

February 2023

US Market Structure Monthly



US Market Microstructure Observations

- The average daily share volume in US equities was 11.3B shares in February 2023, which was flat month over month (MoM) but down 6% year over year (YoY).
- Trade reporting facility (TRF) share volume as a percent of total consolidated share volume decreased 1.7% MoM to 44.8% in February 2023.
- Spreads in S&P 500 and Russell 2000 stocks widened slightly in February 2023 compared to the prior month. Excluding the first and last half hour of the day, the median S&P 500 stock's spread increased 2% to 5.0bps in February, from 4.9bps in January 2023, while the median Russell 2000 stock's spread widened 1% to 18.3bps in February 2023, from 18.1bps the prior month.

Market Structure News

SEC Finalizes Rules on T+1 Settlement

The Securities and Exchange Commission (SEC) announced adopted rule changes to shorten the standard settlement cycle for most broker dealer transactions in securities from two business days after the trade to one business day after the trade (T+1). Moving to T+1 settlement will become effective on May 28, 2024. Additionally, the final rule also includes requirements for broker dealers to establish policies and procedures to ensure the completion of allocations, confirmations, and affirmations as soon as technically possible, but no later than the end of trade date.

<https://www.sec.gov/news/press-release/2023-29>

New SEC Rules on Corporate Insider Trading

On April 1, 2023, new SEC rules will go into effect that will require increased disclosure and certain restrictions on corporate insiders buying and selling their company's shares. The rules will apply to 10b5-1 plans, which allow corporate insiders to create buying and selling schedules for their company's shares sometime in the future. The new rules will include requiring insiders to wait 90 days after starting or modifying a 10b5-1 plan, disclosure of such plans in a company's quarterly and annual reports, and disclosures around using a 10b5-1 plan when insiders report their trades.

<https://www.wsj.com/articles/new-sec-rules-target-corporate-insider-trading-4f1c64e8>

GOP Lawmakers Question SEC's Authority to Pursue Climate Disclosure Proposal

House Financial Services Committee Chair Patrick McHenry (R-NC), Senate Banking Committee Ranking Member Tim Scott (R-SC), and Representative Bill Huizenga (R-MI) submitted a letter to the SEC criticizing the SEC's proposed climate disclosure rules for companies, citing that the proposal is statutory overreach and outside the scope of the SEC's mission. The letter requested that the SEC provide information explaining the Commission's approach, economic analysis, and legal justification for its climate disclosure proposal. In March 2022, the SEC released a rule proposal requiring companies to make certain climate related disclosures on their registration statement and periodic reports.

<https://www.lexology.com/library/detail.aspx?g=7c99a43b-5522-402b-a2c4-769c1095ad23>

<https://www.sec.gov/news/press-release/2022-46>

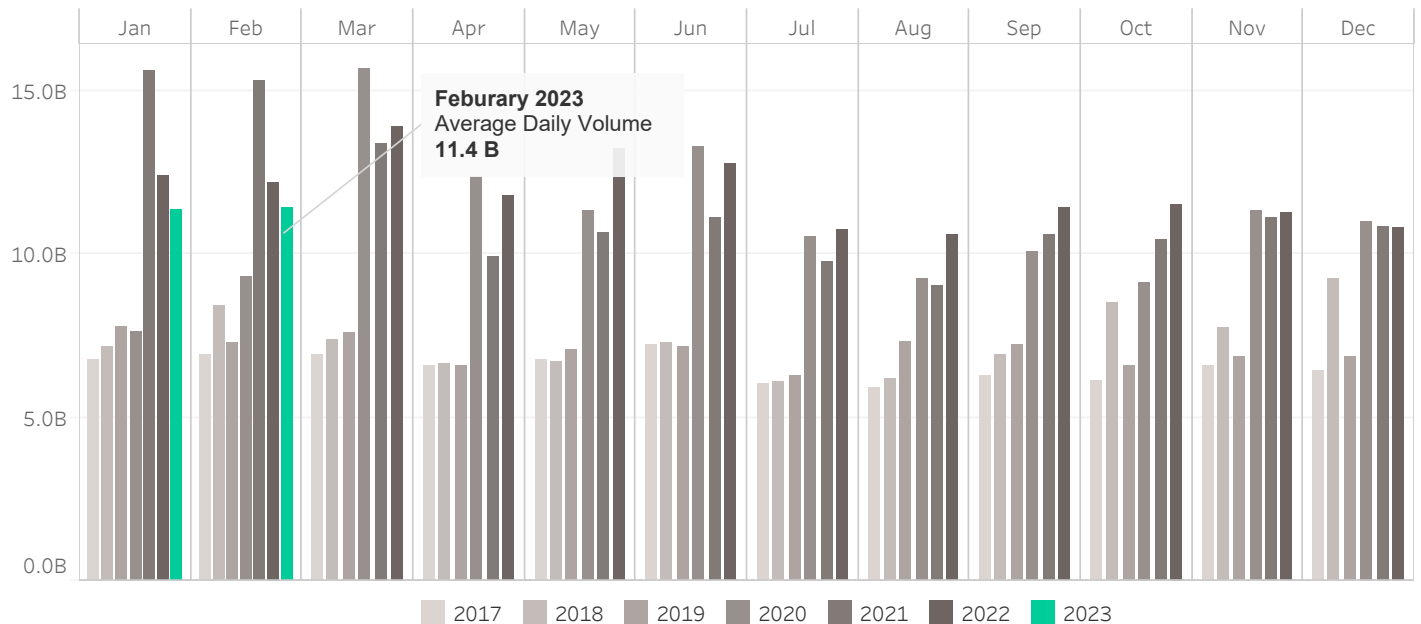
SEC Proposes Rule to Raise Requirements on Crypto Custody

The SEC adopted a rule proposal that would expand the types of assets, including cryptocurrencies, that investment advisors, including hedge fund and pensions funds, are required to hold using qualified custodians. The proposal also creates new requirements for qualified custodians, and notes that certain features of cryptocurrencies could make them difficult to safeguard in compliance with the new rules. While qualified custodians in traditional assets have included broker dealers, banks, and trust companies, many crypto trading platforms offer custody services in crypto assets, which the SEC has expressed concern that these services might not keep customer assets safe in the event of a bankruptcy.

<https://www.wsj.com/articles/sec-considers-rules-that-could-threaten-crypto-custody-services-89ba4cd5>

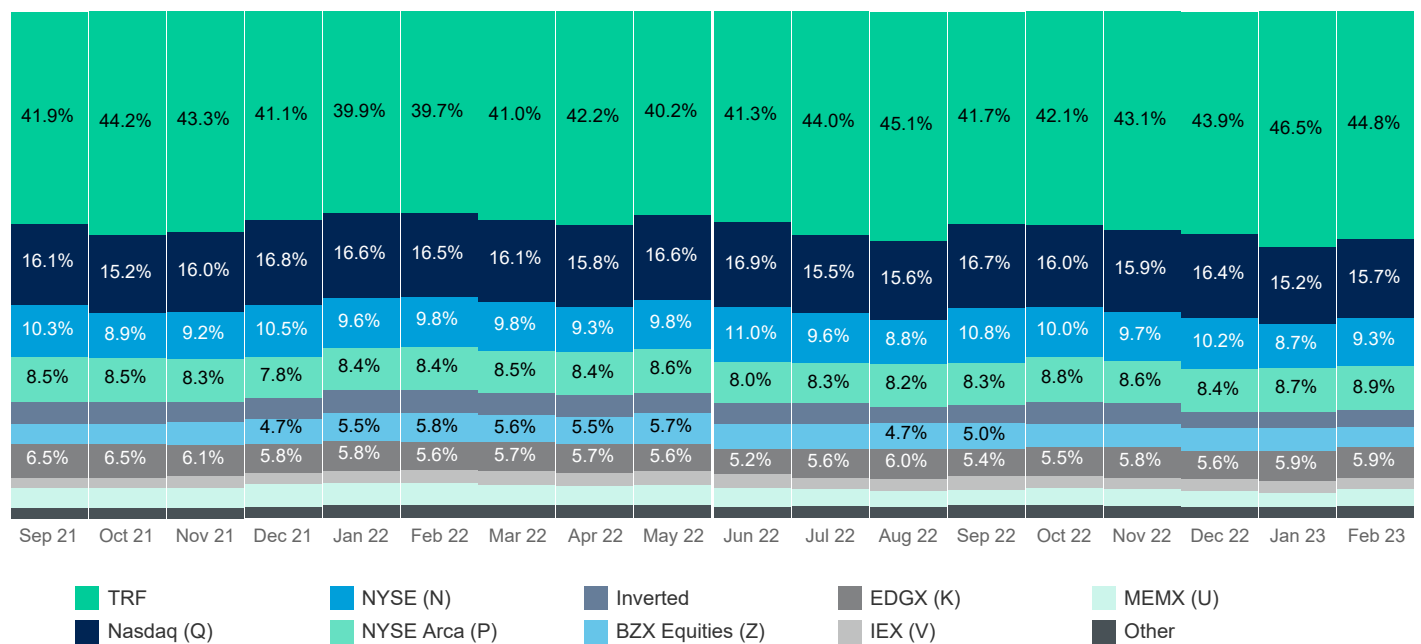


Average Daily Market Volume



Source data: Cboe Global Markets

Venue Market Share

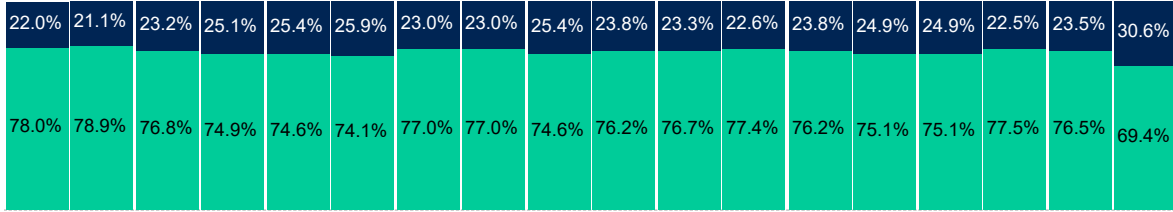


Source data: Cboe Global Markets



TRF Volume Breakdown

■ ATS
■ OTC Non ATS

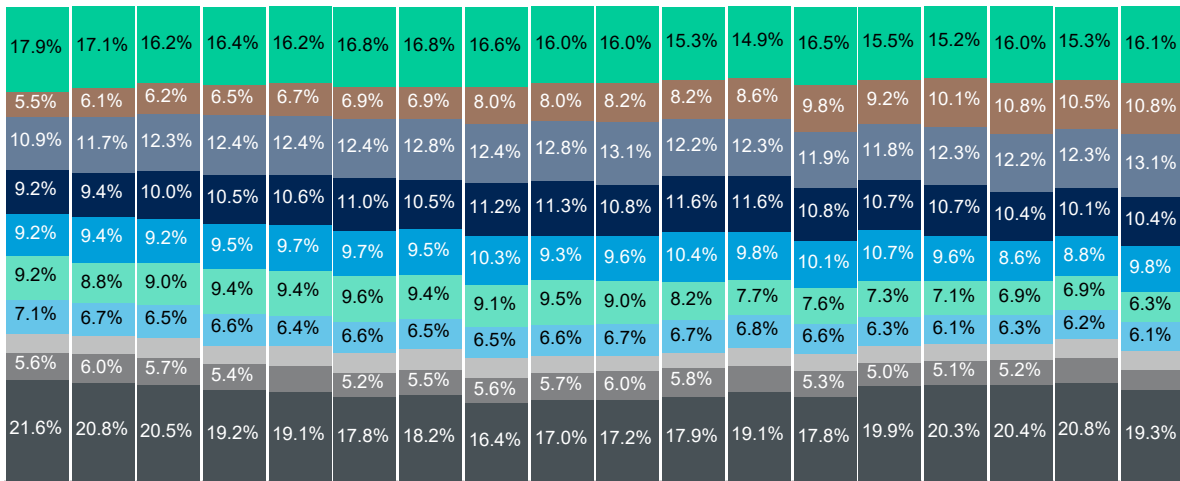


Sep 21 Oct 21 Nov 21 Dec 21 Jan 22 Feb 22 Mar 22 Apr 22 May 22 Jun 22 Jul 22 Aug 22 Sep 22 Oct 22 Nov 22 Dec 22 Jan 23 Feb 23

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

ATS Market Share

■ UBS
■ Intelligent Cross
■ Goldman Sachs
■ Morgan Stanley
■ JP Morgan
■ Credit Suisse
■ Level
■ BIDS
■ Virtu
■ Other

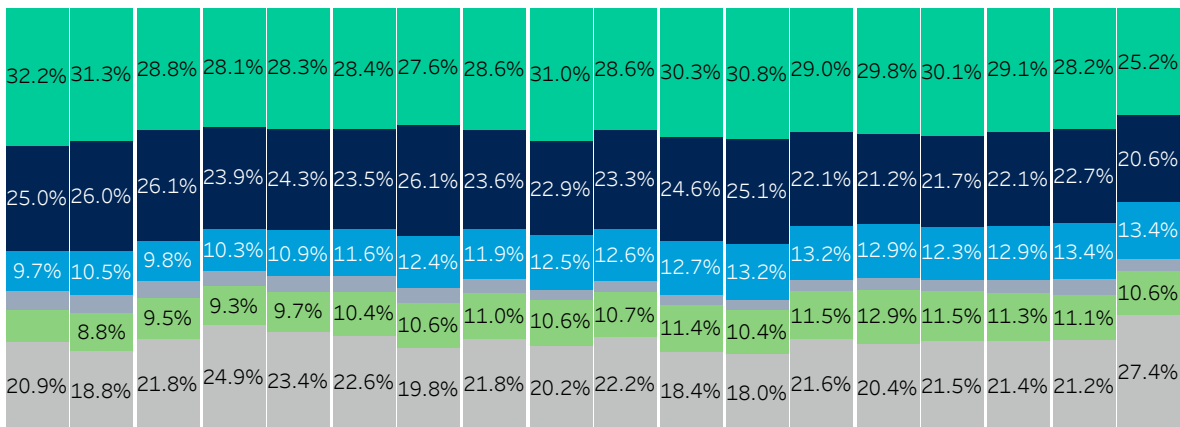


Sep 21 Oct 21 Nov 21 Dec 21 Jan 22 Feb 22 Mar 22 Apr 22 May 22 Jun 22 Jul 22 Aug 22 Sep 22 Oct 22 Nov 22 Dec 22 Jan 23 Feb 23

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

OTC Non-ATS Market Share

■ Citadel
■ Virtu
■ G1
■ Two Sigma
■ Jane Street
■ Other

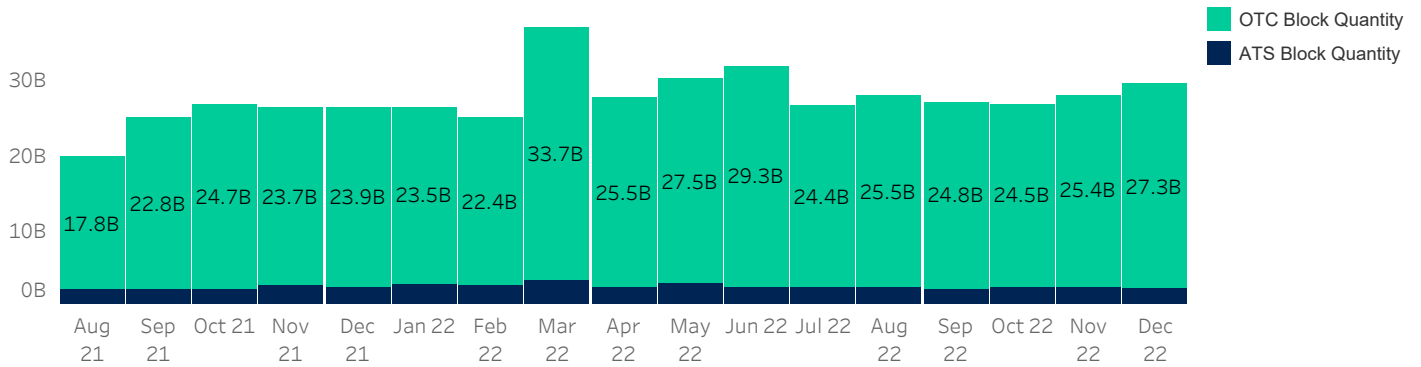


Sep 21 Oct 21 Nov 21 Dec 21 Jan 22 Feb 22 Mar 22 Apr 22 May 22 Jun 22 Jul 22 Aug 22 Sep 22 Oct 22 Nov 22 Dec 22 Jan 23 Feb 23

Source: FINRA, NMS Tier 1 & 2 Securities

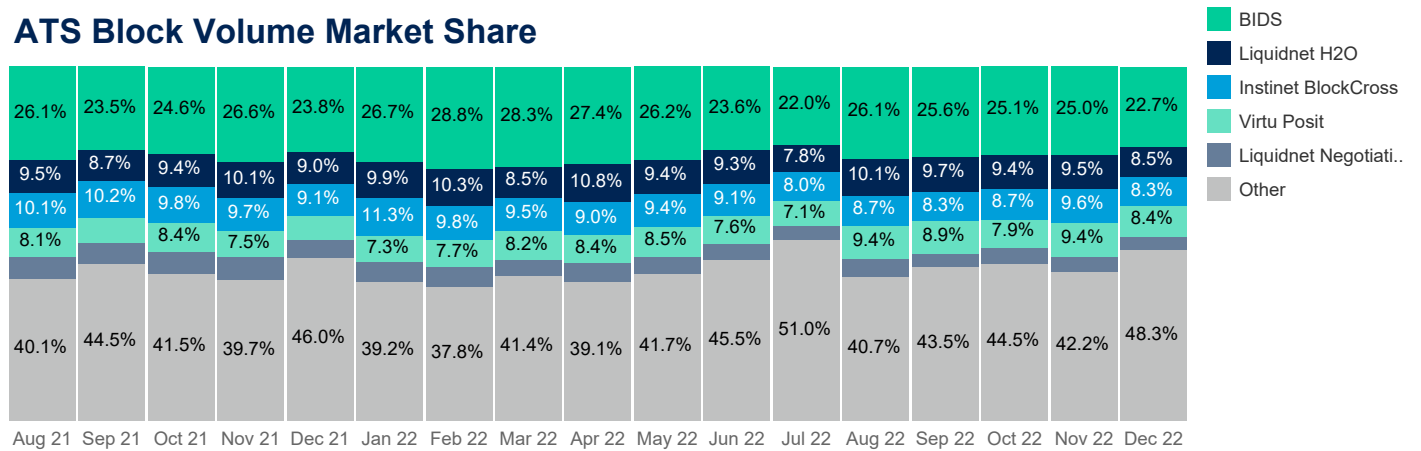


TRF Block Volume Breakdown (Shares)



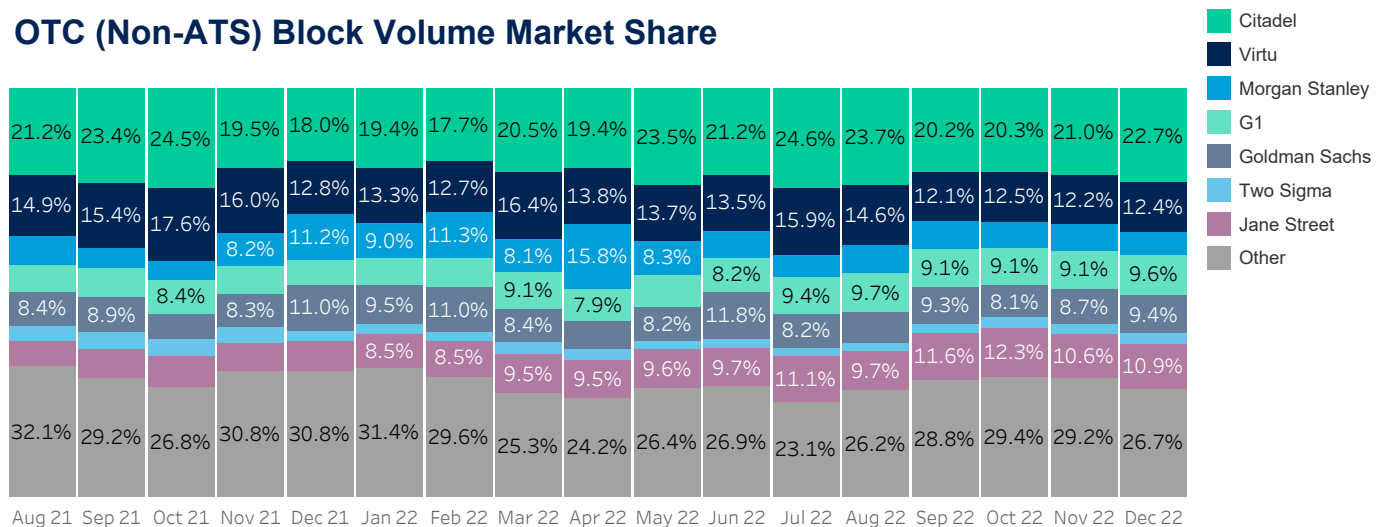
Source: FINRA

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



Quotesize in Shares

		1Q 22		2Q 22			3Q 22			4Q 22			1Q 23	
		Feb 22	Mar 22	Apr 22	May 22	Jun 22	Jul 22	Aug 22	Sep 22	Oct 22	Nov 22	Dec 22	Jan 23	Feb 23
First 30 Min	SP500	187	186	180	196	195	188	185	183	187	186	189	194	218
	RUS2000	225	230	236	250	243	232	228	225	232	226	231	250	271
Mid Day	SP500	193	185	176	186	190	181	179	184	189	192	194	199	214
	RUS2000	230	234	232	234	246	237	234	235	245	248	250	257	262
Last 30 Min	SP500	199	195	190	190	198	197	201	201	212	210	210	216	222
	RUS2000	246	254	255	259	276	267	265	263	274	279	291	289	283

Spread Bps

First 30 Min	SP500	13.6	13.9	13.4	15.1	13.5	13.2	11.8	10.7	12.5	12.9	12.3	11.7	11.4
	RUS2000	56.9	53.8	51.3	57.0	50.4	48.1	45.3	43.2	49.2	51.1	49.8	47.8	47.1
Mid Day	SP500	5.9	6.1	5.5	6.5	5.7	5.2	4.7	4.9	5.4	5.5	5.1	4.9	5.0
	RUS2000	25.0	23.2	22.5	25.0	21.6	20.4	19.1	18.7	19.9	21.2	18.6	18.1	18.3
Last 30 Min	SP500	4.1	3.9	3.6	3.9	3.5	3.2	2.9	3.2	3.4	3.2	3.2	3.1	3.2
	RUS2000	19.1	17.1	16.6	18.1	16.2	15.4	14.1	14.1	14.7	15.5	14.2	13.6	14.1

One Minute Volatility Bps

First 30 Min	SP500	19.6	20.0	20.2	24.0	21.4	20.7	15.6	17.5	20.4	17.7	14.4	14.5	13.9
	RUS2000	23.6	22.6	21.7	26.9	24.1	26.6	21.0	20.8	23.1	21.4	16.2	16.2	17.0
Mid Day	SP500	8.1	8.4	8.2	9.9	8.3	7.5	6.2	8.6	8.1	6.8	5.8	5.7	5.9
	RUS2000	7.7	7.1	6.8	9.0	6.8	6.1	5.5	7.4	6.7	5.4	4.1	3.8	4.5
Last 30 Min	SP500	10.1	9.0	9.1	10.8	9.0	7.9	6.2	9.3	8.8	7.1	6.5	6.3	6.9
	RUS2000	10.8	8.6	8.8	9.8	8.1	6.9	6.2	8.9	7.2	6.8	5.7	5.4	6.9

Percent ADV by Time of Day

Open	SP500	1.0%	0.9%	1.1%	1.0%	1.0%	1.1%	1.0%	0.9%	0.9%	0.9%	1.1%	0.9%	1.0%
	RUS2000	0.8%	0.8%	0.7%	0.7%	0.7%	0.7%	0.8%	0.7%	0.7%	0.7%	0.7%	0.7%	0.7%
First 30 Min	SP500	9.3%	9.1%	9.3%	9.3%	9.4%	9.8%	9.6%	9.0%	9.0%	9.2%	8.6%	8.7%	8.6%
	RUS2000	8.1%	8.0%	7.6%	8.2%	7.6%	8.1%	8.2%	7.4%	7.6%	7.5%	7.2%	7.5%	7.5%
Last 30 Min	SP500	19.1%	19.0%	19.0%	18.6%	19.2%	18.6%	18.8%	18.7%	18.8%	18.7%	19.0%	19.3%	19.3%
	RUS2000	21.0%	20.1%	19.6%	19.7%	19.8%	20.3%	20.4%	20.1%	20.0%	21.0%	20.0%	20.3%	20.6%
Close	SP500	11.1%	12.6%	11.8%	10.9%	13.1%	12.5%	11.9%	12.3%	11.9%	11.6%	14.7%	12.9%	12.2%
	RUS2000	9.7%	10.2%	10.6%	9.1%	10.8%	11.8%	10.4%	11.4%	11.6%	10.4%	11.9%	10.7%	11.0%

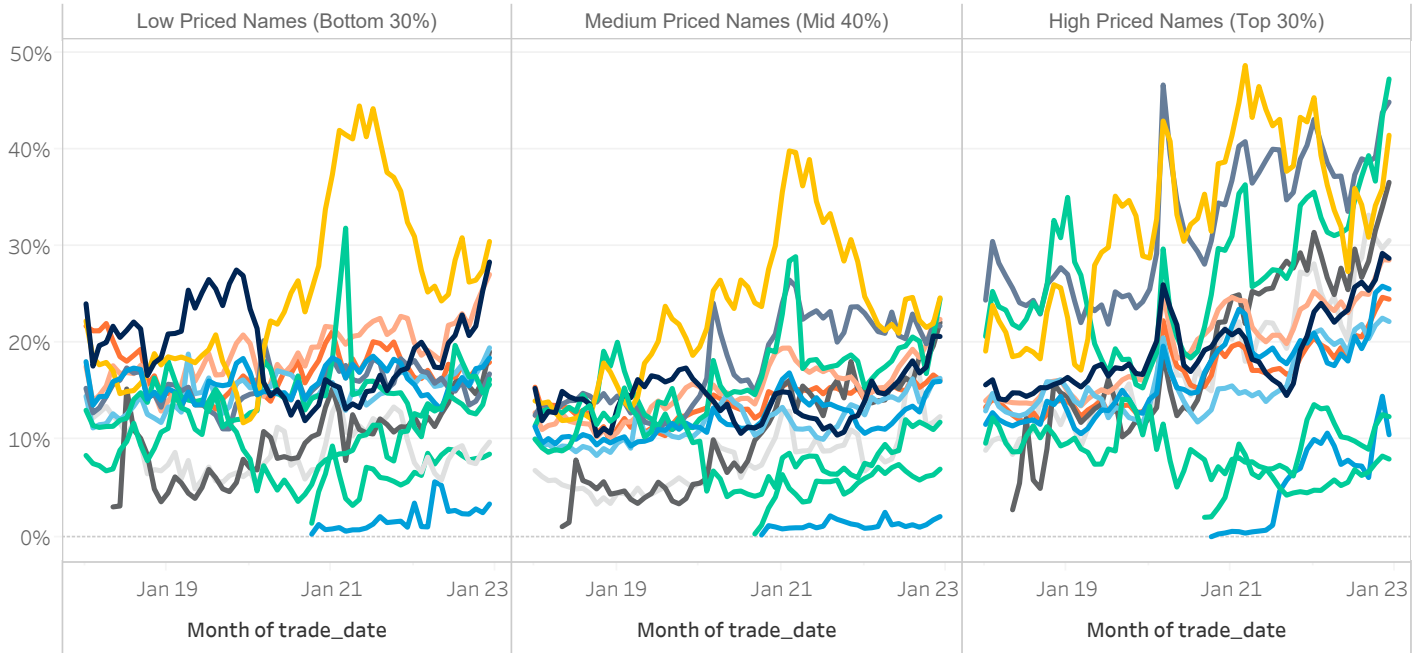
Median used for all metrics

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

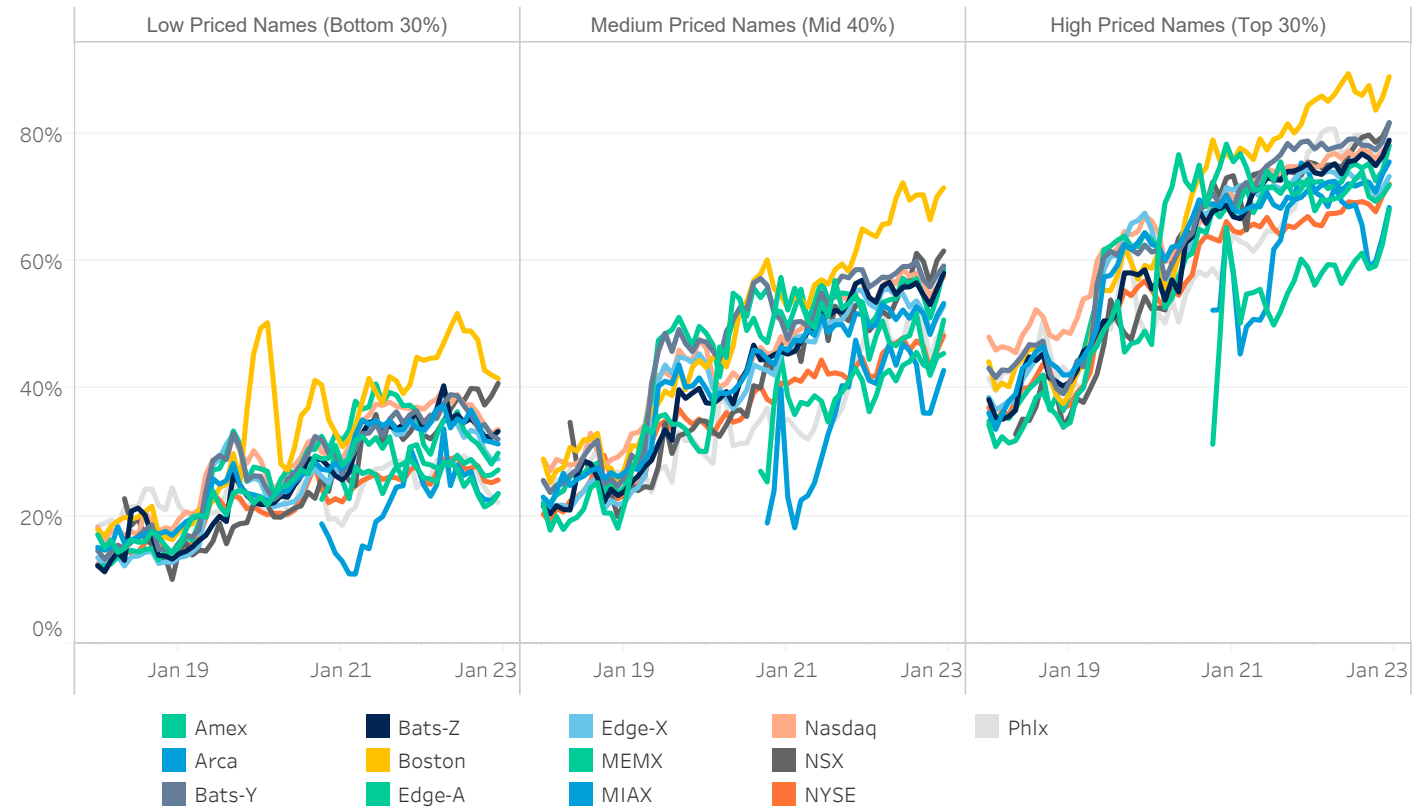
Source data: Virtu Financial



Hidden Trades Proportion by Price and Venue



Oddlot Trades Proportion by Price and Venue



Source data: SEC



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