

May 2021

US Market Structure Monthly



US Market Microstructure Observations

- The average daily volume in US equities was 10.6B shares in May 2021, up 7.1% month over month and down 6.2% year over year.
- Trade reporting facility (TRF) market share decreased 1.3% month over month to 42.4% in May 2021.
- Spreads remained stable. Excluding the first and last half hour of the day, median spreads decreased slightly by 2.3% and 2.2% month over month for S&P 500 and RUS 2000 symbols, respectively, in May 2021.
- Deviating from the trends in spreads, intraday volatility increased by 13.0% and 10.2% month over month for S&P 500 and RUS 2000 symbols, respectively, in May 2021.
- The proportion of volume traded in the close auction volume for S&P 500 symbols decreased to 11.1% in May 2021, versus 13.2% in April.

Market Structure News

SEC Approves Capital Raising Through Direct Listing on Nasdaq

The Securities and Exchange Commission (SEC) approved the proposal by Nasdaq to allow companies to raise capital through direct listings as an alternative to the traditional initial public offering (IPO). Unlike the traditional IPO, direct listings require no underwriters and no shares are sold prior to the opening auction. Direct listings are also not subject to a lock-up period, unlike with IPOs, during which investors are restricted from selling outside of the IPO. This latest approval will allow both shares from existing shareholders and also new shares from the company to participate in a direct listing. In December 2020, the SEC approved a similar proposal by the NYSE to allow companies raise capital through direct listings.

<https://www.reuters.com/business/sec-approves-nasdaq-proposal-allow-ipo-alternative-raise-funds-2021-05-21/>

SEC Chairman Gensler Signals More Scrutiny of Crypto and SPACs

In remarks prepared for a House Appropriations Committee subcommittee, SEC Chairman Gary Gensler highlighted the need for tougher oversight for cryptocurrencies and SPACs from an investor protection standpoint and signaled increased regulatory disclosures for private equity.

<https://www.bloomberg.com/news/articles/2021-05-26/wall-street-s-new-cop-signals-more-scrutiny-for-crypto-and-spacs?sref=GrQuSk5T>

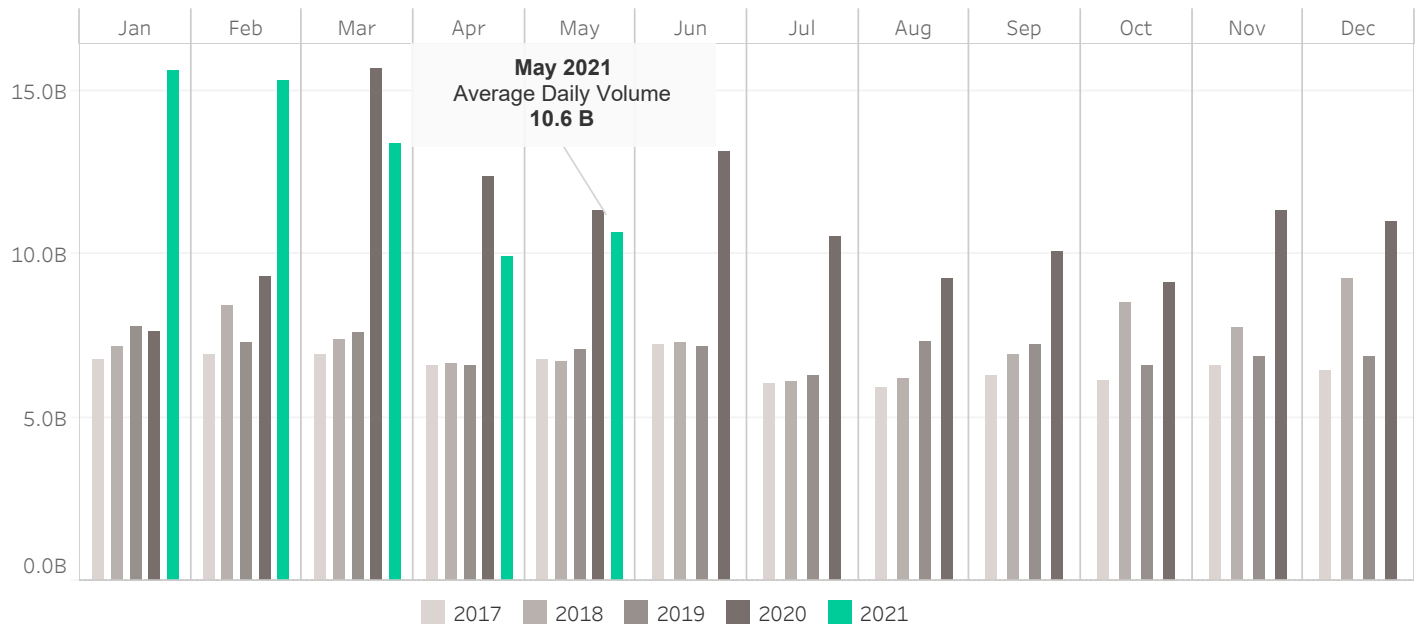
SEC Starts Official Review of SkyBridge, Fidelity Bitcoin ETF Applications

SkyBridge Capital and Fidelity Investments each filed applications with the SEC for new bitcoin ETFs, joining four other bitcoin-based ETFs that are under official SEC review, with more still pending.

<https://www.coindesk.com/sec-starts-official-review-of-skybridge-fidelity-bitcoin-etf-applications>

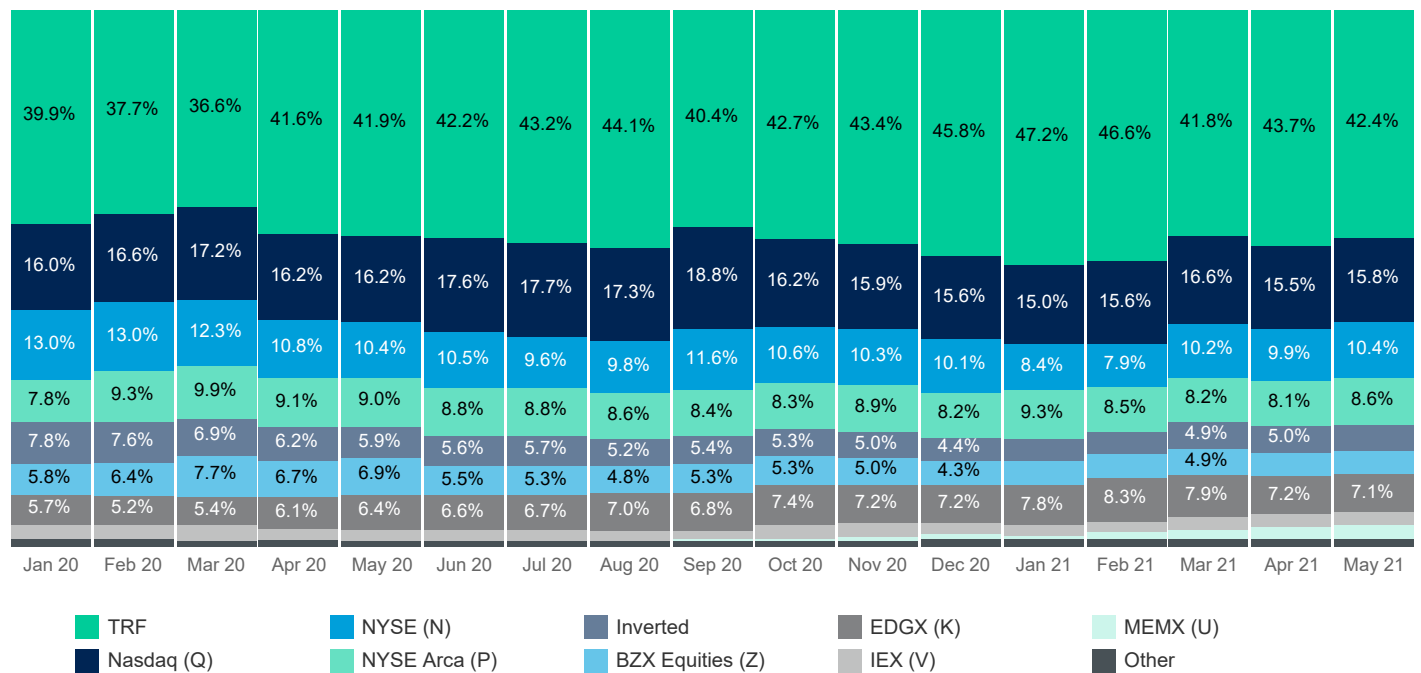


Average Daily Market Volume



Source data: Cboe Global Markets

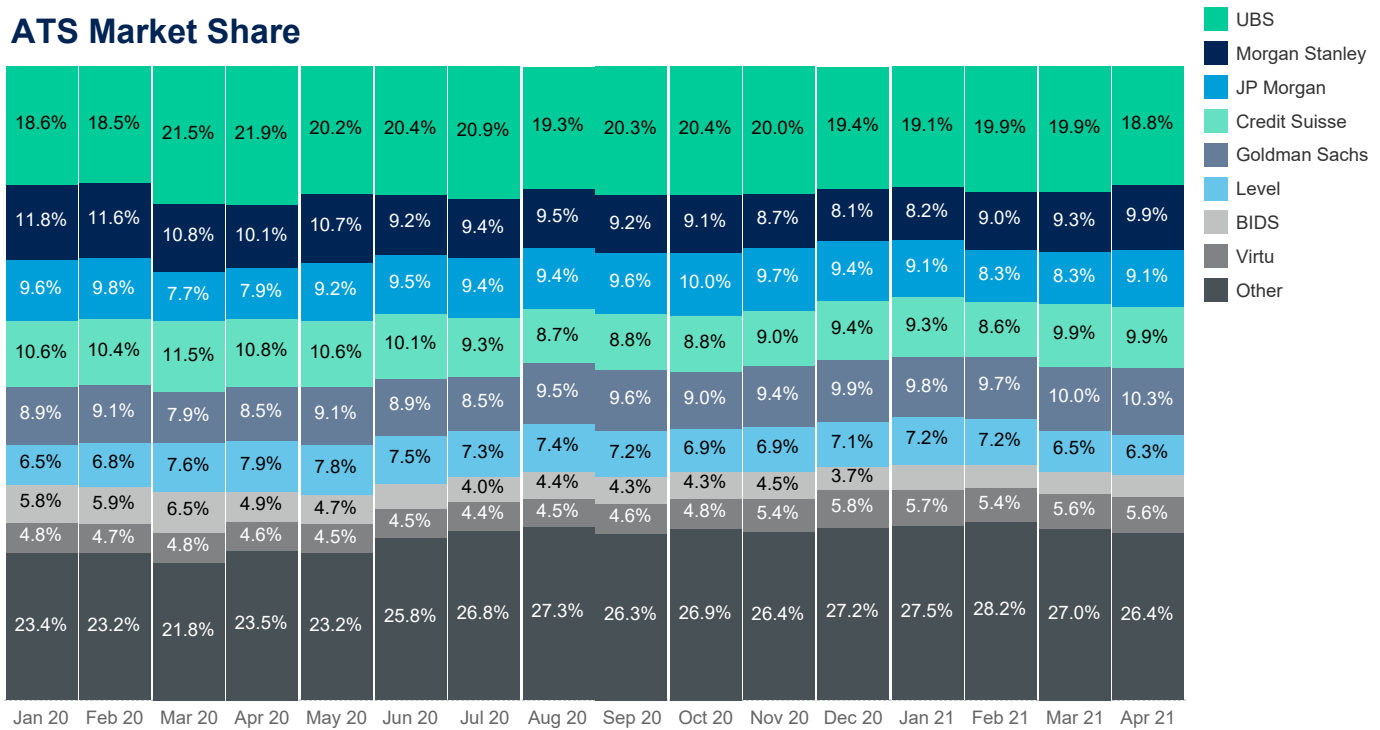
Venue Market Share



Source data: Cboe Global Markets

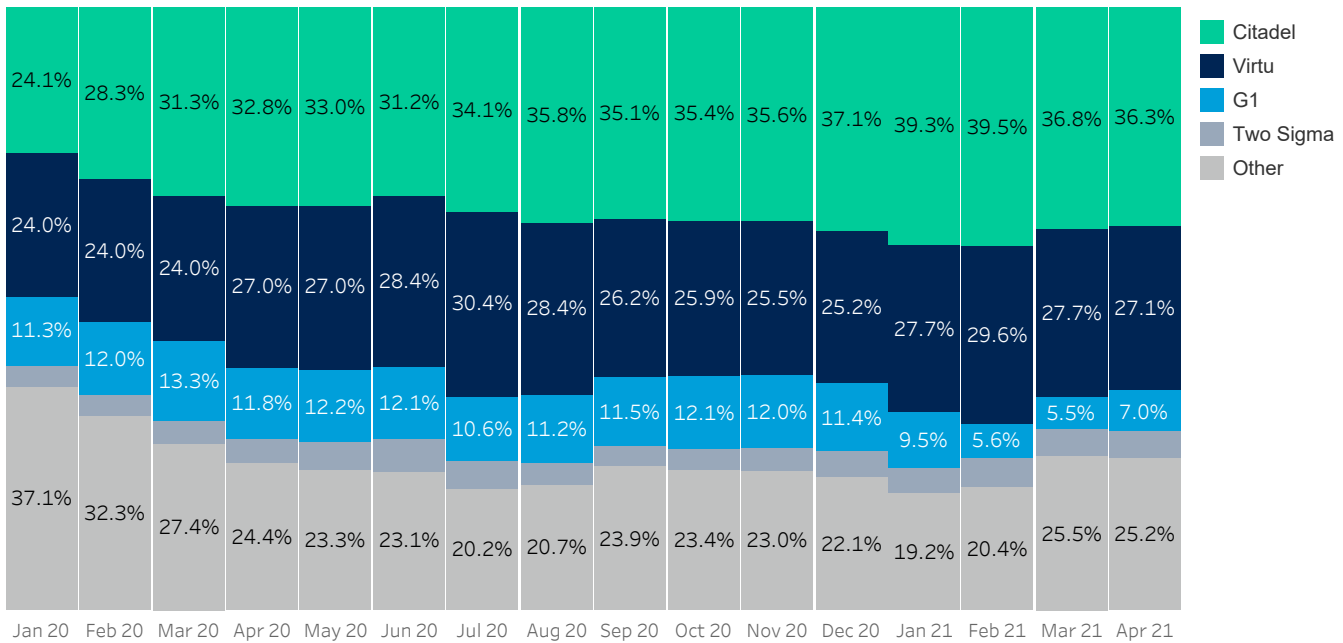


ATS Market Share



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

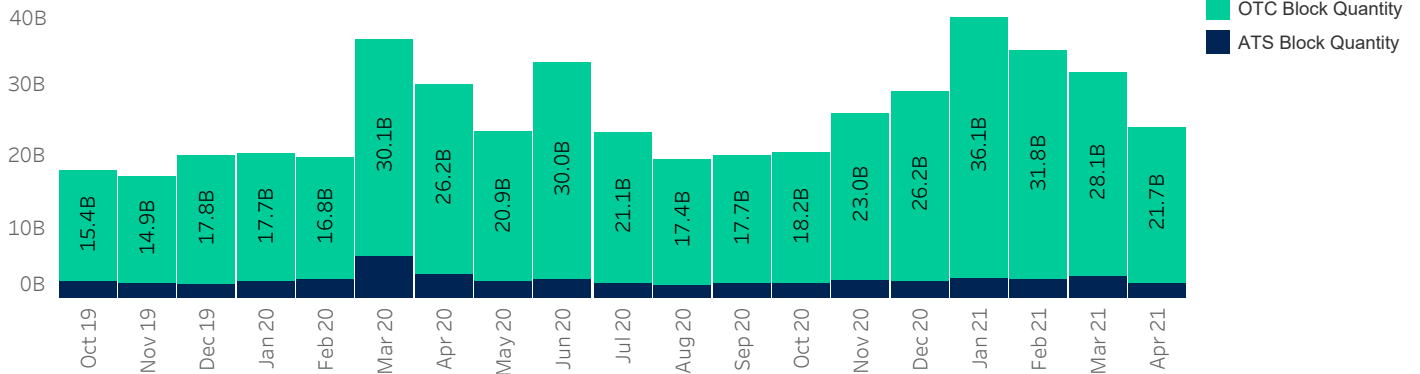
OTC Non-ATS Market Share



Source: FINRA, NMS Tier 1 & 2 Securities

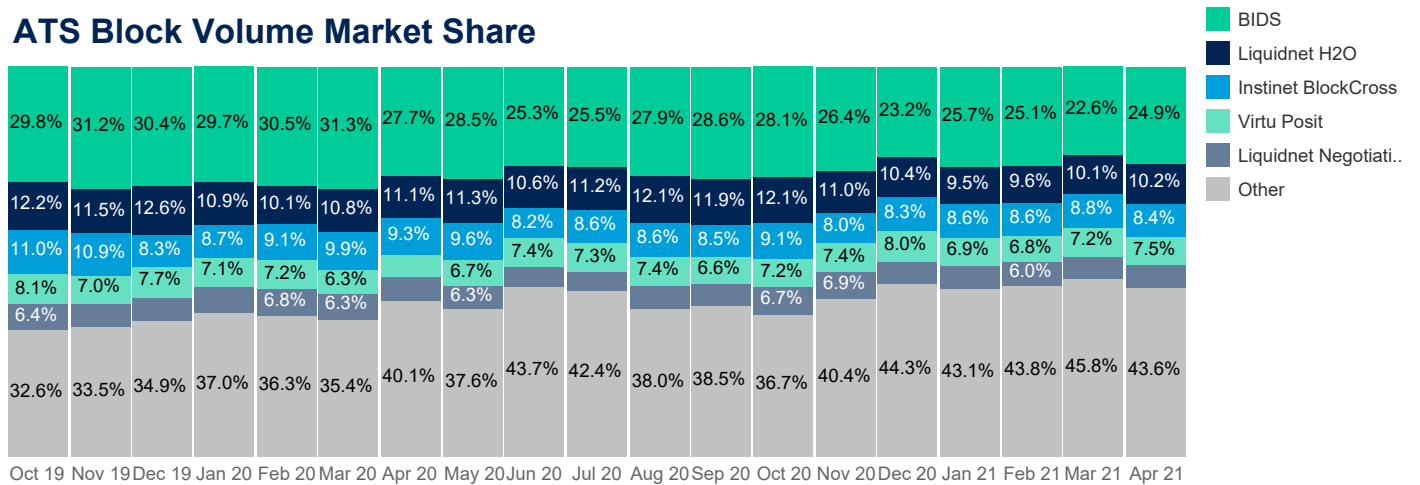


TRF Block Volume Breakdown (Shares)



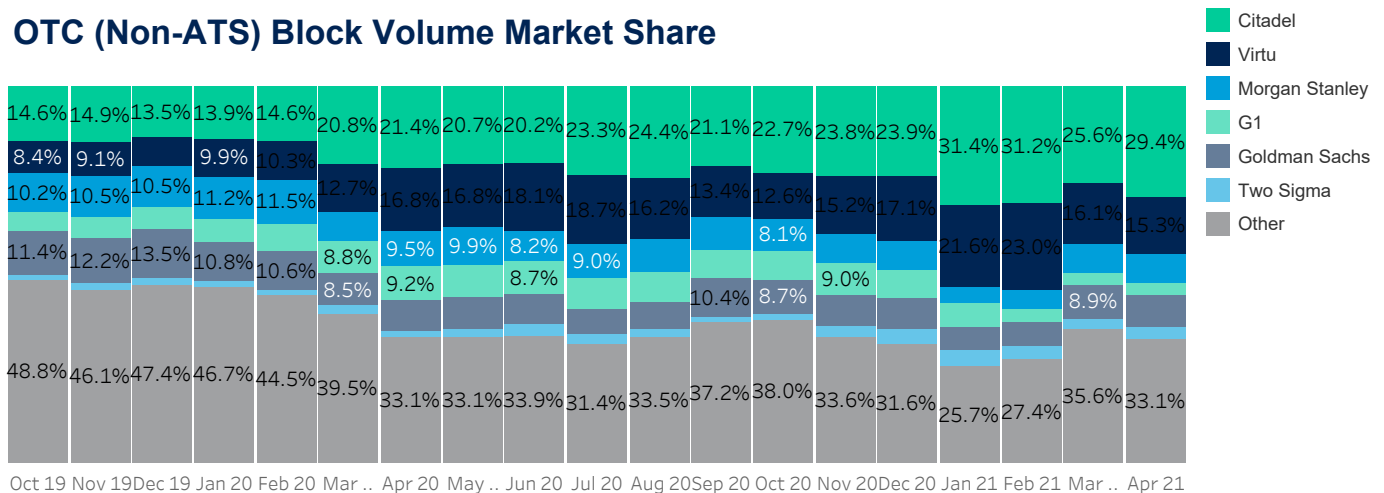
Source: FINRA

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

		2Q 20		3Q 20			4Q 20			1Q 21			2Q 21	
		May 20	Jun 20	Jul 20	Aug 20	Sep 20	Oct 20	Nov 20	Dec 20	Jan 21	Feb 21	Mar 21	Apr 21	May 21
First 30 Min	SP500	196	200	207	205	204	206	201	197	192	193	191	188	184
	RUS2000	200	206	209	207	207	225	226	228	216	217	222	231	225
Mid Day	SP500	197	204	212	220	215	206	206	206	201	204	195	198	193
	RUS2000	209	218	227	235	233	236	236	232	223	220	207	216	211
Last 30 Min	SP500	229	229	242	264	239	236	231	233	231	238	217	225	224
	RUS2000	239	243	264	283	272	274	263	260	250	255	225	238	235

Spread Bps

First 30 Min	SP500	11.8	11.0	10.4	9.6	11.0	13.0	14.7	12.4	13.2	13.6	13.2	10.3	10.2
	RUS2000	65.2	56.7	50.6	41.8	44.7	57.1	67.2	60.3	63.2	61.8	67.0	57.7	56.8
Mid Day	SP500	5.7	5.3	4.8	4.2	5.3	6.4	6.5	5.4	5.7	5.3	5.6	4.4	4.3
	RUS2000	25.0	23.3	20.2	17.1	18.9	24.9	26.9	24.6	26.8	25.5	27.7	23.1	22.6
Last 30 Min	SP500	4.2	3.8	3.3	3.0	3.6	4.2	4.5	3.8	3.7	3.6	3.8	3.1	3.1
	RUS2000	19.3	18.2	15.4	13.5	15.0	18.9	21.2	19.1	19.7	19.3	20.8	17.5	16.9

One Minute Volatility Bps

First 30 Min	SP500	24.5	23.3	19.5	16.0	20.1	16.0	20.2	15.3	17.5	18.7	18.8	14.5	16.4
	RUS2000	33.2	31.3	25.3	23.7	26.0	16.9	20.9	16.5	20.7	22.1	25.8	18.4	21.6
Mid Day	SP500	9.6	9.7	7.6	5.9	8.4	7.1	7.7	5.8	6.9	6.7	7.9	5.4	6.1
	RUS2000	11.9	11.5	9.1	7.0	8.3	5.7	6.3	5.3	6.6	6.9	9.3	5.9	6.5
Last 30 Min	SP500	11.5	11.5	8.9	6.9	9.9	7.8	8.9	6.8	7.6	7.3	8.8	6.2	7.1
	RUS2000	15.0	14.8	10.2	7.7	9.9	7.3	8.8	7.4	8.7	8.7	11.8	7.5	8.6

Percent ADV by Time of Day

Open	SP500	1.0%	1.1%	1.0%	1.1%	1.0%	1.1%	1.1%	1.1%	1.3%	1.2%	1.1%	1.3%	1.2%
	RUS2000	0.9%	0.9%	0.8%	0.9%	0.8%	0.9%	0.9%	0.8%	0.9%	1.0%	0.9%	0.9%	0.9%
First 30 Min	SP500	9.4%	9.1%	9.6%	9.9%	9.5%	9.2%	10.3%	9.5%	9.6%	10.1%	9.2%	9.6%	9.7%
	RUS2000	7.9%	7.3%	7.6%	8.2%	8.0%	7.6%	8.4%	7.8%	8.1%	8.7%	8.4%	8.1%	8.4%
Last 30 Min	SP500	17.7%	17.9%	18.3%	18.7%	17.9%	18.1%	17.4%	17.4%	16.9%	17.2%	17.6%	17.8%	18.4%
	RUS2000	18.7%	18.5%	20.0%	19.8%	18.7%	19.8%	18.8%	19.0%	18.5%	18.6%	18.6%	19.3%	19.3%
Close	SP500	9.0%	10.3%	9.9%	10.5%	12.0%	11.0%	10.7%	13.7%	12.0%	10.6%	11.9%	13.2%	11.1%
	RUS2000	8.3%	8.9%	9.4%	7.9%	9.6%	9.3%	9.9%	10.6%	10.0%	8.3%	9.2%	9.5%	8.7%

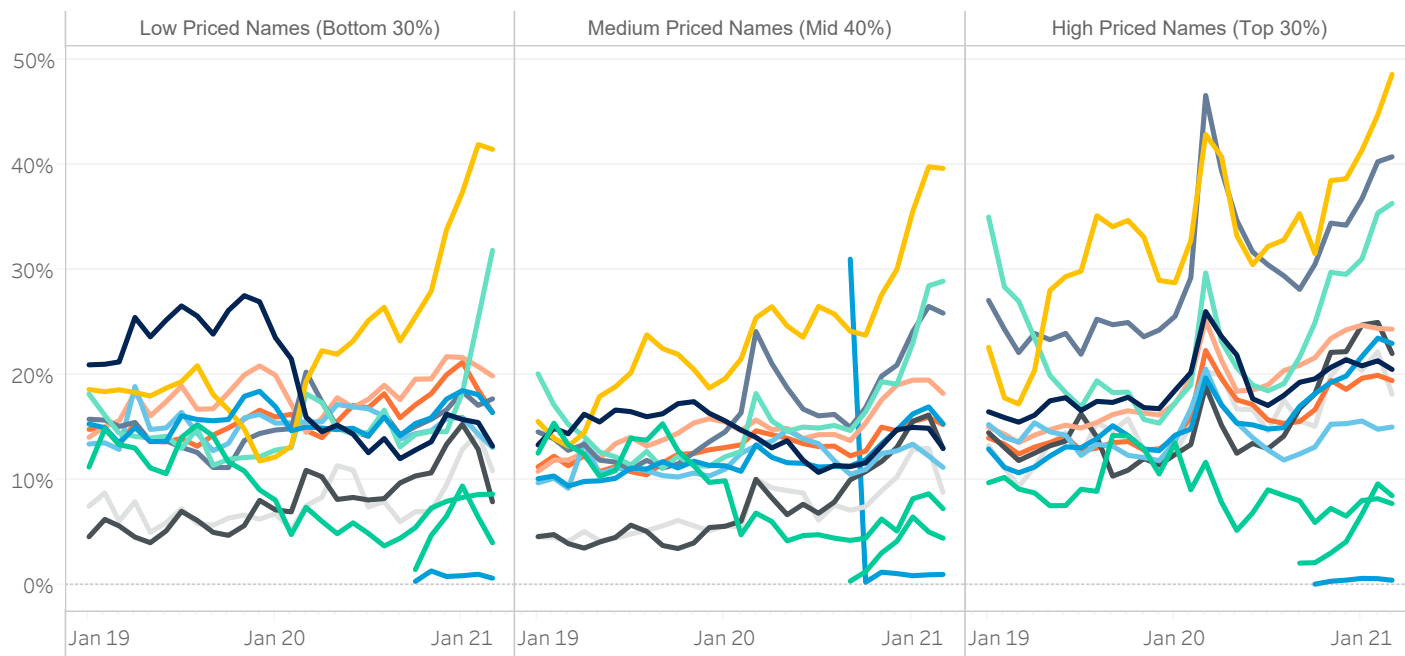
Median used for all metrics

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

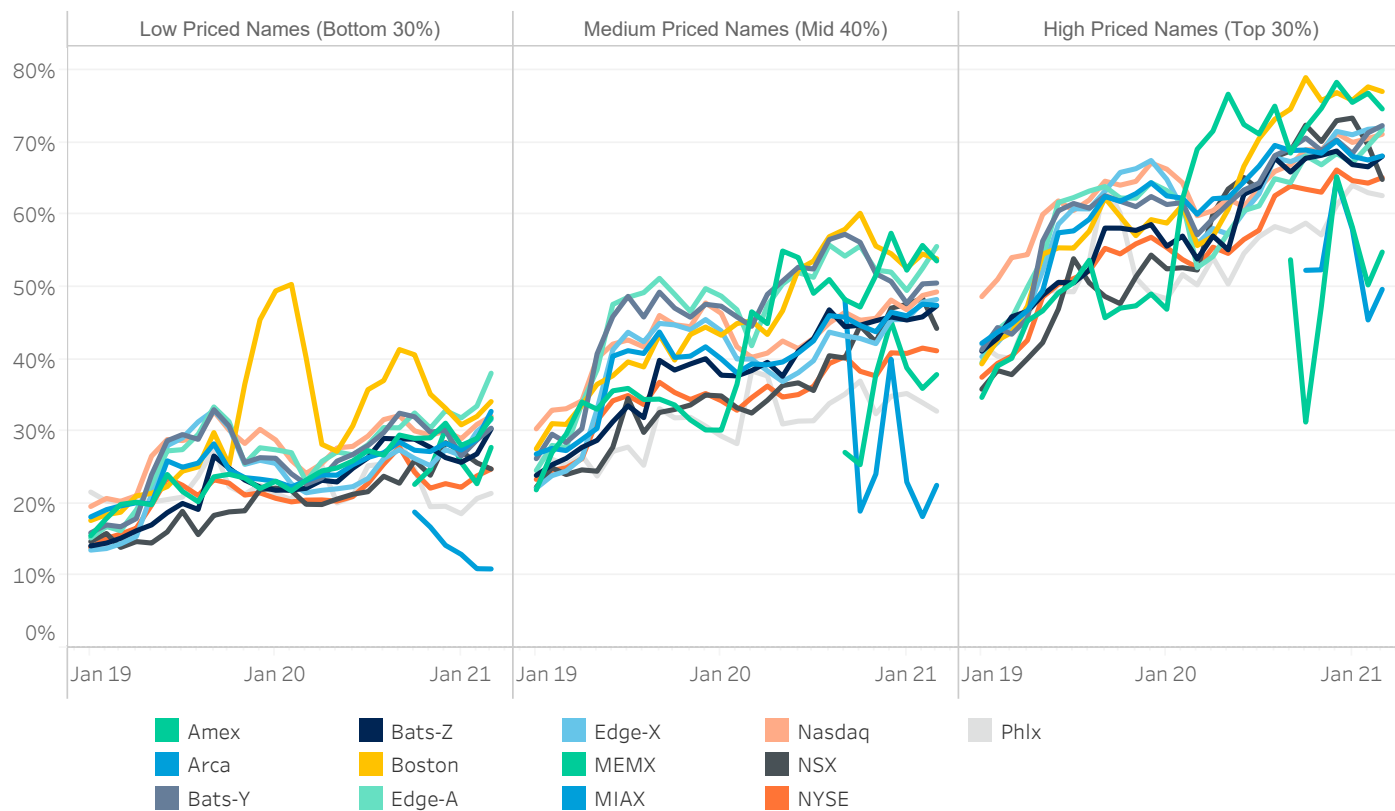
Source data: Virtu Financial



Hidden Trades Proportion by Price and Venue



Oddlot Trades Proportion by Price and Venue



Source data: SEC



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