

# Jun 2023 US Market Structure Monthly

# **MICROSTRUCTURE OBSERVATIONS**

- The average daily share volume in US equities was 11.3B shares in June 2023, up 7% month over month (MoM) but down 12% year over year (YoY).
- Trade reporting facility (TRF) share volume as a percent of total consolidated share volume was 43.1% in June 2023, almost unchanged compared to the prior month.
- Spreads in S&P 500 and Russell 2000 stocks narrowed in June 2023 relative to the prior month. Excluding the first and last half hour of the trading day, the median S&P 500 stock's spread narrowed 8% to 4.6bps in June 2023 from 5.0bps in May 2023, while the median Russell 2000 stock's spread narrowed 9% to 17.9bps in June 2023 from 19.6bps the prior month.

# **US MARKET STRUCTURE NEWS**

### Republicans Request the SEC to Rescind Proposal on Exchange Definition

In a letter sent to the Securities and Exchange Commission (SEC), U.S. House Financial Services Committee Republicans asked the regulator to rescind its proposed rule to change the definition of 'exchange'. The letter citied the proposal would "stifle competition and harm digital market participants and the U.S. economy broadly." In January 2022, the SEC proposed amendments to Exchange Act Rule 3b-16 that would include "Communication Protocol Systems" within the agency's definition of an exchange. In April 2023, the SEC reopened the comment period on the proposal, as well as provided supplemental information related to cryptocurrency platforms.

Virtu Financial has submitted two comment letters on the SEC's exchange definition proposal, one in April 2022, and the second in June 2023. Virtu opposes the rule proposal, citing that the SEC exceeded its statuary authority by not conducting a sufficient economic analysis and that the SEC failed to define a key term in the proposal, "communication protocol system", leaving it open for enforcement interpretation. https://news.bloomberglaw.com/crypto/mchenry-tells-sec-to-rescind-proposed-definition-of-an-exchange

https://virtu-www.s3.amazonaws.com/uploads/documents/Virtu-Financial-Regulation-ATS-Comment-Letter-20220418.pdf

https://virtu-www.s3.us-east-

<u>1.amazonaws.com/uploads/documents/VIrtu%20Comment%20Letter%20on%20SEC%27s%20Reg%20AT</u> <u>S%20Proposal%20%2806132023%29.pdf</u>

# SEC No Action Letter on Research Payments from MiFID II Firms Expires

The SEC allowed their MiFID II Relief no action letters to expire on July 3, 2023, barring U.S. broker dealers from accepting cash payments for research from MiFID II impacted firms unless the broker dealer is also registered as an investment advisor. The SEC originally issued their no action letters in 2017 post the changes of MIFID II which required European asset managers to pay for sell side research from their



own assets instead of through bundled brokerage commissions. SEC Commissioner Mark Uyeda issued a statement expressing disappointment in the SEC not extending their no action letters, citing concern on increased difficulty for U.S. broker dealers to provide research moving forward. Additional, Commissioner Uyeda highlighted current European Union and United Kingdom discussions on easing the current commission unbundling requirements, and the potential best course of action for the SEC would have been to extend the no action letters considering these potential changes.

https://www.sec.gov/news/statement/uyeda-statement-staff-no-action-letter-07-05-2023

#### SEC Cites Recent Bitcoin ETF Applications as Inadequate

The SEC recently informed Nasdaq and Cboe Global Markets that their spot Bitcoin ETF applications, which were filed on behalf of asset managers, were inadequate. Specifically, the SEC cited a lack of clarity on applications "shared surveillance agreement", where surveillance would be shared by the stock exchange and the spot bitcoin trading platform. The SEC said the applications did not name the bitcoin exchange or provide enough information about the details of the surveillance agreements. The exchanges can update and refile their applications based on the SEC's feedback.

https://www.wsj.com/articles/sec-says-spot-bitcoin-etf-filings-are-inadequate-390336e8

#### House Republicans Introduce Bill to Remove SEC Chair

U.S. House of Representatives Whip Tom Emmer (R-Minn) and Representative Warren Davidson (R-Ohio) introduced the SEC Stabilization Act in mid-June. The bill would restructure the SEC by adding an additional commissioner (bringing the total to six commissioners) and establishing an executive director to oversee the agency's operation, effectively removing the role of chairman. Each political party would hold three commissioner seats. In explaining the rationale for the bill, Mr. Emmer said the SEC chairman currently "retains a concerning level of discretion which leaves the other four commissioner positions effectively redundant."

https://www.pionline.com/washington/republicans-propose-removing-sec-chairman-gary-genslerrestructuring-agency

### Nasdaq to Acquire Financial Software Firm Adenza

Nasdaq has agreed to acquire Adenza, a maker of software that helps manage trading, risk management, and post trade processing and regulatory reporting, for \$10.5 billion. If completed, the transaction would mark the largest acquisition in Nasdaq's history. Adenza's client roster includes most banks and brokerages that regulators have deemed as systematically important. The deal further diversifies Nasdaq's revenue towards sources that are less susceptible to market volumes and volatility.

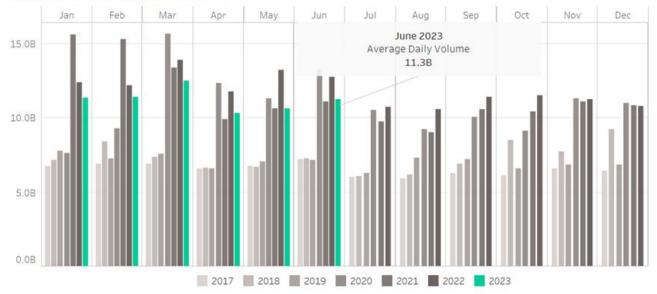
https://www.wsj.com/articles/nasdaq-to-buy-financial-software-firm-adenza-for-10-5-billion-ec711194

#### SEC Advisory Group Requests Name Change for Single Stock and Leveraged ETFs

The SEC's Investor Advisory Committee in a draft recommendation called for a name change for single stock and leveraged ETFs. The committee highlighted in its letter that single stock and leveraged ETF products have caused confusion and capital loss among retail investors due in part to these investors associating the ETF term with more standard, diversified products. According to ETF.com, four asset managers have launched 29 single stock ETFs since July 2022.

https://www.ft.com/content/3e81d4f7-8f94-4c73-a7db-1d7c22166a74





# Average Daily Market Volume

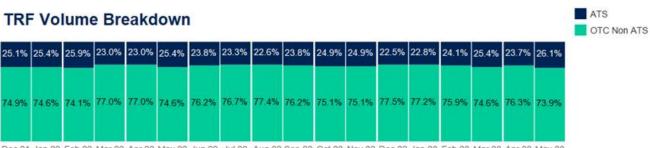
Source data: Cboe Global Markets

# Venue Market Share

43.3%	41.1%	39.9%	39.7%	41.0%	42.2%	40.2%	41.3%	44.0%	45.1%	41.7%	42.1%	43.1%	43.9%	46.5%	44.8%	41.7%	44.8%	43.0%	43.1%
16.0%	16.8%	16.6%	16.5%	16.1%	15.8%	16.6%	16.9%	15.5%	15.6%	16.7%	16.0%	15.9%	16.4%	15.2%	15.7%	16.5%	15.5%	16.4%	17.0%
9.2%	10.5%	9.6%	9.8%	9.8%	9.3%	9.8%	11.0%	9.6%	8.8%	10.8%	10.0%	9.7%	10.2%		9.3%	10.6%	9.3%	10.0%	10.8%
8.3%	7.8%	8.4%	8.4%	8.5%	8.4%	8.6%	8.0%	8.3%	8.2%	8.3%	8.8%	8.6%	8.4%	8.7%	8.9%	9.0%	8.8%	8.4%	8.1%
6.1%	<b>4.7%</b> 5.8%	5.5% 5.8%	5.8% 5.6%	5.6% 5.7%	5.5% 5.7%	5.7% 5.6%	5.2%	5.6%	4.7% 6.0%	5.0% 5.4%	5.5%	5.8%	5.6%	5.9%	5.9%	5.9%	6.2%	4.7% 5.8%	5.5%
Nov 21	Dec 21	Jan 22	Feb 22	Mar 22	Apr 22	May 22	Jun 22	Jul 22	Aug 22	Sep 22	Oct 22	Nov 22	Dec 22	Jan 23	Feb 23	Mar 23	Apr 23	May 23	Jun 23
	TRF Nasdaq (Q)				NYSE (N) NYSE Arca (P)				BZX Equities (Z)				K (K) √)			MEMX (U)			

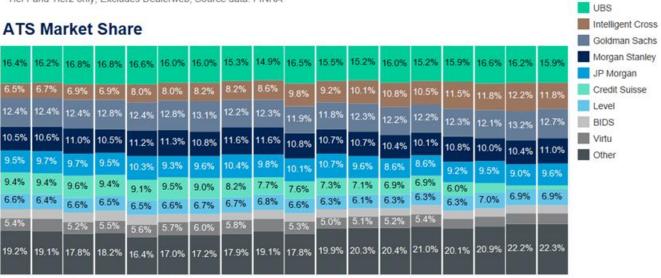
Source data: Cboe Global Markets





Dec 21 Jan 22 Feb 22 Mar 22 Apr 22 May 22 Jun 22 Jul 22 Aug 22 Sep 22 Oct 22 Nov 22 Dec 22 Jan 23 Feb 23 Mar 23 Apr 23 May 23

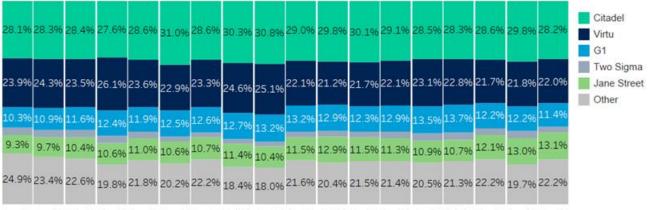
Tier1 and Tier2 only; Excludes Dealerweb, Source data: FINRA



Dec 21 Jan 22 Feb 22 Mar 22 Apr 22 May 22 Jul 22 Jul 22 Aug 22 Sep 22 Oct 22 Nov 22 Dec 22 Jan 23 Feb 23 Mar 23 Apr 23 May 23

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

# **OTC Non-ATS Market Share**

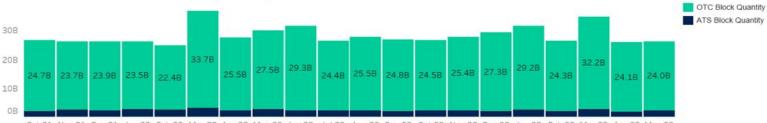


Dec 21 Jan 22 Feb 22 Mar 22 Apr 22 May 22 Jun 22 Jul 22 Aug 22 Sep 22 Oct 22 Nov 22 Dec 22 Jan 23 Feb 23 Mar 23 Apr 23 May 23 Source: FINRA, NMS Tier 1 & 2 Securities



#### TRF Block Volume Breakdown (Shares)

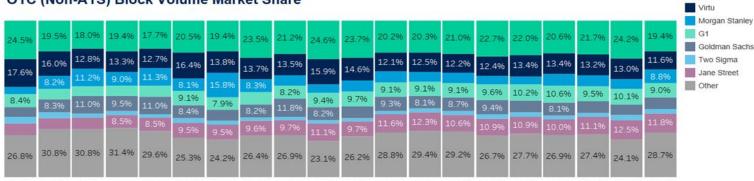
Source: FINRA



Oct 21 Nov 21 Dec 21 Jan 22 Feb 22 Mar 22 Apr 22 May 22 Jun 22 Jul 22 Aug 22 Sep 22 Oct 22 Nov 22 Dec 22 Jan 23 Feb 23 Mar 23 Apr 23 May 23

#### BIDS **ATS Block Volume Market Share** Liquidnet H2O Instinet BlockCross 22.2% 21.5% 22.0% 22.7% 22.8% 24.6% 26.6% 23.8% 26.2% 23.6% 26.1% 25.6% 25.1% 25.0% 24.5% 24.2% 26.7% 27 4% 28.8% 28.3% Virtu Posit Liquidnet Negotiation 7.8% 8.0% 8.5% 7.7% 8.4% 9.0% 9.3% 9 1% 10.1% 9.4% 9.4% 9.5% 10.1% 9.4% 10.1% 9.7% 9.9% 10.8% 8.5% 10.3% 8.0% Other 80 9.4% 9.6% 8.0% 9.5 9.09 8.4% 8.2% OTCX 6.9% 9.8% 7.6% 7.9% 8.9% 9.1% 8.4% 8.9% 9.4% 7.5% 8.5% 9.4% 8 2% 8.4% 51.0% 51.0% 49.9% 48.3% 48.1% 46.0% 45.5% 43.5% 44.5% 43.7% 42.4% 41.5% 39.7% 39.2% 41.4% 39.1% 41.7% 40 7% 42.2% 37.8% Oct 21 Nov 21 Dec 21 Jan 22 Feb 22 Mar 22 Mar 22 Jul 22 Jul 22 Sep 22 Oct 22 Nov 22 Dec 22 Jan 23 Feb 23 Mar 23 Apr 23 May 23 Excludes Dealerweb; Blocks defined as >10K shares; Source data: FINRA Citadel

#### OTC (Non-ATS) Block Volume Market Share



 Oct 21
 Nov 21
 Dec 21
 Jan 22
 Feb 22
 Mar 22
 May 22
 Jul 22
 Aug 22
 Sep 22
 Oct 22
 Nov 22
 Dec 22
 Jan 23
 Feb 23
 Mar 23
 Apr 23
 May 23

Blocks defined as >10K shares; Source data: FINRA



#### **Quotesize in Shares**

		2Q 22			3Q 22			4Q 22				1Q 23		2Q 23		
		Apr 22	May	Jun 22	Jul 22	Aug 22	Sep 22	Oct 22	Nov 22	Dec 22	Jan 23	Feb 23	Mar 23	Apr 23	May	Jun 23
First 30 Min	SP500	180	196	195	188	185	183	187	186	189		218	235	229	227	227
	RUS2000	236	250		232	228	225	232	226	231	250	271	300	300	298	292
Mid Day	SP500	176	186	190	181	179	184	189	192	194	199	214	228	224	217	218
	RUS2000	232	234	246	237	234	235	245		250	257	262	279	283	280	275
Last 30 Min	SP500	190	190	198	197	201	201	212		210	216	222	230	231	222	226
	RUS2000	255	259	276	267	265	263	274		291	289	283	300	309	300	301

# Spread Bps

First 30 Min	SP500	13.4	15.1	13.5	13.2	11.8	10.7	12.5	12.9	12.3	11.7	11.4	10.7	9.6	10.7	11.1
	RUS2000	51.3	57.0	50.4		45.3	43.2	49.2	51.1	49.8	47.8	47.1	48.9	44.7	47.7	45.7
Mid Day	SP500	5.5	6.5	5.7	5.2	4.7	4.9	5.4	5.5		4.9	5.0	5.1	4.4	5.0	4.7
	RUS2000	22.5	25.0	21.6	20.4	19.1	18.7	19.9	21.2	18.6	18.1	18.3		18.0	19.6	18.2
Last 30 Min	SP500	3.6	3.9	3.5	3.2	2.9	3.2	3.4	3.2	3.2	3.1	3.2		3.0	3.3	3.1
	RUS2000	16.6	18.1	16.2	15.4	14.1	14.1	14.7	15.5	14.2	13.6	14.1		14.2	15.2	14.2

# **One Minute Volatility Bps**

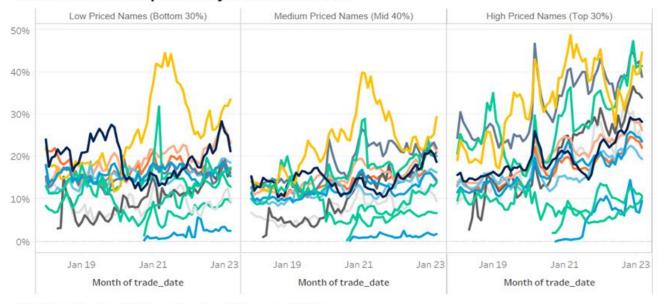
First 30 Min SP500		20.2	24.0	21.4	20.7		17.5	20.4	17.7	14.4	14.5	13.9	14.9	12.9	13.8	14.9
	RUS2000	21.7	26.9	24.1	26.6	21.0		23.1	21.4	16.2	16.2	17.0	17.2	14.6	15.9	17.1
Mid Day	SP500	8.2	9.9	8.3	7.5	6.2	8.6	8.1	6.8	5.8	5.7	5.9		4.9	5.4	5.0
	RUS2000	6.8	9.0	6.8	6.1		7.4	6.7	5.4	4.1	3.8	4.5		2.9	3.6	3.6
Last 30 Min	SP500	9.1	10.8	9.0	7.9	6.2	9.3	8.8	7.1	6.5	6.3	6.9	7.4	5.9	6.0	5.7
	RUS2000	8.8	9.8	8.1		6.2	8.9	7.2	6.8	5.7	5.4	6.9	7.9	5.4	5.9	5.9

# Percent ADV by Time of Day

Open	SP500	1.196	1.0%	1.0%	1.196	1.0%	0.9%	0.9%	0.9%	1.196	0.996	1.096	0.9%	1.196	1.096	0.9%
	RUS2000	0.7%	0.7%	0.7%	0.7%	0.8%		0.7%	0.7%		0.7%	0.7%	0.7%	0.8%	0.796	0.6%
First 30 Min	SP500	9.3%	9.3%	9.4%	9.8%	9.6%		9.0%	9.2%	8.6%	8.7%	8.6%	8.5%	8.7%		8.7%
	RUS2000	7.6%	8.2%	7.6%	8.1%	8.2%	7.4%	7.6%	7.5%	7.2%		7.5%	7.2%	7.3%	7.5%	7.3%
Last 30 Min	SP500	19.0%	18.6%	19.2%	18.6%	18.8%	18.7%		18.7%	19.0%	19.3%	19.3%	18.7%	19.4%	18.9%	18.8%
	RUS2000	19.6%	19.7%	19.8%	20.3%	20.4%	20.1%		21.0%	20.0%	20.3%	20.6%	19.9%	20.4%	19.9%	19.8%
Close	SP500	11.8%	10.9%	13.1%		11.9%	12.3%	11.9%	11.6%	14.7%	12.9%	12.2%	13.4%	13.6%	12.9%	14.6%
	RUS2000	10.6%	9.1%	10.8%	11.8%	10.4%	11.4%	11.6%	10.4%	11.9%	10.7%		11.4%	11.8%	11.0%	12.2%

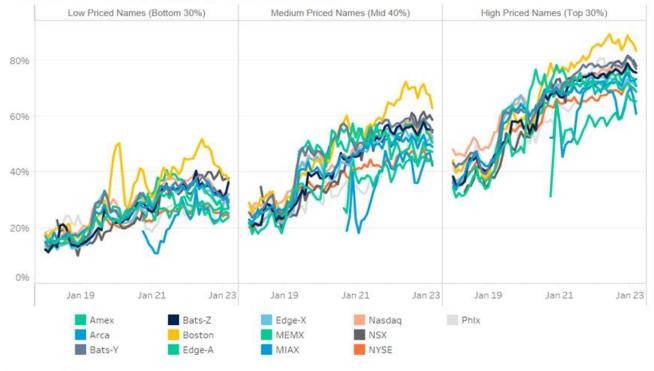
Median used for all metrics One minute volatility is calculated using the difference between the high and low price within a one minute time bin, divided by that bin's VWAP Source data: Virtu Financial





## **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 <u>info@virtu.com</u> | <u>www.virtu.com</u>

© 2023 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.

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 Canada Corp., member Canadian Investor Protection Fund and Investment Industry Regulatory Organization of Canada; in Europe, Virtu Europe Trading Limited, registered in Ireland No. 283940 ("VETL") (VETL 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 VETL and VFIL is North Dock One, Fifth Floor, 91-92 North Wall Quay, Dublin 1, Ireland, D01 H7V7; 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).