

# Dec 2023

## U.S. Market Structure Monthly

### MICROSTRUCTURE OBSERVATIONS

- The average daily volume in US equities was 12.5B shares in December 2023, which was up 18% month over month (MoM) and up 16% year over year (YoY). Share volume in sub \$1 stocks hit a 5 year monthly high in December 2023, accounting 18% of the total market volume.
- Trade reporting facility (TRF) share volume as a percent of total consolidated share volume was 43.6% in December 2023, flat relative to the prior month.
- Quoted spreads in both S&P 500 and Russell 2000 stocks narrowed in December 2023 compared to the prior month. Excluding the first and last half hour of the trading day, the median S&P 500 stock's spread narrowed 12% to 4.4bps in December 2023 from 5.0bps in November 2023, while the median Russell 2000 stock's spread narrowed 6% to 19.3bps in December 2023 from 20.6bps the prior month.

### U.S. MARKET STRUCTURE NEWS

#### SEC Approves Spot Bitcoin ETPs

The Securities and Exchange Commission (SEC), in a 3-2 vote, approved the applications from 11 asset managers to launch spot bitcoin ETPs. Trading in spot bitcoin ETPs began on January 11<sup>th</sup>. The SEC had previously rejected applications to launch spot bitcoin ETPs on the grounds that the underlying security is vulnerable to fraud and market manipulation. Chair Gary Gensler said that the approved applications are similar to previously rejected applications, but due to an August 2023 appeals court ruling that required the SEC to reconsider the spot bitcoin ETP application from Grayscale Investments, as well as studies on the correlation between the spot bitcoin price and the CME bitcoin futures price (the SEC has already approved ETPs that hold bitcoin futures), the SEC concluded that any fraud impacting the price in the spot market would have a similar impact on the futures market. Chair Gensler though did add in his statement that the SEC “did not approve or endorse bitcoin.”

<https://www.wsj.com/finance/regulation/sec-approves-bitcoin-etfs-for-everyday-investors-dc3125ef>

<https://www.wsj.com/finance/regulation/grayscale-wins-lawsuit-against-sec-over-bitcoin-etf-1b305cfa>

#### U.S. Court Vacates New SEC Buyback Rules

The Fifth Circuit Court of Appeals granted a motion filed by the U.S. Chamber of Commerce, the Longview Chamber of Commerce, and the Texas Association of Business to vacate the SEC's new share repurchase rules. The new rules required companies to provide more information on share buyback programs, including disclosure on shares purchased daily rather than monthly aggregates and company director transactions. The Court originally ruled on October 31, 2023, that the SEC “acted arbitrarily and capriciously” and had failed to conduct a proper cost-benefit analysis when formulating the new rules but gave the SEC 30 days to “correct defects in the rules”. The SEC did not respond during the 30-day window, resulting in the Court's decision to vacate the rule.

<https://www.pionline.com/regulation/sec-buyback-disclosure-rule-vacated-appeals-court>

### **Hedge Fund Groups Sue SEC on New Short Sell Disclosure Rules**

The Managed Funds Association, the National Association of Private Fund Managers, and the Alternative Investment Management Association filed a lawsuit against the SEC on the Commission's new rules requiring increased disclosure on short sales. The lawsuit was filed in the Fifth Circuit Court of Appeals, the same court that ruled against the SEC on their new share repurchase rules. The lawsuit argues that the SEC disregarded the interconnected nature of the rules. As an example, the lawsuit cites the SEC will publish aggregate short sell data on a delayed basis to minimize information leakage, but at the same time new rules would require broker dealers to publish detailed information on loans of securities daily. The trade groups also argue the new rules' costs outweigh the benefits, overstep the SEC's statutory authority, and are in violation of the Administrative Procedures Act.

<https://www.pionline.com/regulation/sec-sued-over-short-selling-securities-lending-disclosure-rules>

<https://www.wsj.com/finance/regulation/legal-hurdles-stack-up-for-genslers-sec-355efdb3>

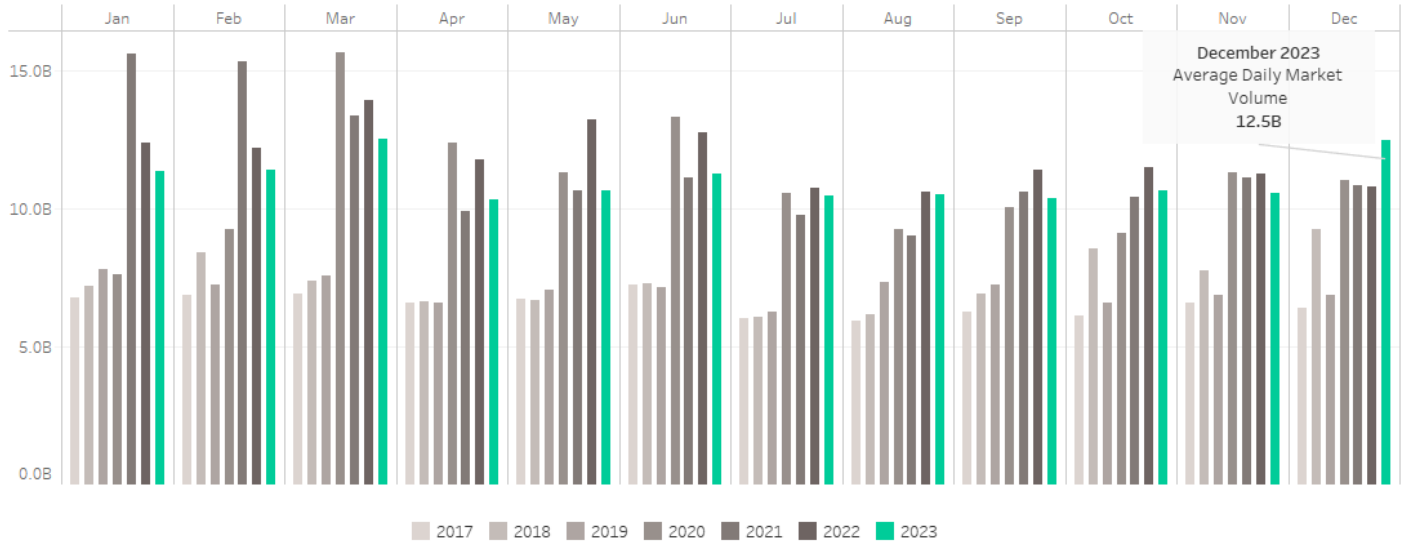
### **SEC Adopts Rules to Expand Central Clearing for Treasuries**

The SEC, in a 4-1 vote, adopted rule changes that would expand the scope of Treasury related transactions that would need to be centrally cleared. Specifically, the amendments require that covered clearing agencies in the U.S. Treasury market adopt policies and procedures designed to require their members to submit for clearing cash transactions in Treasury securities, as well as repurchase agreements collateralized by Treasury securities. Additionally, central clearing houses will be required to keep the collateral of their members separate from that held on behalf of their members' customers. Clearing houses have until March 2025 to comply with provisions on risk management, while members have until December 2025 and June 2026 to centrally clear cash Treasury and repurchase agreements respectively.

<https://www.reuters.com/markets/europe/us-treasury-market-braces-overhaul-vote-clearing-looms-2023-12-13/>

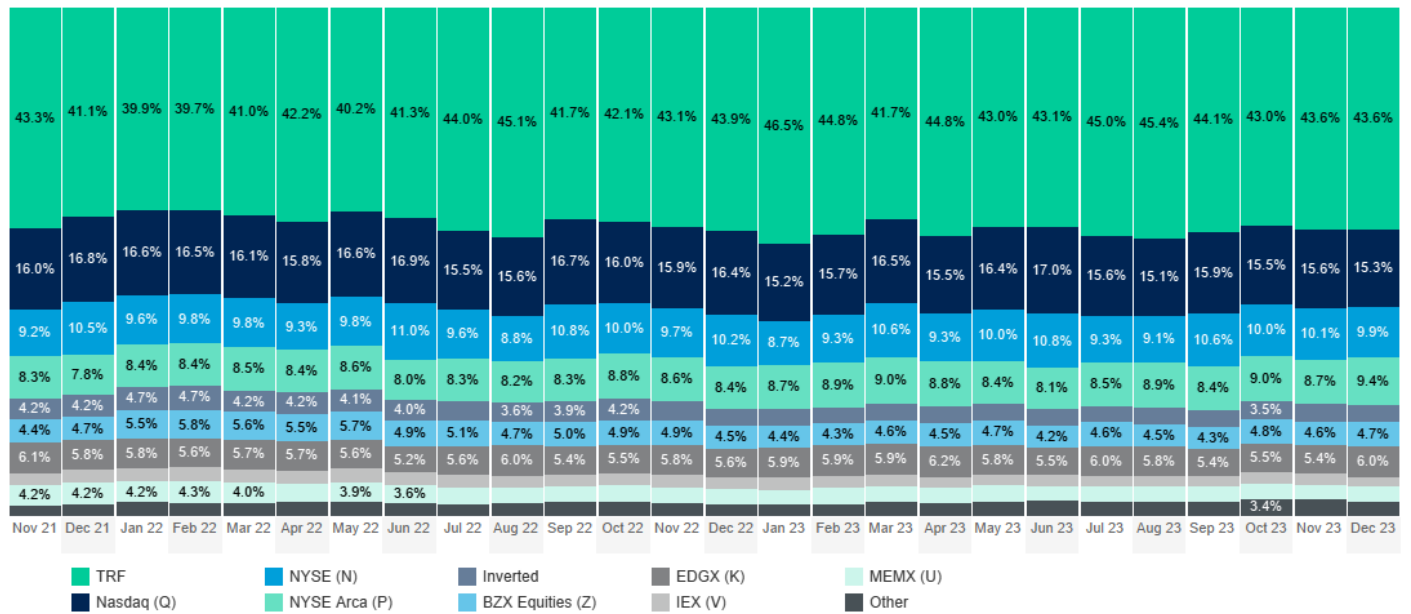
<https://www.sec.gov/news/press-release/2023-247>

## Average Daily Market Volume



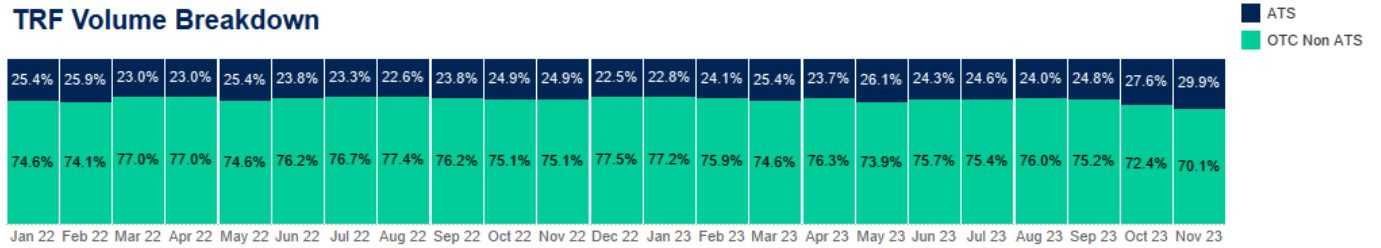
Source data: Cboe Global Markets

## Venue Market Share



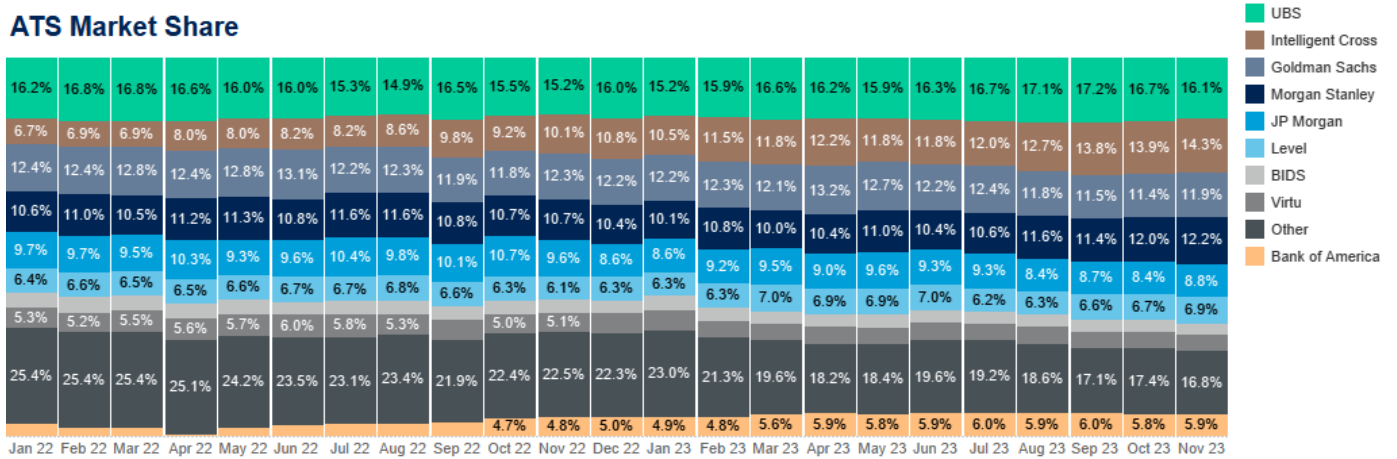
Source data: Cboe Global Markets

## TRF Volume Breakdown



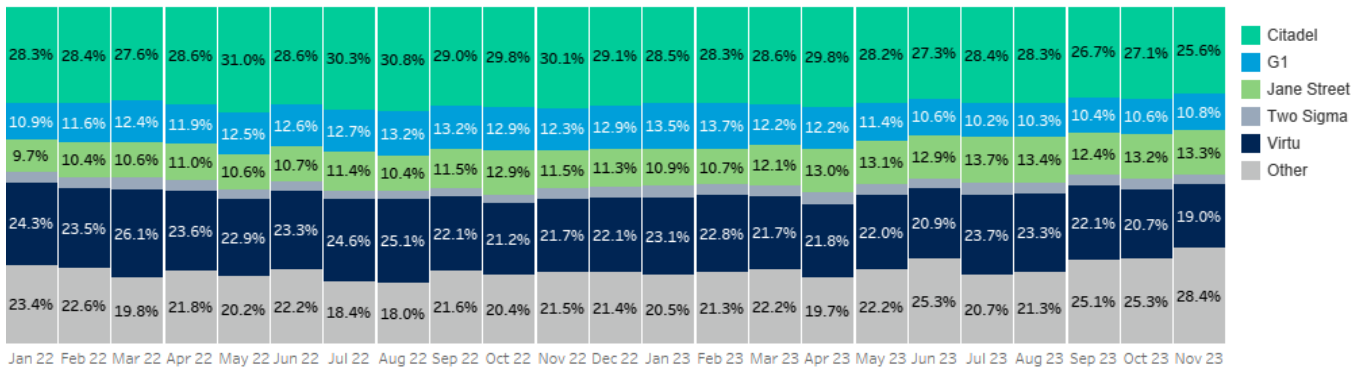
Tier1 and Tier2 only; Excludes Dealerweb, Source data: FINRA

## ATS Market Share



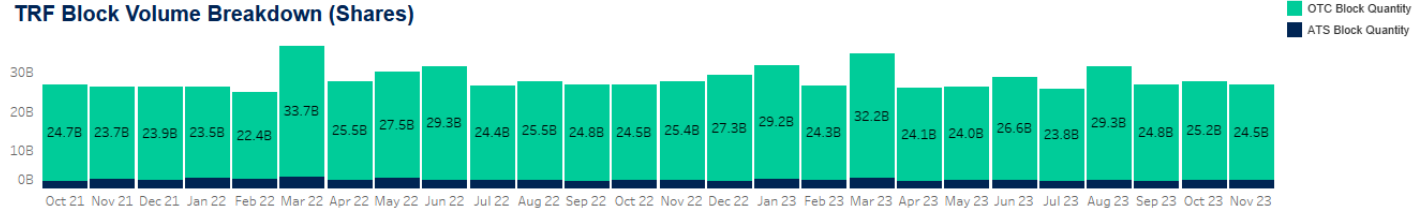
Excludes Dealerweb, OTC; Venues rolled up to firm level; Source data: FINRA

## OTC Non-ATS Market Share

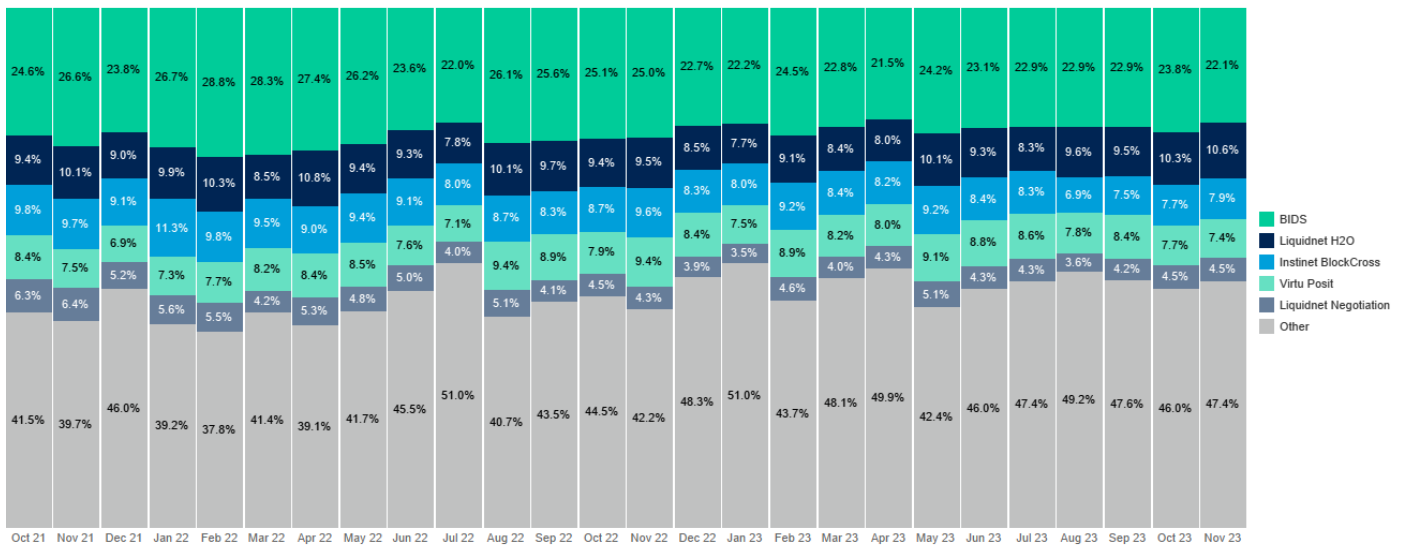


Source: FINRA, NMS Tier 1 & 2 Securities

### TRF Block Volume Breakdown (Shares)

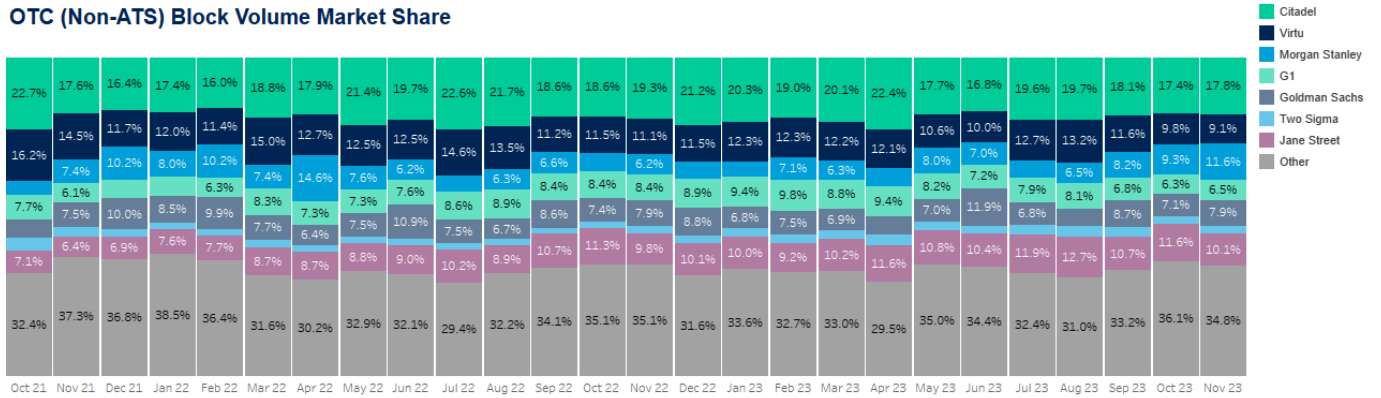


### ATS Block Volume Market Share



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

### Quotesize in Shares

	2Q 22			3Q 22			4Q 22			1Q 23			2Q 23			3Q 23			4Q 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 23	Jun 23	Jul 23	Aug 23	Sep 23	Oct 23	Nov 23	Dec 23	
First 30 Min	SP500	180	196	195	188	185	183	187	186	189	194	218	235	229	227	226	222	224	222	230	236	242
	RUS2000	236	250	243	232	228	225	232	226	231	250	271	300	300	298	290	278	288	288	300	301	305
Mid Day	SP500	176	186	190	181	179	184	189	192	194	199	214	228	224	217	216	213	212	211	211	220	224
	RUS2000	232	234	246	237	234	235	245	248	250	257	262	279	283	280	275	270	275	283	286	300	299
Last 30 Min	SP500	190	190	198	197	201	201	212	210	210	216	222	230	231	222	226	222	212	217	212	226	228
	RUS2000	255	259	276	267	265	263	274	279	291	289	283	300	309	300	304	289	288	303	316	331	317

### 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	10.8	10.3	12.4	11.7	10.8
	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	40.8	39.4	45.6	48.1	45.1
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	4.8	4.6	5.4	5.0	4.4
	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	17.2	17.4	20.4	20.6	19.3
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	3.1	3.1	3.3	3.1	2.9
	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	13.3	13.2	14.4	14.7	14.0

### 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	12.7	12.3	16.4	13.7	12.2
	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	15.1	14.0	17.6	17.6	16.7
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	4.9	4.1	6.2	4.9	4.3
	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	2.8	1.5	3.2	2.4	2.9
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	5.7	5.1	6.3	5.3	5.1
	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	5.0	3.8	4.5	4.5	5.8

### Percent ADV by Time of Day

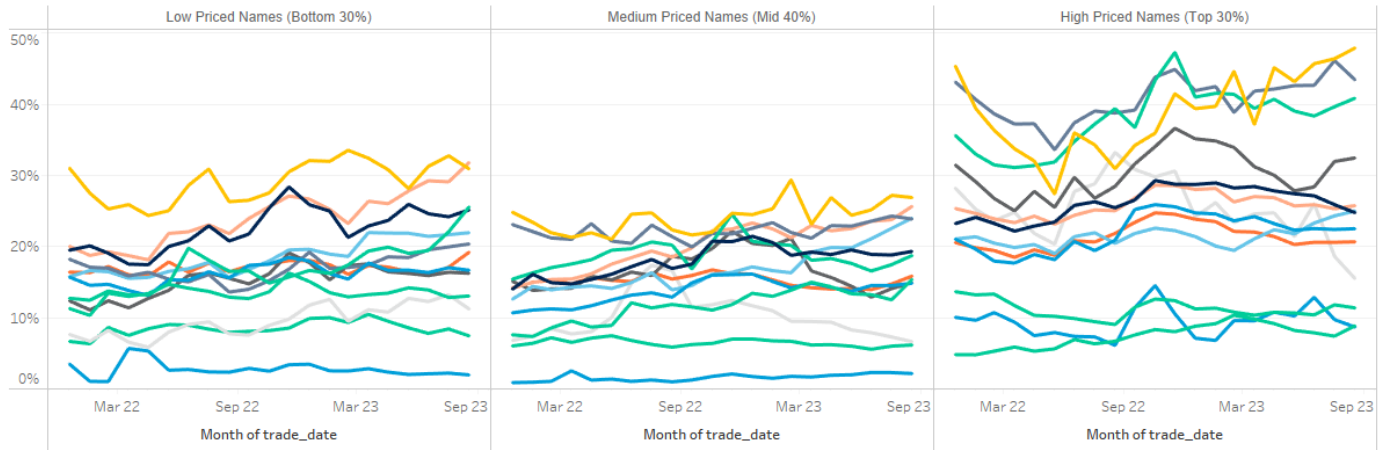
Open	SP500	1.1%	1.0%	1.0%	1.1%	1.0%	0.9%	0.9%	0.9%	1.1%	0.9%	1.0%	0.9%	1.1%	1.0%	1.0%	1.0%	0.9%	0.9%	0.9%	0.9%	0.9%	1.0%
	RUS2000	0.7%	0.7%	0.7%	0.7%	0.8%	0.7%	0.7%	0.7%	0.7%	0.7%	0.7%	0.7%	0.8%	0.7%	0.6%	0.7%	0.7%	0.6%	0.6%	0.7%	0.7%	
First 30 Min	SP500	9.3%	9.3%	9.4%	9.8%	9.6%	9.0%	9.0%	9.2%	8.6%	8.7%	8.6%	8.5%	8.7%	8.8%	8.7%	9.1%	8.4%	8.1%	8.1%	8.5%	7.9%	
	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%	7.3%	6.9%	6.4%	7.0%	6.9%	
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%	20.3%	20.1%	19.5%	19.1%	19.1%	
	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%	20.8%	21.3%	20.9%	20.6%	20.1%	
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%	13.8%	16.3%	13.7%	14.7%	16.2%	
	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%	11.7%	14.5%	14.5%	13.3%	14.1%	

Median used for all metrics

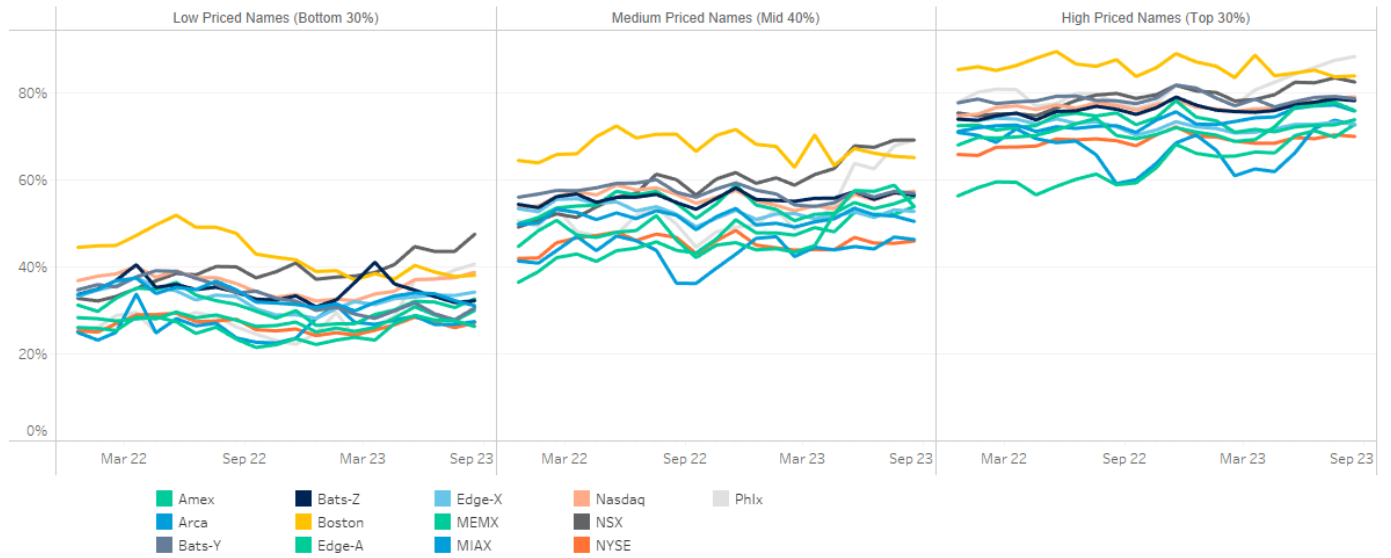
One minute volatility is calculated using the difference between the high and low price within a one minute time bin, divided by that bin's VWAP

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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