

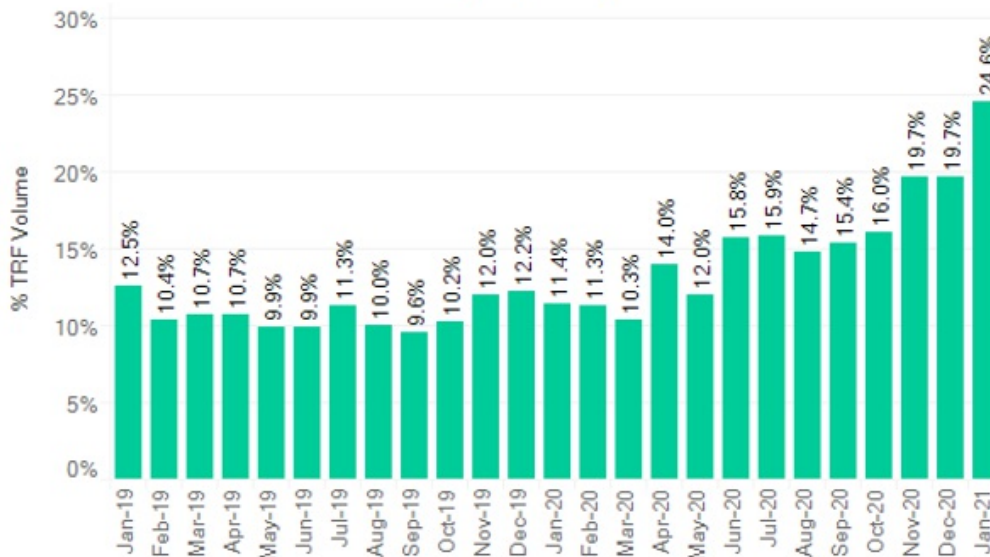
# January 2021 US Market Structure Monthly



## US Market Microstructure Observations

- The average daily volume in US equities was 15.5B shares in January 2021, up 40.9% month over month and 103.9% year over year.
- Trade reporting facility (TRF) market share increased for the fourth consecutive month to a new high of 47.5% in January 2021, up 1.7% month over month. TRF volume has become highly concentrated in a few names; in January 2021, ten symbols accounted for 24.6% of the TRF volume.

## TRF Volume accounted for by top 10 symbols



Note: TRFdata aggregates FINRA/Nasdaq TRF Carteret, FINRA/Nasdaq TRF Chicago, and FINRA/NYSE TRF

- Excluding the first and last half hour of trading, the median size at the National Best Bid and Offer (NBBO) decreased by 2.4% and 3.9% month over month for S&P 500 and RUS 2000 symbols, respectively, in January 2021.
- Excluding the first and last half hour of the day, median spreads increased by 5.6% and 8.9% month over month for S&P 500 and RUS 2000 symbols, respectively, in January 2021.
- Consistent with the trends in spreads, excluding the first and last half hour of trading, intraday volatility for S&P 500 and RUS 2000 symbols increased by 19.0% and 24.5%, respectively, month over month.
- Median proportion of volume traded in the close auction volume for S&P 500 symbols decreased by 1.7% month over month, normalizing from 13.7% to 12.0% in January 2021.



## Market Structure News

### **SEC to Review Brokers' Restrictions on GameStop, AMC Trading**

The SEC announced plans to review the actions of brokerage firms that placed restrictions on investors' ability to trade stocks such as GameStop Corp. or AMC Entertainment Holdings Inc. Regulators are also investigating potential manipulative trading and evaluating the market structure and operations for retail investing.

<https://www.wsj.com/articles/sec-to-review-brokers-restrictions-on-gamestop-amc-trading-11611932473>

### **Biden Names Gary Gensler for SEC Chairman**

President Biden nominated Gary Gensler to head the Securities and Exchange Commission. The appointment decision needs to be confirmed by the Senate to take effect. Previously, Mr. Gensler headed the US Commodity Futures Trading Commission under the Obama administration. Although his detailed priorities have not yet been outlined, observers have noted Mr. Gensler's reputation for being aggressive in regard to regulations and the likelihood he will pursue additional enforcement efforts and new disclosure rules for public companies.

<https://www.wsj.com/articles/bidens-candidate-for-sec-chairman-is-expected-to-be-tough-on-companies-11611743403>

<https://www.wsj.com/articles/companies-brace-themselves-for-new-esg-regulations-under-biden-11610719200>

<https://www.wsj.com/articles/day-trader-mania-will-challenge-sec-under-gensler-bidens-choice-for-chairman-11611961219>

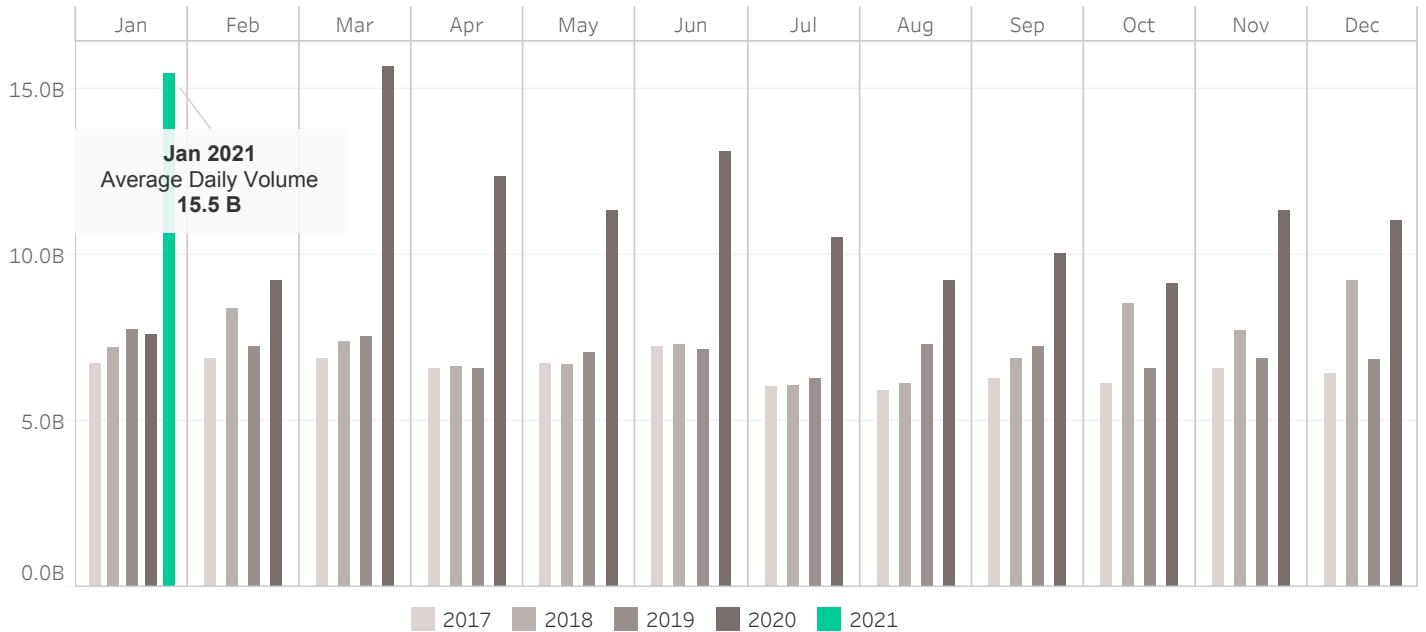
### **CFTC Chair Steps Down**

Heath Tarbert stepped down as Commodity Futures Trading Commission (CFTC) chair, with Georgetown University Professor and Faculty Director, Chris Brummer as a leading candidate to replace him.

<https://www.reuters.com/article/us-usa-biden-cftc-exclusive-idUSKBN29Q2MT>

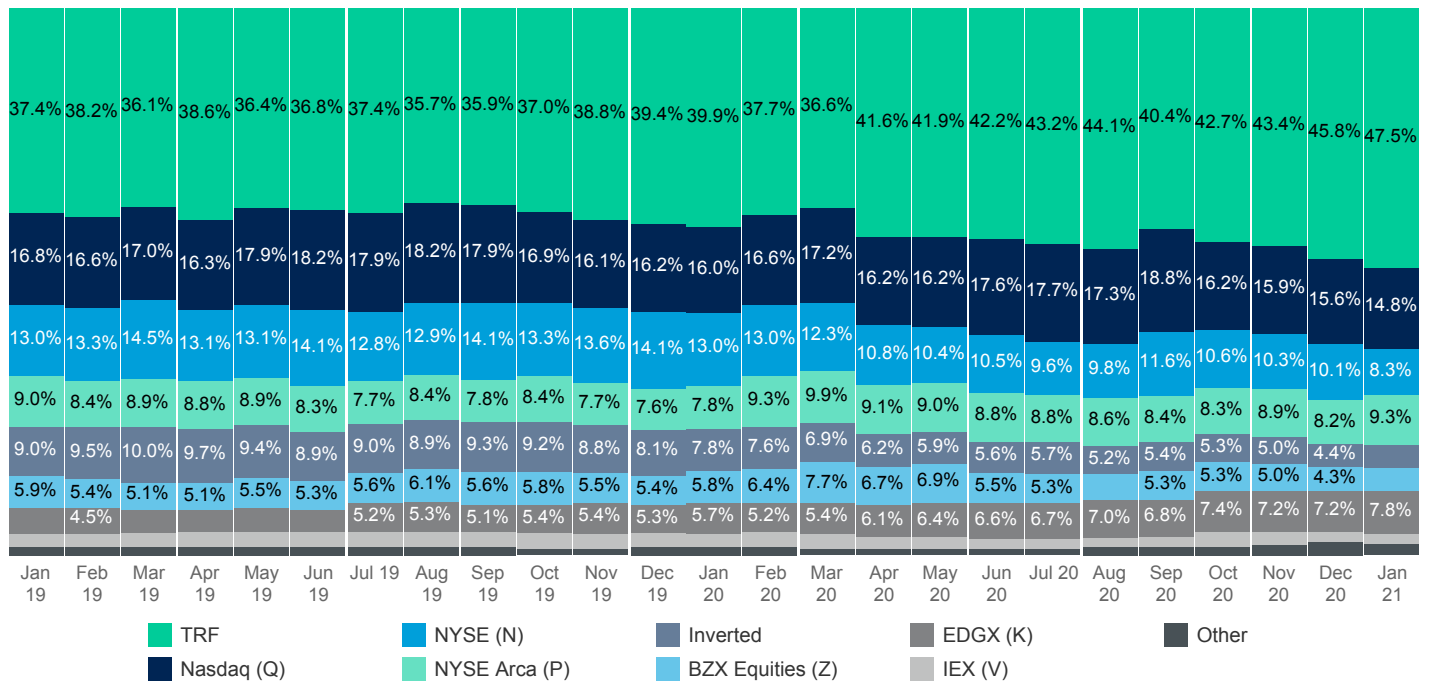


## Average Daily Market Volume



Source data: Cboe Global Markets

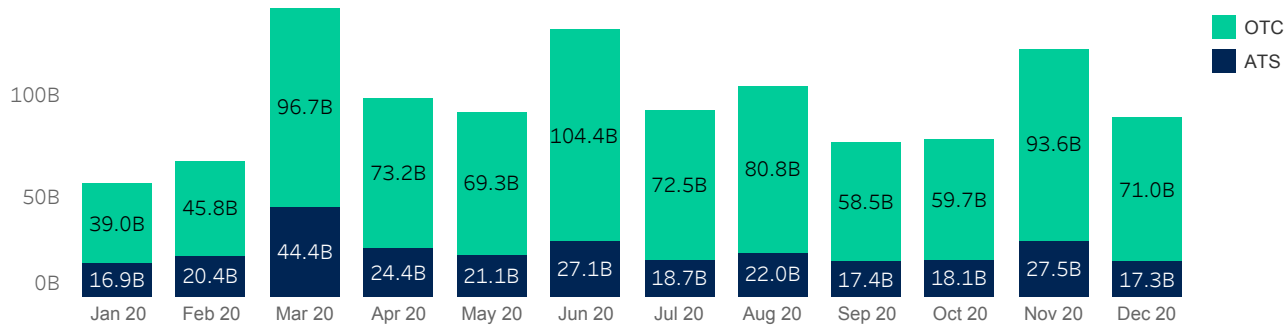
## Venue Market Share



Source data: Cboe Global Markets

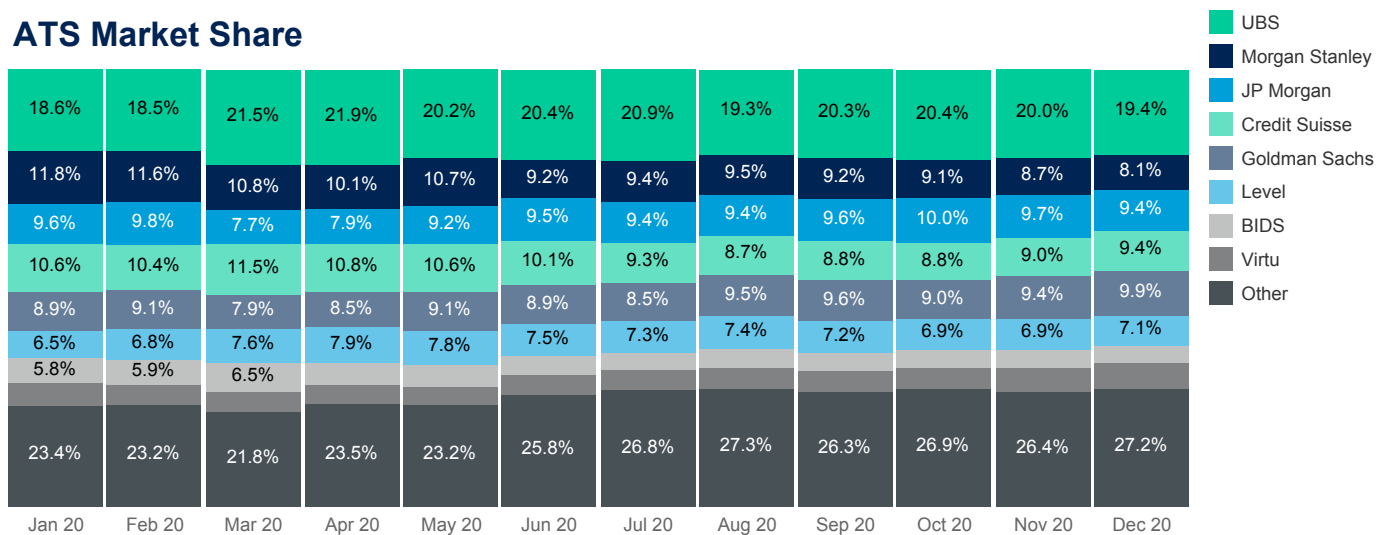


## TRF Volume Breakdown (Shares)



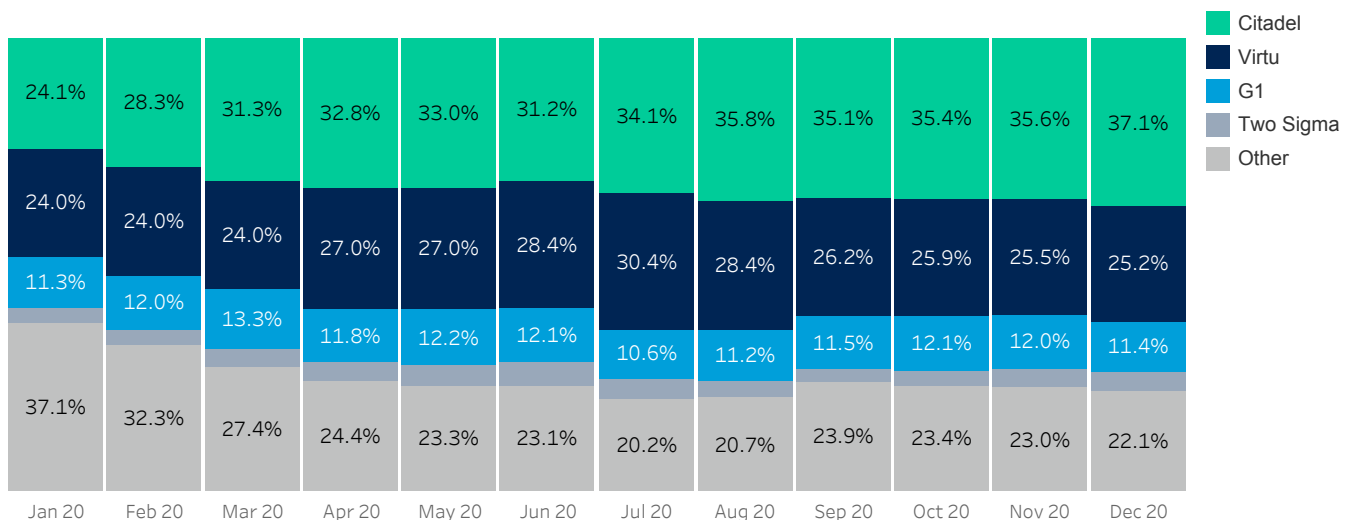
Source: FINRA, NMS Tier 1 & 2 Securities

## ATS Market Share



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

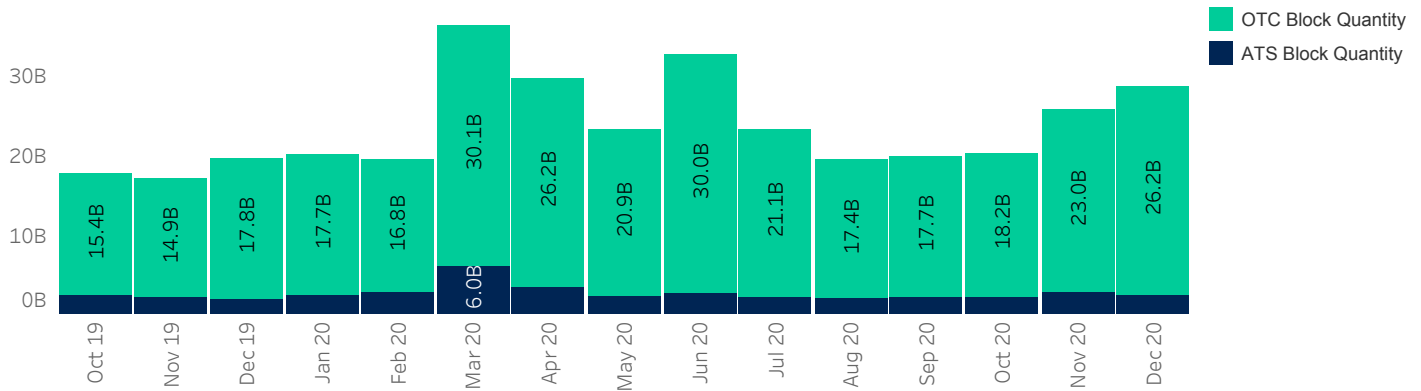
## OTC Non-ATS Market Share



Source: FINRA, NMS Tier 1 & 2 Securities

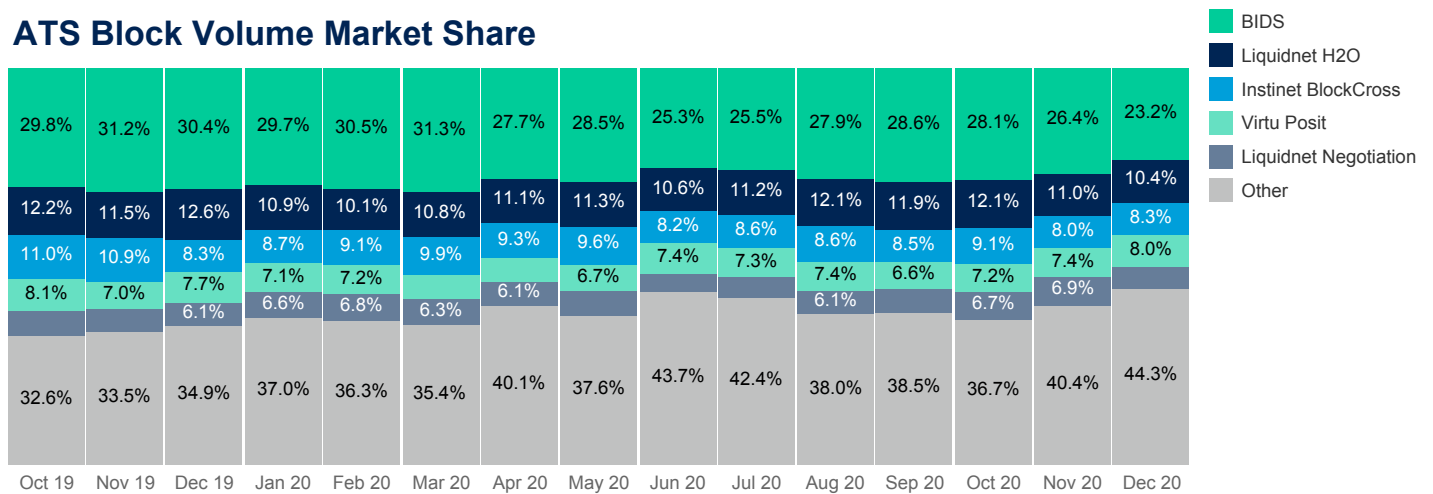


## TRF Block Volume Breakdown (Shares)



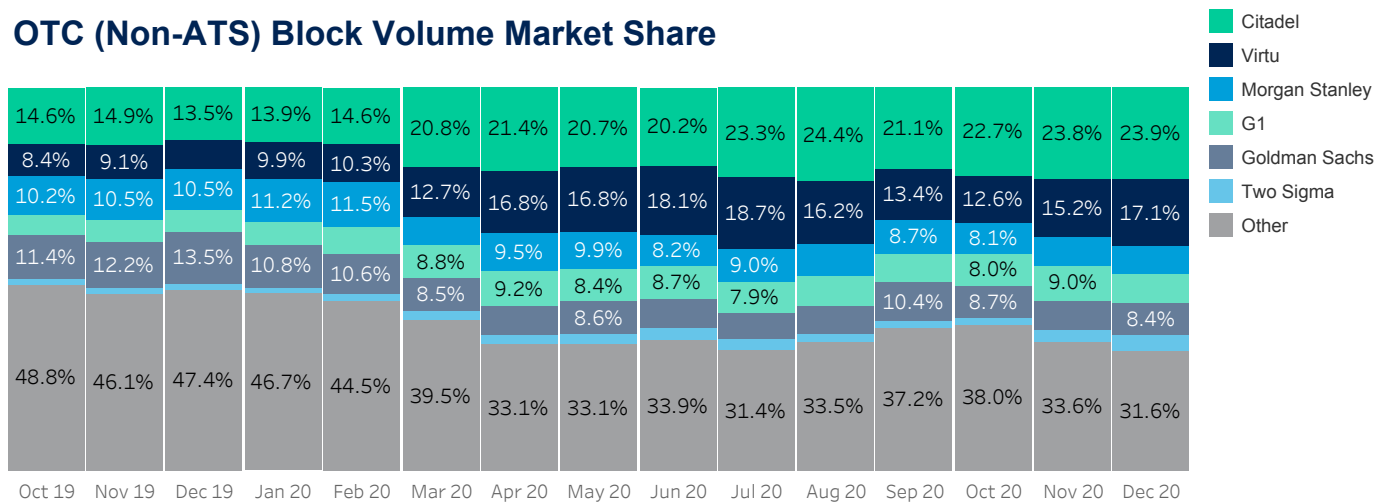
Source: FINRA

## 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

	1Q 20			2Q 20			3Q 20			4Q 20			1Q 21	
	Jan 20	Feb 20	Mar 20	Apr 20	May 20	Jun 20	Jul 20	Aug 20	Sep 20	Oct 20	Nov 20	Dec 20	Jan 21	
First 30 Min	SP500	176	185	185	184	196	200	207	205	204	206	201	197	192
	RUS2000	193	204	200	194	200	206	209	207	207	225	226	228	216
Mid Day	SP500	199	194	174	177	197	204	212	220	215	206	206	206	201
	RUS2000	210	216	200	198	209	218	227	235	233	236	236	232	223
Last 30 Min	SP500	254	240	193	200	229	229	242	264	239	236	231	233	231
	RUS2000	250	264	233	228	239	243	264	283	272	274	263	260	250

## Spread Bps

First 30 Min	SP500	7.7	9.8	28.1	19.4	11.8	11.0	10.4	9.6	11.0	13.0	14.7	12.4	13.2
	RUS2000	36.3	43.7	108.1	87.0	65.2	56.7	50.6	41.8	44.7	57.1	67.2	60.3	63.2
Mid Day	SP500	3.4	4.1	13.1	8.4	5.7	5.3	4.8	4.2	5.3	6.4	6.5	5.4	5.7
	RUS2000	14.5	16.4	42.5	34.8	25.0	23.3	20.2	17.1	18.9	24.9	26.9	24.6	26.8
Last 30 Min	SP500	2.3	2.5	9.7	5.8	4.2	3.8	3.3	3.0	3.6	4.2	4.5	3.8	3.7
	RUS2000	10.9	11.2	33.2	25.1	19.3	18.2	15.4	13.5	15.0	18.9	21.2	19.1	19.7

## One Minute Volatility Bps

First 30 Min	SP500	11.2	14.6	53.4	32.8	24.5	23.3	19.5	16.0	20.1	16.0	20.2	15.3	17.5
	RUS2000	15.4	16.9	45.1	40.8	33.2	31.3	25.3	23.7	26.0	16.9	20.9	16.5	20.7
Mid Day	SP500	4.3	5.6	27.7	14.4	9.6	9.7	7.6	5.9	8.4	7.1	7.7	5.8	6.9
	RUS2000	4.7	5.7	21.8	16.4	11.9	11.5	9.1	7.0	8.3	5.7	6.3	5.3	6.6
Last 30 Min	SP500	5.1	6.1	36.1	17.0	11.5	11.5	8.9	6.9	9.9	7.8	8.9	6.8	7.6
	RUS2000	5.3	5.8	28.0	20.1	15.0	14.8	10.2	7.7	9.9	7.3	8.8	7.4	8.7

## Percent ADV by Time of Day

Open	SP500	1.1%	1.1%	1.0%	1.1%	1.0%	1.1%	1.0%	1.1%	1.0%	1.1%	1.1%	1.1%	1.3%
	RUS2000	0.9%	0.9%	0.8%	0.8%	0.9%	0.9%	0.8%	0.9%	0.8%	0.9%	0.9%	0.8%	0.9%
First 30 Min	SP500	7.9%	8.6%	8.2%	8.7%	9.4%	9.1%	9.6%	9.9%	9.5%	9.2%	10.3%	9.5%	9.6%
	RUS2000	7.3%	7.2%	6.3%	7.0%	7.9%	7.3%	7.6%	8.2%	8.0%	7.6%	8.4%	7.8%	8.1%
Last 30 Min	SP500	18.0%	17.9%	18.3%	17.7%	17.7%	17.9%	18.3%	18.7%	17.9%	18.1%	17.4%	17.4%	16.9%
	RUS2000	18.8%	18.6%	19.9%	18.9%	18.7%	18.5%	20.0%	19.8%	18.7%	19.8%	18.8%	19.0%	18.5%
Close	SP500	13.8%	12.0%	9.9%	9.8%	9.0%	10.3%	9.9%	10.5%	12.0%	11.0%	10.7%	13.7%	12.0%
	RUS2000	9.4%	8.1%	9.0%	8.9%	8.3%	8.9%	9.4%	7.9%	9.6%	9.3%	9.9%	10.6%	10.0%

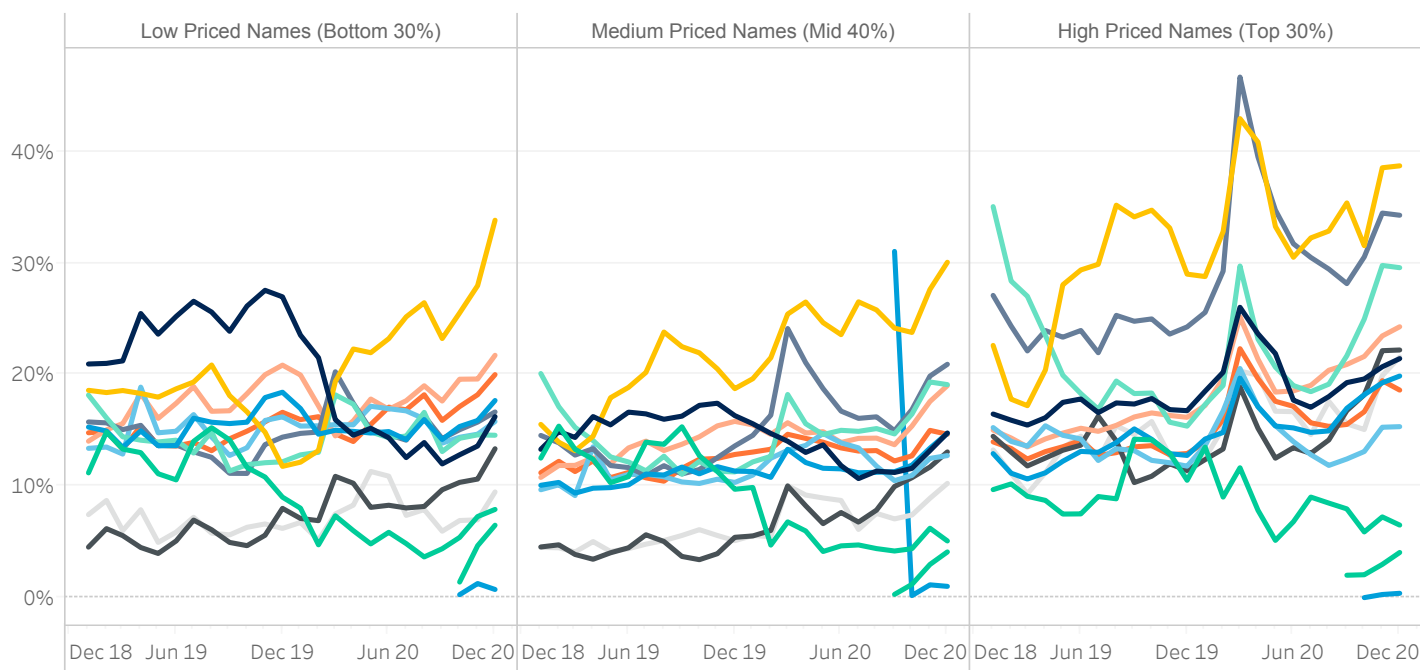
Median used for all metrics

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

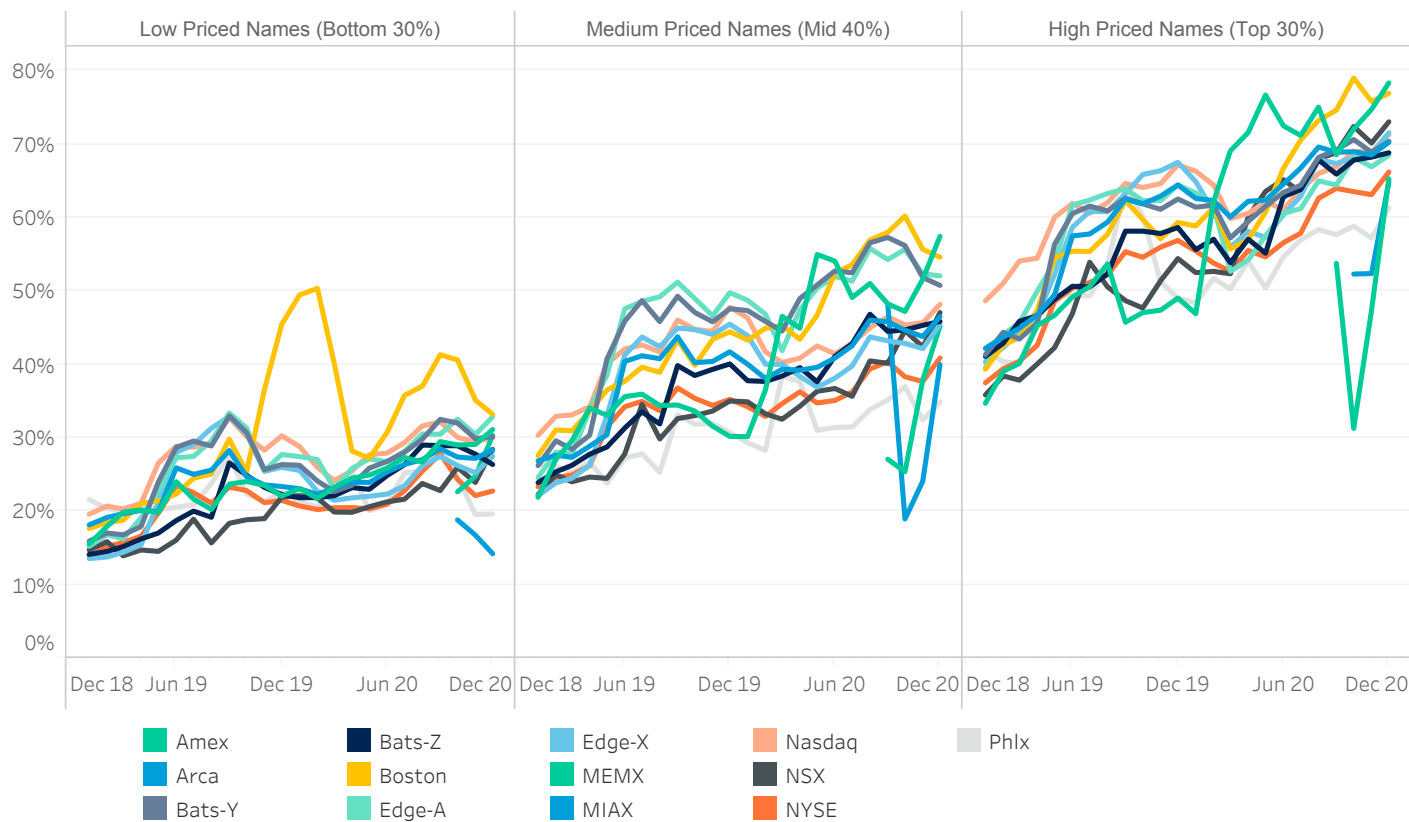
Source data: Virtu Financial



## Hidden Trades Proportion by Price and Venue



## Oddlot Trades Proportion by Price and Venue



Source data: SEC



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