March 2023 Canada Market Structure Monthly



MARKET MICROSTRUCTURE OBSERVATIONS

• In March 2023, the average daily volume for TSX listed securities was 725 million shares, up 2% compared to February 2023 and down 20% compared to March 2022. While volume improved, volatility and spread conditions deteriorated compared to February 2023.

• In non-TSX listed securities, the average daily volume was 312 million shares, down 12% compared to February 2023 and down 31% compared to March 2022. Liquidity, spread and volatility conditions deteriorated slightly compared to February 2023.

• Dark venue market share reversed its recent trend in 2023, decreasing compared to February 2023. This drop in market share was most noted on MATCHNow, with a drop of 0.8% compared to February 2023.

CANADA MARKET STRUCTURE NEWS

Instinet Canada Cross Notice of Approval for New Conditional Functionality

On March 1 st, 2023, the Ontario Securities Commission approved the amendment proposed by Instinet Canada Cross Limited (ICX) to create two classes of conditional order types and matching instruction functionality. ICX will publish a notice on its website indicating the date of implementation, which is anticipated to be in the second quarter of 2023.

https://www.osc.ca/en/industry/market-regulation/marketplaces/alternative-trading-systems-atss/atss-operating-ontario/instinet-canada-cross-icx-orders-notices/instinet-1

Alpha Exchange Inc. Notice of Proposed Amendment and Request for Comments

On March 2, 2023, the TMX filed an application with the Ontario Securities Commission for approval to introduce a new market comprising of two new order books: Alpha-X and Alpha DRK.

Included in the proposal is the removal of Alpha's randomized 1-3ms speed bump, which will be replaced with a 1ms delay on Alpha and a 10ms delay on Alpha-X. Alpha-X - in addition to the existing visible order types, Alpha-X will offer a new, discretionary Smart Limit order type. Alpha DRK - a dark order book with a suite of pegged and limit dark order types, plus a new Smart Peg order type with the discretionary ability of trading at more aggressive prices.

The new Alpha-X and Alpha DRK order books are expected to be implemented in September 2023, subject to regulatory approval and client readiness.

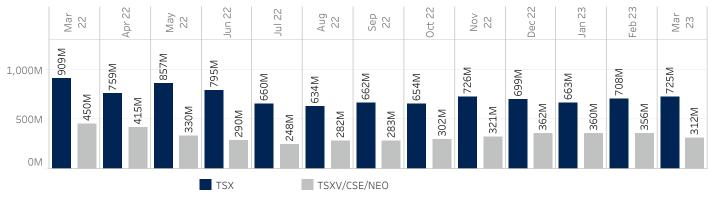
https://www.tsx.com/resource/en/2974/proposed-amendments-re-alpha-x-alpha-drk-and-order-processing-delay-2023-03-02-en.pdf

Canadian Securities Exchange – Amendments to CSE Listing Policies Approved

On March 30 th 2023, the Ontario Securities Commission approved significant changes to the CSE Listing Policies and Forms that reflect requirements for non-venture issuers seeking to list on the CSE. These amendments would also streamline the listing of Special Purpose Acquisition Corporations (SPACs) and Exchange Traded Funds (ETFs), including Closed End Funds (CEFs).

https://www.osc.ca/en/industry/market-regulation/marketplaces/exchanges/recognized-exchanges/canadian-securities-exchange-cse-rule-review-notices





Average Daily Market Volume By Listing Exchange (Shares)

Source data: Virtu Financial

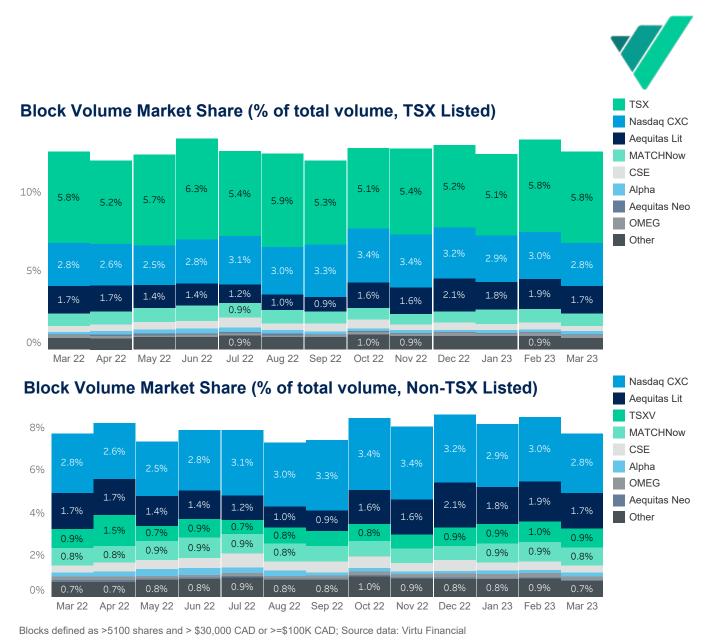
Venue Market Share (TSX-Listed)

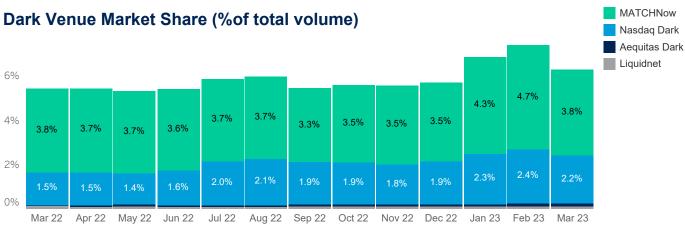
54.8%	53.4%	53.9%	54.7%	54.4%	56.3%	57.4%	54.6%	56.5%	55.5%	54.7%	54.5%	55.8%
15.1%	15.4%	16.0%	14.8%	15.4%	14.9%	16.3%	16.5%	15.6%	15.9%	15.7%	15.5%	15.6%
	6.9%	6.3%							6.5%	6.8%	7.0%	
			6.1%									
6.00/	C 20/	E 0%	E 00/	6 40/	6.0%	E 00/	6 40/	E 00/	6.0%	6.20/	6.20/	6.6%
6.0%	6.2%	5.9%	5.8%	6.4%	6.0%	5.8%	6.4%	5.9%	6.0%	6.3%	6.3%	6.6%
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

Venue Market Share (Non-TSX-Listed)

39.6%	38.0%	40.6%	43.2%	41.2%	40.0%	40.2%	39.6%	40.8%	38.5%	40.1%	38.4%	38.8%
7.9%	8.6%	7.9%	7.2%		8.1%	7.8%	9.4%	8.2%	11.1%	9.8%	10.2%	9.1%
			6.4%									
19.5%	20.6%	20.1%	19.5%	22.5%	21.1%	20.7%	20.2%	19.6%	19.7%	19.5%	21.1%	20.9%
6.3%												
	7.2%	6.6%	6.4%		7.8%	8.2%	8.1%	8.3%	8.5%	8.5%	8.7%	8.4%
9.5%	8.8%	8.1%	7.6%	7.6%	7.6%	7.6%	7.4%	7.8%	7.3%	7.2%	7.2%	7.6%
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
	TSX Nasdaq CXC		Aequita		Alp Ae	oha quitas Neo	1			Other		

Source data: Virtu Financial





TSX listed securities only; Source data: Virtu Financial



Quotesize in Shares

		1Q 22		2Q 22			3Q 22			4Q 22			1Q 23	
		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
First 30 Min	S&P/TSX 60	801	800	769	864	900	803	795		870	930	871	809	850
	S&P/TSX Composite	953	992	958	1,067	1,109	961	945		1,050	1,098	1,122	1,000	1,055
	Non-TSX-Listed	6,079	5,540	5,120	4,698	4,334	4,388	4,500	4,599	4,778	4,969	4,945	4,969	4,763
Mid Day	S&P/TSX 60	952	914	909	1,013	1,080		971	980	1,024	1,075	1,042	968	1,034
	S&P/TSX Composite	1,127	1,131	1,140	1,246	1,309	1,182	1,166	1,213	1,275	1,323	1,350	1,219	1,290
	Non-TSX-Listed	5,300	5,170	4,828	4,748	4,459	4,771	4,609	4,418	4,419	4,650	4,650	4,475	4,462
Last 30 Min	S&P/TSX 60	1,035	973	976	1,112	1,207	1,216	1,175	1,206	1,207	1,201	1,231	1,112	1,181
	S&P/TSX Composite	1,308	1,250	1,239	1,367		1,396	1,382	1,472	1,497	1,481	1,563	1,416	1,496
	Non-TSX-Listed	5,606	5,300	5,103	4,752	4,428	4,486	4,394	4,158	4,417	4,605	4,598	4,653	4,846

Spread Bps

First 30 Min	S&P/TSX 60	6.0	5.9	6.4	6.0	6.5	6.0	5.9	6.4	6.5	6.2	6.1	6.0	
	S&P/TSX Composite	12.1	12.2	14.2		14.8	13.9	14.4	14.8	14.0	13.4	13.4	13.2	13.4
	Non-TSX-Listed	175.4	170.5	204.9	215.7	229.8	201.2	220.6	219.5	218.1	215.1	210.5	203.5	212.6
Mid Day	S&P/TSX 60	3.6	3.5	4.0	3.8	4.1	3.8	3.9	3.8		3.7	3.6	3.7	3.6
	S&P/TSX Composite	7.6	7.5	9.0	8.3	8.6	8.1	8.7	8.6		8.3	8.4	8.4	8.2
	Non-TSX-Listed	132.7	129.0	145.0	152.7	163.9	143.0	148.3	151.6	156.4	156.9	149.3	137.0	
Last 30 Min	S&P/TSX 60	2.7	2.7	3.1	3.0	3.0	2.9	3.0	2.9	2.9	2.8	2.8	2.9	2.8
	S&P/TSX Composite	6.5	6.5	7.5		7.5	7.2	7.8	7.5	7.1	7.2	7.4	7.4	7.2
	Non-TSX-Listed	133.3	129.0	147.1	144.9	155.4	140.9	140.7	150.4	147.7	145.5	140.1	135.2	141.2

One Minute Volatility Bps

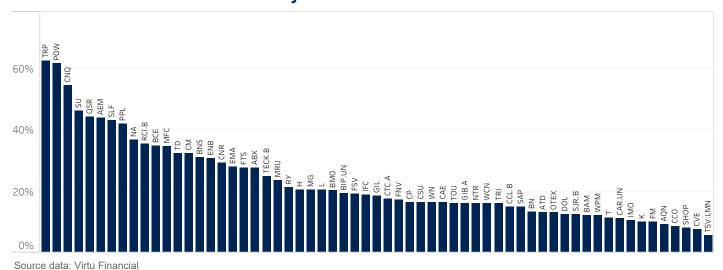
First 30 Min	S&P/TSX 60	15.4	14.4	17.2	15.4	15.9	13.9	14.2	17.0	14.3	13.5	11.9	12.1	13.7
	S&P/TSX Composite	19.2	17.7	21.0	20.0	22.3	18.2	18.7	20.9		16.5	15.0	15.4	17.3
	Non-TSX-Listed	18.6	21.3	36.5	33.1	30.9	20.9	22.1	23.2	20.7	22.8	17.7	17.9	21.4
Mid Day	S&P/TSX 60	5.4	5.1	7.3	5.8		4.6	6.0	6.1	5.2	4.7	4.0	4.4	5.4
	S&P/TSX Composite	6.1	5.6	8.2	6.9	6.0	5.0	6.3	6.5	5.6	4.8	4.0	4.4	
	Non-TSX-Listed	6.3	7.2	12.5	9.7	8.0	6.2		7.3	6.3	5.7	4.5	5.3	7.3
Last 30 Min	S&P/TSX 60	5.2	4.9	7.5	5.8	5.1	4.3	5.9	5.6	5.1	5.0	4.0	4.7	5.2
	S&P/TSX Composite	5.2	5.1	7.4	5.7	4.8	3.9	5.4	5.2		4.5	3.8	4.3	4.8
	Non-TSX-Listed	5.6	6.6	11.3	7.7	6.4	5.4	6.7	6.7	5.4	5.4	3.8	4.7	6.2

Percent MDV by Time of Day

Open	S&P/TSX 60	0.6%	0.6%	0.6%	0.7%	0.5%	0.6%	0.5%	0.4%	0.5%	0.5%	0.5%		0.5%
	S&P/TSX Composite	0.6%	0.5%	0.5%	0.5%	0.5%	0.5%	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%
	S&P/TSX 60	13.6%	12.5%	12.6%	12.4%	13.0%	12.9%	9.7%	10.4%	10.2%	10.1%	8.9%	9.7%	9.4%
	S&P/TSX Composite	13.9%	12.8%	12.7%	12.8%	13.7%	13.4%	11.4%		11.4%	10.5%	10.0%	10.9%	10.2%
	Non-TSX-Listed	17.1%	18.0%	18.7%	18.9%	19.8%	20.2%	18.5%	18.0%	19.4%	17.4%	17.5%	17.0%	18.0%
Last 30 Min	S&P/TSX 60	34.6%	38.7%	36.4%	40.9%	36.1%	36.8%		31.5%	32.5%	36.7%	35.1%	36.1%	37.2%
	S&P/TSX Composite	24.8%	24.9%	26.3%	24.5%	26.0%	25.7%	26.1%	26.1%	25.5%	27.0%	26.9%	29.0%	28.9%
	Non-TSX-Listed	8.2%	7.6%	7.2%	7.2%	6.7%		6.9%	6.3%	6.0%	6.2%	6.3%	7.4%	5.9%
Close	S&P/TSX 60	6.9%	7.8%	6.7%	7.3%	7.4%	7.4%	16.3%	12.2%	12.8%	18.7%	15.4%	18.7%	18.4%
	S&P/TSX Composite	3.7%	4.2%	3.7%	4.4%	4.5%	4.4%	6.4%		6.3%	7.1%	6.6%	8.1%	7.8%
	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





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



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