

# September 2021

## US Market Structure Monthly



### US Market Microstructure Observations

- The average daily volume in US equities was 10.6B shares in September 2021, up 17.8% month over month (MoM) and 6.0% year over year.
- Trade reporting facility (TRF) market share decreased 1.2% MoM to 41.9%.
- Excluding the first and last half hour of the day, median spreads widened 2.5% MoM for S&P 500 symbols while narrowed 3.2% MoM for RUS 2000 symbols.
- Intraday volatility increased 12.5% and 7.5% month over month for S&P 500 and RUS 2000 symbols, respectively.
- The proportion of volume traded in the closing auction for S&P 500 symbols increased slightly from 10.7% to 11.7%.

### Market Structure News

#### **Virtu Financial Submits Petition to the US Security and Exchange Commission to Enhance Execution Quality Stats for Retail Executions**

Virtu Financial submitted a petition for rulemaking to the US Security and Exchange Commission (SEC), requesting the Commission amend Rule 605 of Regulation NMS to increase transparency and provide enhanced execution quality metrics to the investment community. In its petition, Virtu requested the following:

1. Report size improvement metrics
2. Include all displayed quotes, including odd lot quotes in benchmark
3. Include odd lot and >9,999 share orders as well as short, stop, and pre-market orders
4. Create buckets to report activity based on notional value of orders
5. Include a count of orders filled at midpoint and other increments within the NBBO

<https://www.bloomberg.com/news/articles/2021-09-21/virtu-fires-opening-shot-in-tussle-with-sec-over-trading-rules?sref=GrQuSk5T>

<https://www.sec.gov/rules/petitions/2021/petn4-775.pdf>

#### **SEC Plans More Disclosure Requirements on Swaps**

The SEC is considering more disclosures for complex derivative transactions like those that led to the collapse of Archegos Capital Management. SEC Chairman Gensler commented in a recent interview that the regulator wants to publish aggregate data on the securities that underlie investment firms' swap positions.

<https://www.bloomberg.com/news/articles/2021-09-15/gensler-says-sec-plans-more-swaps-disclosures-post-archegos>

#### **SEC Considers Asking Funds for Criteria Used to Tout Sustainability**

The SEC is considering requirements for fund managers to show supporting evidence for any environmental, social and/or governance (ESG) claims. The SEC expects to seek public comment on the issue later this year or in early 2022.

<https://www.wsj.com/articles/sec-chief-gary-gensler-braces-for-clash-with-crypto-traders-11628164980>

#### **SEC Chairman Gensler Calls for More Funding in Senate Hearing**

In a recent Senate hearing, SEC Chairman Gensler called on Congress to provide more resources to the SEC in support of addressing topics such as cryptocurrency trading platforms, payment for order flow and to enhance disclosures on private funds.

<https://www.wsj.com/articles/gary-gensler-focuses-on-crypto-trading-platforms-in-senate-hearing-11631640427>



## Market Structure News Continued

### Level ATS and Luminex Announce Merger Plans

Subject to regulatory approvals, Level ATS, an independent US equity non-displayed venue for the sell-side, and Luminex, a block trading venue owned by the buy-side, have entered a definitive agreement to merge.

<https://www.prnewswire.com/news-releases/level-ats-and-luminex-to-merge-unifying-sell-side-and-buy-side-networks-under-unique-industry-consortium-301381252.html>

### SEC Signals Potential Bond Market Regulations Overhaul

SEC Chairman Gensler signaled the potential for a bond market regulations overhaul. While specific details have not yet been laid out, some analysts believe that one of the SEC's initiatives will be a centralized quote system for bonds, similar to that of the equity market.

<https://www.bloomberg.com/news/articles/2021-09-14/gensler-turns-spotlight-on-how-hard-it-can-be-to-get-bond-prices?sref=GrQuSk5T>

### Senate Proposal Aims to Tax ETFs

Senate Finance Committee Chairman, Ron Wyden, proposed a tax on Exchange Traded Funds' (ETFs) use of "in-kind" transactions, which currently avoids triggering capital-gains taxes. Initially intended for mutual funds, such in-kind transactions can transfer appreciated stocks, bonds and/or other assets to Wall Street intermediaries instead of cash. The proposal seeks to eliminate the tax efficiency advantage of the ETF industry.

<https://www.wsj.com/articles/democrats-tax-proposal-takes-aim-at-etfs-11631717324>

### President Biden Plans to Nominate Saule Omarova to Run the Office of the Comptroller of the Currency

The Office of the Comptroller oversees the US's biggest lenders. Saule Omarova, who teaches at Cornell University Law School, has criticized cryptocurrencies and advocated for the US government to have a greater role in banking. Analysts believe the nomination will face a tough confirmation fight in the Senate.

<https://www.wsj.com/articles/democrats-tax-proposal-takes-aim-at-etfs-11631717324>

### SEC Taps Dan Berkovitz to Serve as General Counsel

Mr. Berkovitz previously served as general counsel at the Commodity Futures Trading Commission when current SEC Chairman Gensler led that agency from 2009 through 2013. As general counsel, one of the main roles is to ensure that the agency's regulations could withstand legal challenges.

<https://www.wsj.com/articles/sec-taps-dan-berkovitz-to-serve-as-general-counsel-11632841831>

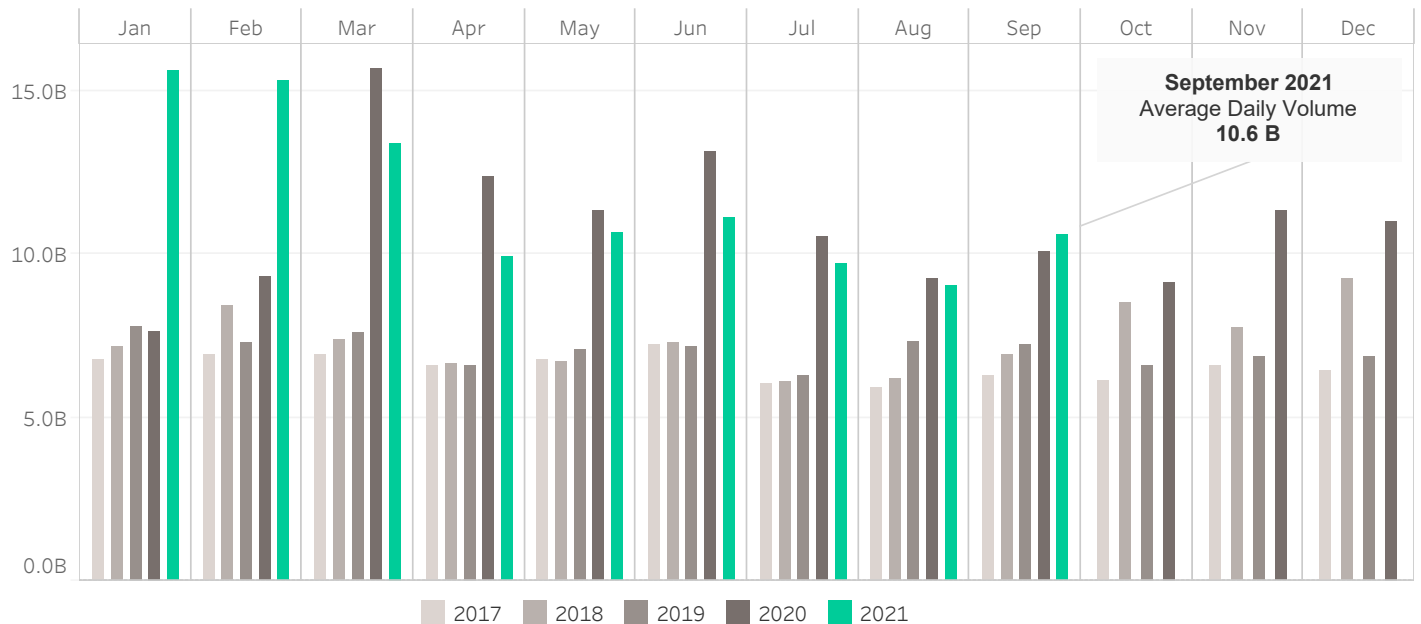
### One Chronos ATS Receives Regulatory Approval

OneChronos ATS, a periodic auction non-displayed venue, has received regulatory approval and is preparing to launch before the end of 2021. Instead of a continuous order book, OneChronos ATS will initiate auctions every tenth of a second throughout the trading day. In the US, the SEC has also approved the introduction of periodic auction by Cboe Global Markets.

<https://www.marketsmedia.com/onechronos-ats-readies-for-launch/>

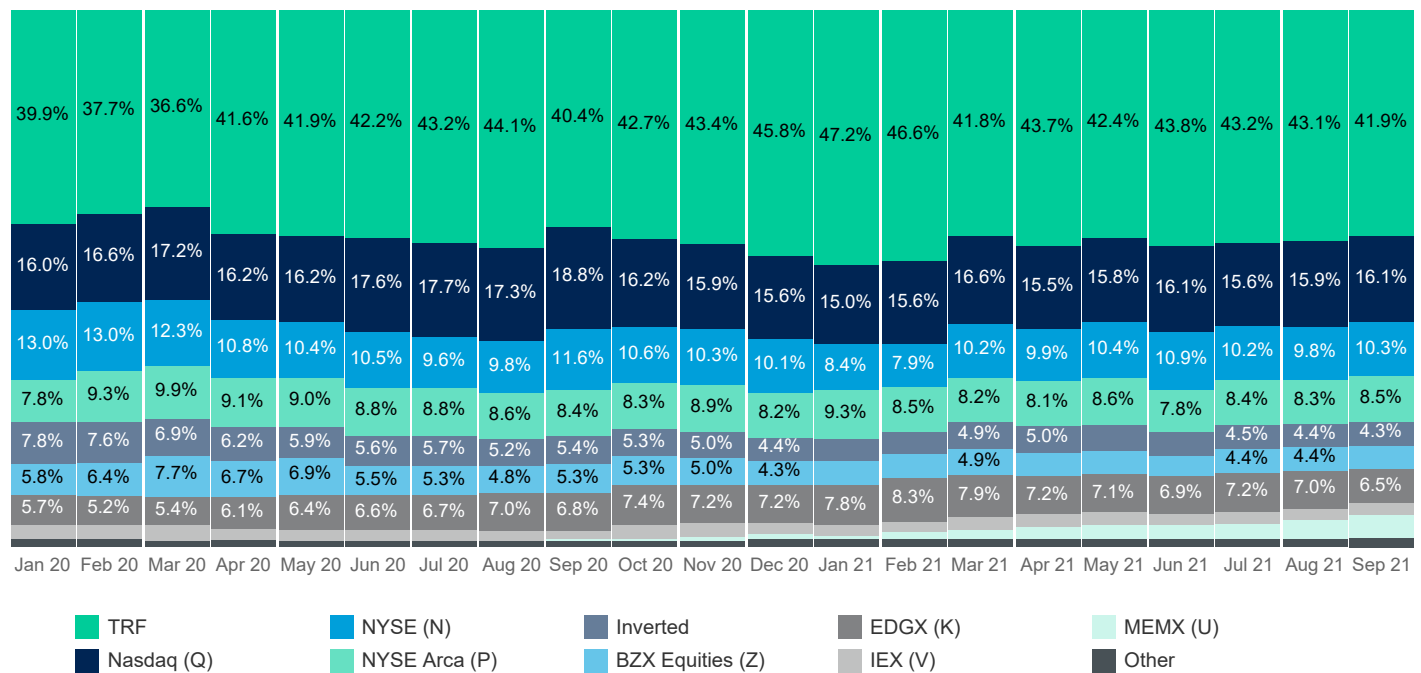


## Average Daily Market Volume



Source data: Cboe Global Markets

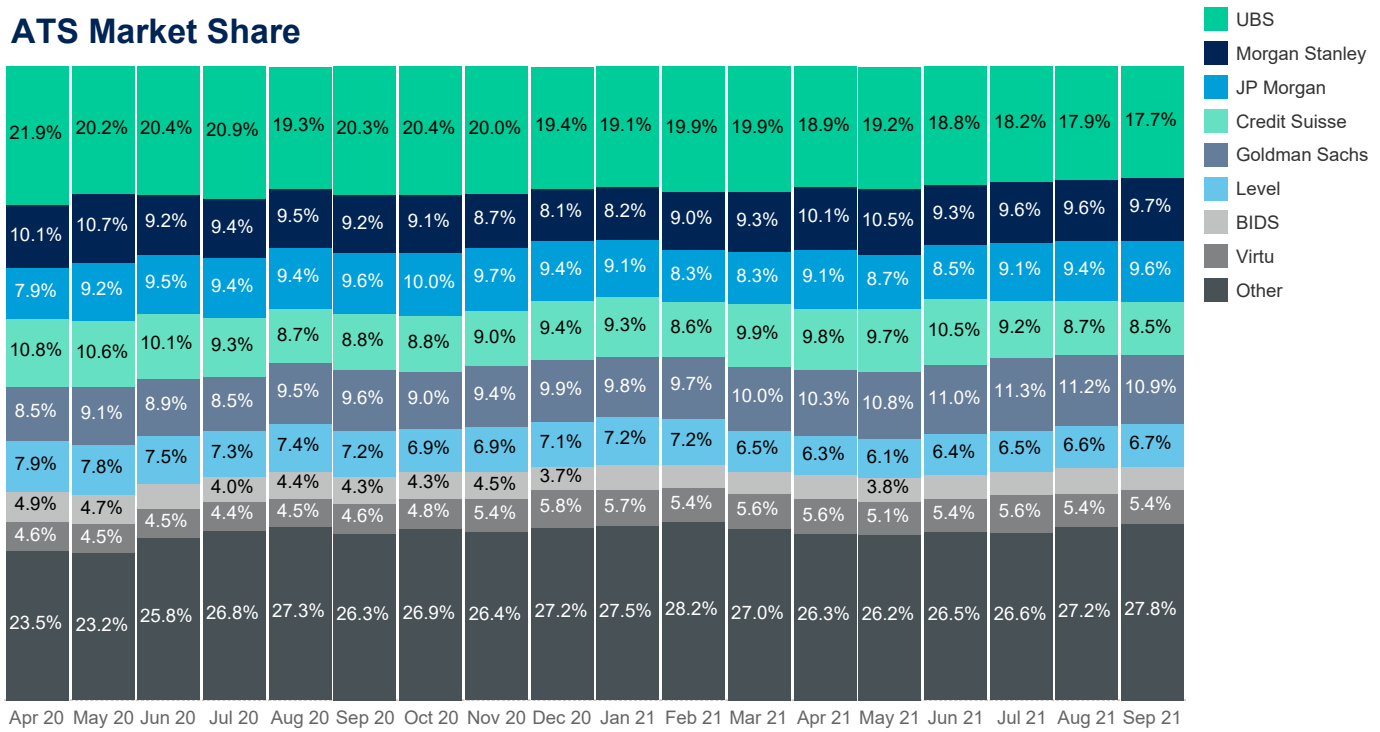
## Venue Market Share



Source data: Cboe Global Markets

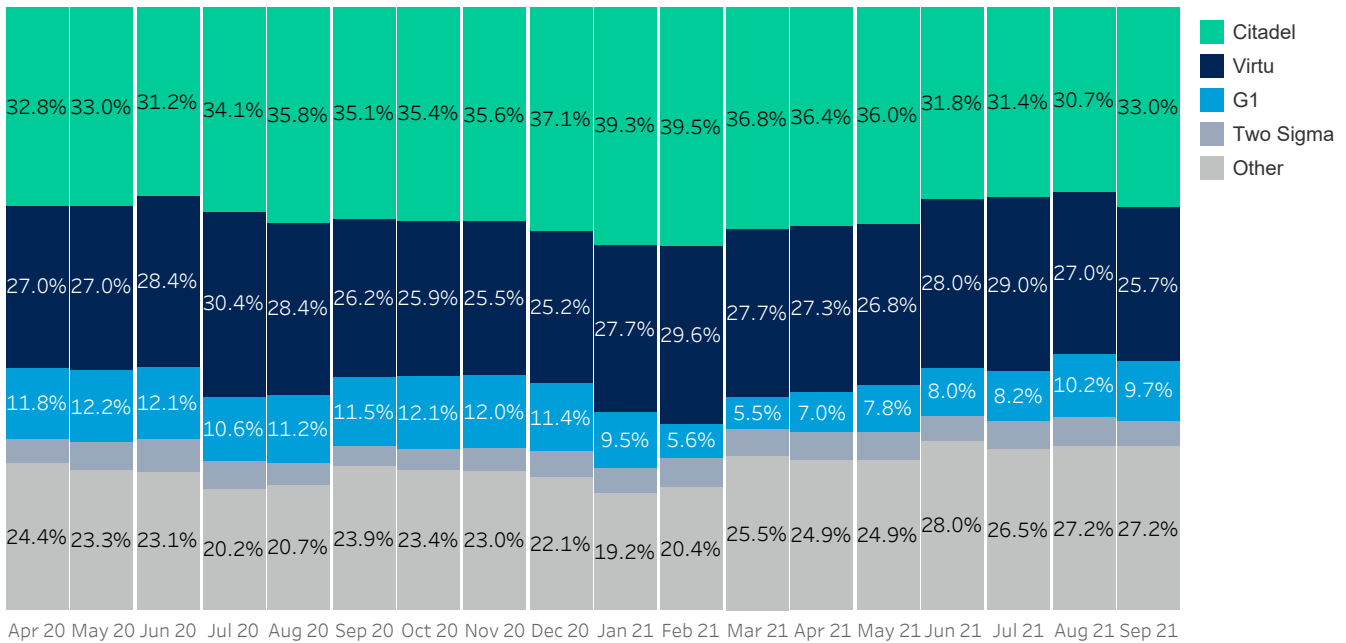


## ATS Market Share



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

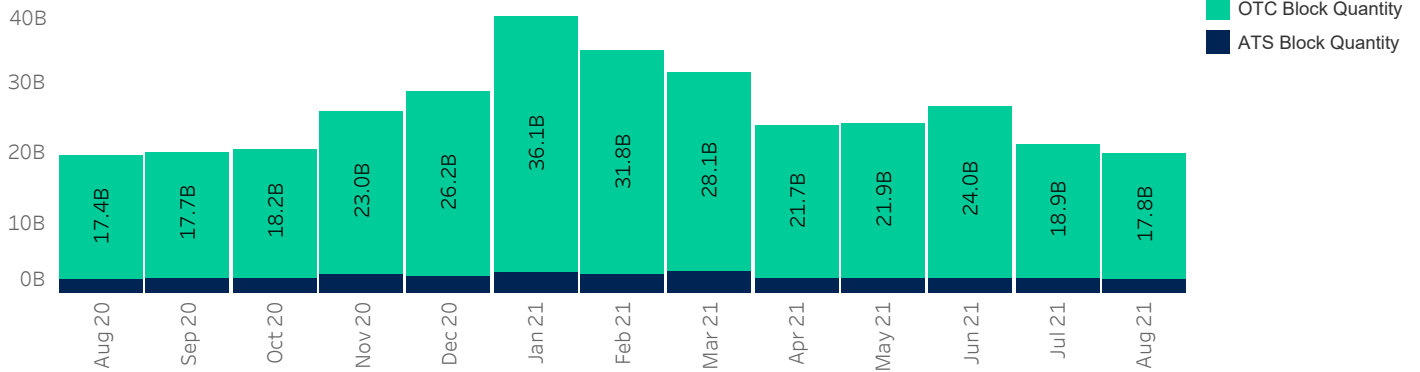
## OTC Non-ATS Market Share



Source: FINRA, NMS Tier 1 & 2 Securities

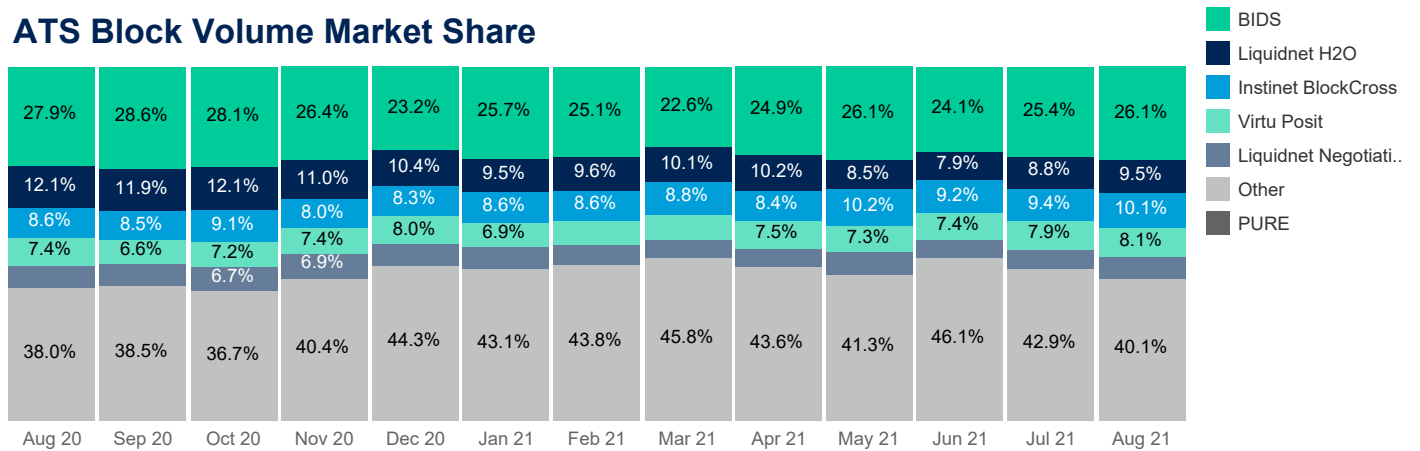


## TRF Block Volume Breakdown (Shares)



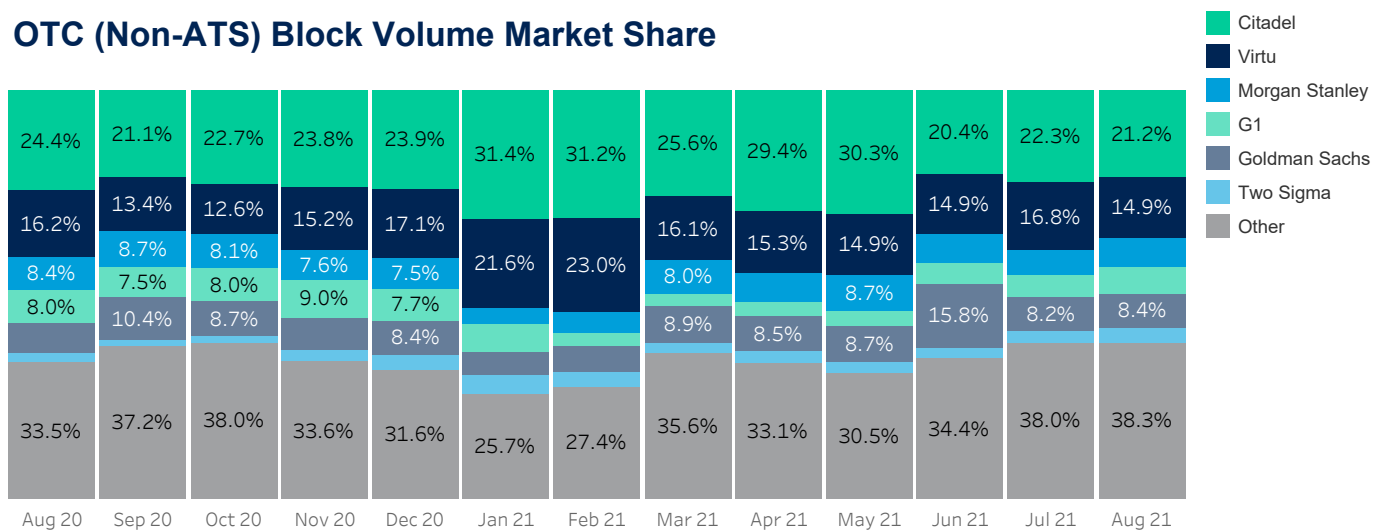
Source: FINRA

## 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

		3Q 20	4Q 20			1Q 21			2Q 21			3Q 21		
		Sep 20	Oct 20	Nov 20	Dec 20	Jan 21	Feb 21	Mar 21	Apr 21	May 21	Jun 21	Jul 21	Aug 21	Sep 21
First 30 Min	SP500	204	206	201	197	192	193	191	188	184	178	177	176	171
	RUS2000	207	225	226	228	216	217	222	231	225	217	222	221	214
Mid Day	SP500	215	206	206	206	201	204	195	198	193	197	190	193	184
	RUS2000	233	236	236	232	223	220	207	216	211	213	210	215	208
Last 30 Min	SP500	239	236	231	233	231	238	217	225	224	239	232	238	219
	RUS2000	272	274	263	260	250	255	225	238	235	243	240	249	236

## Spread Bps

First 30 Min	SP500	11.0	13.0	14.7	12.4	13.2	13.6	13.2	10.3	10.2	8.1	9.7	9.9	9.3
	RUS2000	44.7	57.1	67.2	60.3	63.2	61.8	67.0	57.7	56.8	45.0	52.7	51.5	45.7
Mid Day	SP500	5.3	6.4	6.5	5.4	5.7	5.3	5.6	4.4	4.3	3.5	4.1	4.0	4.1
	RUS2000	18.9	24.9	26.9	24.6	26.8	25.5	27.7	23.1	22.6	18.0	19.9	18.8	18.2
Last 30 Min	SP500	3.6	4.2	4.5	3.8	3.7	3.6	3.8	3.1	3.1	2.6	2.9	2.7	2.8
	RUS2000	15.0	18.9	21.2	19.1	19.7	19.3	20.8	17.5	16.9	14.1	14.4	14.2	14.3

## One Minute Volatility Bps

First 30 Min	SP500	20.1	16.0	20.2	15.3	17.5	18.7	18.8	14.5	16.4	12.8	14.5	14.2	14.8
	RUS2000	26.0	16.9	20.9	16.5	20.7	22.1	25.8	18.4	21.6	15.9	19.3	18.8	18.6
Mid Day	SP500	8.4	7.1	7.7	5.8	6.9	6.7	7.9	5.4	6.1	4.5	5.3	4.8	5.4
	RUS2000	8.3	5.7	6.3	5.3	6.6	6.9	9.3	5.9	6.5	4.9	6.2	5.3	5.7
Last 30 Min	SP500	9.9	7.8	8.9	6.8	7.6	7.3	8.8	6.2	7.1	5.2	5.7	5.3	6.2
	RUS2000	9.9	7.3	8.8	7.4	8.7	8.7	11.8	7.5	8.6	6.5	7.2	6.6	7.7

## Percent ADV by Time of Day

Open	SP500	1.0%	1.1%	1.1%	1.1%	1.3%	1.2%	1.1%	1.3%	1.2%	1.1%	1.2%	1.1%	1.0%
	RUS2000	0.8%	0.9%	0.9%	0.8%	0.9%	1.0%	0.9%	0.9%	0.9%	0.8%	1.0%	0.9%	0.9%
First 30 Min	SP500	9.5%	9.2%	10.3%	9.5%	9.6%	10.1%	9.2%	9.6%	9.7%	9.5%	10.0%	9.7%	9.7%
	RUS2000	8.0%	7.6%	8.4%	7.8%	8.1%	8.7%	8.4%	8.1%	8.4%	7.9%	8.9%	8.8%	8.5%
Last 30 Min	SP500	17.9%	18.1%	17.4%	17.4%	16.9%	17.2%	17.6%	17.8%	18.4%	18.5%	18.3%	18.3%	18.2%
	RUS2000	18.7%	19.8%	18.8%	19.0%	18.5%	18.6%	18.6%	19.3%	19.3%	19.4%	19.8%	19.5%	19.6%
Close	SP500	12.0%	11.0%	10.7%	13.7%	12.0%	10.6%	11.9%	13.2%	11.1%	12.3%	12.5%	10.7%	11.7%
	RUS2000	9.6%	9.3%	9.9%	10.6%	10.0%	8.3%	9.2%	9.5%	8.7%	10.0%	9.9%	8.9%	9.7%

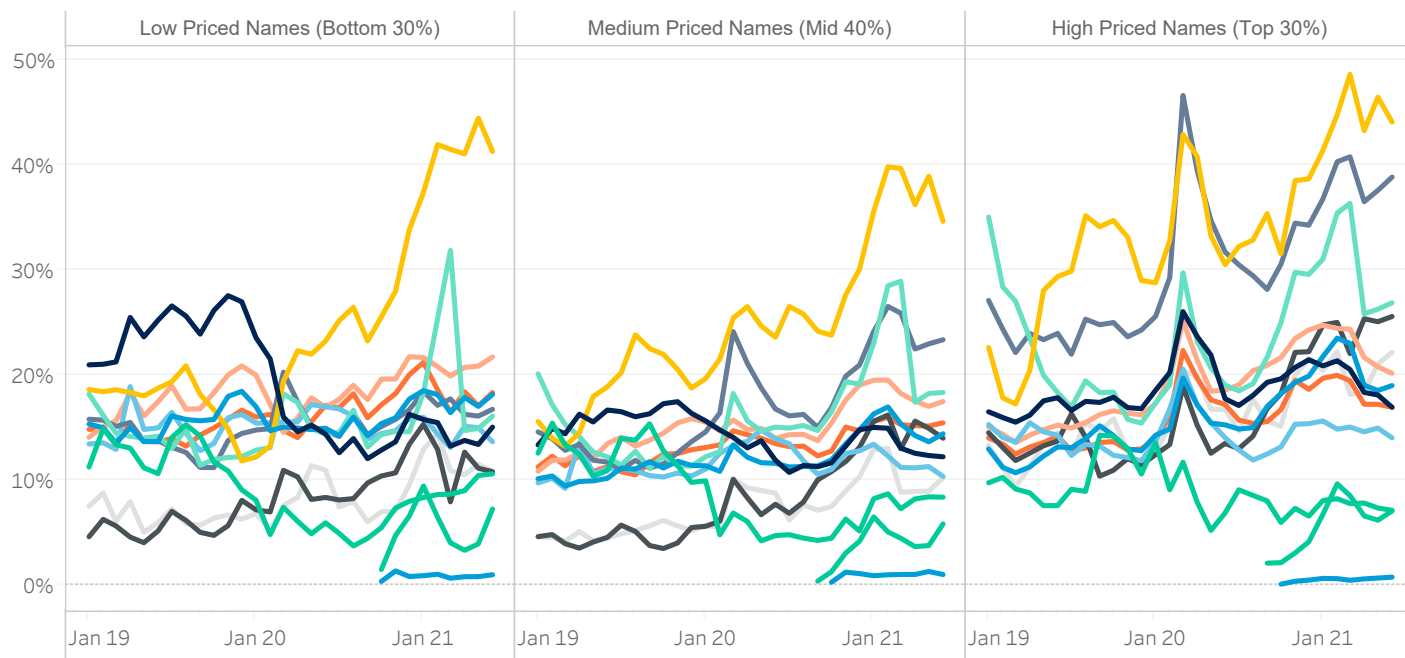
Median used for all metrics

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

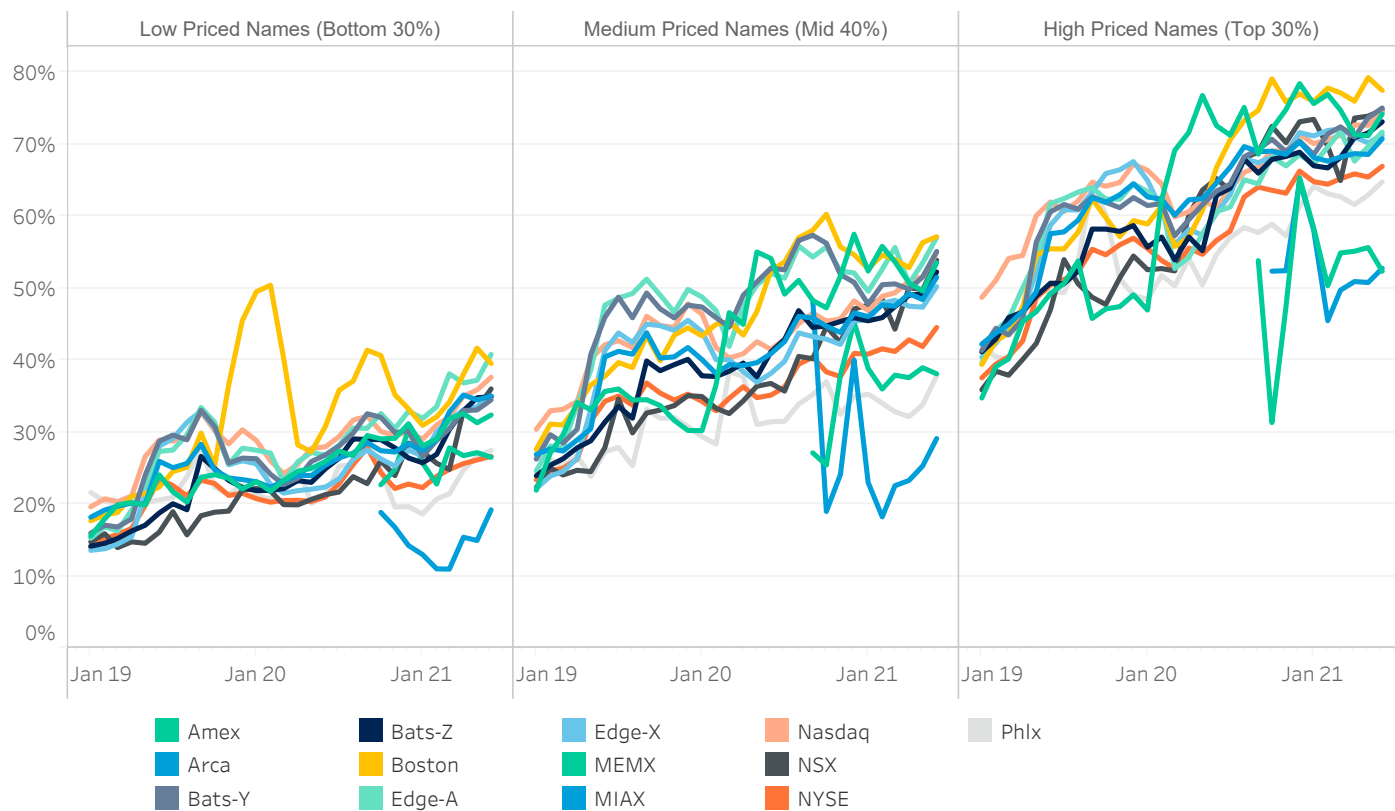
Source data: Virtu Financial



## Hidden Trades Proportion by Price and Venue



## Oddlot Trades Proportion by Price and Venue



Source data: SEC



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