April 2021
Canada Market Structure Monthly

MARKET MICROSTRUCTURE OBSERVATIONS

• The average daily volume for TSX listed securities continued its recent downward trend in April 2021 decreasing by 24% MoM and 31% YoY to 711M shares, while experiencing improvements in spreads and quoted shares.

• For non-TSX listed securities, the average daily volume continued its decline to 685M shares. While this represents a 31% decrease MoM, this is still an increase of 174% YoY. Liquidity conditions were mixed as quoted shares dropped alongside slight spread improvements MoM.

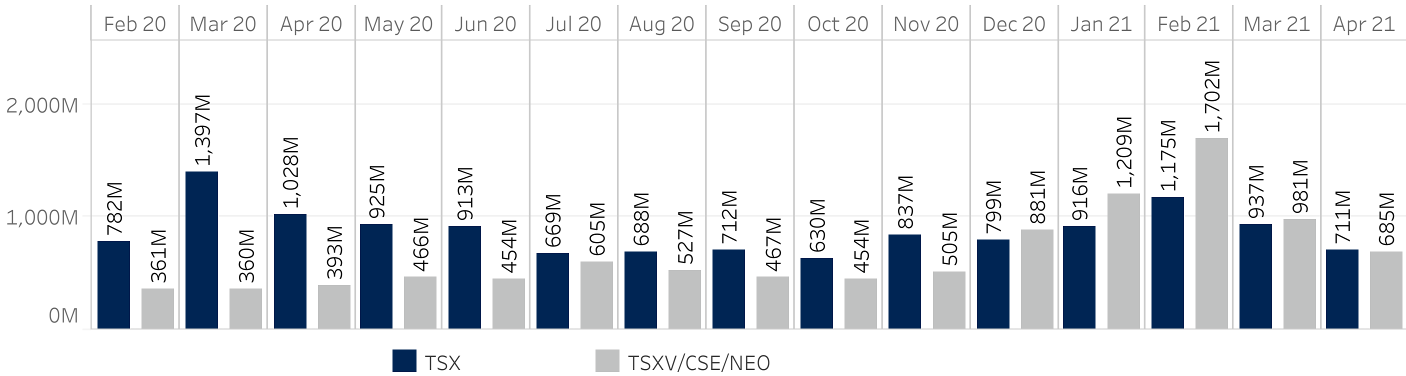
• TSX and non-TSX securities experienced marked MoM volatility improvements in April, hitting a new 12-month low. These volatility improvements, combined with the drop in market volume, emphasize the lack of any major macro drivers during the month of April 2021.

CANADA MARKET STRUCTURE NEWS

MATCHNow Conditional Book Request for Comment
On 8 April, TriAct Canada Marketplace LP (operating as MATCHNow) submitted a request for comment to the Ontario Securities Commission (OSC) regarding proposed changes to the MATCHNow conditional book. MATCHNow has proposed a new opt-in feature to allow conditional orders to interact and match with firm (resting) dark orders. If approved, subscribers will be able to mark firm orders as available for interaction with conditionals via a new FIX tag or at the session level. The expected implementation date is approximately 60 days following OSC approval.
https://www.osc.ca/en/industry/market-regulation/marketplaces/alternative-trading-systems-atss/atss-operating-ontario/match-now-operated-tri-act-orders-notices/notice

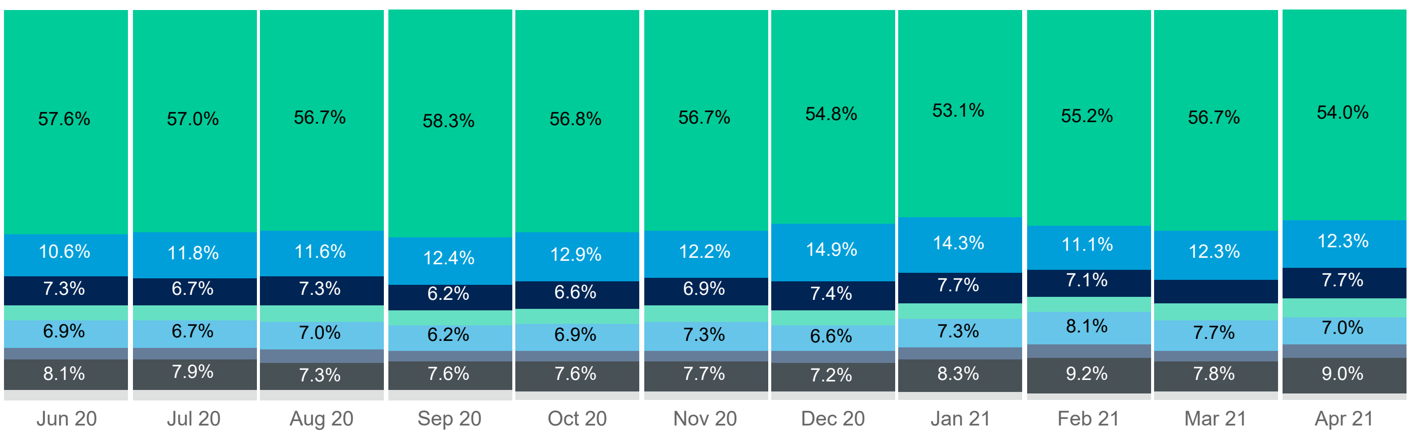
Canadian Securities Exchange Receives Approval for Non-Display Trading Enhancements
On 15 April, Canadian Securities Exchange (CSE) received approval for their proposed non-displayed rule changes. These changes included the previously approved, although not implemented, at-the-touch (ATT) dark order type to allow for dark liquidity provision at the protected NBBO. New proposals included the addition of a seek dark liquidity order type and a non-display order type. Seek dark liquidity orders allow IOC orders to search for dark liquidity on CSE. Non-display orders will interact with the displayed CSE book with any residual balance booked as a non-display order with price/time priority. The planned implementation date for these changes is Q4 2021.
https://www.osc.ca/en/industry/market-regulation/marketplaces/exchanges/recognized-exchanges/canadian-securities-exchange-cse-rule-review-notices/notice-approval-0

Average Daily Market Volume By Listing Exchange (Shares)

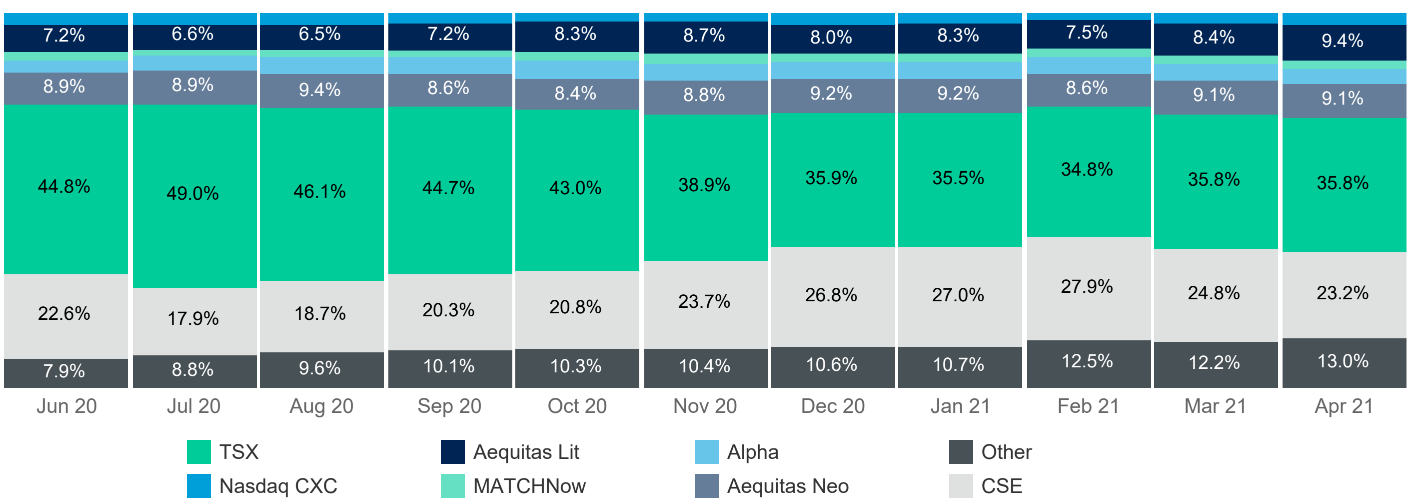


Source data: Virtu Financial

Venue Market Share (TSX-Listed)

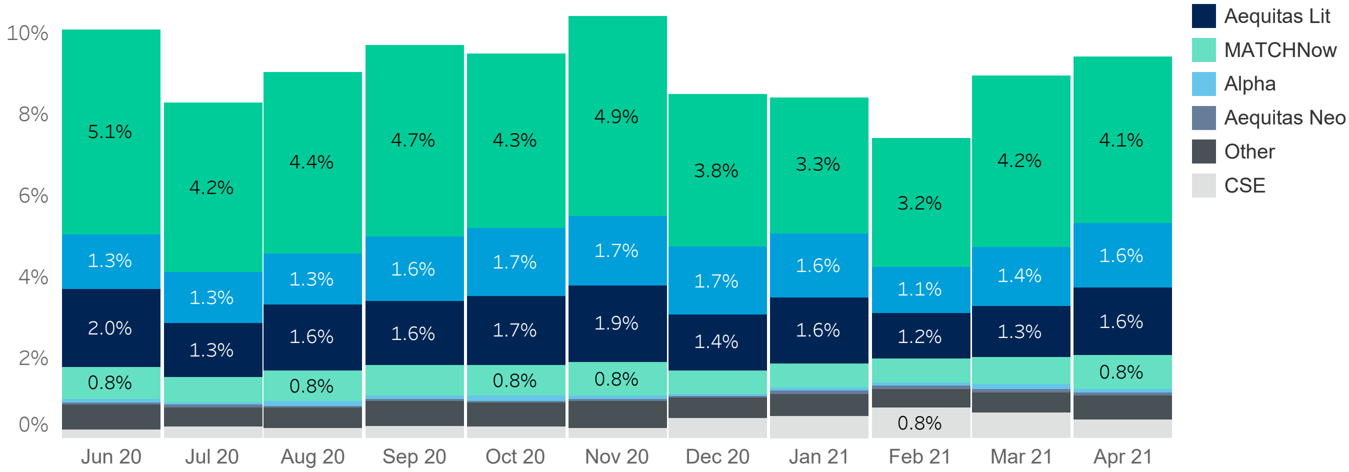


Venue Market Share (Non-TSX-Listed)

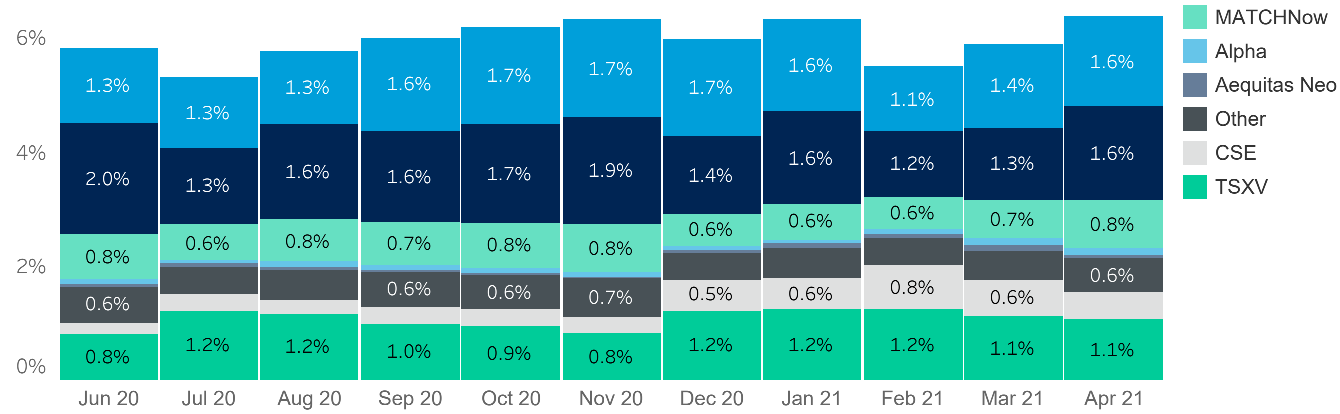


Source data: Virtu Financial

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

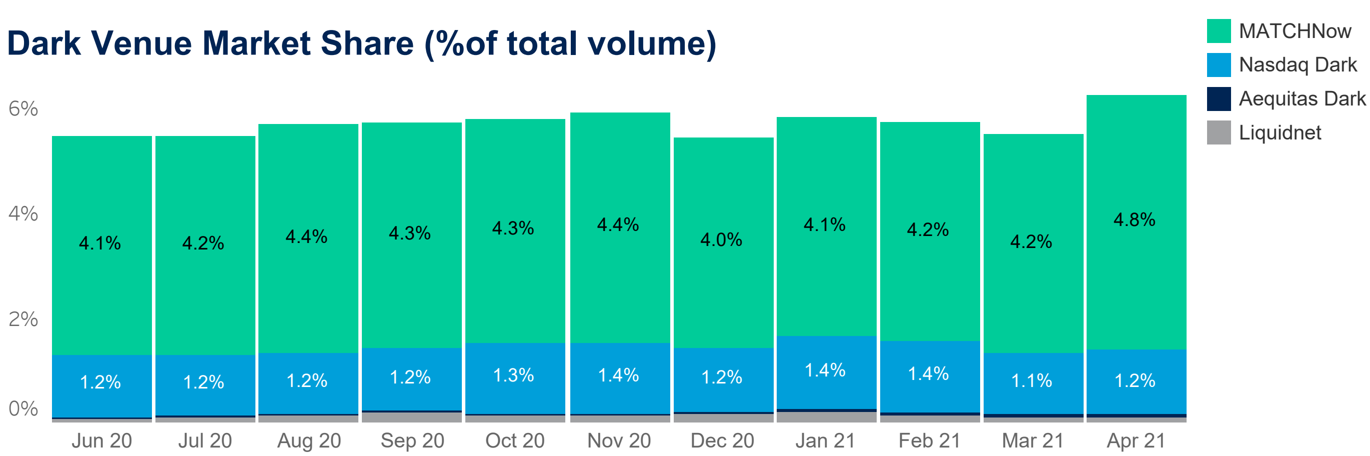


Block Volume Market Share (% of total volume, Non-TSX Listed)



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

		2Q 20			3Q 20			4Q 20			1Q 21			2Q 21
		Apr 20	May 20	Jun 20	Jul 20	Aug 20	Sep 20	Oct 20	Nov 20	Dec 20	Jan 21	Feb 21	Mar 21	Apr 21
First 30 Min	S&P/TSX 60	492	501	520	609	621	653	683	638	741	780	755	793	848
	S&P/TSX Composite	587	549	583	661	688	727	760	734	780	827	840	865	933
	Non-TSX-Listed	8,600	9,499	9,373	11,111	10,065	8,732	8,066	7,712	10,122	11,000	13,258	9,500	8,203
Mid Day	S&P/TSX 60	642	755	730	810	845	841	835	815	940	967	961	970	1,054
	S&P/TSX Composite	745	813	822	891	927	946	909	885	977	1,035	1,069	1,083	1,155
	Non-TSX-Listed	5,814	6,551	7,341	8,349	7,525	6,227	5,536	5,570	7,531	8,575	10,247	7,403	6,381
Last 30 Min	S&P/TSX 60	788	966	953	1,040	1,068	1,015	1,085	1,082	1,190	1,206	1,243	1,190	1,313
	S&P/TSX Composite	990	1,106	1,119	1,172	1,217	1,204	1,249	1,181	1,270	1,285	1,318	1,272	1,389
	Non-TSX-Listed	7,124	8,500	8,750	9,978	9,000	7,737	7,050	6,891	9,374	10,500	12,168	8,832	7,381

Spread Bps

		Apr 20	May 20	Jun 20	Jul 20	Aug 20	Sep 20	Oct 20	Nov 20	Dec 20	Jan 21	Feb 21	Mar 21	Apr 21
First 30 Min	S&P/TSX 60	11.3	7.6	7.2	6.8	6.2	6.5	5.9	6.0	5.3	6.2	5.8	5.8	5.0
	S&P/TSX Composite	24.8	18.8	16.9	14.5	12.9	12.9	12.2	12.6	11.8	12.8	12.4	12.1	10.9
	Non-TSX-Listed	312.5	270.2	238.6	232.6	215.1	214.0	201.1	200.0	194.2	188.7	185.2	175.0	171.5
Mid Day	S&P/TSX 60	5.6	4.6	4.5	4.4	4.1	4.3	4.1	4.0	3.6	4.0	3.8	3.8	3.4
	S&P/TSX Composite	12.3	10.1	9.4	8.2	7.6	7.7	7.3	7.4	7.2	7.7	7.5	7.6	6.7
	Non-TSX-Listed	252.2	212.8	187.5	181.8	169.2	166.5	157.5	148.6	151.5	145.8	142.9	134.3	134.9
Last 30 Min	S&P/TSX 60	4.4	3.6	3.5	3.3	3.1	3.3	3.1	3.0	3.0	3.2	3.1	3.1	2.8
	S&P/TSX Composite	10.1	8.5	8.0	7.1	6.6	6.7	6.3	6.3	6.2	6.7	6.5	6.6	6.0
	Non-TSX-Listed	244.0	201.1	181.8	178.4	164.4	161.3	152.7	143.8	149.7	144.9	142.9	135.4	133.3

One Minute Volatility Bps

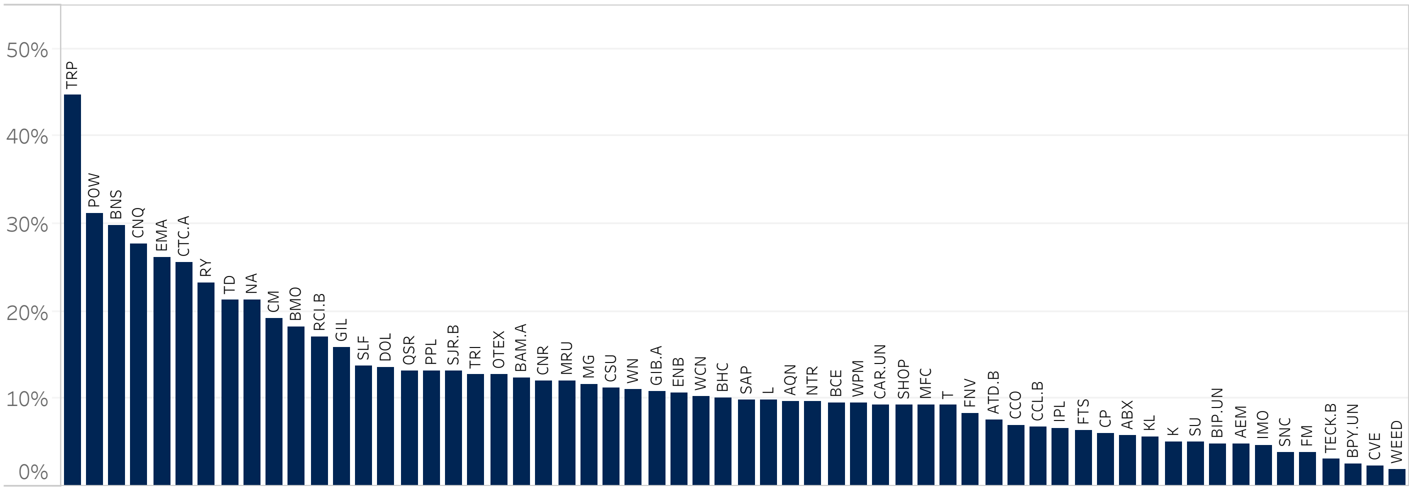
		Apr 20	May 20	Jun 20	Jul 20	Aug 20	Sep 20	Oct 20	Nov 20	Dec 20	Jan 21	Feb 21	Mar 21	Apr 21
First 30 Min	S&P/TSX 60	30.0	22.2	21.3	16.5	15.3	17.3	14.1	16.6	13.6	14.0	14.1	15.0	11.0
	S&P/TSX Composite	36.8	28.0	26.8	20.8	19.6	21.2	17.8	20.5	18.0	18.5	18.9	19.4	14.5
	Non-TSX-Listed	30.3	27.5	27.5	23.8	26.5	22.7	20.4	23.6	22.8	22.0	25.0	26.4	18.2
Mid Day	S&P/TSX 60	11.6	7.7	7.6	5.5	5.0	6.2	5.3	5.5	4.5	4.6	4.5	5.3	3.6
	S&P/TSX Composite	12.7	8.3	8.2	6.1	5.7	6.7	5.6	6.1	5.4	5.5	5.5	6.5	3.9
	Non-TSX-Listed	16.1	13.6	12.0	10.2	9.3	11.3	8.6	8.5	6.7	6.5	7.7	9.4	5.7
Last 30 Min	S&P/TSX 60	12.5	8.4	7.4	5.4	4.6	6.2	4.9	5.3	4.5	4.7	4.5	5.1	3.6
	S&P/TSX Composite	12.8	8.5	7.6	5.6	5.0	6.1	4.9	5.8	5.0	5.0	5.0	6.0	3.9
	Non-TSX-Listed	14.4	9.6	10.6	10.1	10.7	9.8	9.8	8.7	5.9	6.9	5.5	8.0	6.6

Percent MDV by Time of Day

		Apr 20	May 20	Jun 20	Jul 20	Aug 20	Sep 20	Oct 20	Nov 20	Dec 20	Jan 21	Feb 21	Mar 21	Apr 21
Open	S&P/TSX 60	0.7%	0.6%	0.6%	0.5%	0.6%	0.5%	0.5%	0.6%	0.5%	0.6%	0.6%	0.6%	0.6%
	S&P/TSX Composite	0.6%	0.5%	0.5%	0.5%	0.6%	0.5%	0.5%	0.6%	0.5%	0.6%	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	11.2%	12.1%	11.7%	11.6%	11.3%	11.2%	10.5%	12.3%	11.5%	12.2%	36.1%	12.0%	12.8%
	S&P/TSX Composite	11.7%	12.5%	11.7%	12.4%	13.0%	12.4%	12.0%	13.7%	12.5%	13.2%	39.1%	12.7%	12.9%
	Non-TSX-Listed	22.1%	22.2%	21.4%	21.3%	21.6%	20.9%	21.1%	21.2%	21.0%	21.2%	60.2%	19.2%	18.7%
Last 30 Min	S&P/TSX 60	31.0%	29.0%	30.0%	32.4%	29.4%	33.4%	36.8%	30.7%	33.7%	33.2%	91.5%	32.4%	33.1%
	S&P/TSX Composite	23.1%	22.5%	22.7%	24.4%	22.7%	23.5%	23.5%	23.2%	24.2%	23.0%	62.8%	22.6%	25.5%
	Non-TSX-Listed	11.1%	10.8%	10.7%	9.5%	9.7%	10.1%	10.4%	10.3%	9.4%	9.7%	26.8%	10.1%	9.3%
Close	S&P/TSX 60	8.6%	8.9%	12.3%	11.4%	9.9%	15.8%	20.2%	11.8%	18.6%	11.8%	12.1%	11.7%	9.7%
	S&P/TSX Composite	3.1%	3.9%	4.8%	5.1%	4.8%	4.8%	4.7%	3.9%	6.0%	4.5%	5.2%	4.3%	4.8%
	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

April 2021 Median MOC % of Daily Volume - S&P/TSX 60



Source data: Virtu Financial

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