
Last 30 Min	SP500	190	190	198	197	201	201	212	210	210	216	222	230	231	222	226	222
	RUS2000	255	259	276	267	265	263	274	279	291	289	283	300	309	300	304	289

Spread Bps

First 30 Min	SP500	13.4	15.1	13.5	13.2	11.8	10.7	12.5	12.9	12.3	11.7	11.4	10.7	9.6	10.7	10.9	10.1
	RUS2000	51.3	57.0	50.4	48.1	45.3	43.2	49.2	51.1	49.8	47.8	47.1	48.9	44.7	47.7	45.4	40.3
Mid Day	SP500	5.5	6.5	5.7	5.2	4.7	4.9	5.4	5.5	5.1	4.9	5.0	5.1	4.4	5.0	4.6	4.2
	RUS2000	22.5	25.0	21.6	20.4	19.1	18.7	19.9	21.2	18.6	18.1	18.3	19.6	18.0	19.6	17.8	16.3
Last 30 Min	SP500	3.6	3.9	3.5	3.2	2.9	3.2	3.4	3.2	3.2	3.1	3.2	3.2	3.0	3.3	3.0	2.8
	RUS2000	16.6	18.1	16.2	15.4	14.1	14.1	14.7	15.5	14.2	13.6	14.1	14.7	14.2	15.2	13.8	13.0

One Minute Volatility Bps

First 30 Min	SP500	20.2	24.0	21.4	20.7	15.6	17.5	20.4	17.7	14.4	14.5	13.9	14.9	12.9	13.8	14.8	14.6
	RUS2000	21.7	26.9	24.1	26.6	21.0	20.8	23.1	21.4	16.2	16.2	17.0	17.2	14.6	15.9	16.5	16.2
Mid Day	SP500	8.2	9.9	8.3	7.5	6.2	8.6	8.1	6.8	5.8	5.7	5.9	6.7	4.9	5.4	4.8	4.6
	RUS2000	6.8	9.0	6.8	6.1	5.5	7.4	6.7	5.4	4.1	3.8	4.5	5.5	2.9	3.6	3.3	3.0
Last 30 Min	SP500	9.1	10.8	9.0	7.9	6.2	9.3	8.8	7.1	6.5	6.3	6.9	7.4	5.9	6.0	5.5	5.4
	RUS2000	8.8	9.8	8.1	6.9	6.2	8.9	7.2	6.8	5.7	5.4	6.9	7.9	5.4	5.9	5.2	4.9

Percent ADV by Time of Day

Open	SP500	1.1%	1.0%	1.0%	1.1%	1.0%	0.9%	0.9%	0.9%	1.1%	0.9%	1.0%	0.9%	1.1%	1.0%	1.0%	1.0%
	RUS2000	0.7%	0.7%	0.7%	0.7%	0.8%	0.7%	0.7%	0.7%	0.7%	0.7%	0.7%	0.7%	0.8%	0.7%	0.6%	0.7%
First 30 Min	SP500	9.3%	9.3%	9.4%	9.8%	9.6%	9.0%	9.0%	9.2%	8.6%	8.7%	8.6%	8.5%	8.7%	8.8%	8.7%	9.1%
	RUS2000	7.6%	8.2%	7.6%	8.1%	8.2%	7.4%	7.6%	7.5%	7.2%	7.5%	7.5%	7.2%	7.3%	7.5%	7.3%	7.5%
Last 30 Min	SP500	19.0%	18.6%	19.2%	18.6%	18.8%	18.7%	18.8%	18.7%	19.0%	19.3%	19.3%	18.7%	19.4%	18.9%	18.8%	19.2%
	RUS2000	19.6%	19.7%	19.8%	20.3%	20.4%	20.1%	20.0%	21.0%	20.0%	20.3%	20.6%	19.9%	20.4%	19.9%	20.1%	20.3%
Close	SP500	11.8%	10.9%	13.1%	12.5%	11.9%	12.3%	11.9%	11.6%	14.7%	12.9%	12.2%	13.4%	13.6%	12.9%	14.1%	13.4%
	RUS2000	10.6%	9.1%	10.8%	11.9%	10.4%	11.4%	11.6%	10.4%	11.9%	10.7%	11.0%	11.4%	11.8%	11.0%	11.7%	11.6%

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 data: Virtu Financial

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