

July 2022

Canada Market Structure Monthly

MARKET MICROSTRUCTURE OBSERVATIONS

- The average daily volume for TSX listed securities decreased in July 2022 by 17% MoM to 662M shares while up 17% YoY. While liquidity conditions improved MoM, spread and volatility conditions deteriorated and were near the 12-month highs in June.
- Average daily volume for non-TSX listed securities dropped to 250M shares, marking a new 12-month low. YoY, this represents a 47% drop and a 14% drop MoM. While volatility conditions improved, liquidity and spread conditions continued to deteriorate for non-listed TSX securities.
- As TSX Block volumes continued their summer-time decline whereas dark venue market share showed an increase MoM.

CANADA MARKET STRUCTURE NEWS

Nasdaq Canada Approved to Launch PureStream Order Type on its CXD Trading Book

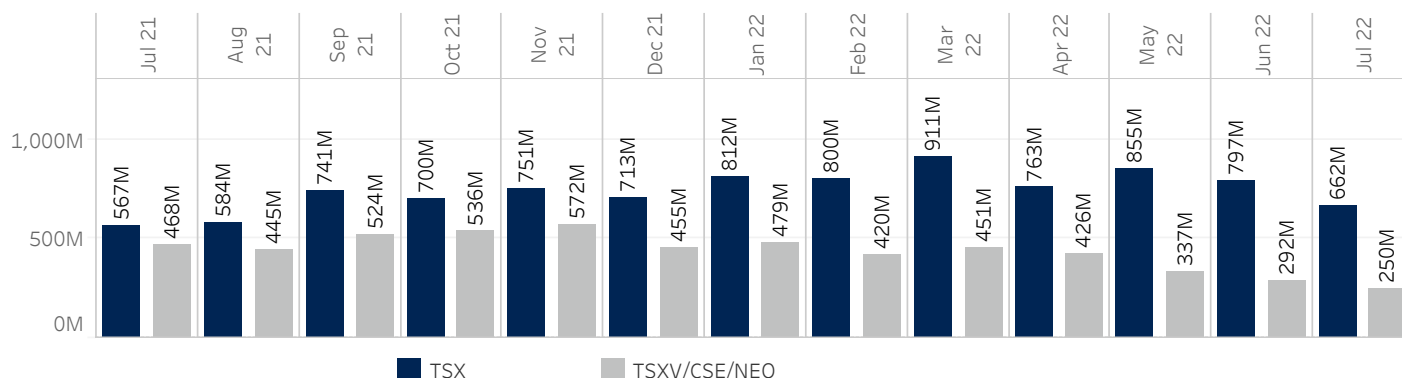
On 28 July 2022, Nasdaq CXC Limited (operating as Nasdaq Canada) received approval for the launch of the **PureStream** order type on its CXD Trading Book. This new functionality is expected to launch in October 2022.

PureStream orders are paired with one another based on a specific liquidity transfer rate instead of a specific price. The liquidity transfer rate (LTR) indicates the percentage volume of a reference trade that a user is willing to trade. When orders are paired, streams are established which are held by the system until a reference trade occurs. A match is then generated from orders paired in a stream based on their LTR and identified with a unique liquidity marker that will be disseminated in CXD's market data feed. For more information on PureStream's order type features and methodologies please consult the link below.

<https://www.osc.ca/en/industry/market-regulation/marketplaces/exchanges/recognized-exchanges/nasdaq-cxc-limited-rule-review-notices/notice-approval-introduction-purestream>
<https://www.osc.ca/en/industry/market-regulation/marketplaces/exchanges/recognized-exchanges/nasdaq-cxc-limited-rule-review-notices/nasdaq-cxc-limited-notice-proposed#:~:text=Nasdaq%20Canada%20is%20proposing%20to,user%20is%20willing%20to%20trade>)

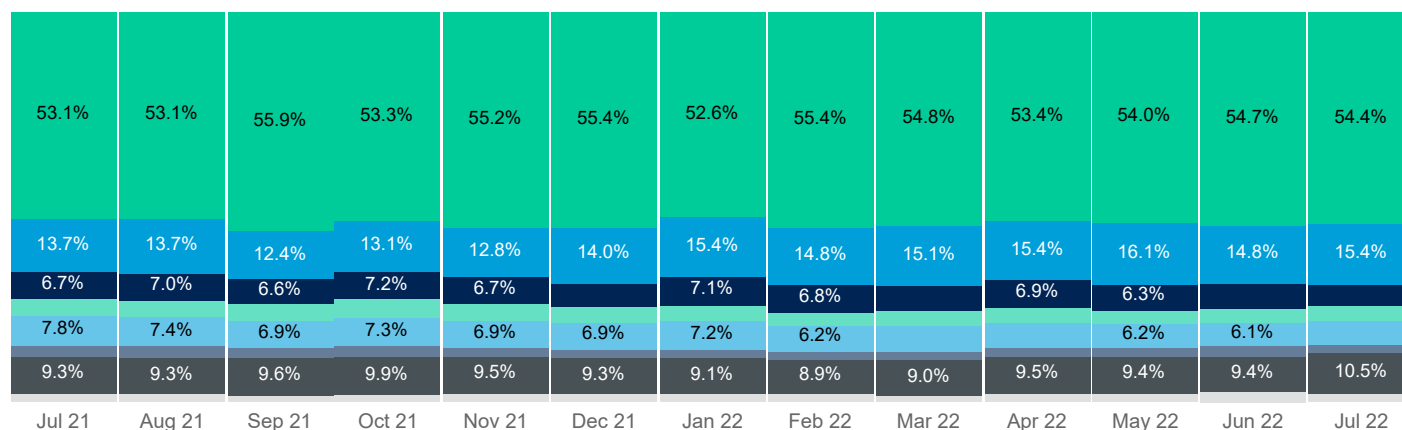


Average Daily Market Volume By Listing Exchange (Shares)

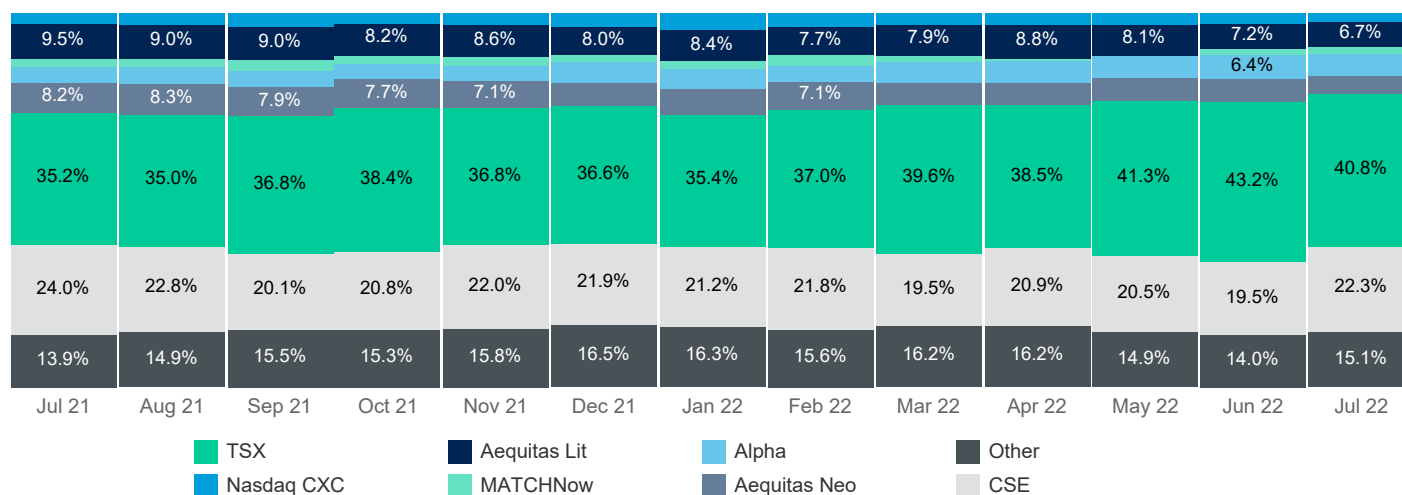


Source data: Virtu Financial

Venue Market Share (TSX-Listed)



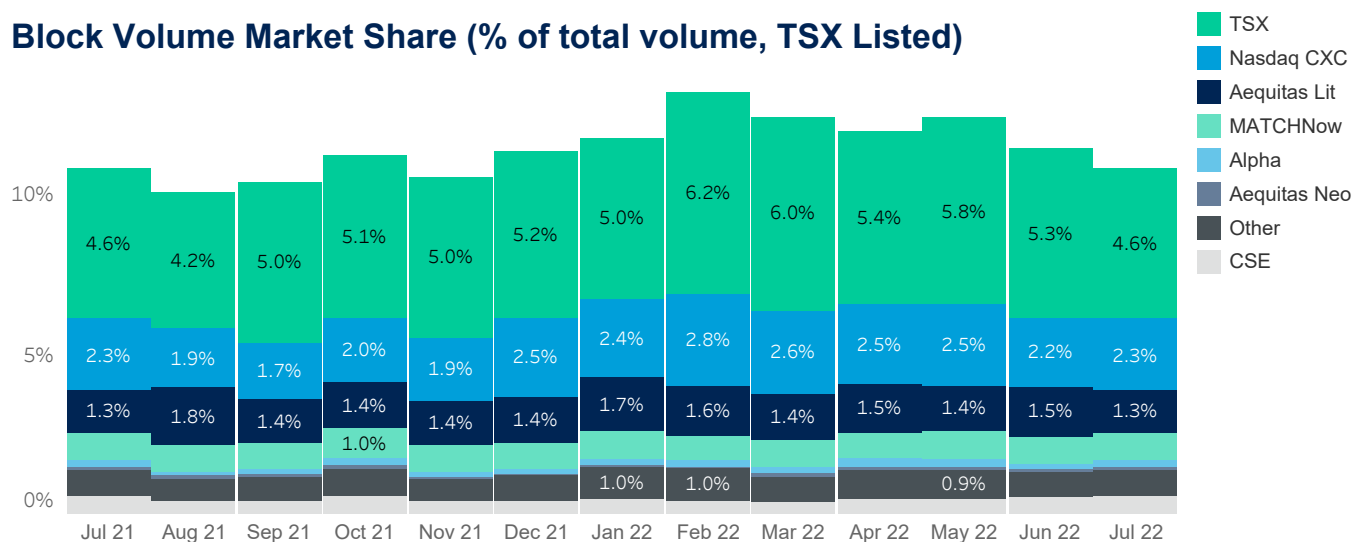
Venue Market Share (Non-TSX-Listed)



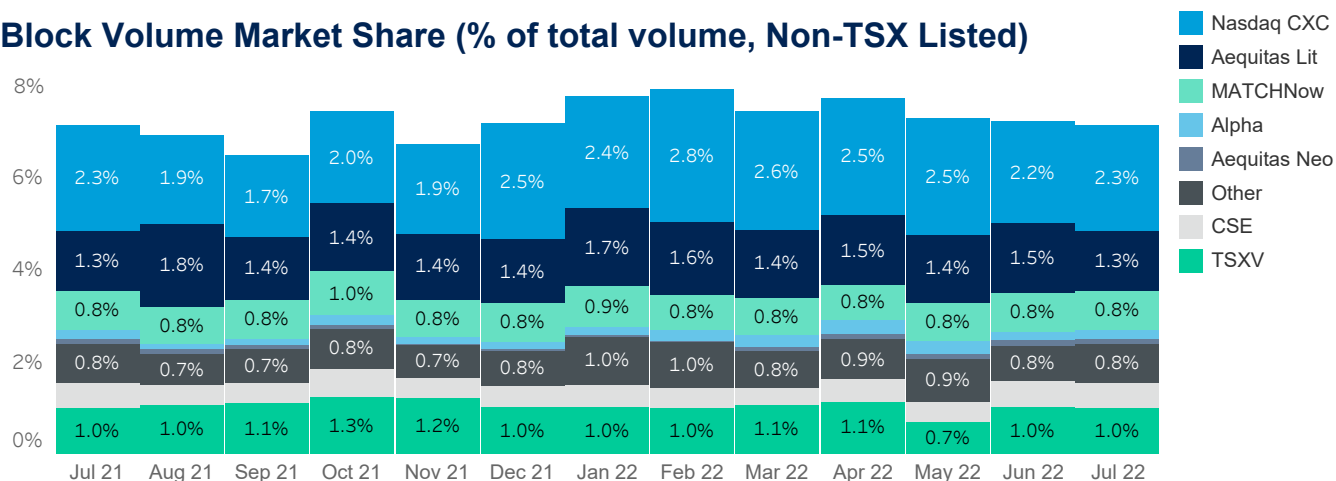
Source data: Virtu Financial



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

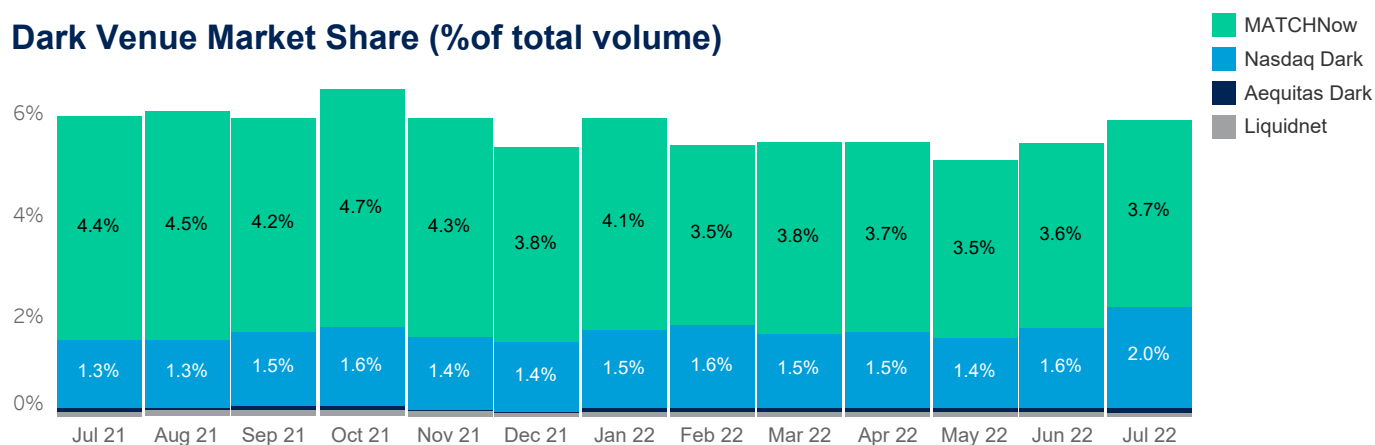


Block Volume Market Share (% of total volume, Non-TSX Listed)



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

		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 Min	S&P/TSX 60	841	862	912	887	836	866	818	759	800	807	786	881	915
	S&P/TSX Composite	986	1,011	1,054	1,085	994	1,049	970	884	945	993	958	1,068	1,101
	Non-TSX-Listed	6,394	5,729	6,073	6,360	6,702	5,071	5,189	5,000	6,079	5,540	5,120	4,698	4,334
Mid Day	S&P/TSX 60	1,038	1,050	1,093	1,094	1,020	1,005	968	921	952	915	914	1,026	1,093
	S&P/TSX Composite	1,202	1,242	1,273	1,316	1,216	1,222	1,165	1,092	1,130	1,135	1,145	1,248	1,310
	Non-TSX-Listed	5,000	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	1,239	1,253	1,299	1,274	1,217	1,127	1,068	1,009	1,036	974	985	1,125	1,237
	S&P/TSX Composite	1,444	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	6,033	5,600	5,904	6,383	5,900	5,000	4,774	4,625	5,606	5,300	5,103	4,752	4,428

Spread Bps

First 30 Min	S&P/TSX 60	5.1	4.8	4.9	4.9	5.4	5.4	5.6	5.6	5.9	5.8	6.4	6.0	6.5
	S&P/TSX Composite	11.6	11.2	10.9	10.6	10.8	11.4	11.3	11.5	11.9	12.0	14.0	13.2	14.4
	Non-TSX-Listed	174.0	164.9	170.1	170.5	163.9	175.4	172.4	163.1	175.4	170.5	204.9	215.7	229.8
Mid Day	S&P/TSX 60	3.4	3.2	3.2	3.3	3.4	3.4	3.5	3.4	3.6	3.5	4.0	3.8	4.0
	S&P/TSX Composite	7.0	6.8	6.8	7.0	7.2	7.5	7.7	7.5	7.5	7.4	8.8	8.2	8.5
	Non-TSX-Listed	132.3	125.0	128.2	128.6	123.2	122.0	124.2	122.2	132.7	129.0	145.0	152.7	163.9
Last 30 Min	S&P/TSX 60	2.7	2.5	2.5	2.5	2.7	2.9	2.8	2.8	2.7	2.7	3.0	3.0	3.0
	S&P/TSX Composite	6.0	5.9	5.8	6.0	6.2	6.5	6.6	6.7	6.4	6.4	7.4	7.2	7.4
	Non-TSX-Listed	131.6	124.3	129.9	126.8	123.5	125.7	125.5	125.5	133.3	129.0	147.1	144.9	155.4

One Minute Volatility Bps

First 30 Min	S&P/TSX 60	10.7	11.0	11.9	11.7	11.6	13.3	13.9	13.8	15.4	14.3	17.0	15.3	15.8
	S&P/TSX Composite	15.2	15.1	15.6	15.1	15.1	17.5	17.8	17.9	19.0	17.6	21.0	19.9	22.0
	Non-TSX-Listed	17.7	18.0	19.6	17.5	19.9	24.0	24.1	22.7	18.6	21.3	36.5	33.1	30.9
Mid Day	S&P/TSX 60	3.5	3.3	3.7	3.4	3.5	4.4	5.2	4.9	5.3	5.0	7.3	5.8	5.3
	S&P/TSX Composite	3.8	3.4	3.8	3.6	3.9	4.7	5.7	5.5	6.0	5.6	8.2	6.8	6.0
	Non-TSX-Listed	6.1	5.7	6.3	5.8	5.8	7.1	9.2	7.1	6.3	7.2	12.5	9.7	8.0
Last 30 Min	S&P/TSX 60	3.6	3.1	3.5	3.3	3.4	4.5	5.2	5.4	5.2	4.9	7.5	5.8	5.1
	S&P/TSX Composite	3.4	2.9	3.4	3.2	3.4	4.5	5.1	5.3	5.2	5.0	7.3	5.7	4.8
	Non-TSX-Listed	5.4	5.2	6.8	4.9	4.9	6.7	8.6	6.2	5.6	6.6	11.3	7.7	6.4

Percent MDV by Time of Day

Open	S&P/TSX 60	0.7%	0.6%	0.6%	0.6%	0.6%	0.6%	0.6%	0.6%	0.6%	0.6%	0.6%	0.7%	0.5%
	S&P/TSX Composite	0.6%	0.5%	0.5%	0.6%	0.6%	0.5%	0.5%	0.6%	0.6%	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%
First 30 Min	S&P/TSX 60	13.1%	13.2%	14.5%	14.1%	14.3%	13.5%	12.8%	13.4%	13.4%	12.6%	12.6%	12.4%	12.9%
	S&P/TSX Composite	14.1%	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	19.0%	17.9%	18.4%	18.8%	19.4%	17.3%	17.4%	17.5%	17.1%	18.0%	18.7%	18.9%	19.8%
Last 30 Min	S&P/TSX 60	32.0%	29.8%	31.8%	29.7%	31.5%	34.2%	33.5%	35.1%	34.8%	39.2%	36.9%	41.4%	36.1%
	S&P/TSX Composite	25.3%	22.7%	22.9%	22.0%	23.5%	25.1%	23.0%	25.9%	25.2%	25.3%	26.5%	24.6%	26.4%
	Non-TSX-Listed	9.0%	8.7%	8.7%	8.1%	8.3%	8.0%	8.4%	8.9%	8.2%	7.6%	7.2%	7.2%	6.7%
Close	S&P/TSX 60	7.0%	6.4%	6.6%	7.3%	6.4%	6.9%	6.7%	7.8%	6.9%	7.8%	6.7%	7.4%	7.4%
	S&P/TSX Composite	4.2%	3.2%	3.3%	3.7%	3.7%	3.6%	3.6%	4.0%	3.8%	4.3%	4.0%	4.5%	4.5%
	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%

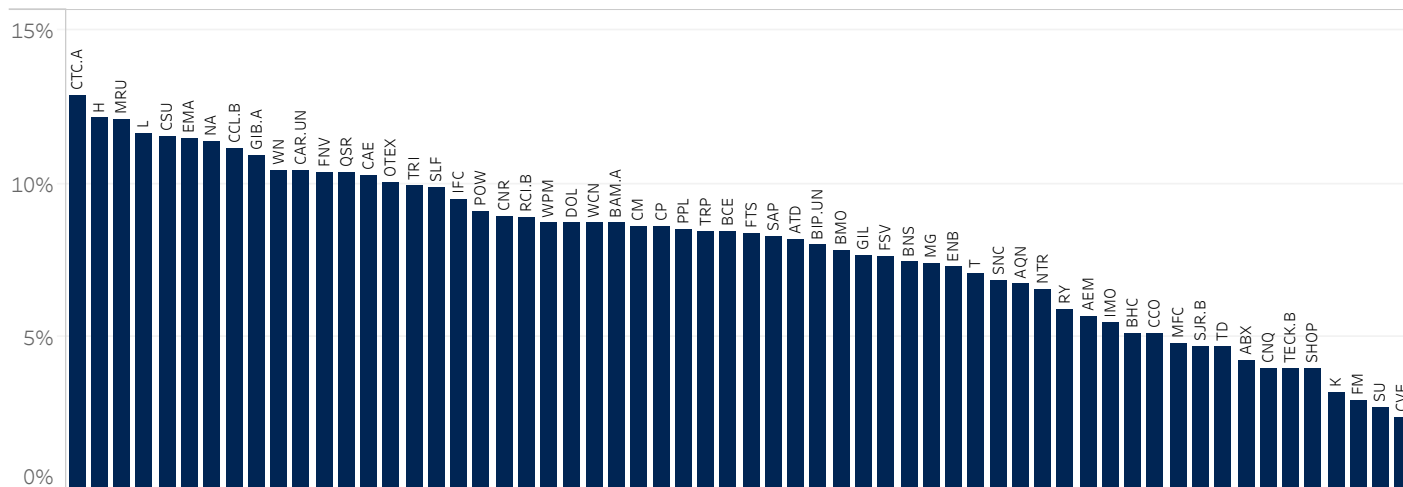
Median used for all metrics

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



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



Source data: Virtu Financial



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