# July 2022 US Market Structure Monthly



### **US Market Microstructure Observations**

• The average daily volume in US equities was 10.7B shares in July 2022, down 16% month over month (MoM) but up 10% year over year (YoY).

• Trade reporting facility (TRF) market share increased 2.7% MoM to 44.0% in July 2022, its highest monthly level since October 2021.

• Spreads narrowed to their lowest levels of the year in July 2022. Excluding the first and last half hour of the day, median spreads declined 9% and 6% MoM for S&P 500 and RUS 2000 symbols, respectively, in July 2022.

• In market structure news, the SEC intends not to extend its no action letter on hard research payments by MiFID II compliant firms to US broker dealers, potentially altering the research payment landscape for EU-affiliated firms.

#### **Market Structure News**

### SEC Plans Not to Extend No Action Letter on EU Firm Research Payments

The Division of Investment Management at the SEC announced that it will allow its no action letter from 2017 on US broker dealers accepting cash payments from investment managers governed by MiFID II to expire in July 2023. The original no action letter allowed US broker dealers to accept cash payments for research from MiFID II compliant firms' own P&L, rather than payment from client commissions. Without this letter, a US broker dealer accepting hard cash payments would be subject to regulation under the Advisors Act, requiring the broker dealer to register as an investment advisor. Given the expected expiration of the no action letter, investment firms subject to MiFID II rules would be required to pay for research via a commission sharing agreement (CSA).

https://www.sec.gov/news/speech/birdthistle-remarks-pli-investment-management-2022-072622

#### US Officials Express Doubt on Deal to Audit US Listed Chinese Companies

The US and China have continued to negotiate terms for the US to audit Chinese companies listed on US exchanges, with certain US officials expressing concern that a deal will not be reached. Chinese firms could be forced to de-list their US-based securities in 2023 without a deal. Early in July, US SEC Chair Gary Gensler said that he was "not particularly confident" that a deal could be reached. As part of its oversight of US listed companies' audits, the Public Company Accounting Oversight Board (PCAOB), said that it would not accept restrictions on access to audit papers for Chinese companies. Due to security concerns, China opposes increased US oversight.

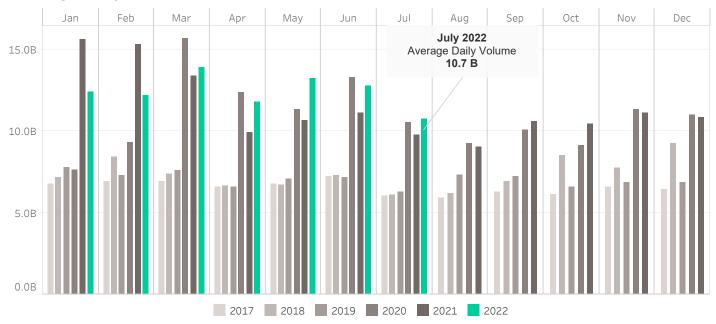
https://www.reuters.com/legal/government/us-regulators-wont-accept-any-restrictions-china-audit-access-sources-2022-07-26/

### SEC Urges Crypto Exchanges to Register with the Regulator

In comments on the cryptocurrency market, SEC Chair Gensler said the agency would work with digital asset exchanges to prepare them for regulation as securities exchanges. He has also instructed SEC staff to address potential conflicts of interest with crypto exchange operators who also act as market makers on their platforms. Additionally, in the crypto space, reports emerged in late July that the SEC is currently investigating Coinbase, a crypto marketplace, for allowing users to trade digital assets that have not been registered as securities.

https://finance.yahoo.com/news/sec-gensler-steps-push-crypto-173635989.html https://www.cnbc.com/2022/07/26/coinbase-shares-tumble-after-report-that-its-facing-sec-probe.html





# Average Daily Market Volume

Source data: Cboe Global Markets

Ven	ue M	arket	t Sha	re	

47.2%	46.6%	41.8%	43.7%	42.4%	43.8%	43.1%	43.1%	41.9%	44.2%	43.3%	41.1%	39.9%	39.7%	41.0%	42.2%	40.2%	41.3%	44.0%
15.0%	15.6%	16.6%	15.5%	15.8%	16.1%	15.6%	15.9%	16.1%	15.2%	16.0%	16.8%	16.6%	16.5%	16.1%	15.8%	16.6%	16.9%	15.5%
8.4%	7.9%	10.2%	9.9%	10.4%	10.9%	10.0%	9.8%	10.3%	8.9%	9.2%	10.5%	9.6%	9.8%	9.8%	9.3%	9.8%	11.0%	9.6%
9.3%	8.5%	8.2%	8.1%	8.6%	7.8%	8.4%	8.3%	8.5%	8.5%	8.3%	7.8%	8.4%	8.4%	8.5%	8.4%	8.6%	8.0%	8.3%
		4.9%									4.7%	5.5%	5.8%	5.6%	5.5%	5.7%		
7.8%	8.3%	7.9%	7.2%	7.1%	6.9%	7.1%	7.0%	6.5%	6.5%	6.1%	5.8%	5.8%	5.6%	5.7%	5.7%	5.6%	5.2%	5.6%
Jan 21	Feb 21	Mar 21	Apr 21	May 21	Jun 21	Jul 21	Aug 21	Sep 21	Oct 21	Nov 21	Dec 21	Jan 22	Feb 22	Mar 22	Apr 22	May 22	Jun 22	Jul 22
	TRF Nasda	aq (Q)		_	YSE (N) YSE Arc			Inverte BZX E	ed quities (	Z)		9GX (K) K (V)			MEMX Other	(U)		

Source data: Cboe Global Markets



## **TRF Volume Breakdown**

ATS OTC Non ATS

18.4%	19.1%	22.8%	22.1%	22.8%	21.7%	23.5%	24.0%	22.0%	21.1%	23.2%	25.1%	25.4%	25.9%	23.0%	23.0%	25.4%	24.7%
81.6%	80.9%	77.2%	77.9%	77.2%	78.3%	76.5%	76.0%	78.0%	78.9%	76.8%	74.9%	74.6%	74.1%	77.0%	77.0%	74.6%	75.3%

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

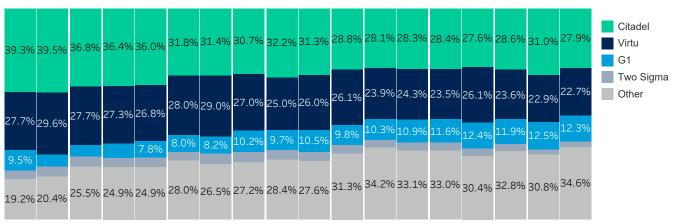
Tier1 and Tier2 only; Excludes Dealerweb, Source data: FINRA



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

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

## **OTC Non-ATS Market Share**



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



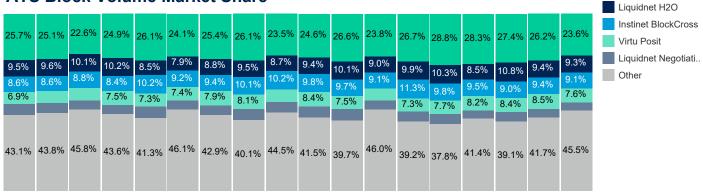
BIDS



### **TRF Block Volume Breakdown (Shares)**

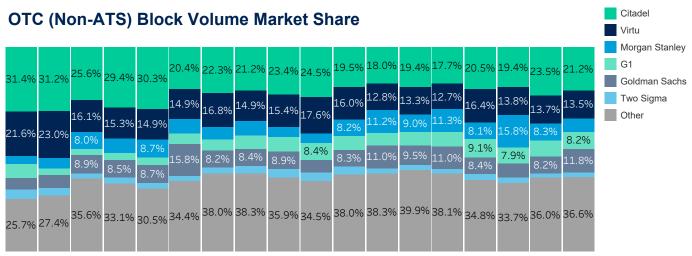
Source: FINRA

## **ATS Block Volume Market Share**



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

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



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

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



## **Quotesize in Shares**

			3Q 21			4Q 21			1Q 22			2Q 22		3Q 22
		Jul 21	Aug 21	Sep 21	Oct 21	Nov 21	Dec 21	Jan 22	Feb 22	Mar 22	Apr 22	May 22	Jun 22	Jul 22
First 30 Mir	n SP500	177	176	171	170	172	187	184	187	186	180	196	195	188
	RUS2000	222	221	214	207	201	220		225	230	236	250	243	232
Mid Day	SP500	190	193	184	181	183	192	188	193	185	176	186	190	181
	RUS2000	210	215	208	205	209	219		230	234	232	234	246	237
Last 30 Mir	SP500	232	238	219	210	213	208	200	199	195	190	190	198	197
	RUS2000	240	249	236	232	238	242	244		254	255	259	276	267

# **Spread Bps**

First 30 Mir	n SP500	9.7	9.9	9.3	11.1	12.3	13.9	14.2	13.6	13.9	13.4	15.1	13.5	13.2
	RUS2000	52.7		45.7	47.3	50.2	58.4	57.4	56.9	53.8	51.3	57.0	50.4	48.1
Mid Day	SP500	4.1	4.0	4.1	4.3	4.7	5.6	5.7	5.9	6.1		6.5	5.7	5.2
	RUS2000	19.9	18.8	18.2	18.7	21.0	24.2	24.9	25.0	23.2	22.5	25.0		20.4
Last 30 Mir	n SP500	2.9	2.7	2.8	3.0	3.1	3.7	3.8	4.1	3.9	3.6	3.9	3.5	3.2
	RUS2000	14.4	14.2	14.3	14.8	15.6	18.0	18.6	19.1	17.1	16.6	18.1		15.4

## **One Minute Volatility Bps**

First 30 Min	n SP500	14.5	14.2	14.8	15.3	15.9	17.3	20.0	19.6	20.0	20.2	24.0	21.4	20.7
	RUS2000	19.3	18.8	18.6	17.7	18.9		23.2	23.6	22.6	21.7	26.9	24.1	26.6
Mid Day	SP500	5.3	4.8	5.4	5.2	5.0	6.1	7.6	8.1	8.4	8.2	9.9	8.3	7.5
	RUS2000		5.3	5.7	5.2	5.2	5.9	7.1	7.7	7.1	6.8	9.0	6.8	6.1
Last 30 Mir	SP500	5.7	5.3	6.2	6.1	5.5	7.2	9.0	10.1	9.0	9.1	10.8	9.0	7.9
	RUS2000	7.2	6.6	7.7	7.2	7.3	9.1	10.0	10.8	8.6	8.8	9.8	8.1	6.9

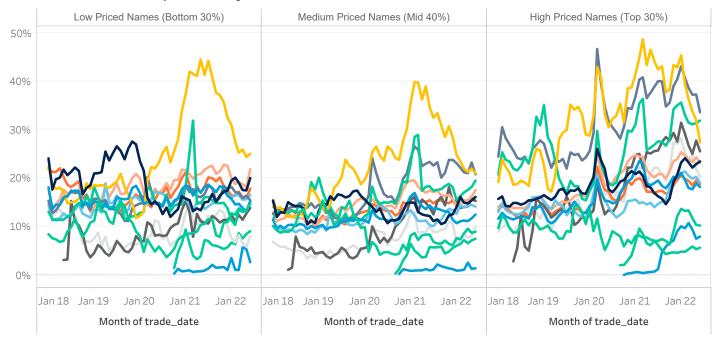
# Percent ADV by Time of Day

Open	SP500	1.2%	1.1%	1.0%	1.1%	1.1%	1.0%	1.0%	1.0%	0.9%	1.1%	1.0%	1.0%	1.1%
	RUS2000	1.0%	0.9%	0.9%	0.9%	0.9%	0.8%	0.7%		0.8%	0.7%	0.7%	0.7%	0.7%
First 30 Mi	n SP500	10.0%	9.7%	9.7%	9.5%	9.7%	9.2%	9.2%	9.3%	9.1%	9.3%	9.3%	9.4%	9.8%
	RUS2000	8.9%	8.8%	8.5%	8.3%	8.5%	8.2%	7.5%	8.1%	8.0%	7.6%		7.6%	8.1%
Last 30 Mi	n SP500	18.3%	18.3%	18.2%	18.8%	18.3%	18.4%	18.7%	19.1%	19.0%	19.0%	18.6%	19.2%	18.6%
	RUS2000	19.8%	19.5%	19.6%	19.1%	19.4%	19.8%	20.3%	21.0%	20.1%	19.6%	19.7%		20.3%
Close	SP500	12.5%	10.7%	11.7%	12.1%	11.5%	13.9%	11.5%	11.1%	12.6%	11.8%	10.9%	13.1%	12.5%
	RUS2000		8.9%	9.7%	10.1%	8.8%	10.7%	8.9%	9.7%	10.2%	10.6%	9.1%	10.8%	11.8%

Median used for all metrics

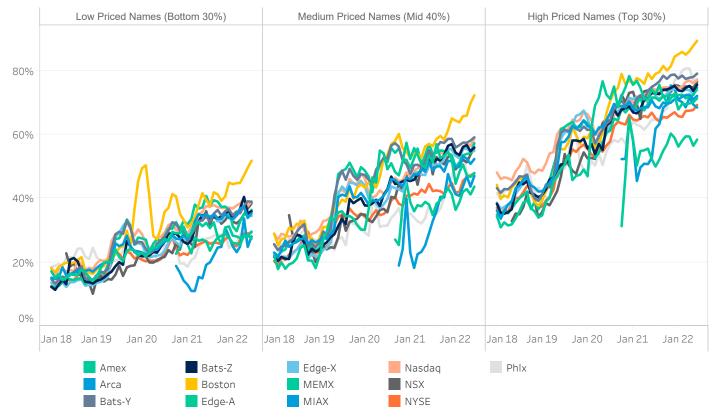
One minute volatility is calculated using the difference between the high and low price within a one minute time bin, divided by that bin's VWAP Source data: Virtu Financial





# Hidden Trades Proportion by Price and Venue

## **Oddlot Trades Proportion by Price and Venue**



Source data: SEC



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