

August 2021

US Market Structure Monthly



US Market Microstructure Observations

- The average daily volume in US equities was 9.0B shares in August 2021, down 7.2% month over month and down 2.2% year over year, hitting the lowest level since the start of the Covid-19 pandemic.
- Trade reporting facility (TRF) market share remained at 43% in August 2021, unchanged from the prior month.
- Excluding the first and last half hour of the day, median spreads decreased by 2.4% and 5.5% month over month for S&P 500 and RUS 2000 symbols, respectively, in August 2021.
- Consistent with the trends in spreads, intraday volatility decreased by 7.5% and 14.5% month over month for S&P 500 and RUS 2000 symbols, respectively, in August 2021.
- The proportion of volume traded in the closing auction for S&P 500 symbols decreased from 12.5% to 10.7% in August 2021.

Market Structure News

SEC Chief Pushes for Increased Regulation of Digital Assets

SEC Chair Gary Gensler outlined his desire to regulate digital assets to the same extent as stocks and bonds at the Aspen Security Forum in early August. Mr. Gensler recommended that Congress create an investment protection regime for bitcoin and other digital assets.

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

Securities Industry and Financial Markets Association Issues Letter Supporting T+1 Settlement

The Securities Industry and Financial Markets Association (SIFMA) submitted a letter to the SEC in support of shortening the settlement cycle for stock trades to one day from the current two days. However, the letter did not support moving to same day settlement, which would require a much large investment in re-architecting how trades are settled. Chair Gensler has indicated previously that he is supportive of shorter settlement time periods.

<https://www.bloomberg.com/news/articles/2021-08-17/wall-street-breaks-from-robinhood-in-stock-settlement-lobbying?sref=DK3y4h9m>

SEC gives Chinese companies new requirements for US IPO disclosures

The SEC issued new disclosure requirements for Chinese companies seeking to IPO in the US. These disclosures include details on:

1. The use of variable interest entities (VIEs) for IPOs and implications for investors
2. The risk that Chinese authorities will interfere with company operations
3. Cases where companies do not comply with the US Holding Foreign Companies Accountable Act on accounting disclosure to regulators

<https://www.reuters.com/business/finance/exclusive-sec-gives-chinese-companies-new-requirements-us-ipo-disclosures-2021-08-23/>



Market Structure News Continued

President Biden Said to Pick Behnam as Top US Derivatives Regulator

President Biden plans to name Rostin Behnam to lead the US Commodity Futures Trading Commission—the agency which oversees the US derivatives market including cryptocurrency trading. Mr. Behnam has been the acting head of the agency since January 2021. A formal announcement on the appointment is expected in the coming weeks.

<https://www.pionline.com/regulation/biden-said-pick-rostin-behnam-lead-cftc>

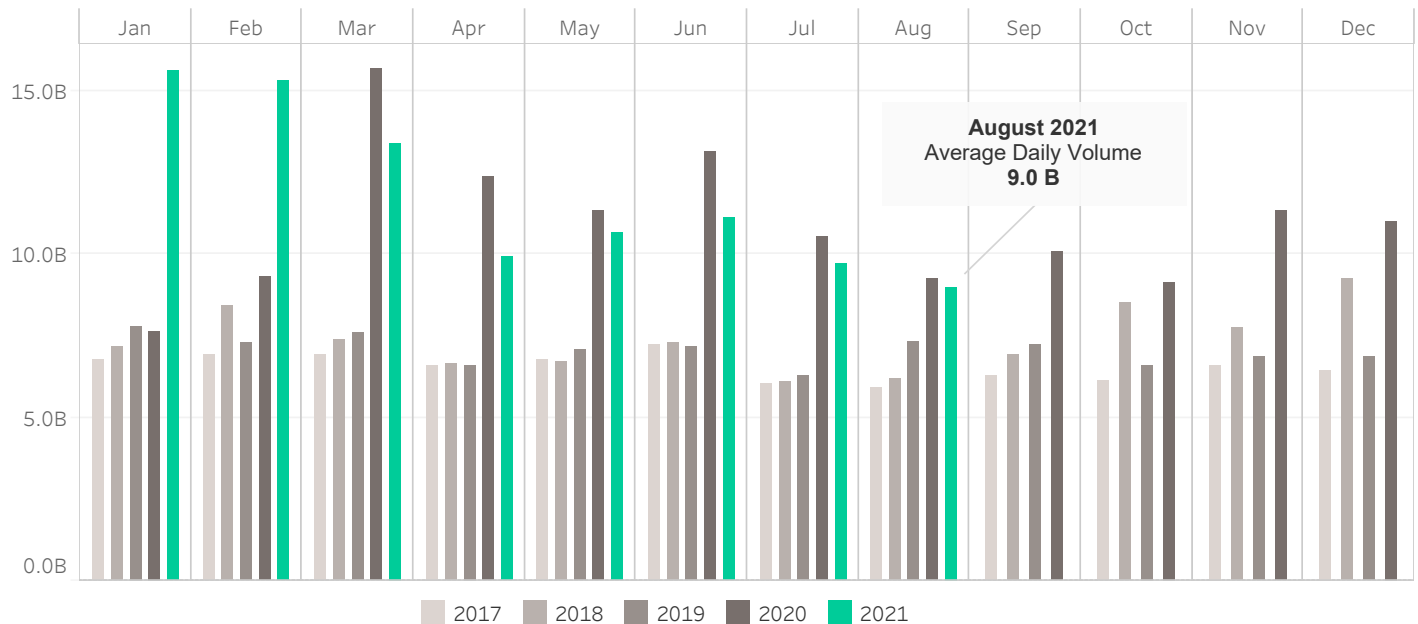
SEC Enhances Access to Financial Disclosure Data

The SEC announced open data enhancements that provide public access to financial statements and other disclosures made by public traded companies on its Electronic Data Gathering, Analysis, and Retrieval system (EDGAR). For the first time, aggregate statement data will be available through application programming interfaces (APIs).

<https://www.sec.gov/news/press-release/2021-159>

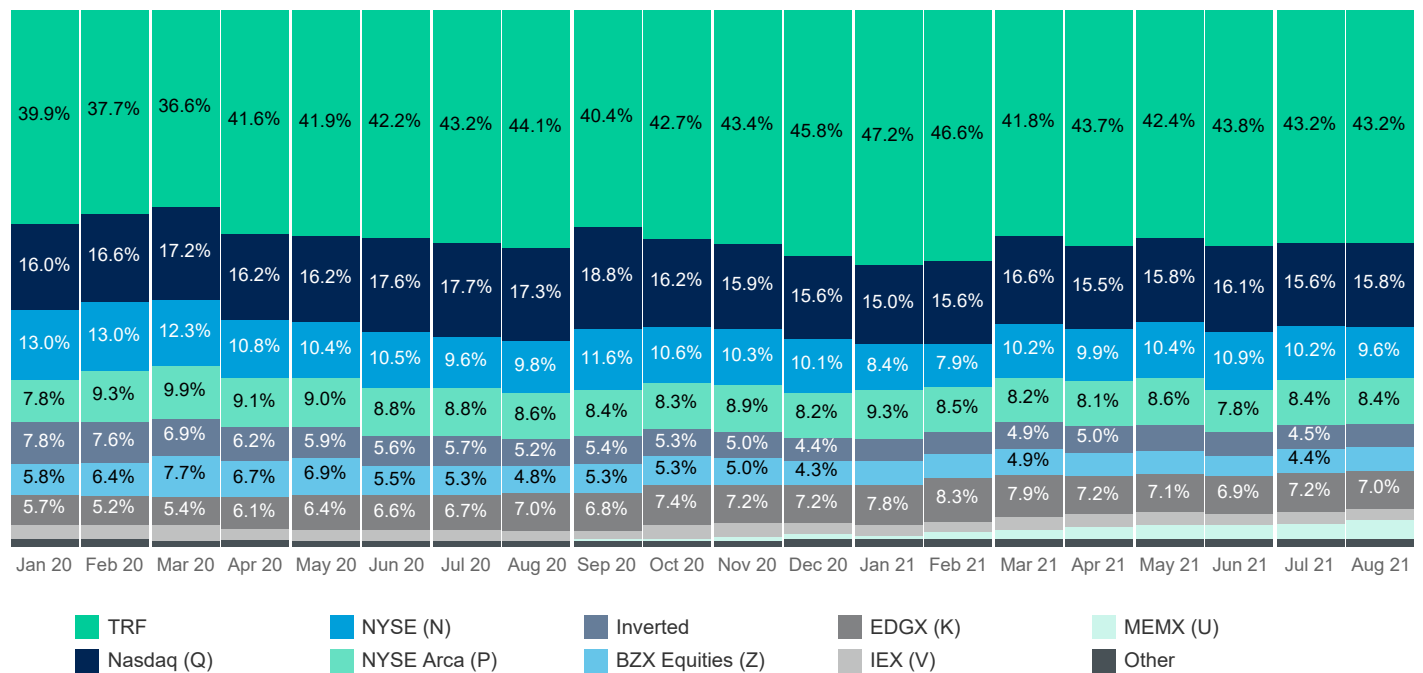


Average Daily Market Volume



Source data: Cboe Global Markets

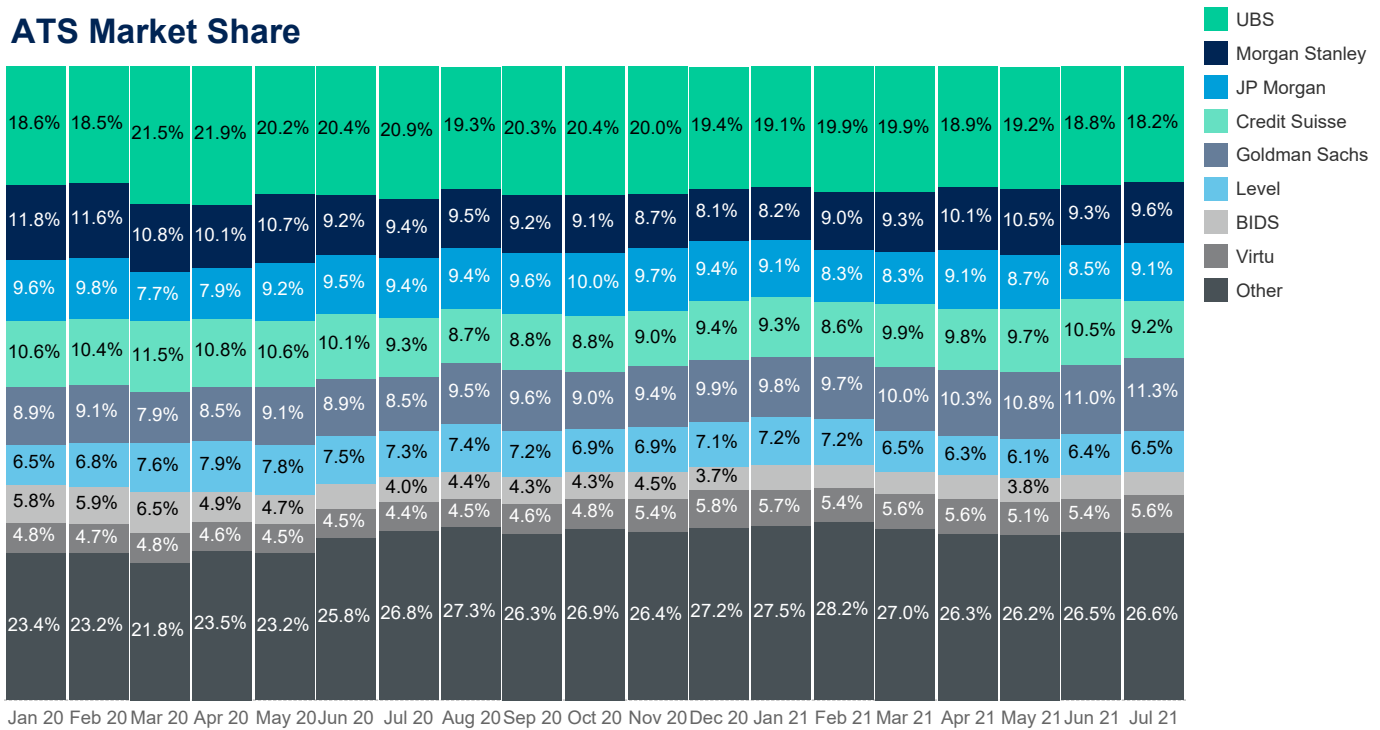
Venue Market Share



Source data: Cboe Global Markets

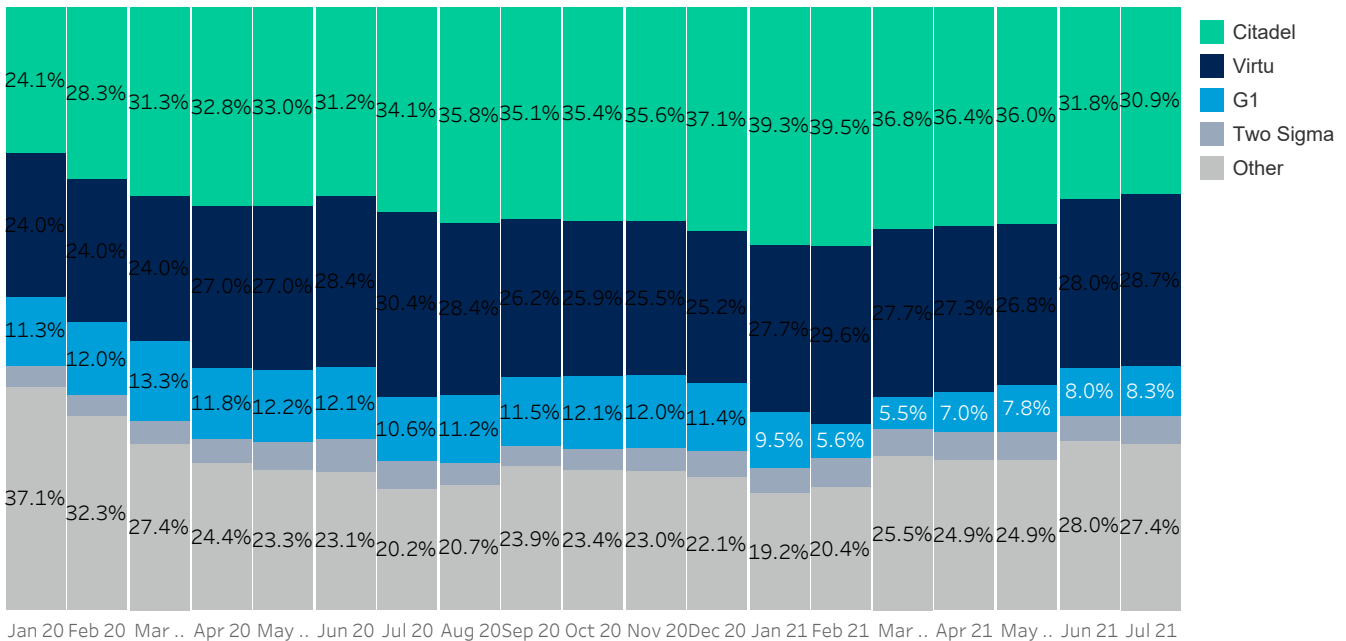


ATS Market Share



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

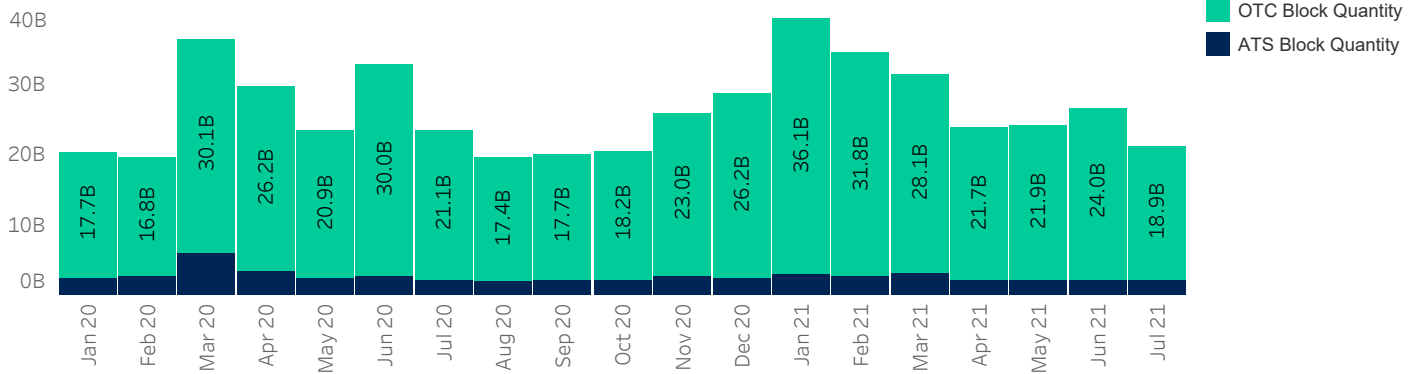
OTC Non-ATS Market Share



Source: FINRA, NMS Tier 1 & 2 Securities

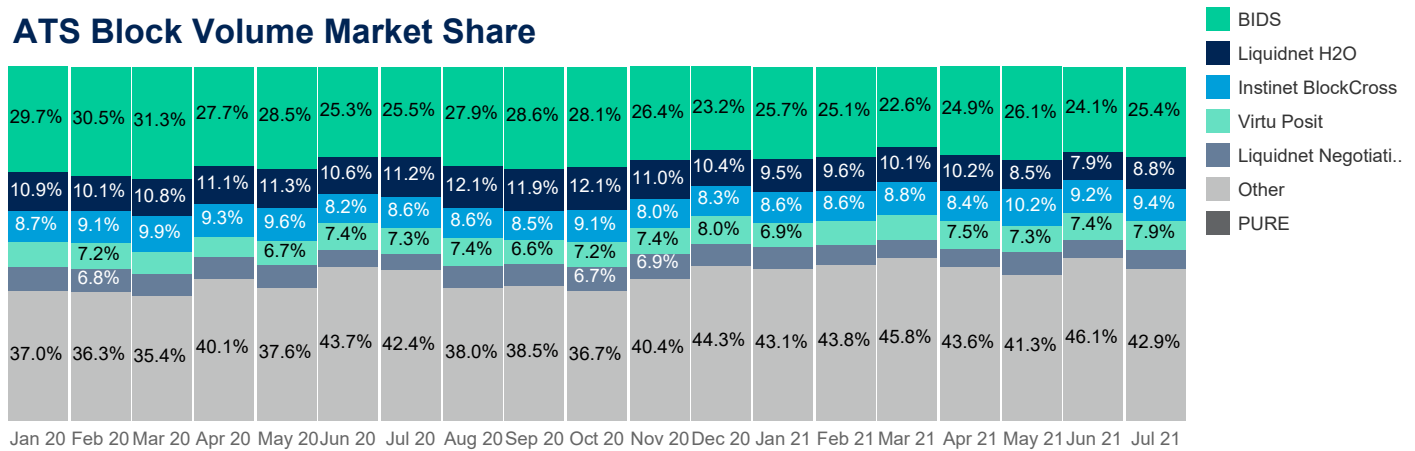


TRF Block Volume Breakdown (Shares)



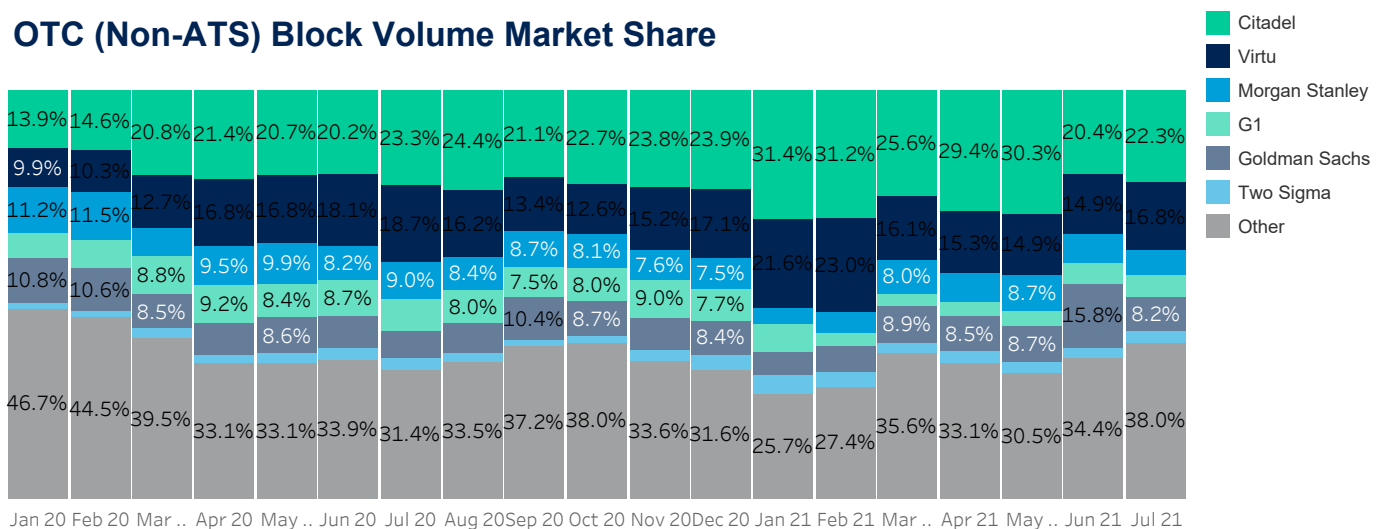
Source: FINRA

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	
		Aug 20	Sep 20	Oct 20	Nov 20	Dec 20	Jan 21	Feb 21	Mar 21	Apr 21	May 21	Jun 21	Jul 21	Aug 21
First 30 Min	SP500	205	204	206	201	197	192	193	191	188	184	178	177	176
	RUS2000	207	207	225	226	228	216	217	222	231	225	217	222	221
Mid Day	SP500	220	215	206	206	206	201	204	195	198	193	197	190	193
	RUS2000	235	233	236	236	232	223	220	207	216	211	213	210	215
Last 30 Min	SP500	264	239	236	231	233	231	238	217	225	224	239	232	239
	RUS2000	283	272	274	263	260	250	255	225	238	235	243	240	249

Spread Bps

First 30 Min	SP500	9.6	11.0	13.0	14.7	12.4	13.2	13.6	13.2	10.3	10.2	8.1	9.7	9.9
	RUS2000	41.8	44.7	57.1	67.2	60.3	63.2	61.8	67.0	57.7	56.8	45.0	52.7	51.6
Mid Day	SP500	4.2	5.3	6.4	6.5	5.4	5.7	5.3	5.6	4.4	4.3	3.5	4.1	4.0
	RUS2000	17.1	18.9	24.9	26.9	24.6	26.8	25.5	27.7	23.1	22.6	18.0	19.9	18.8
Last 30 Min	SP500	3.0	3.6	4.2	4.5	3.8	3.7	3.6	3.8	3.1	3.1	2.6	2.9	2.7
	RUS2000	13.5	15.0	18.9	21.2	19.1	19.7	19.3	20.8	17.5	16.9	14.1	14.4	14.2

One Minute Volatility Bps

First 30 Min	SP500	16.0	20.1	16.0	20.2	15.3	17.5	18.7	18.8	14.5	16.4	12.8	14.5	14.2
	RUS2000	23.7	26.0	16.9	20.9	16.5	20.7	22.1	25.8	18.4	21.6	15.9	19.3	18.9
Mid Day	SP500	5.9	8.4	7.1	7.7	5.8	6.9	6.7	7.9	5.4	6.1	4.5	5.3	4.9
	RUS2000	7.0	8.3	5.7	6.3	5.3	6.6	6.9	9.3	5.9	6.5	4.9	6.2	5.3
Last 30 Min	SP500	6.9	9.9	7.8	8.9	6.8	7.6	7.3	8.8	6.2	7.1	5.2	5.7	5.3
	RUS2000	7.7	9.9	7.3	8.8	7.4	8.7	8.7	11.8	7.5	8.6	6.5	7.2	6.6

Percent ADV by Time of Day

Open	SP500	1.1%	1.0%	1.1%	1.1%	1.1%	1.3%	1.2%	1.1%	1.3%	1.2%	1.1%	1.2%	1.1%
	RUS2000	0.9%	0.8%	0.9%	0.9%	0.8%	0.9%	1.0%	0.9%	0.9%	0.9%	0.8%	1.0%	0.9%
First 30 Min	SP500	9.9%	9.5%	9.2%	10.3%	9.5%	9.6%	10.1%	9.2%	9.6%	9.7%	9.5%	10.0%	9.8%
	RUS2000	8.2%	8.0%	7.6%	8.4%	7.8%	8.1%	8.7%	8.4%	8.1%	8.4%	7.9%	8.9%	8.8%
Last 30 Min	SP500	18.7%	17.9%	18.1%	17.4%	17.4%	16.9%	17.2%	17.6%	17.8%	18.4%	18.5%	18.3%	18.4%
	RUS2000	19.8%	18.7%	19.8%	18.8%	19.0%	18.5%	18.6%	18.6%	19.3%	19.3%	19.4%	19.8%	19.6%
Close	SP500	10.5%	12.0%	11.0%	10.7%	13.7%	12.0%	10.6%	11.9%	13.2%	11.1%	12.3%	12.5%	10.7%
	RUS2000	7.9%	9.6%	9.3%	9.9%	10.6%	10.0%	8.3%	9.2%	9.5%	8.7%	10.0%	9.9%	8.9%

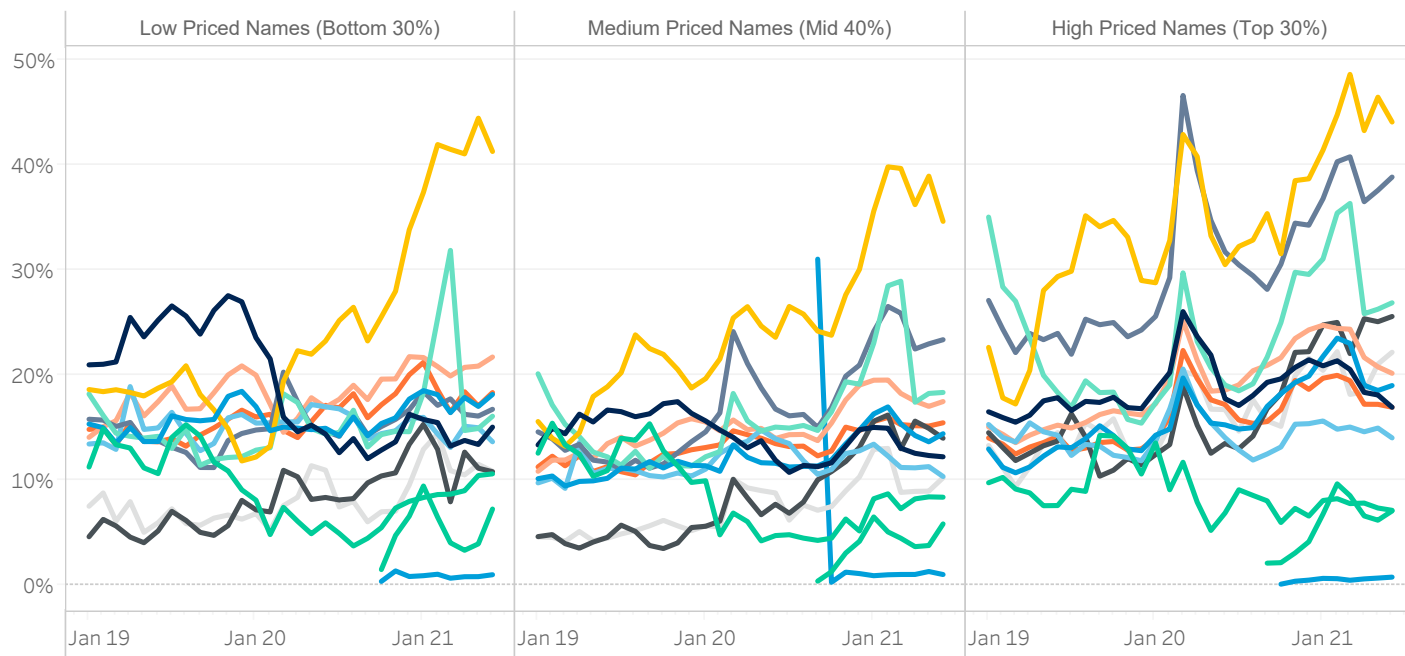
Median used for all metrics

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

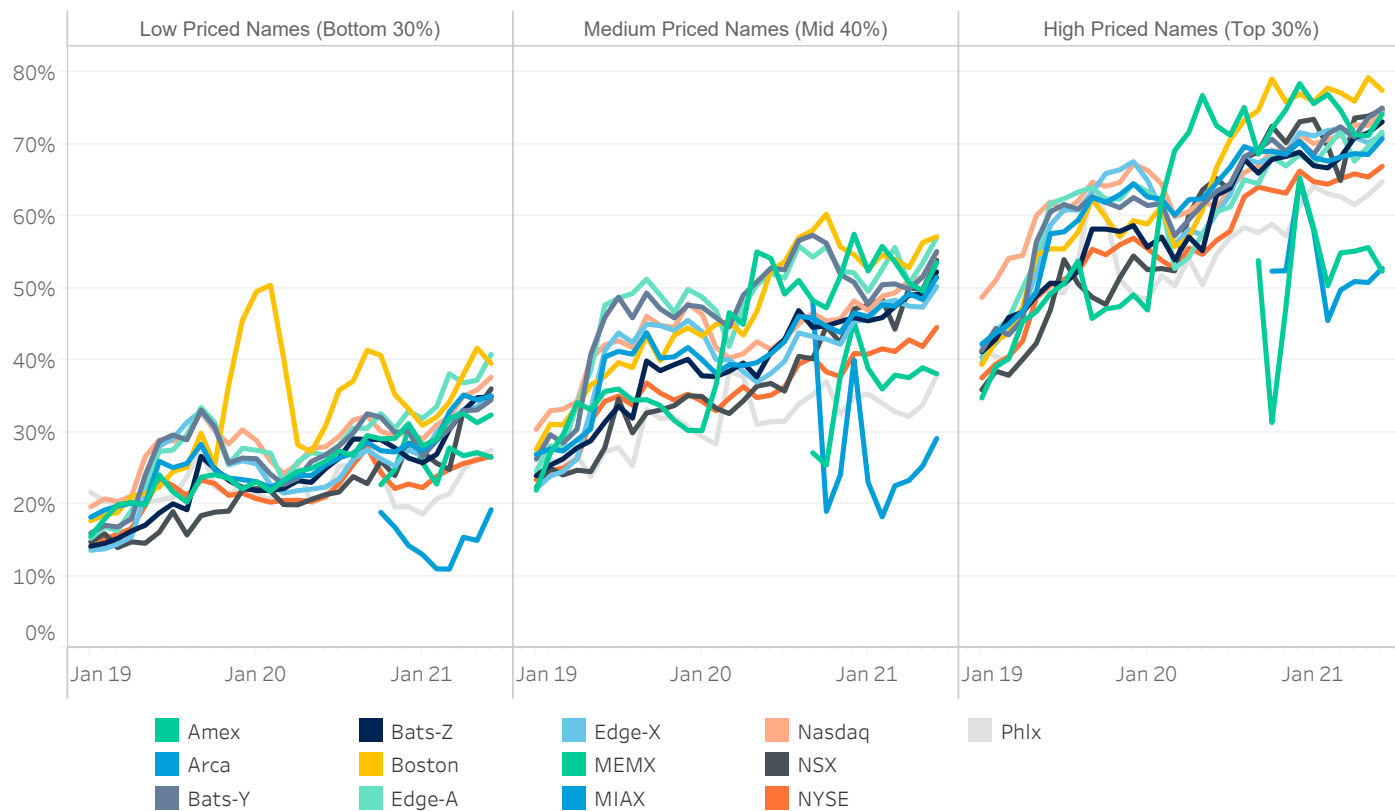
Source data: Virtu Financial



Hidden Trades Proportion by Price and Venue



Oddlot Trades Proportion by Price and Venue



- Amex
- Bats-Z
- Edge-X
- Nasdaq
- Phlx
- Arca
- Boston
- MEMX
- NSX
- Bats-Y
- Edge-A
- MIAX
- NYSE



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