

May 2023 CA Market Structure Monthly

MICROSTRUCTURE OBSERVATIONS

- In May 2023, the average daily volume for TSX listed securities was 558 million shares, down 8% compared to April 2023 and down 35% compared to May 2022. Liquidity, spread, and volatility conditions maintained similar levels to April 2023.
- In non-TSX listed securities, the average daily volume was 264 million shares, down 21% compared to April 2023 and down 20% compared to May 2022. While liquidity and volatility conditions were stable, spread conditions improved compared to April 2023.
- While block volumes were stable to down as compared to April 2023, dark venues saw an increase in market share in May 2023. This increase occurred primarily on MATCHNow with a 0.3% increase in market share.

CA MARKET STRUCTURE NEWS

TSX Alpha Exchange - Announces Static Order Processing Delay

On May 4, the TSX announced plans to change the order processing delay on TSX Alpha Exchange. While this new static order processing delay is designed to allow continued protection to liquidity providers during volatile market conditions, it aims to provide enhanced certainty of execution in certain routing scenarios. For example, this could allow smart order routers to obtain greater execution certainty when routing to the market.

Instead of a randomized delay of between 1-3 milliseconds as Alpha currently does today, the change would set the delay to a static 1 millisecond on all eligible order. Orders marked as post only and meet the minimum size requirements will continue to bypass the delay.

This change is planned to launch in 3Q 2023.

TSX Withdraws Proposal to Introduce Priority for Price Setting Orders

On May 5, the TSX announced it had withdrawn its May 2022 proposal to introduce allocation priority for price setting orders. The proposal, which was initially to be effective in 3Q 2022, was designed to provide queue priority benefits for any order creating a new price level but without the obligation for the order to rest in the book for a minimum of 1 second as Long Life orders are required to do.

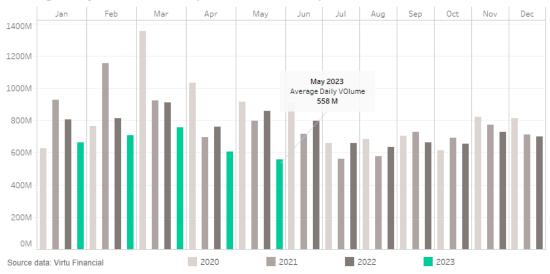
Canadian Securities Exchange (CSE) Amends Listing Statement

On May 18, CSE received approval for <u>modifications to their listing requirements</u>. The goal of these changes was to better clarify the intent of the forms required for a company to list on CSE. The amended listing statement also permits an issuer to rely on its existing disclosure record when preparing listing statements.

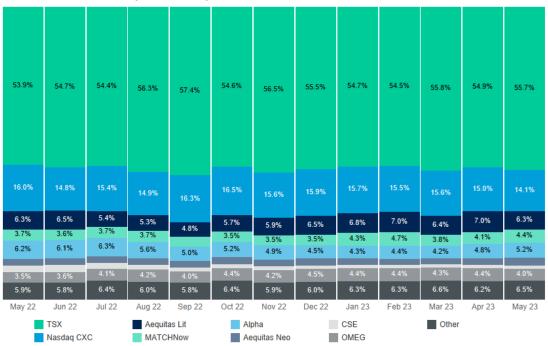
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Average Daily Market Volume (Shares, TSX Listed)



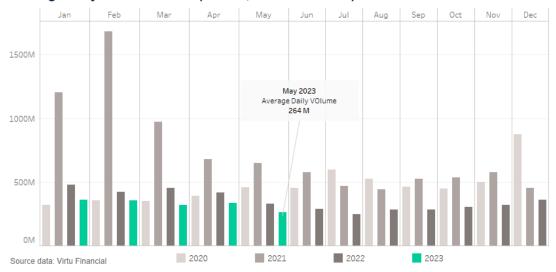
Venue Market Share (TSX Listed)



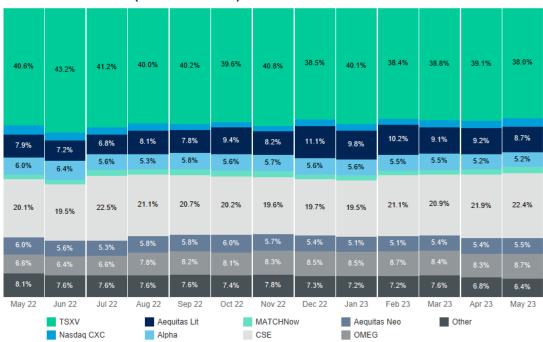
Source data: Virtu Financial



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

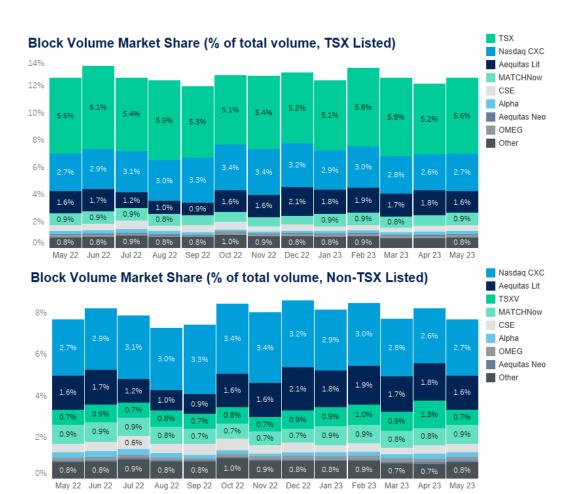


Venue Market Share (Non-TSX Listed)



Source data: Virtu Financial





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



TSX listed securities only; Source data: Virtu Financial



Quotesize in Shares

		2Q 22		3Q 22			4Q 22			1Q 23			2Q 23	
		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
First 30 Min	S&P/TSX 60	762		892	795	780	823	855	916	854	798	840	892	877
	S&P/TSX Composite	958	1,067	1,106	960	943	1,023	1,048	1,097	1,118	997		1,114	1,078
	Non-TSX-Listed	5,120	4,698	4,334	4,388	4,500	4,599	4,778	4,969	4,945	4,969	4,763	6,191	5,930
Mid Day	S&P/TSX 60	899	1,000	1,068	980	954	964		1,057	1,025	953	1,017	1,104	1,106
	S&P/TSX Composite	1,138	1,246	1,309	1,181	1,164	1,211	1,271	1,319	1,345	1,215	1,287	1,417	1,355
	Non-TSX-Listed	4,828	4,748	4,459	4,771	4,609	4,418	4,419	4,650	4,650	4,475	4,462	5,649	5,629
Last 30 Min	S&P/TSX 60	962	1,092	1,187	1,198	1,151	1,169	1,178	1,171	1,203	1,090	1,156	1,229	1,194
	S&P/TSX Composite	1,238	1,366	1,412	1,395	1,382		1,491	1,476	1,558	1,411	1,494	1,596	1,536
	Non-TSX-Listed	5,103	4,752	4,428	4,486	4,394	4,158	4,417	4,605	4,598	4,653	4,846	6,000	5,761

Spread Bps

First 30 Min	S&P/TSX 60	6.5	6.0	6.6	6.1	6.1	6.5	6.6	6.2		6.1	6.1	5.3	6.2
	S&P/TSX Composite	14.2		14.8	13.9	14.4	14.8	14.0	13.4	13.4	13.2	13.4	11.7	12.7
	Non-TSX-Listed	204.9	215.7	229.8	201.2	220.6	219.5	218.1	215.1	210.5	203.5		198.5	184.3
Mid Day	S&P/TSX 60	4.1	3.9	4.1	3.9	4.0	3.9		3.7	3.6	3.7	3.7	3.3	3.8
	S&P/TSX Composite	9.0	8.3	8.6	8.1	8.7	8.6		8.3	8.4	8.4	8.2	7.6	8.2
	Non-TSX-Listed	145.0	152.7	163.9	143.0	148.3	151.6	156.4	156.9	149.3	137.0		138.9	125.9
	S&P/TSX 60	3.1	3.0	3.0	2.9	3.0	2.9		2.8	2.8	2.9	2.9	2.6	2.8
	S&P/TSX Composite	7.5		7.5	7.2	7.8	7.5	7.1	7.2	7.4	7.4	7.2	6.8	7.2
	Non-TSX-Listed	147.1	144.9	155.4	140.9	140.7	150.4	147.7	145.5	140.1	135.2		134.3	123.6

One Minute Volatility Bps

First 30 Min	S&P/TSX 60	17.1	15.5	15.9		14.2	16.9	14.2	13.5	11.9	12.1	13.6	11.0	11.8
	S&P/TSX Composite	21.0	20.0	22.4		18.7	20.8	18.2	16.5	15.0	15.4	17.4	13.4	14.1
	Non-TSX-Listed	36.5	33.1	30.9	20.9	22.1	23.2	20.7	22.8	17.7	17.9	21.4	15.7	15.1
Mid Day	S&P/TSX 60	7.3	5.8	5.3	4.6	5.9	6.1		4.7	4.0	4.4	5.4	3.7	4.2
	S&P/TSX Composite	8.2	6.9	6.0	5.0	6.3	6.5		4.8	4.1	4.4	5.7	3.5	3.9
	Non-TSX-Listed	12.5	9.7	8.0	6.2	6.9	7.3		5.7	4.5	5.3	7.3	5.0	4.8
Last 30 Min	S&P/TSX 60	7.4	5.8	5.1	4.3	5.8	5.6	5.1	5.0	4.0	4.7	5.2	3.8	4.3
	S&P/TSX Composite	7.4	5.7		3.9	5.4	5.2	4.9	4.6	3.8	4.3	4.8	3.2	3.7
	Non-TSX-Listed	11.3	7.7	6.4	5.4	6.7	6.7	5.4		3.8	4.7	6.2	4.0	4.0

Percent MDV by Time of Day

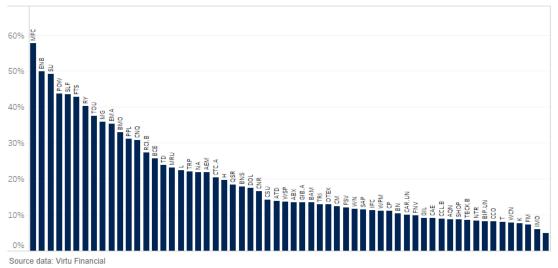
-	S&P/TSX 60	0.6%	0.7%	0.5%	0.6%	0.5%	0.4%	0.5%	0.5%	0.5%	0.5%		0.5%	0.5%
	S&P/TSX Composite	0.5%	0.5%	0.5%	0.5%	0.4%	0.4%	0.4%	0.4%		0.4%	0.4%	0.4%	0.4%
	Non-TSX-Listed	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
First 30 Min	S&P/TSX 60	12.6%	12.4%	13.0%	13.1%	9.6%	10.4%	10.1%		8.9%	9.7%	9.5%	9.4%	9.9%
	S&P/TSX Composite	12.6%	12.8%	13.7%	13.4%	11.4%	11.4%		10.5%	10.0%	10.9%	10.2%	10.1%	10.6%
	Non-TSX-Listed	18.7%	18.9%	19.8%	20.2%	18.5%		19.4%	17.4%	17.5%	17.0%	18.0%	18.0%	16.4%
Last 30 Min	S&P/TSX 60	36.1%	40.9%	36.5%	36.8%		31.5%	33.1%	36.7%	34.7%	36.0%	37.2%	39.9%	35.1%
	S&P/TSX Composite		24.5%	26.0%	25.7%	26.1%	26.2%	25.5%	27.0%	26.9%	29.0%	28.6%	30.0%	27.2%
	Non-TSX-Listed	7.2%	7.2%	6.7%		6.9%	6.3%	6.0%	6.2%	6.3%	7.4%	5.9%	7.8%	8.1%
Close	S&P/TSX 60	6.7%	7.3%	7.5%	7.4%	16.0%	12.3%	12.8%	18.2%	15.2%	18.5%	18.1%	19.3%	
	S&P/TSX Composite	3.7%	4.4%	4.5%	4.4%		5.6%	6.3%	7.1%	6.6%	8.1%	7.8%	9.1%	6.9%
	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



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



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