

Jun 2023

CA Market Structure Monthly

MICROSTRUCTURE OBSERVATIONS

- In June 2023, the average daily volume for TSX listed securities was 542 million shares, down 3% compared to May 2023 and down 32% compared to June 2022. While volatility conditions improved, liquidity and spread conditions were unchanged compared to May 2023.
- In non-TSX listed securities, the average daily volume was 260 million shares in June 2023, down 2% compared to May 2023 and down 10% compared to June 2022. While volatility conditions improved, liquidity and spread conditions deteriorated compared to May 2023.
- TSX-listed block volumes increased in June 2023 compared to May 2023, continuing a recent trend, and approaching a 12-month high of 14%. Dark market volumes remained unchanged in June 2023 compared to the prior month.

CA MARKET STRUCTURE NEWS

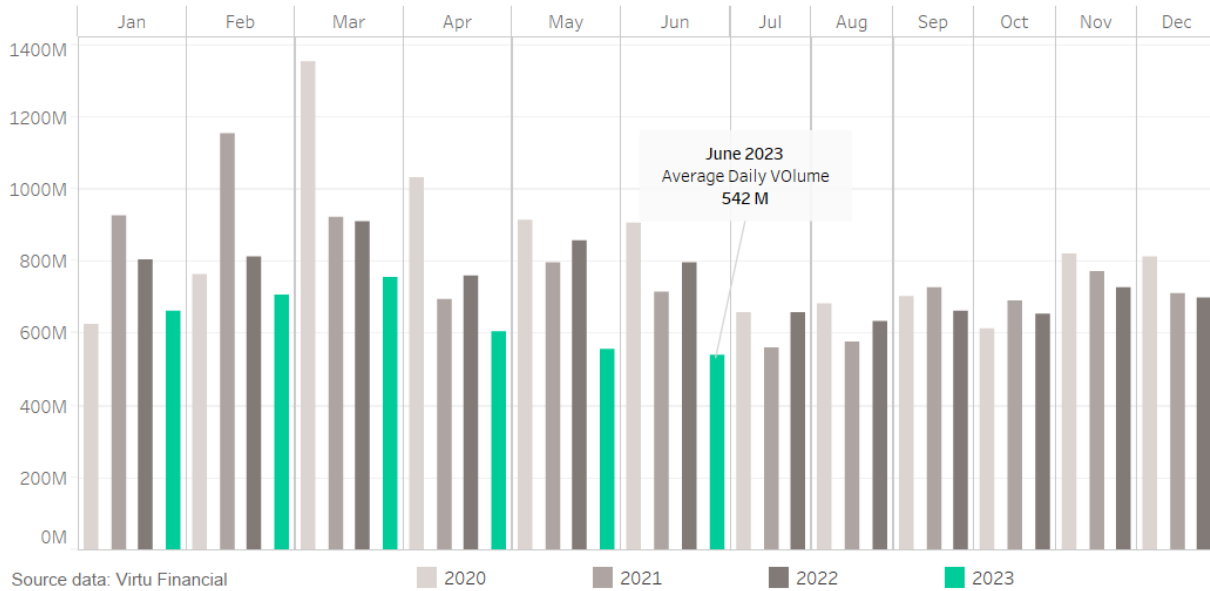
CIRO Publishes 2024 Priorities

On June 1, the Canadian Investment Regulatory Organization (CIRO) released its Fiscal Year 2024 Annual Priorities. The focus for the fiscal year: April 2023 – March 2024 will be on developing a CIRO brand, promoting investor protection initiatives, the harmonization of their regulatory approach, and supporting industry transformation.

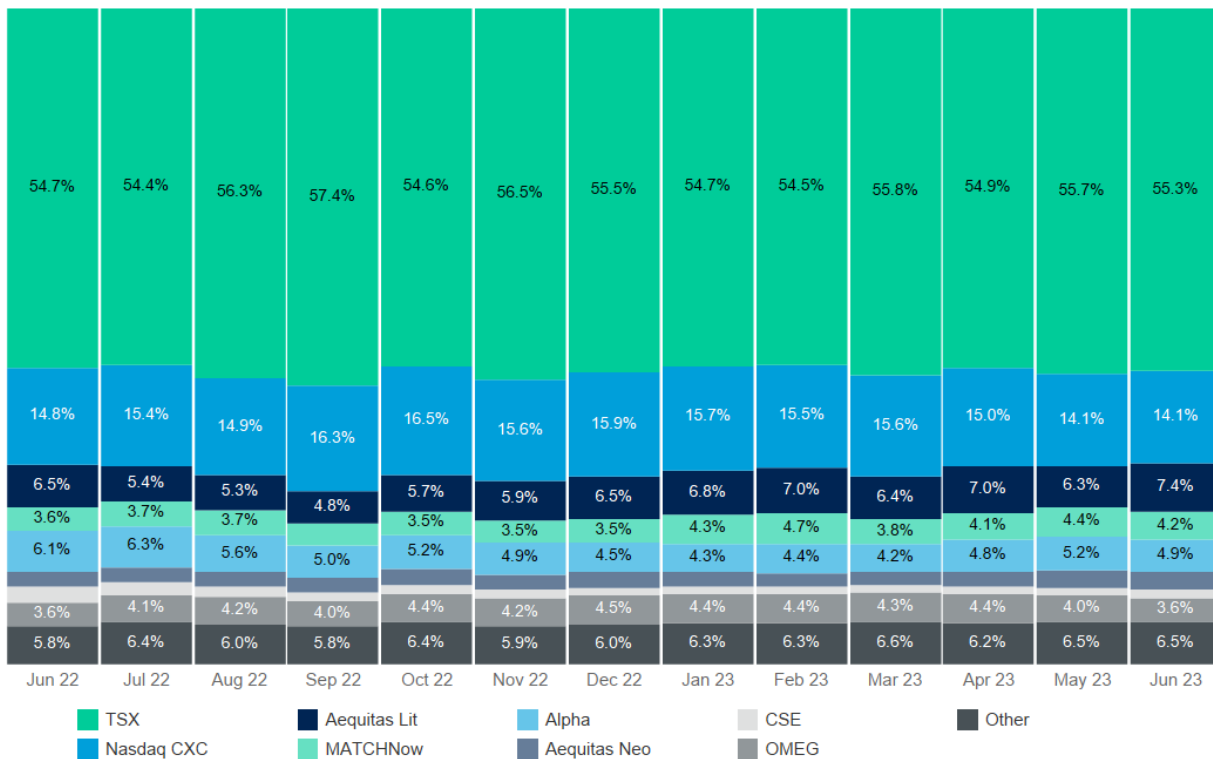
Consult the link below for further details on the 8 priority areas.

<https://www.ciro.ca/news-room/publications/ciro-publishes-2024-priorities>

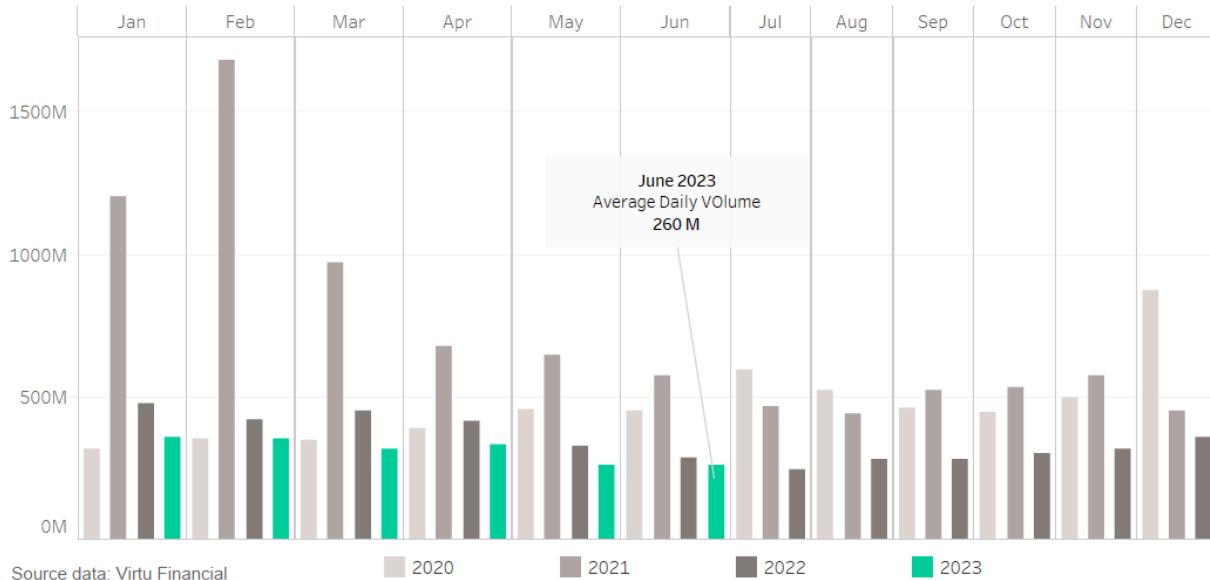
Average Daily Market Volume (Shares, TSX Listed)



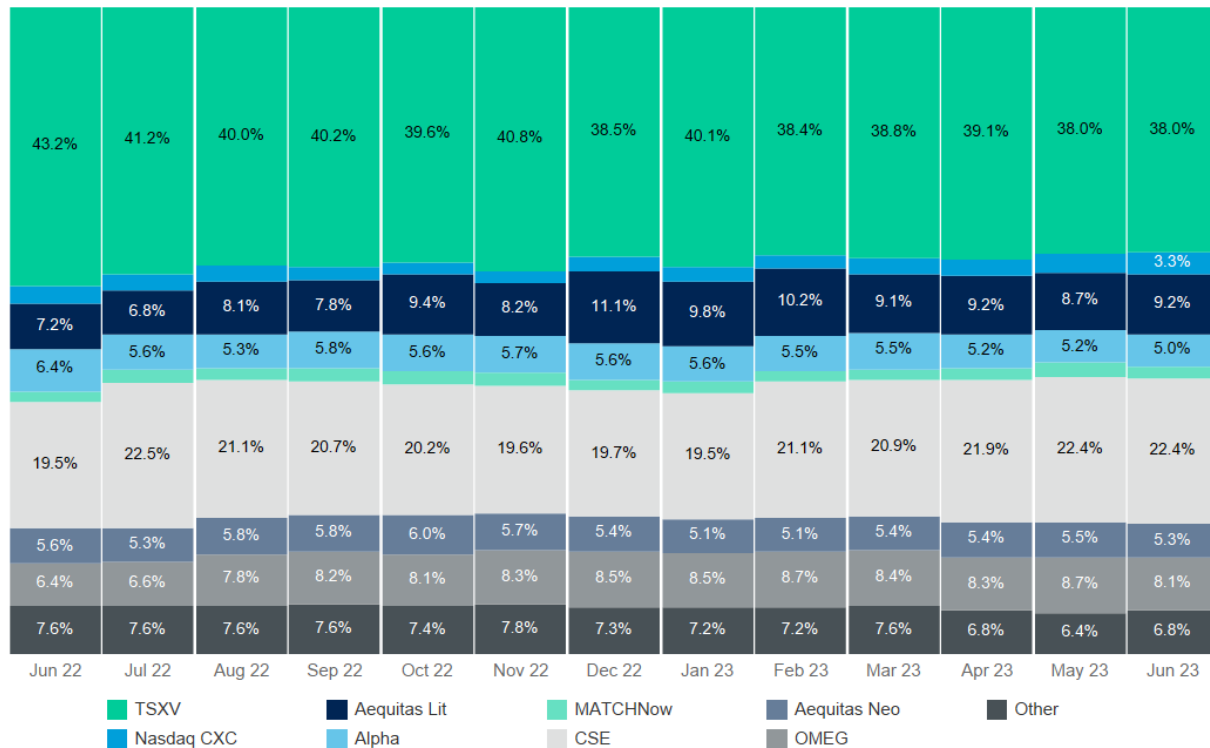
Venue Market Share (TSX Listed)



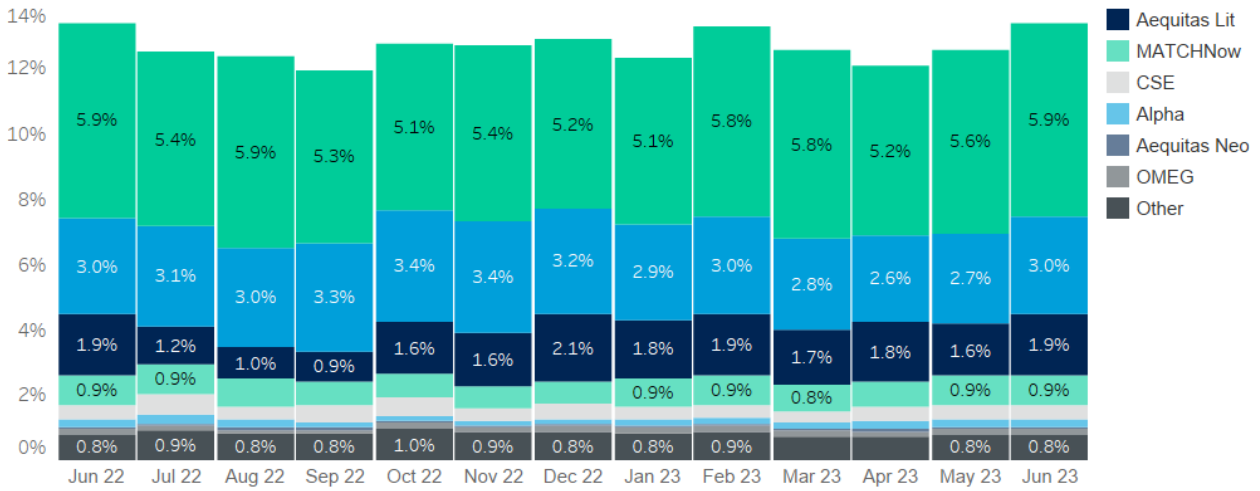
Average Daily Market Volume (Shares, Non-TSX Listed)



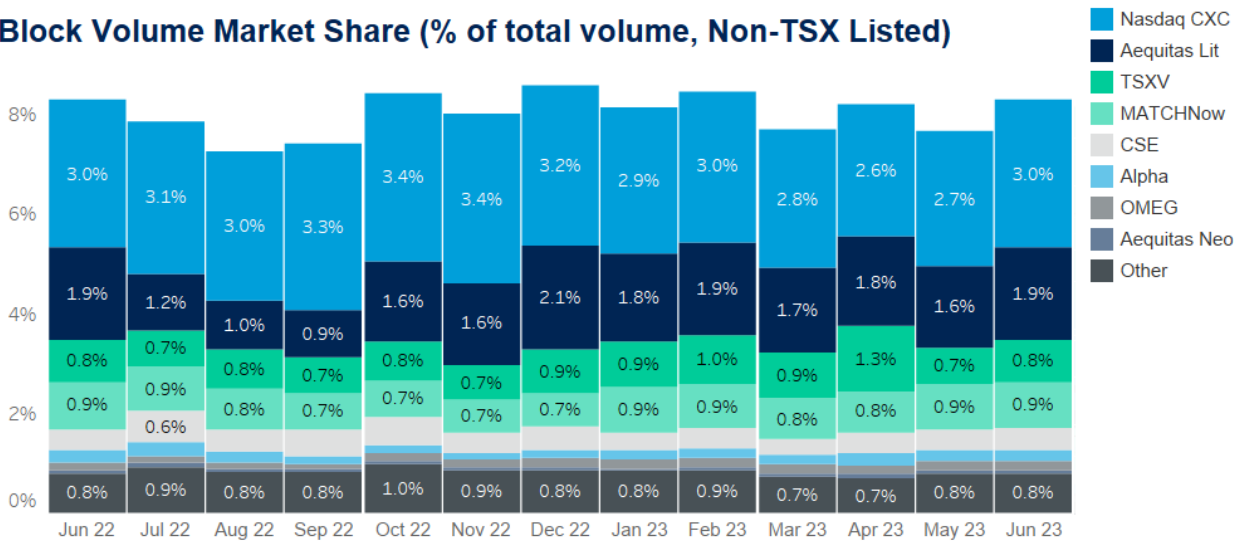
Venue Market Share (Non-TSX Listed)



Block Volume Market Share (% of total volume, TSX Listed)

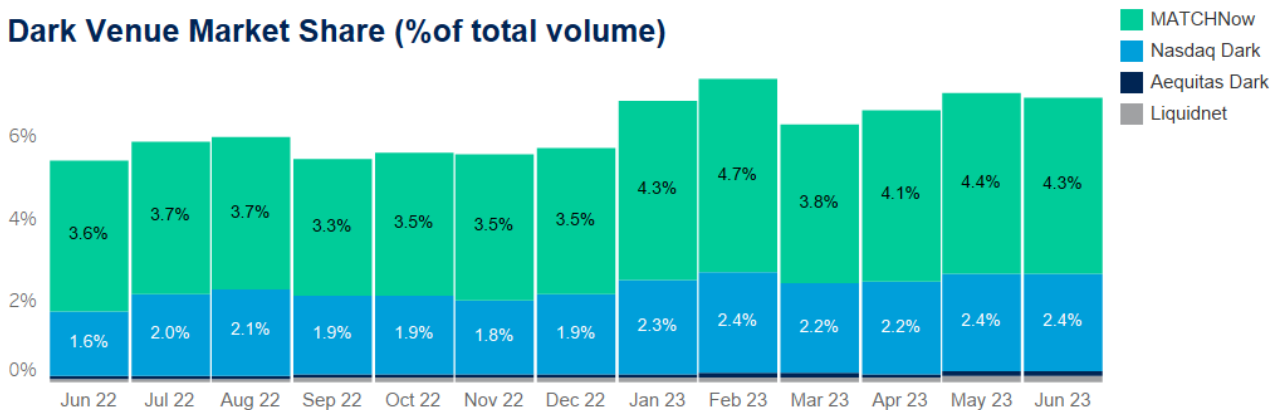


Block Volume Market Share (% of total volume, Non-TSX Listed)



Blocks defined as >5100 shares and > \$30,000 CAD or >=\$100K CAD; Source data: Virtu Financial

Dark Venue Market Share (% of total volume)



TSX listed securities only; Source data: Virtu Financial

Quotesize in Shares

		2Q 22	3Q 22			4Q 22			1Q 23			2Q 23		
		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
First 30 Min	S&P/TSX 60	851	892	795	780	823	855	916	854	798	840	892	877	889
	S&P/TSX Composite	1,063	1,105	965	944	1,022	1,046	1,097	1,117	997	1,049	1,114	1,075	1,090
	Non-TSX-Listed	4,698	4,334	4,388	4,500	4,599	4,778	4,969	4,945	4,969	4,763	6,191	5,930	5,259
Mid Day	S&P/TSX 60	1,000	1,068	980	954	964	1,007	1,057	1,025	953	1,017	1,104	1,106	1,112
	S&P/TSX Composite	1,243	1,305	1,182	1,164	1,212	1,269	1,317	1,345	1,213	1,286	1,415	1,352	1,359
	Non-TSX-Listed	4,748	4,459	4,771	4,609	4,418	4,419	4,650	4,650	4,475	4,462	5,649	5,629	5,000
Last 30 Min	S&P/TSX 60	1,092	1,187	1,198	1,151	1,169	1,178	1,171	1,203	1,090	1,156	1,229	1,194	1,214
	S&P/TSX Composite	1,368	1,407	1,398	1,382	1,468	1,490	1,474	1,553	1,410	1,493	1,589	1,531	1,535
	Non-TSX-Listed	4,752	4,428	4,486	4,394	4,158	4,417	4,605	4,598	4,653	4,846	6,000	5,761	5,017

Spread Bps

First 30 Min	S&P/TSX 60	6.0	6.6	6.1	6.1	6.5	6.6	6.2	6.2	6.1	6.1	5.3	6.2	6.3
	S&P/TSX Composite	13.4	14.7	13.8	14.3	14.7	13.9	13.4	13.4	13.1	13.4	11.7	12.7	12.3
	Non-TSX-Listed	215.7	229.8	201.2	220.6	219.5	218.1	215.1	210.5	203.5	212.6	198.5	184.3	192.3
Mid Day	S&P/TSX 60	3.9	4.1	3.9	4.0	3.9	3.8	3.7	3.6	3.7	3.7	3.3	3.8	3.8
	S&P/TSX Composite	8.3	8.6	8.1	8.7	8.6	8.3	8.3	8.4	8.4	8.2	7.6	8.2	8.0
	Non-TSX-Listed	152.7	163.9	143.0	148.3	151.6	156.4	156.9	149.3	137.0	149.1	138.9	125.9	130.7
Last 30 Min	S&P/TSX 60	3.0	3.0	2.9	3.0	2.9	2.9	2.8	2.8	2.9	2.9	2.6	2.8	2.8
	S&P/TSX Composite	7.2	7.5	7.2	7.8	7.5	7.1	7.2	7.4	7.4	7.2	6.8	7.2	7.4
	Non-TSX-Listed	144.9	155.4	140.9	140.7	150.4	147.7	145.5	140.1	135.2	141.2	134.3	123.6	128.2

One Minute Volatility Bps

First 30 Min	S&P/TSX 60	15.5	15.9	13.9	14.2	16.9	14.2	13.5	11.9	12.1	13.6	11.0	11.8	10.6
	S&P/TSX Composite	19.9	22.3	18.0	18.7	20.8	18.2	16.5	15.0	15.4	17.4	13.4	14.1	12.3
	Non-TSX-Listed	33.1	30.9	20.9	22.1	23.2	20.7	22.8	17.7	17.9	21.4	15.7	15.1	13.6
Mid Day	S&P/TSX 60	5.8	5.3	4.6	5.9	6.1	5.2	4.7	4.0	4.4	5.4	3.7	4.2	3.5
	S&P/TSX Composite	6.8	6.0	5.0	6.3	6.5	5.6	4.8	4.1	4.4	5.7	3.5	3.9	2.9
	Non-TSX-Listed	9.7	8.0	6.2	6.9	7.3	6.3	5.7	4.5	5.3	7.3	5.0	4.8	4.4
Last 30 Min	S&P/TSX 60	5.8	5.1	4.3	5.8	5.6	5.1	5.0	4.0	4.7	5.2	3.8	4.3	3.8
	S&P/TSX Composite	5.7	4.8	3.9	5.4	5.3	4.9	4.6	3.8	4.3	4.8	3.2	3.7	3.0
	Non-TSX-Listed	7.7	6.4	5.4	6.7	6.7	5.4	5.4	3.8	4.7	6.2	4.0	4.0	3.5

Percent MDV by Time of Day

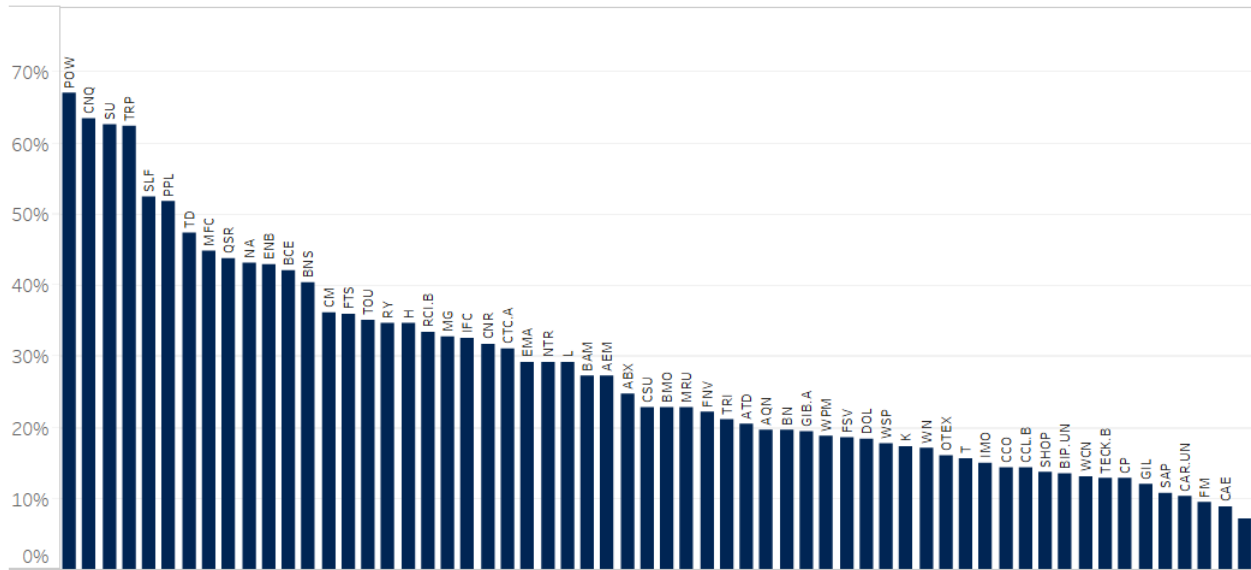
Open	S&P/TSX 60	0.7%	0.5%	0.6%	0.5%	0.4%	0.5%	0.5%	0.5%	0.5%	0.5%	0.5%	0.5%	0.5%
	S&P/TSX Composite	0.5%	0.5%	0.5%	0.4%	0.4%	0.4%	0.4%	0.4%	0.4%	0.4%	0.4%	0.4%	0.5%
	Non-TSX-Listed	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
First 30 Min	S&P/TSX 60	12.4%	13.0%	13.1%	9.6%	10.4%	10.1%	10.1%	8.9%	9.7%	9.5%	9.4%	9.9%	11.1%
	S&P/TSX Composite	12.8%	13.7%	13.4%	11.4%	11.4%	11.3%	10.5%	10.0%	10.9%	10.2%	10.0%	10.6%	11.8%
	Non-TSX-Listed	18.9%	19.8%	20.2%	18.5%	18.0%	19.4%	17.4%	17.5%	17.0%	18.0%	18.0%	16.4%	19.4%
Last 30 Min	S&P/TSX 60	40.9%	36.5%	36.8%	36.3%	31.5%	33.1%	36.7%	34.7%	36.0%	37.2%	39.9%	35.1%	45.8%
	S&P/TSX Composite	24.6%	26.2%	25.7%	26.2%	26.2%	25.5%	27.0%	27.0%	29.1%	28.9%	30.0%	27.4%	33.6%
	Non-TSX-Listed	7.2%	6.7%	6.7%	6.9%	6.3%	6.0%	6.2%	6.3%	7.4%	5.9%	7.8%	8.1%	10.1%
Close	S&P/TSX 60	7.3%	7.5%	7.4%	16.0%	12.3%	12.8%	18.2%	15.2%	18.5%	18.1%	19.3%	13.8%	21.9%
	S&P/TSX Composite	4.4%	4.5%	4.4%	6.5%	5.7%	6.3%	7.1%	6.6%	8.1%	7.8%	9.1%	6.9%	9.6%
	Non-TSX-Listed	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%

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

June 2023 Median MOC % of Daily Volume - S&P/TSX 60



Source data: Virtu Financial

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

© 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).