August 2022 Canada Market Structure Monthly



MARKET MICROSTRUCTURE OBSERVATIONS

• In August 2022, the average daily volume for TSX listed securities was 625M shares, down 6% MoM but up 7% YoY. Despite deteriorating liquidity conditions MoM, spreads and volatility conditions improved away from June highs.

• In non-TSX listed securities, the average daily volume increased to 278M shares, reversing the recent downward trend. Despite an 11% increase MoM, this was still down 38% YoY. Liquidity, spread and volatility conditions all improved MoM.

• TSX Block volumes reversed their negative trend from the summer, while dark venue market share held onto its market share gains made in July.

CANADA MARKET STRUCTURE NEWS

MATCHNow Seeks to Modify Conditional Order Interaction Within Its Trading System

On 18 August 2022, Cboe's MATCHNow (dark ATS) issued a request for comments relating to its notice of proposed changes affecting conditional orders within its trading system. In the event of regulatory approval, the following changes and their respective rollout dates may be implemented:

1 November 2022

- · Large IOC orders can interact with orders resting in the MATCHNow conditional pool.
- Auto-firm-up feature would enable buy-side conditionals to automatically firm up when contras are present in the system.

1 December 2022

- · Firmed-up conditional orders from buy-side clients could interact with all "firm" orders available in MATCHNow.
- Clean-up feature would allow the tail end of uncommitted conditional orders to opt-in and trade against contra orders in MATCHNow.

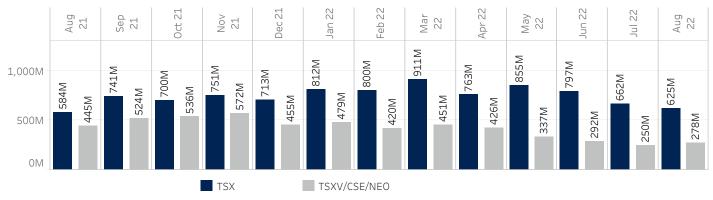
https://www.osc.ca/sites/default/files/2022-08/triact 20220818 changes-to-matchnow-trading-system.pdf

New CSNX Trading Book Scheduled to Launch by the end of September 2022

On 1 September 2022, CNSX Markets Inc. (CSE) received approval for the introduction of a new trading book, CSE2. It is intended that CSE2 will address the significant growth in online retail activity and the resulting pressure to reduce commission rates. The additional book will not have broker preferencing and will offer an inverted trading fee model which will rebate the active side and of the trade and assess a fee to the passive side of the trade.CSE2 is scheduled to launch on 30 September 2022. To learn more about the differences in functionality between the two CSE books, please consult the link below:

https://thecse.com/en/about/publications/notices/notice-2022-002-amendments-to-trading-system-functionality-features





Average Daily Market Volume By Listing Exchange (Shares)

Source data: Virtu Financial

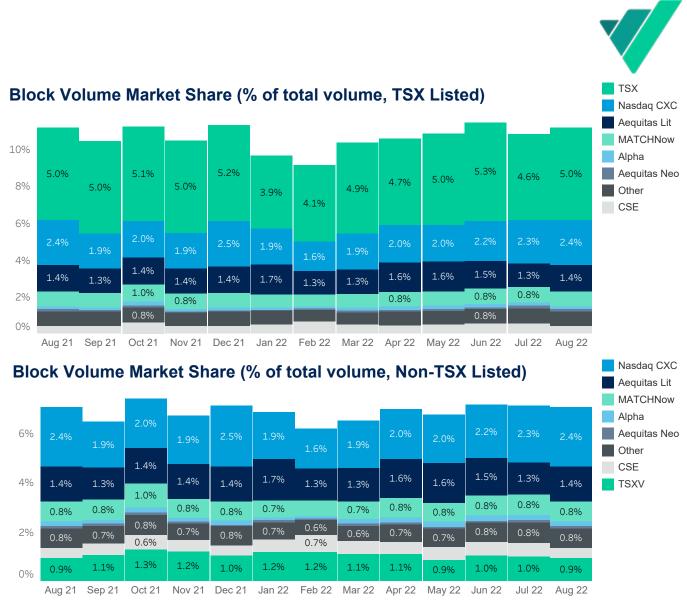
Venue Market Share (TSX-Listed)

53.1%	55.9%	53.3%	55.2%	55.4%	52.6%	55.4%	54.8%	53.4%	54.0%	54.7%	54.4%	56.4%
13.7%	12.4%	13.1%	12.8%	14.0%	15.4%	14.8%	15.1%	15.4%	16.1%	14.8%	15.4%	15.0%
7.0%	6.6%	7.2%	6.7%		7.1%	6.8%		6.9%	6.3%			
7.4%	6.9%	7.3%	6.9%	6.9%	7.2%	6.2%			6.2%	6.1%		
9.3%	9.6%	9.9%	9.5%	9.3%	9.1%	8.9%	9.0%	9.5%	9.4%	9.4%	10.5%	10.0%
Aug 21	Sep 21	Oct 21	Nov 21	Dec 21	Jan 22	Feb 22	Mar 22	Apr 22	May 22	Jun 22	Jul 22	Aug 22

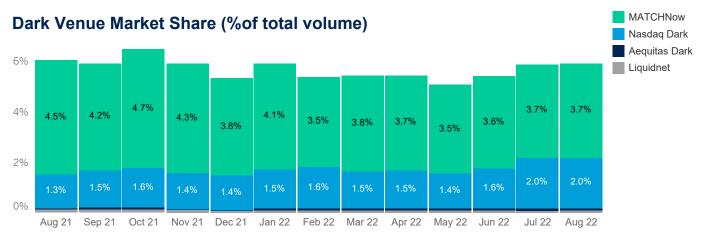
Venue Market Share (Non-TSX-Listed)

9.0%	9.0%	8.2%	8.6%	8.0%	8.4%	7.7%	7.9%	8.8%	8.1%	7.2%	6.7%	8.1%
8.3%	7.9%	7.7%	7.1%			7.1%				6.4%		
35.0%	36.8%	38.4%	36.8%	36.6%	35.4%	37.0%	39.6%	38.5%	41.3%	43.2%	40.8%	40.0%
22.8%	20.1%	20.8%	22.0%	21.9%	21.2%	21.8%	19.5%	20.9%	20.5%	19.5%	22.3%	21.1%
14.9%	15.5%	15.3%	15.8%	16.5%	16.3%	15.6%	16.2%	16.2%	14.9%	14.0%	15.1%	15.4%
Aug 21	Sep 21	Oct 21	Nov 21	Dec 21	Jan 22	Feb 22	Mar 22	Apr 22	May 22	Jun 22	Jul 22	Aug 22
	TSX Nasdaq CXC		Aequita MATCH		Alp Alp	ha quitas Neo		Other CSE				

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

		3Q	3Q 21		4Q 21		1Q 22			2Q 22			3Q 22	
		Aug 21	Sep 21	Oct 21	Nov 21	Dec 21	Jan 22	Feb 22	Mar 22	Apr 22	May 22	Jun 22	Jul 22	Aug 22
First 30 Min	S&P/TSX 60	862	912	887		866	818	759	800	807	786	881	915	823
	S&P/TSX Composite	1,011	1,054	1,085		1,049	970	884	945	993	958	1,068	1,101	965
	Non-TSX-Listed	5,729	6,073	6,360	6,702	5,071	5,189	5,000	6,079	5,540	5,120	4,698	4,334	4,388
Mid Day	S&P/TSX 60	1,050	1,093	1,094	1,020	1,005	968	921	952	915	914	1,026	1,093	
	S&P/TSX Composite	1,242	1,273	1,316	1,216	1,222	1,165	1,092	1,130	1,135	1,145	1,248	1,310	1,190
	Non-TSX-Listed	4,600	4,900	5,292	5,000	4,165	4,050	4,265	5,300	5,170	4,828	4,748	4,459	
Last 30 Min	S&P/TSX 60	1,253	1,299	1,274	1,217	1,127	1,068	1,009	1,036	974	985	1,125	1,237	1,240
	S&P/TSX Composite	1,468	1,487	1,520	1,450	1,417	1,343	1,259	1,313	1,261	1,244	1,372	1,413	
	Non-TSX-Listed	5,600	5,904	6,383	5,900	5,000	4,774	4,625	5,606	5,300	5,103	4,752	4,428	4,486

Spread Bps

First 30 Min	First 30 Min S&P/TSX 60		4.9	4.9	5.4	5.4	5.6		5.9	5.8	6.4	6.0	6.5	6.0
	S&P/TSX Composite	11.2	10.9	10.6	10.8	11.4	11.3		11.9	12.0	14.0	13.2	14.4	13.6
	Non-TSX-Listed	164.9	170.1	170.5	163.9	175.4	172.4	163.1	175.4	170.5	204.9	215.7	229.8	201.2
Mid Day	S&P/TSX 60	3.2	3.2	3.3	3.4	3.4	3.5	3.4	3.6		4.0	3.8	4.0	3.8
	S&P/TSX Composite	6.8	6.8	7.0	7.2	7.5	7.7	7.5	7.5	7.4	8.8	8.2	8.5	8.0
	Non-TSX-Listed	125.0	128.2		123.2	122.0	124.2	122.2	132.7	129.0	145.0	152.7	163.9	143.0
Last 30 Min	S&P/TSX 60	2.5	2.5	2.5	2.7	2.9	2.8	2.8	2.7	2.7	3.0	3.0	3.0	2.9
	S&P/TSX Composite	5.9	5.8	6.0	6.2		6.6	6.7	6.4	6.4	7.4	7.2	7.4	7.0
	Non-TSX-Listed	124.3	129.9	126.8	123.5	125.7	125.5	125.5	133.3	129.0	147.1	144.9	155.4	140.9

One Minute Volatility Bps

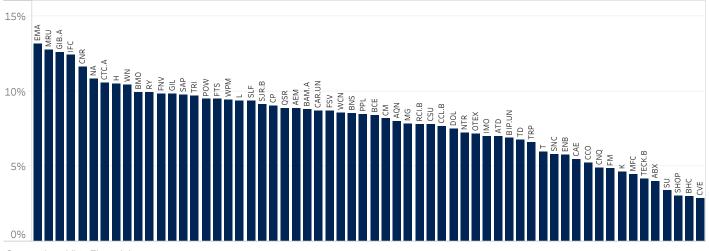
First 30 Mir	S&P/TSX 60	11.0	11.9	11.7	11.6	13.3	13.9	13.8	15.4	14.3	17.0	15.3	15.8	13.7
	S&P/TSX Composite	15.1	15.6	15.1	15.1	17.5		17.9	19.0	17.6	21.0	19.9	22.0	18.1
	Non-TSX-Listed	18.0	19.6	17.5	19.9	24.0	24.1	22.7	18.6	21.3	36.5	33.1	30.9	20.9
Mid Day	S&P/TSX 60	3.3	3.7	3.4	3.5	4.4	5.2		5.3	5.0	7.3	5.8	5.3	4.6
	S&P/TSX Composite	3.4	3.8	3.6	3.9	4.7	5.7		6.0	5.6	8.2	6.8	6.0	5.0
	Non-TSX-Listed	5.7	6.3	5.8	5.8		9.2	7.1	6.3	7.2	12.5	9.7	8.0	6.2
Last 30 Min	S&P/TSX 60	3.1	3.5	3.3	3.4	4.5	5.2	5.4	5.2	4.9	7.5	5.8	5.1	4.3
	S&P/TSX Composite	2.9	3.4	3.2	3.4	4.5	5.1	5.3	5.2	5.0	7.3	5.7		3.9
	Non-TSX-Listed	5.2	6.8	4.9	4.9	6.7	8.6	6.2	5.6	6.6	11.3	7.7	6.4	5.4

Percent MDV by Time of Day

Open	S&P/TSX 60	0.6%	0.6%	0.6%	0.6%	0.6%	0.6%		0.6%	0.6%	0.6%	0.7%	0.5%	0.6%
·	S&P/TSX Composite	0.5%	0.5%	0.6%	0.6%	0.5%		0.6%	0.6%	0.5%	0.5%	0.5%	0.5%	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%
	S&P/TSX 60	13.2%	14.5%	14.1%	14.3%	13.5%	12.8%	13.4%	13.4%	12.6%	12.6%	12.4%	12.9%	13.1%
	S&P/TSX Composite	13.8%	14.1%	14.1%	14.3%	13.3%	12.4%	13.4%	13.8%	12.8%	12.6%	12.8%	13.7%	
	Non-TSX-Listed	17.9%	18.4%	18.8%	19.4%	17.3%	17.4%	17.5%	17.1%	18.0%	18.7%	18.9%	19.8%	20.2%
Last 30 Min	S&P/TSX 60	29.8%	31.8%	29.7%	31.5%	34.2%	33.5%	35.1%		39.2%	36.9%	41.4%	36.1%	36.6%
	S&P/TSX Composite	22.7%	22.9%	22.0%	23.5%	25.1%	23.0%	25.9%	25.2%	25.3%	26.5%	24.6%	26.4%	25.8%
	Non-TSX-Listed	8.7%	8.7%		8.3%	8.0%	8.4%	8.9%	8.2%	7.6%	7.2%	7.2%	6.7%	6.7%
Close	S&P/TSX 60	6.4%	6.6%	7.3%	6.4%	6.9%	6.7%	7.8%	6.9%	7.8%	6.7%	7.4%	7.4%	7.4%
	S&P/TSX Composite	3.2%	3.3%	3.7%	3.7%	3.6%	3.6%	4.0%		4.3%	4.0%	4.5%	4.5%	4.6%
	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





August 2022 Median MOC % of Daily Volume - S&P/TSX 60

Source data: Virtu Financial



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