

# October 2022

## US Market Structure Monthly



### US Market Microstructure Observations

- The average daily volume in US equities was 11.5B shares in October 2022, up 1% month over month (MoM) and up 11% year over year (YoY).
- Trade reporting facility (TRF) market share increased 0.4% MoM to 42.1% in October 2022.
- In a reversal of the recent trend of narrowing spreads, both S&P 500 and Russell 2000 stocks saw an increase in spreads MoM. Excluding the first and last half hour of the trading day, the median S&P 500 name had a spread of 5.4bps in October 2022, an increase of 10% MoM. The median Russell 2000 stock's spread increased to 19.9bps in October 2022, a 6% increase from the prior month.

### Market Structure News

#### Senate Democrats Urge SEC Chair to Slow Down Rulemaking

Twelve Senate Democrats, lead by Sen. Jon Tester of Montana, sent a letter to SEC Chair Gensler in September 2022 requesting that he slow down the pace of rulemaking, and allow for longer comment periods to provide commentators with adequate time to conduct thorough analysis on the proposals. This is not the first time this concern has been raised under Chair Gensler. Republican Senators, including Sen. Bill Hagerty of Tennessee and Sen. Thom Tillis of North Carolina, have expressed concern on the short comment periods considering the number of rule proposals being published. Additionally, SEC Commissioner Hester Peirce has said previously that the 30-day comment period "is typically not enough time to get feedback on a rule proposal." Chair Gensler has pushed back on such concerns, citing that current law only requires the SEC to provide 30 days.

<https://www.politico.com/news/2022/10/20/senate-democrats-gensler-public-comments-sec-00062732>

#### Senate Republicans Requests for the SEC to Explain Staff Attrition

Six Senate Republicans, in a letter to SEC Chair Gensler, requested the Chair to explain the reasons for the large rate of attrition at the SEC this year. Citing an October 2022 report from the SEC Office of the Inspector General, the Senators highlighted in their letter that the SEC attrition rate in 2022 is 6.4%, its highest level in 10 years, with Senior Officer attrition is expected to be 20.8% in 2022. The letter asked for Chair Gensler to explain how the concerns raised in the report will be addressed, as well as requesting longer comment periods for new rule proposals.

<https://www.reuters.com/world/us/senate-republicans-want-sec-explain-why-staff-are-quitting-2022-10-30/>

<https://www.sec.gov/files/inspector-generals-statement-sec-mgmt-and-perf-challenges-october-2022.pdf>

#### SEC Proposes New Liquidity and Pricing Rules for Mutual Funds

The SEC proposed new rules on mutual fund pricing and liquidity, with the objective of improving outcomes during times of market stress and large fund redemptions. The new rules would require mutual funds and certain ETFs to have at least 10% of their assets in highly liquid securities. Additionally, mutual funds would need to have a hard closing time, as well as use "swing pricing", which allows managers of open-end funds to adjust its net asset value when inflows or outflows exceed a certain threshold. Swing pricing enables funds to pass costs to investors entering or leaving a fund relative to existing investors bearing the cost due to dilution. Upon the rule proposal release, the Investment Company Institute, which represents many large asset managers, criticized the proposal, citing that swing pricing would create many operational hurdles and confuse investors without the SEC providing supporting evidence on the dilution created by large redemptions.

<https://www.reuters.com/markets/us/us-sec-vote-proposing-new-liquidity-pricing-rules-mutual-funds-2022-11-02/>

<https://www.marketsmedia.com/ici-objects-to-sec-swing-pricing-proposal/>



## Virtu Comment Letters

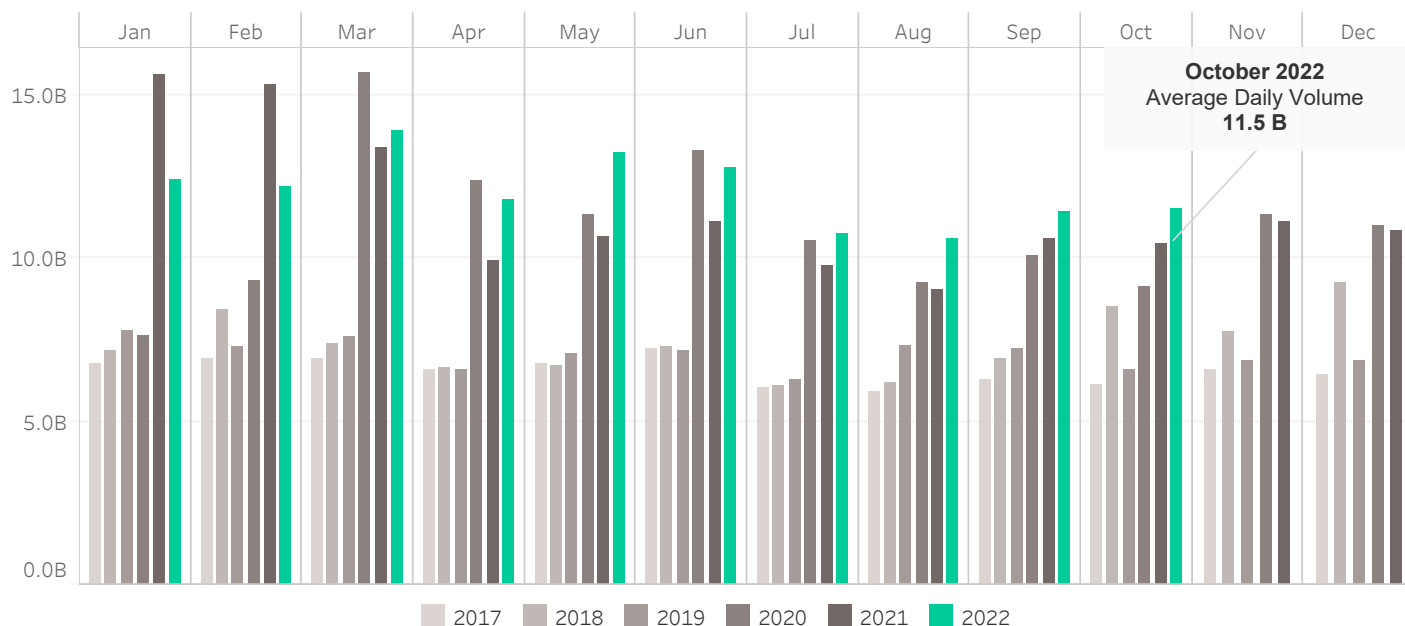
### **Virtu's Comment Letter on the Proposal to Change Certain FINRA Membership Exemptions**

In a comment letter to the SEC, Virtu argues against a rule proposal that would eliminate the exemption from becoming a member of FINRA for brokers and dealers if they effect transactions in securities other than on an exchange of which it is a member. While the proposal argues that certain firms are not subject to FINRA oversight, Virtu expresses concern that these firms are already overseen by self-regulatory organizations (SROs) and the SEC, and that requiring FINRA membership would create duplicative oversight, resulting in incremental costs and burdens, without the SEC identifying a specific market failure that could harm investors. Virtu's US broker-dealer Virtu Americas LLC is already a member of FINRA.

<https://virtu-www.s3.us-east-1.amazonaws.com/uploads/documents/Virtu%20Comment%20Letter%20%2809302022%29%20%281%29.pdf>

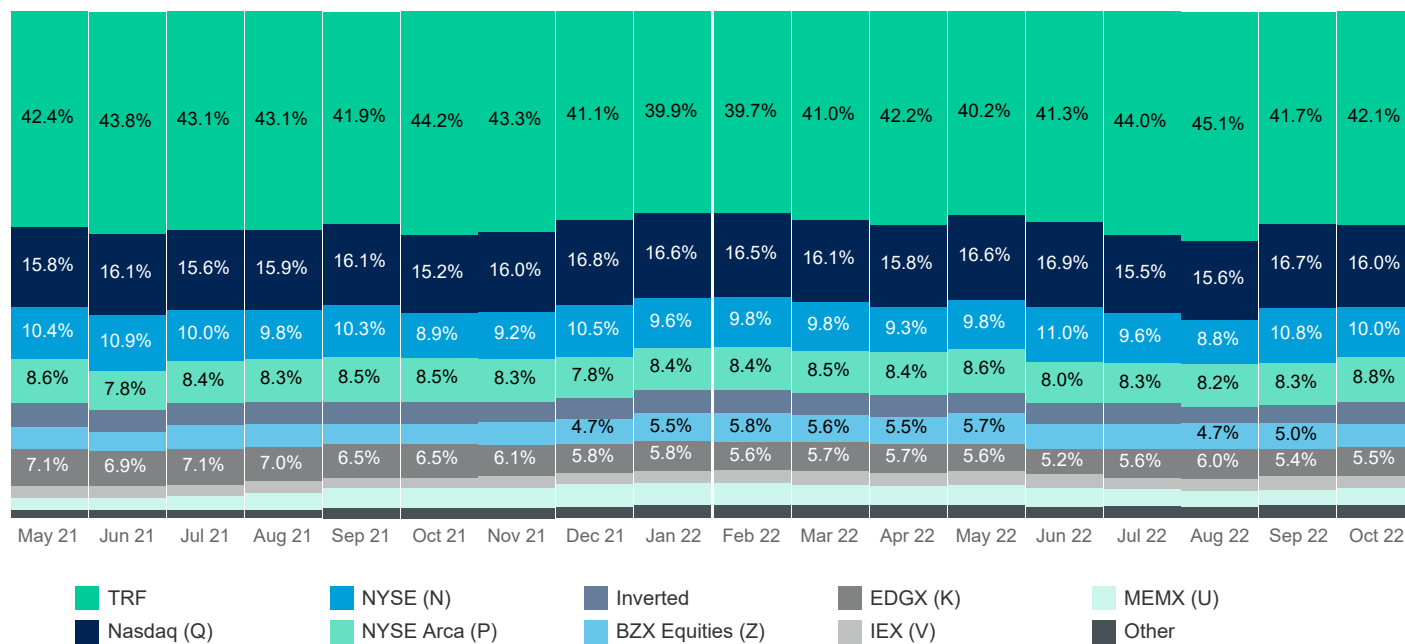


## Average Daily Market Volume



Source data: Cboe Global Markets

## Venue Market Share

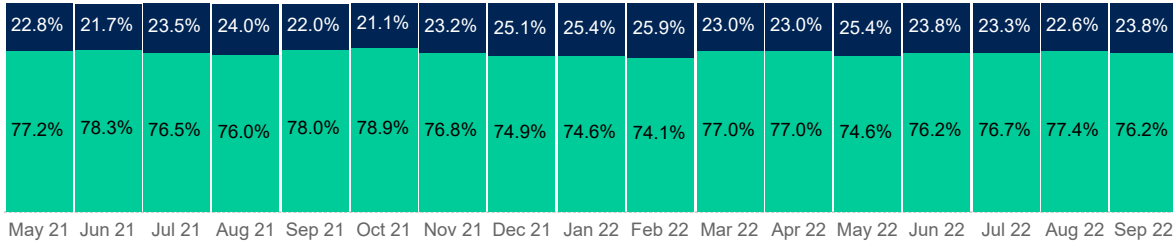


Source data: Cboe Global Markets



## TRF Volume Breakdown

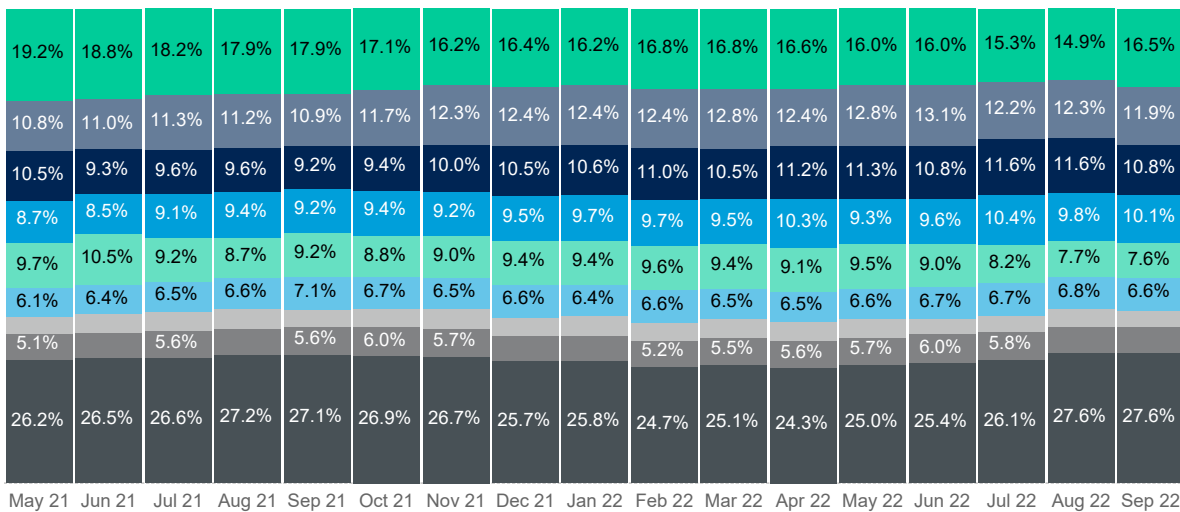
■ ATS  
■ OTC Non ATS



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

## ATS Market Share

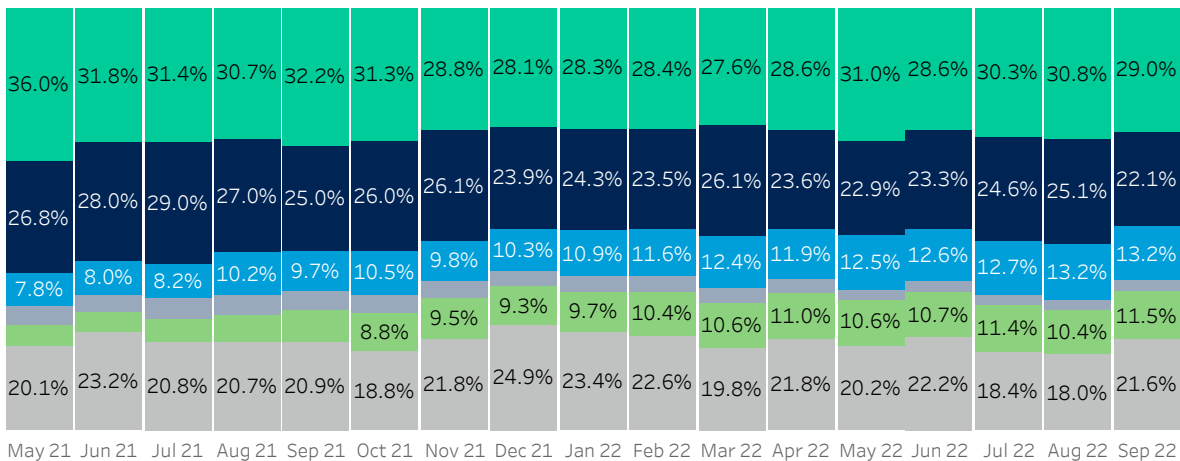
■ UBS  
■ Goldman Sachs  
■ Morgan Stanley  
■ JP Morgan  
■ Credit Suisse  
■ Level  
■ BIDS  
■ Virtu  
■ Other



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

## OTC Non-ATS Market Share

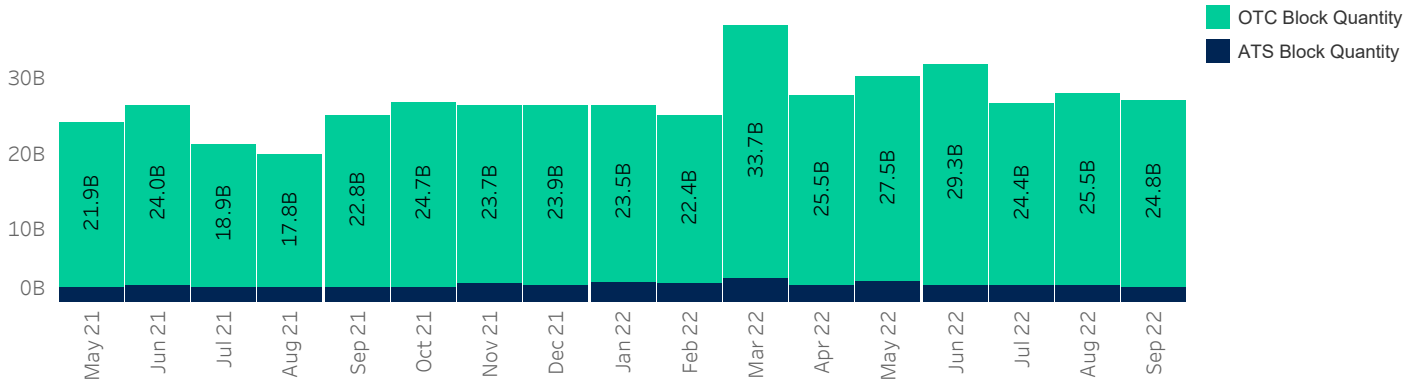
■ Citadel  
■ Virtu  
■ G1  
■ Two Sigma  
■ Jane Street  
■ Other



Source: FINRA, NMS Tier 1 & 2 Securities

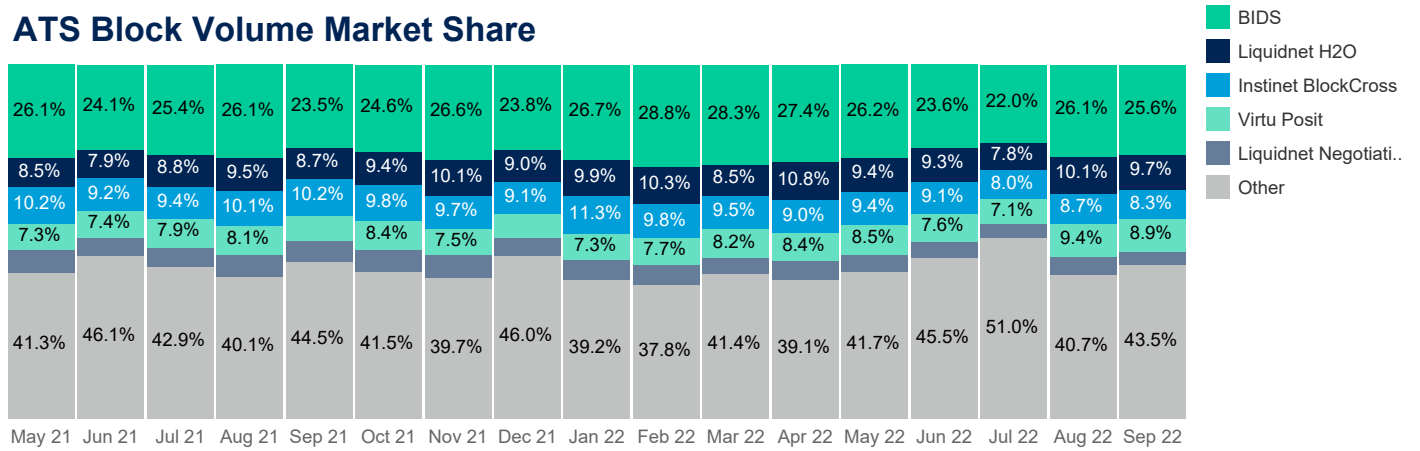


## TRF Block Volume Breakdown (Shares)



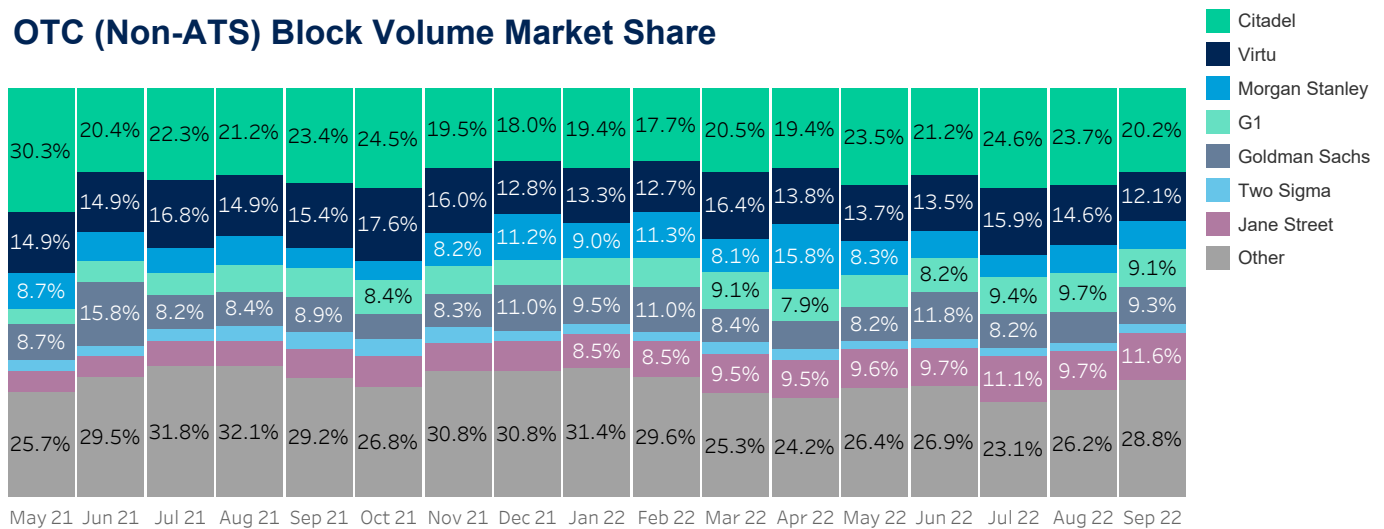
Source: FINRA

## 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

		4Q 21			1Q 22			2Q 22			3Q 22			4Q 22
		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
First 30 Min	SP500	170	172	187	184	187	186	180	196	195	188	185	183	187
	RUS2000	207	201	220	224	225	230	236	250	243	232	228	225	232
Mid Day	SP500	181	183	192	188	193	185	176	186	190	181	179	184	189
	RUS2000	205	209	219	225	230	234	232	234	246	237	234	235	245
Last 30 Min	SP500	210	213	208	200	199	195	190	190	198	197	201	201	212
	RUS2000	232	238	242	244	246	254	255	259	276	267	265	263	274

## Spread Bps

First 30 Min	SP500	11.1	12.3	13.9	14.2	13.6	13.9	13.4	15.1	13.5	13.2	11.8	10.7	12.5
	RUS2000	47.3	50.2	58.4	57.4	56.9	53.8	51.3	57.0	50.4	48.1	45.3	43.2	49.2
Mid Day	SP500	4.3	4.7	5.6	5.7	5.9	6.1	5.5	6.5	5.7	5.2	4.7	4.9	5.4
	RUS2000	18.7	21.0	24.2	24.9	25.0	23.2	22.5	25.0	21.6	20.4	19.1	18.7	19.9
Last 30 Min	SP500	3.0	3.1	3.7	3.8	4.1	3.9	3.6	3.9	3.5	3.2	2.9	3.2	3.4
	RUS2000	14.8	15.6	18.0	18.6	19.1	17.1	16.6	18.1	16.2	15.4	14.1	14.1	14.7

## One Minute Volatility Bps

First 30 Min	SP500	15.3	15.9	17.3	20.0	19.6	20.0	20.2	24.0	21.4	20.7	15.6	17.5	20.4
	RUS2000	17.7	18.9	22.2	23.2	23.6	22.6	21.7	26.9	24.1	26.6	21.0	20.8	23.1
Mid Day	SP500	5.2	5.0	6.1	7.6	8.1	8.4	8.2	9.9	8.3	7.5	6.2	8.6	8.1
	RUS2000	5.2	5.2	5.9	7.1	7.7	7.1	6.8	9.0	6.8	6.1	5.5	7.4	6.7
Last 30 Min	SP500	6.1	5.5	7.2	9.0	10.1	9.0	9.1	10.8	9.0	7.9	6.2	9.3	8.8
	RUS2000	7.2	7.3	9.1	10.0	10.8	8.6	8.8	9.8	8.1	6.9	6.2	8.9	7.2

## Percent ADV by Time of Day

Open	SP500	1.1%	1.1%	1.0%	1.0%	1.0%	0.9%	1.1%	1.0%	1.0%	1.1%	1.0%	0.9%	0.9%
	RUS2000	0.9%	0.9%	0.8%	0.7%	0.8%	0.8%	0.7%	0.7%	0.7%	0.7%	0.8%	0.7%	0.7%
First 30 Min	SP500	9.5%	9.7%	9.2%	9.2%	9.3%	9.1%	9.3%	9.3%	9.4%	9.8%	9.6%	9.0%	9.0%
	RUS2000	8.3%	8.5%	8.2%	7.5%	8.1%	8.0%	7.6%	8.2%	7.6%	8.1%	8.2%	7.4%	7.6%
Last 30 Min	SP500	18.8%	18.3%	18.4%	18.7%	19.1%	19.0%	19.0%	18.6%	19.2%	18.6%	18.8%	18.7%	18.8%
	RUS2000	19.1%	19.4%	19.8%	20.3%	21.0%	20.1%	19.6%	19.7%	19.8%	20.3%	20.4%	20.1%	20.0%
Close	SP500	12.1%	11.5%	13.9%	11.5%	11.1%	12.6%	11.8%	10.9%	13.1%	12.5%	11.9%	12.3%	11.9%
	RUS2000	10.1%	8.8%	10.7%	8.9%	9.7%	10.2%	10.6%	9.1%	10.8%	11.8%	10.4%	11.4%	11.6%

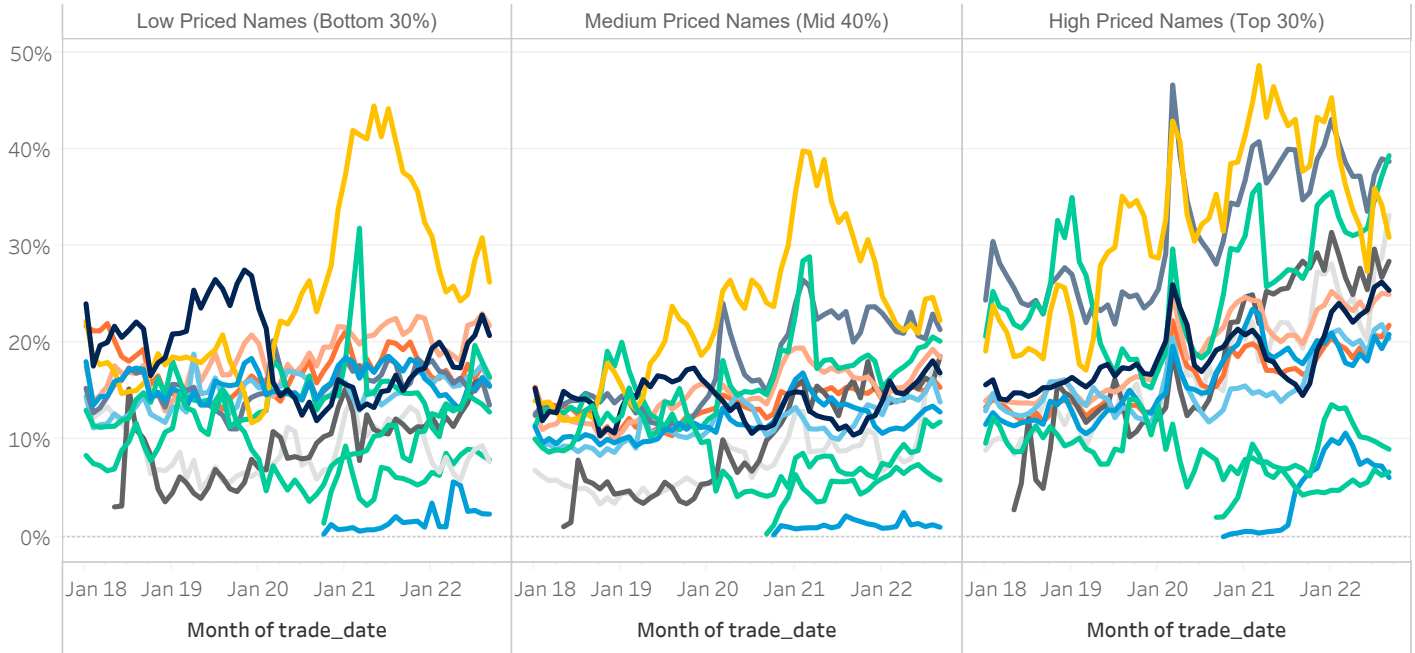
Median used for all metrics

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

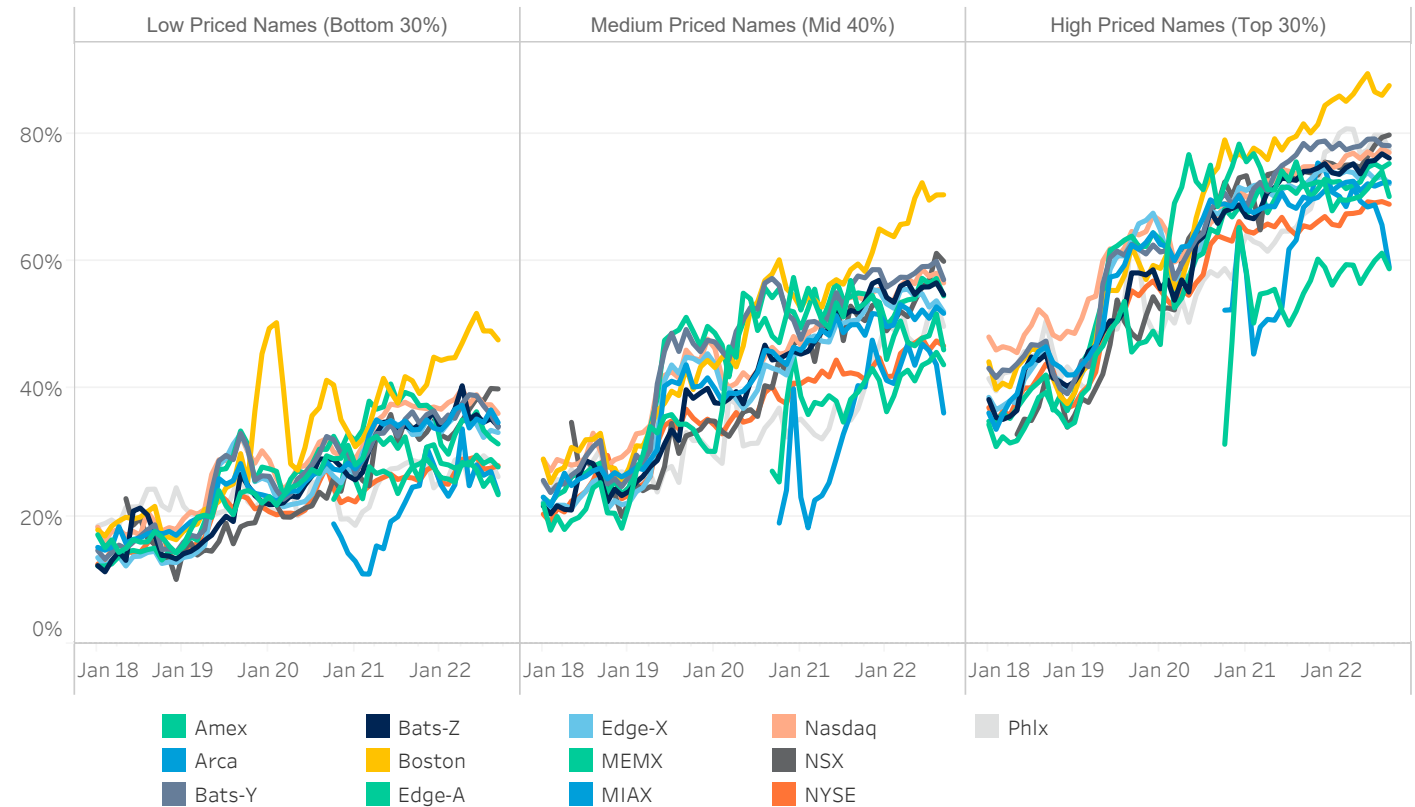
Source data: Virtu Financial



## Hidden Trades Proportion by Price and Venue



## Oddlot Trades Proportion by Price and Venue



Source data: SEC



## ABOUT VIRTU

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