

July 2021

US Market Structure Monthly



US Market Microstructure Observations

- The average daily volume in US equities was 9.7B shares in July 2021, down 12.6% month over month and down 7.6% year over year.
- Trade reporting facility (TRF) market share remained stable month over month, decreasing 0.6% in July 2021.
- Excluding the first and last half hour of the day, median spreads increased by 17.1% and 10.6% month over month for S&P 500 and RUS 2000 symbols, respectively, in July 2021.
- Consistent with the trends in spreads, intraday volatility jumped by 17.8% and 26.5% month over month for S&P 500 and RUS 2000 symbols, respectively, in July 2021.
- The proportion of volume traded in the closing auction saw no significant month over month change in July 2021.

Market Structure News

SEC Calling on Congress to Grant More Scope to Oversee Cryptocurrency

SEC Chair Gensler called for the SEC to take a more active role in regulating cryptocurrency markets, as well as requesting Congress to grant the agency more scope and resources to oversee the cryptocurrency sector. Chair Gensler has told House lawmakers that the investor protection rules that apply to equities and derivatives should also apply to crypto exchanges. Areas where Chair Gensler would like to expand the SEC's remit to include:

1. Decentralized finance (DeFi), software platforms that allow users to borrow, lend, earn interest, and trade assets
2. Stablecoins, which are digital assets pegged to the value of national currencies
3. Crypto asset and trading platforms

<https://www.wsj.com/articles/sec-will-police-cryptocurrencies-to-maximum-possible-extent-chair-gary-gensler-says-11628007567?page=1>

SEC Focuses on Bank Fee in SPAC deals

SEC is investigating whether potential conflicts of interest could arise when banks act as underwriters and advisors on a Special Purpose Acquisition Company (SPAC) deal. In particular, the SEC is interested in fees earned when a bank takes on multiple roles in a deal. The underwriting banks can earn more fees if they go on to represent the merger target and help the SPAC sponsor raise additional cash, thus representing both sides of the transaction.

<https://www.reuters.com/business/exclusive-us-sec-focuses-bank-fee-conflicts-it-steps-up-spac-inquiry-sources-2021-07-13/>

SEC Approves Changes to the IEX Retail Program

SEC approved changes to the IEX Retail Price Improvement Program which include:

1. Change in the Retail Liquidity Provider order type from Discretionary Peg to Midpoint Peg
2. Require that the order originate from retail investors that place less than 390 equity orders per day during a month.
3. Introduce Retail Liquidity Indicator (RLI) to be disseminated via the SIP and IEX's TOPS and DEEP data feeds

<https://iextrading.com/alerts/154>



Market Structure News Continued

SEC to Restart Swaps Regulation Effort

In a prepared speech, SEC Chair Gensler said that the SEC is likely to renew efforts to write rules for the registration and regulation of security-based swap execution facilities, harmonizing with the existing rules in place at the Commodity Futures Trading Commission.

<https://www.reuters.com/business/finance/us-sec-chair-says-agency-write-new-rules-swaps-regulation-2021-07-21/>

SEC to Set New Disclosure Requirements for Chinese Company IPOs

Following new offshore IPO restrictions from China's government, the SEC is looking to add disclosure requirements for Chinese firms before an IPO. In particular, the SEC will require variable interest entities (VIEs), a form of shell company that enables Chinese companies to raise capital abroad despite government restrictions, to clearly distinguish the shell company from the China-based operating company, with detailed information about the relationship between the two entities. In addition, the registration statements will also have to disclose the potential operating impact by the government of China.

<https://www.wsj.com/articles/sec-to-set-new-disclosure-requirements-for-chinese-company-ipos-11627651546?>

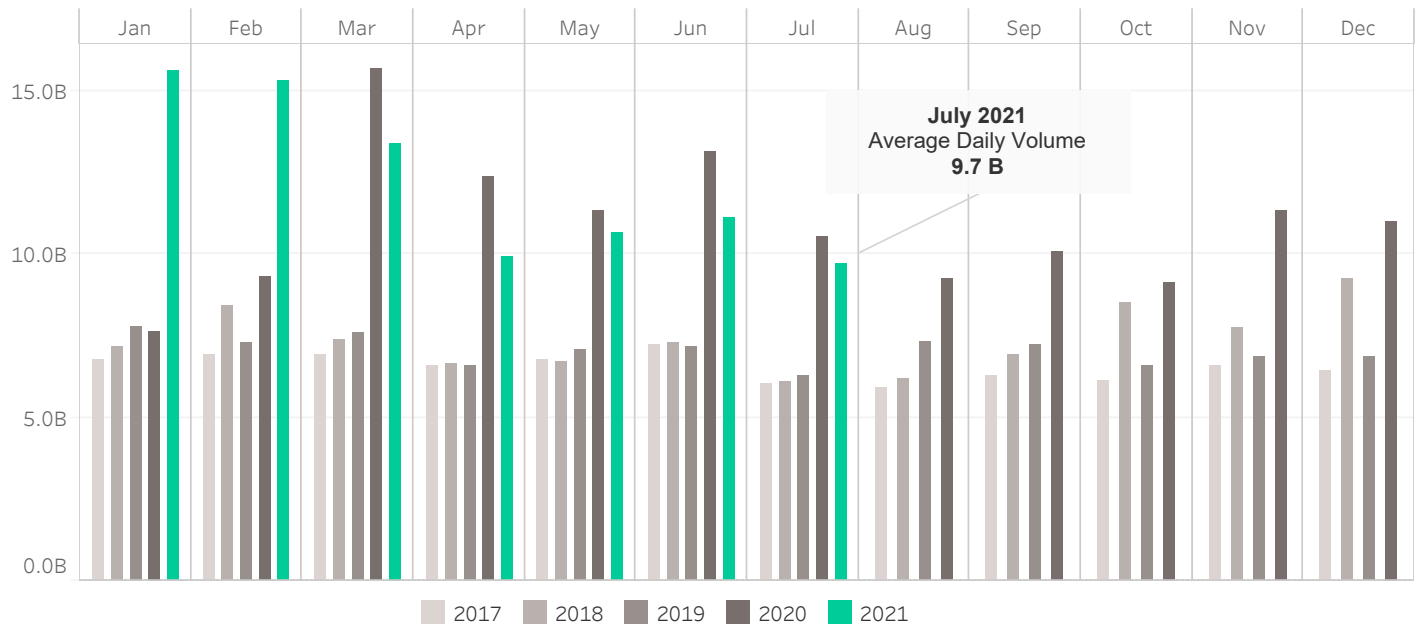
Nasdaq Acquires Minority Stake in Level ATS

Nasdaq has acquired a significant minority stake in Level ATS, an independently operated US equity dark pool. The terms of the transactions were not disclosed.

<https://www.nasdaq.com/press-release/nasdaq-acquires-minority-stake-in-level-ats-2021-08-02>

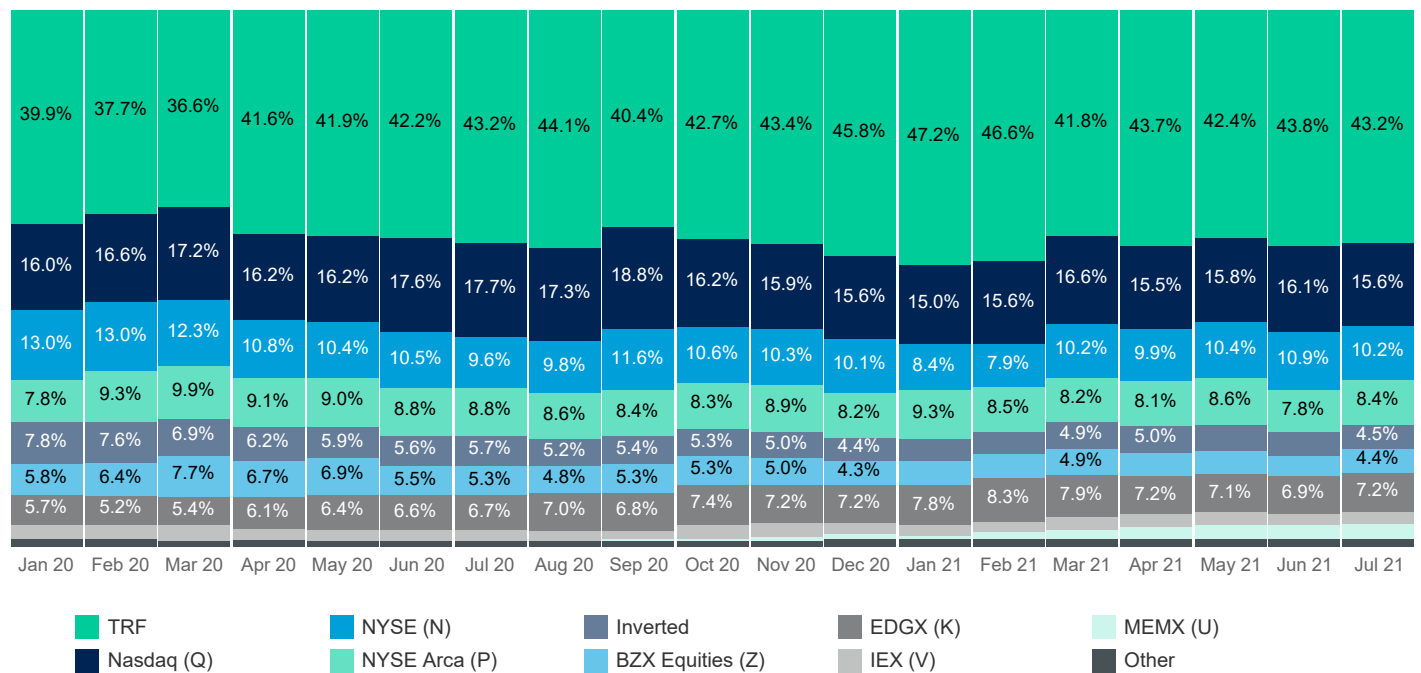


Average Daily Market Volume



Source data: Cboe Global Markets

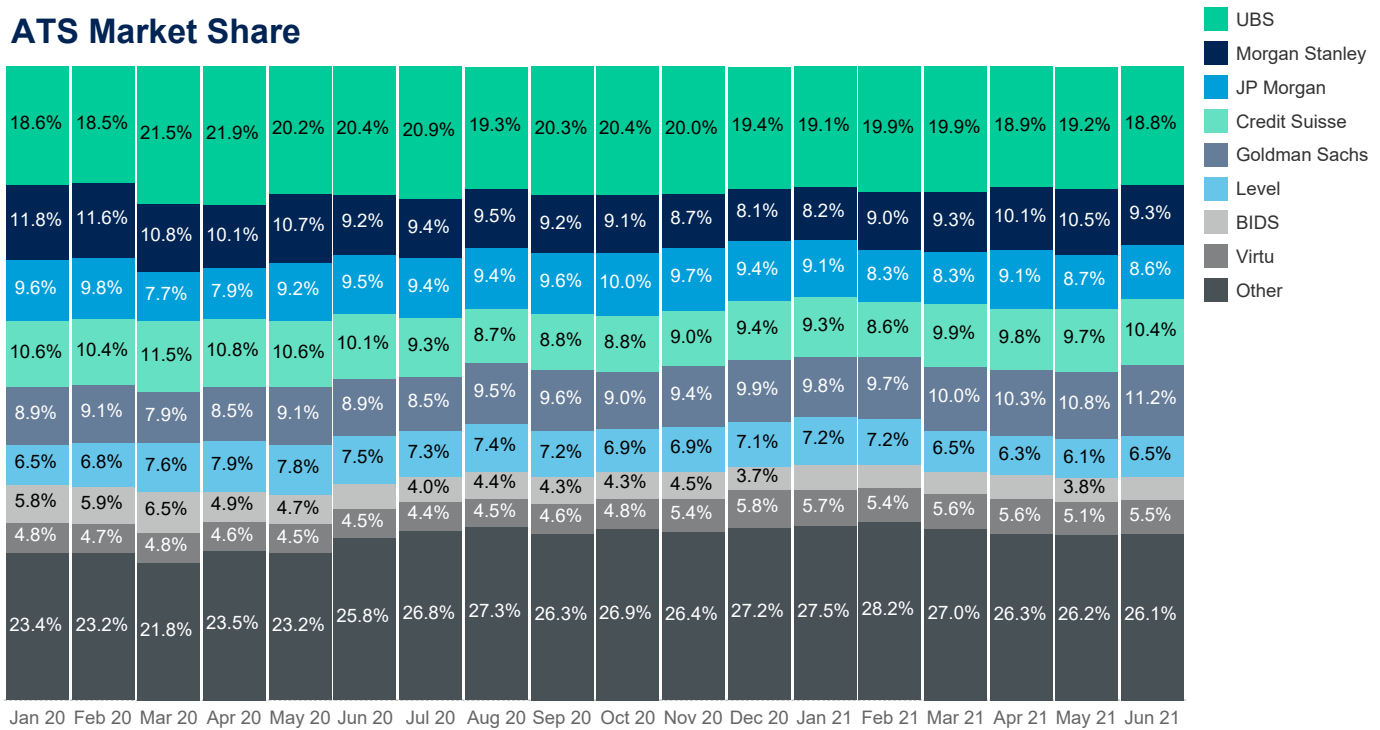
Venue Market Share



Source data: Cboe Global Markets

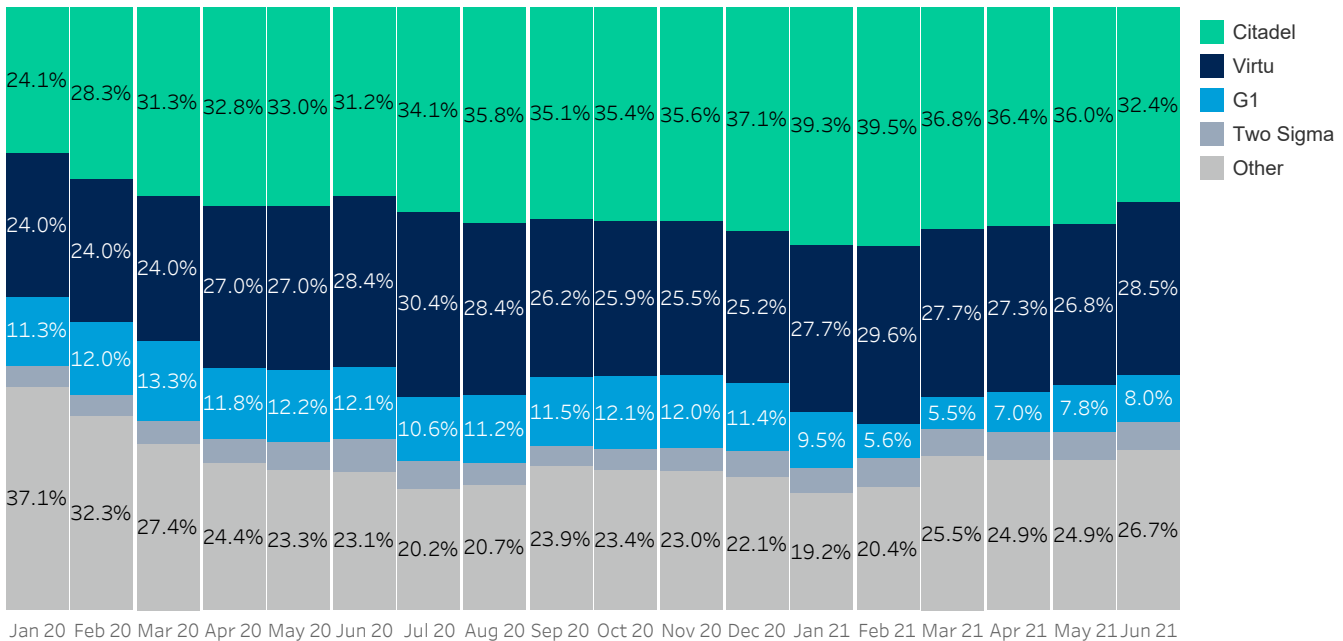


ATS Market Share



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

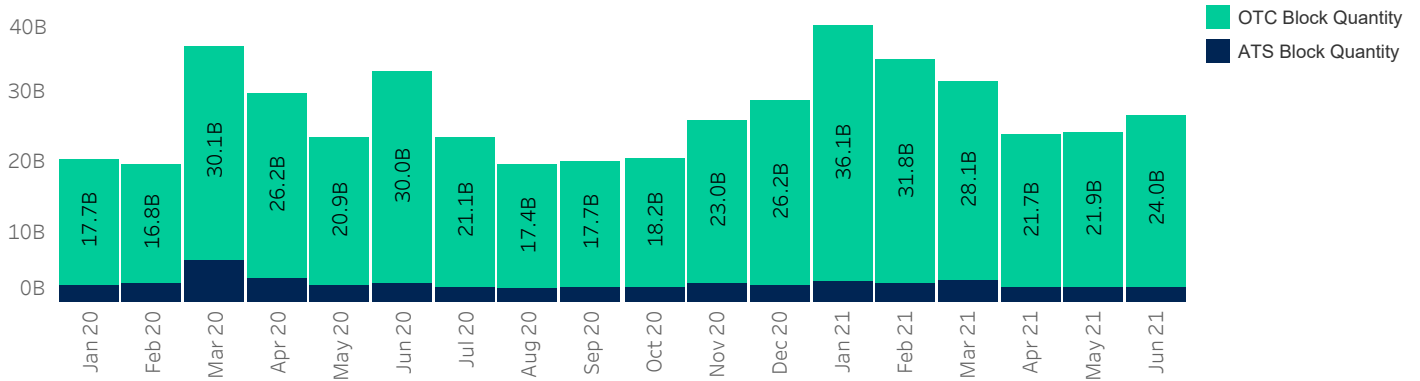
OTC Non-ATS Market Share



Source: FINRA, NMS Tier 1 & 2 Securities

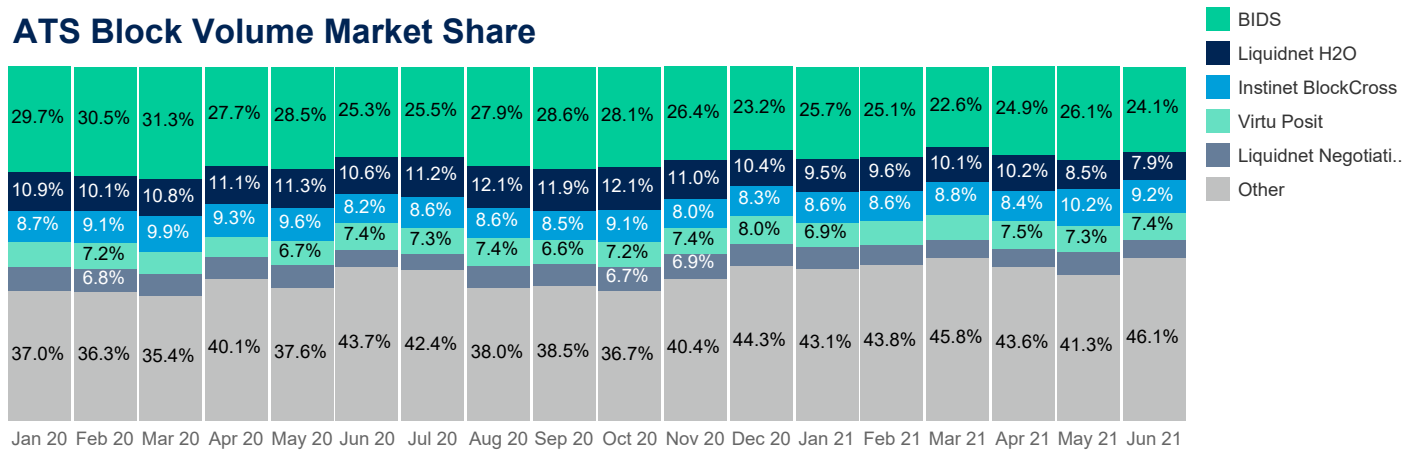


TRF Block Volume Breakdown (Shares)



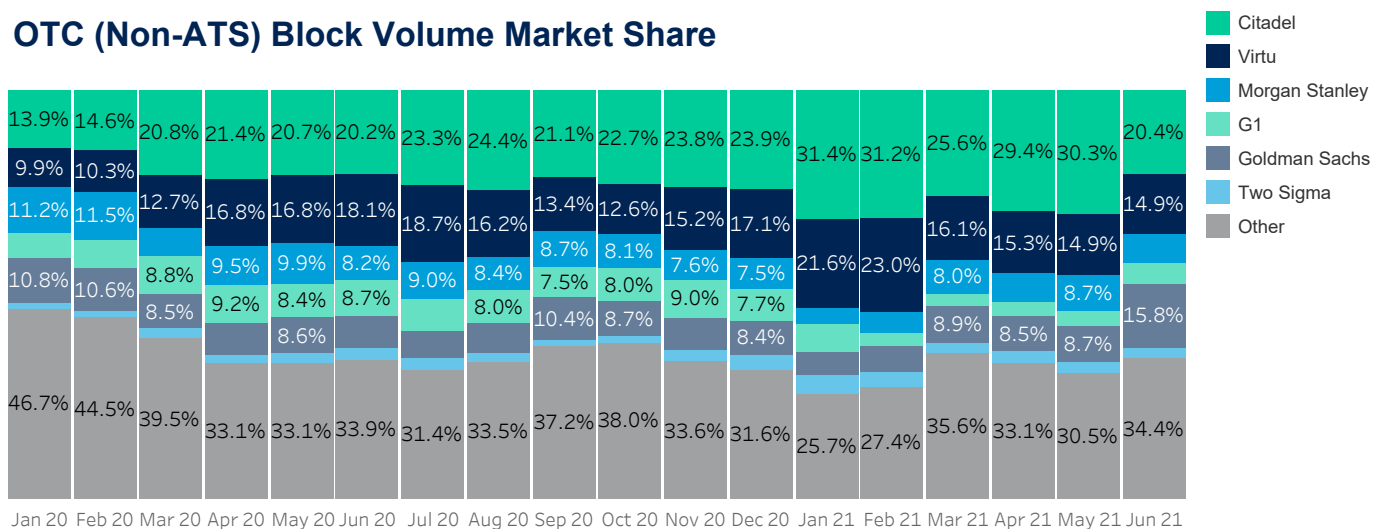
Source: FINRA

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
		Jul 20	Aug 20	Sep 20	Oct 20	Nov 20	Dec 20	Jan 21	Feb 21	Mar 21	Apr 21	May 21	Jun 21	Jul 21
First 30 Min	SP500	207	205	204	206	201	197	192	193	191	188	184	178	177
	RUS2000	209	207	207	225	226	228	216	217	222	231	225	217	222
Mid Day	SP500	212	220	215	206	206	206	201	204	195	198	193	197	190
	RUS2000	227	235	233	236	236	232	223	220	207	216	211	213	210
Last 30 Min	SP500	242	264	239	236	231	233	231	238	217	225	224	239	232
	RUS2000	264	283	272	274	263	260	250	255	225	238	235	243	240

Spread Bps

First 30 Min	SP500	10.4	9.6	11.0	13.0	14.7	12.4	13.2	13.6	13.2	10.3	10.2	8.1	9.7
	RUS2000	50.6	41.8	44.7	57.1	67.2	60.3	63.2	61.8	67.0	57.7	56.8	45.0	52.7
Mid Day	SP500	4.8	4.2	5.3	6.4	6.5	5.4	5.7	5.3	5.6	4.4	4.3	3.5	4.1
	RUS2000	20.2	17.1	18.9	24.9	26.9	24.6	26.8	25.5	27.7	23.1	22.6	18.0	19.9
Last 30 Min	SP500	3.3	3.0	3.6	4.2	4.5	3.8	3.7	3.6	3.8	3.1	3.1	2.6	2.9
	RUS2000	15.4	13.5	15.0	18.9	21.2	19.1	19.7	19.3	20.8	17.5	16.9	14.1	14.4

One Minute Volatility Bps

First 30 Min	SP500	19.5	16.0	20.1	16.0	20.2	15.3	17.5	18.7	18.8	14.5	16.4	12.8	14.5
	RUS2000	25.3	23.7	26.0	16.9	20.9	16.5	20.7	22.1	25.8	18.4	21.6	15.9	19.3
Mid Day	SP500	7.6	5.9	8.4	7.1	7.7	5.8	6.9	6.7	7.9	5.4	6.1	4.5	5.3
	RUS2000	9.1	7.0	8.3	5.7	6.3	5.3	6.6	6.9	9.3	5.9	6.5	4.9	6.2
Last 30 Min	SP500	8.9	6.9	9.9	7.8	8.9	6.8	7.6	7.3	8.8	6.2	7.1	5.2	5.7
	RUS2000	10.2	7.7	9.9	7.3	8.8	7.4	8.7	8.7	11.8	7.5	8.6	6.5	7.2

Percent ADV by Time of Day

Open	SP500	1.0%	1.1%	1.0%	1.1%	1.1%	1.1%	1.3%	1.2%	1.1%	1.3%	1.2%	1.1%	1.2%
	RUS2000	0.8%	0.9%	0.8%	0.9%	0.9%	0.8%	0.9%	1.0%	0.9%	0.9%	0.9%	0.8%	1.0%
First 30 Min	SP500	9.6%	9.9%	9.5%	9.2%	10.3%	9.5%	9.6%	10.1%	9.2%	9.6%	9.7%	9.5%	10.0%
	RUS2000	7.6%	8.2%	8.0%	7.6%	8.4%	7.8%	8.1%	8.7%	8.4%	8.1%	8.4%	7.9%	8.9%
Last 30 Min	SP500	18.3%	18.7%	17.9%	18.1%	17.4%	17.4%	16.9%	17.2%	17.6%	17.8%	18.4%	18.5%	18.3%
	RUS2000	20.0%	19.8%	18.7%	19.8%	18.8%	19.0%	18.5%	18.6%	18.6%	19.3%	19.3%	19.4%	19.8%
Close	SP500	9.9%	10.5%	12.0%	11.0%	10.7%	13.7%	12.0%	10.6%	11.9%	13.2%	11.1%	12.3%	12.5%
	RUS2000	9.4%	7.9%	9.6%	9.3%	9.9%	10.6%	10.0%	8.3%	9.2%	9.5%	8.7%	10.0%	9.9%

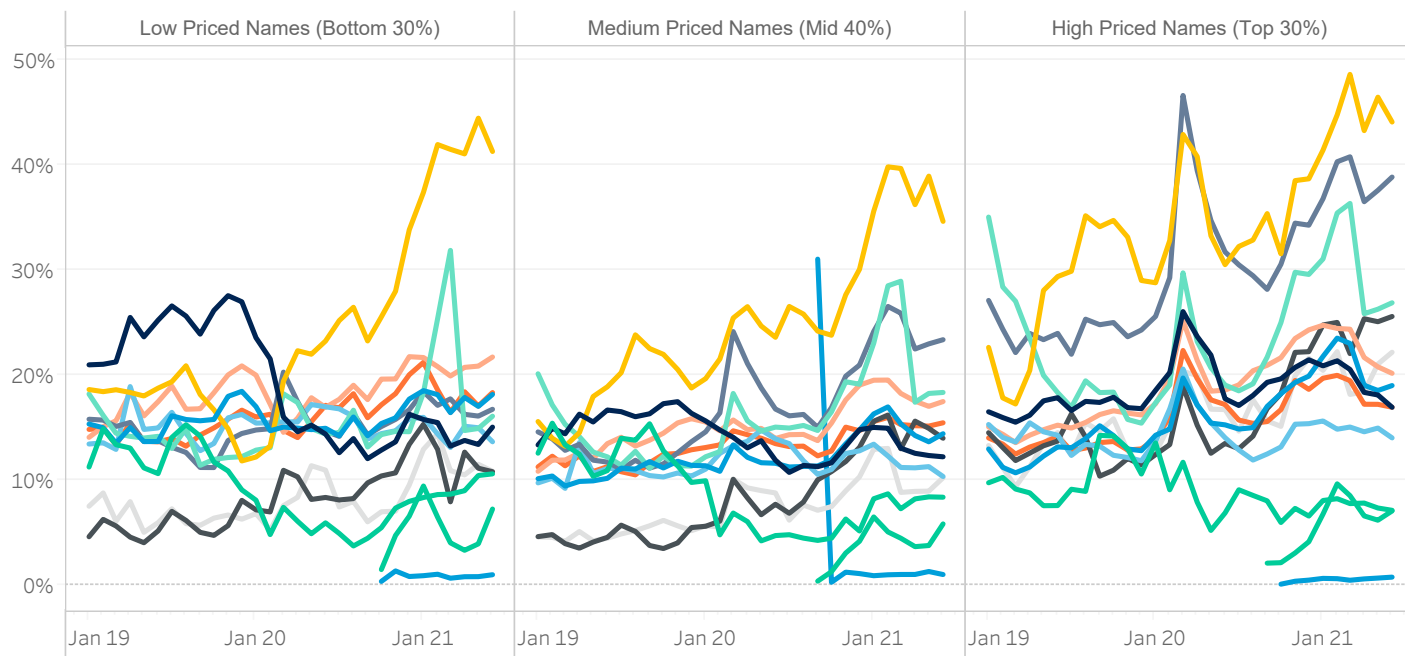
Median used for all metrics

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

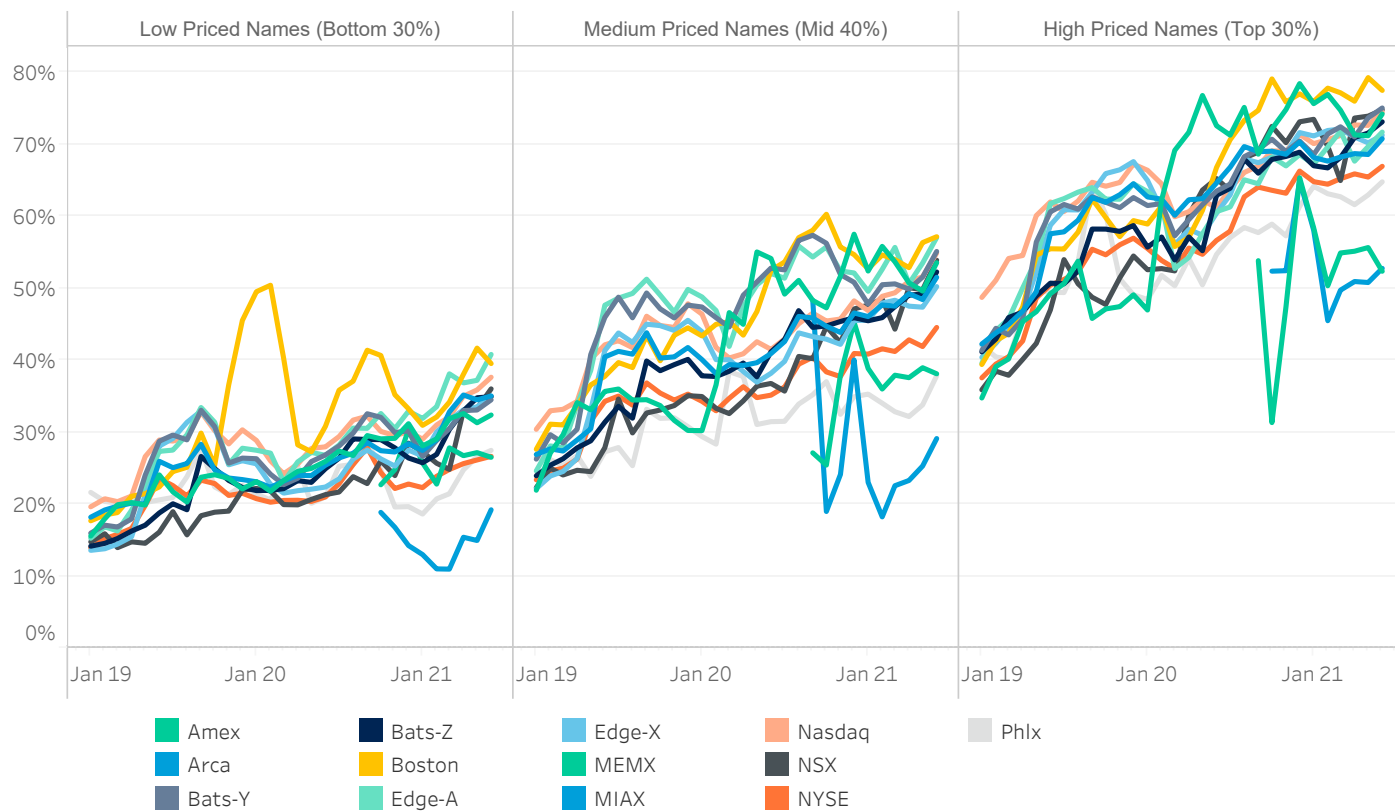
Source data: Virtu Financial



Hidden Trades Proportion by Price and Venue



Oddlot Trades Proportion by Price and Venue



Source data: SEC



ABOUT VIRTU

Virtu is a leading financial services firm that leverages cutting-edge technology to provide execution services and data, analytics and connectivity products to its clients and deliver liquidity to the global markets. Leveraging its global market making expertise and infrastructure, Virtu provides a robust product suite including offerings in execution, liquidity sourcing, analytics and broker-neutral, multi-dealer platforms in workflow technology. Virtu's product offerings allow clients to trade on hundreds of venues across 50+ countries and in multiple asset classes, including global equities, ETFs, foreign exchange, futures, fixed income and myriad other commodities. In addition, Virtu's integrated, multi-asset analytics platform provides a range of pre and post-trade services, data products and compliance tools that clients rely upon to invest, trade and manage risk across global markets.

To learn more, contact your sales representative or call our desk at:

APAC+852.2846.3592 | **CAN**+1.416.874.0800 | **EMEA**+44.20.7670.4066 | **US**+1.646.682.6199
info@virtu.com | www.virtu.com

© 2021 Virtu Financial, Inc. All rights reserved. Not to be reproduced or retransmitted without permission. These materials are for informational purposes and are not intended to be used to make trading or investment decisions, they are not intended as an offer to sell or the solicitation of an offer to buy any security or financial product, and are not intended as advice (investment, tax or legal). The information contained herein includes Virtu proprietary information and/or has been taken from sources we believe to be reliable, but we do not represent or warrant that such information is accurate or complete and it should not be relied upon as such.

Analytics products and services referenced herein may not be subject to oversight by regulatory authorities in one or more jurisdictions, including in Europe, where such products and services are offered by Virtu ITG Ventures Limited, registered in Ireland No. 295549 ("VIVL"). VIVL does not engage in regulated activity.

Securities products and services are offered by the following subsidiaries of Virtu Financial, Inc. In the U.S., Virtu Americas LLC, member FINRA and SIPC; in Canada, Virtu ITG Canada Corp., member Canadian Investor Protection Fund and Investment Industry Regulatory Organization of Canada; in Europe, Virtu ITG Europe Limited, registered in Ireland No. 283940 ("VIEL") (VIEL is authorized and regulated by the Central Bank of Ireland), and Virtu Financial Ireland Limited, registered in Ireland No. 471719 ("VFIL") (VFIL is authorized and regulated by the Central Bank of Ireland). The registered office of VIEL and VFIL is Whitaker Court, Whitaker Square, Sir John Rogerson's Quay, Dublin 2, Ireland; in Asia, Virtu ITG Hong Kong Limited (SFC License No. AHD810), Virtu ITG Singapore Pte Limited (CMS License No. 100138-1), and Virtu ITG Australia Limited (AFS License No. 219582)