# Nov 2023 CA Market Structure Monthly

#### **MICROSTRUCTURE OBSERVATIONS**

- In TSX-listed securities, the average daily volume was 616 million shares in November 2023, up 5% compared to October 2023 and down 15% compared to November 2022. While spread and volatility conditions improved compared to October 2023, average quote sizes remained stable.
- In non TSX-listed securities, the average daily volume was 275 million shares in November 2023, flat compared to October 2023 and down 14% compared to November 2022. Non TSX-listed securities saw liquidity, spread and average quote size conditions remain flat compared to October 2023.
- Spread, volatility and average quote sizes have not changed materially over the preceding 12 months when compared month-to-month. However, when viewed over the full 12-month period, we can see a specific improvement to the metrics in the last 30 minutes of trading. In November 2023, spread and volatility conditions were at 12-month lows for both TSX and non-TSX listings. Similarly, the average quote sizes were at 12-month highs in the last 30 minutes of the day.

#### **CA MARKET STRUCTURE NEWS**

#### Nasdaq Canada – Notice of Approval for PureStream New Functionality

On November 2, 2023, Nasdaq Canada received approval for the changes to how the matching engine processes PureStream orders. PureStream users will now be able to define a minimum stream quantity which will aggregate matched trades until the minimum stream quantity is achieved. This minimum stream quantity must be defined as a sub-lot value and will occur at the average price of all aggregated matched trades. This new functionality is expected to be introduced before the end of the year. Nasdaq Canada will send a Notice communicating the effective date of this change.

https://www.osc.ca/en/industry/market-regulation/marketplaces/exchanges/recognizedexchanges/nasdaq-cxc-limited-rule-review-notices/notice-approval-introduction-new

#### **OSC Seeks Comment on Proposed Fee Changes for Restricted Dealers**

On November 10, 2023, the Ontario Securities Commission (OSC) issued a request for comment for the proposed fee rule changes that would establish new fees for restricted dealers or firms that have been permitted to carry on business under terms and conditions imposed by the OSC. These fees are intended to offset the observed higher onboarding costs related to the registration of restricted dealers, which include the majority of crypto asset trading platforms. These changes, if approved, would mean that a non-

compliant, unregistered firm operating in Ontario is responsible for paying the same participation fees as a registered firm.

Stakeholders are invited to provide comment in writing by February 7, 2024.

https://www.osc.ca/en/news-events/news/osc-seeks-comment-proposed-fee-changesrestricted-dealers

#### **CSA/CIRO** Publish Summary on Short Selling Consultation

On October 19, 2023, the Canadian Securities Administrators (CSA) and the Canadian Investment Regulatory Organization (CIRO) published a summary of responses and comments to their Staff Notice on Short Selling in Canada. CSA/CIRO received 23 comment letters from a wide range of stakeholders including industry associations, exchanges, dealers, issuers, and investors. While comments received reached no specific consensus, CSA/CIRO reiterated that short selling plays important role in helping price discovery in Canadian markets. Some areas for further study were identified such as pre-borrow requirements and mandatory close-outs/buy-ins of short positions. With a balanced approach in mind, CSA/CIRO will continue to further review whether any changes may be appropriate.

https://www.osc.ca/en/securities-law/instruments-rules-policies/2/23-332/csaciro-staff-notice-23-332-summary-comments-and-responses-csaiiroc-staff-notice-23-329-short

#### **OSC Seeks Comment on Priorities for 2024-2025**

On November 16, 2023, the Ontario Securities Commission (OSC) sent a request for feedback from stakeholders on its Statement of Priorities for 2024-2025 (SoP). The SoP includes a large range of initiatives such as advancing work on Environmental, Social and Governance disclosures, broader board diversity and furthering initiatives that promote capital formation in Canada.

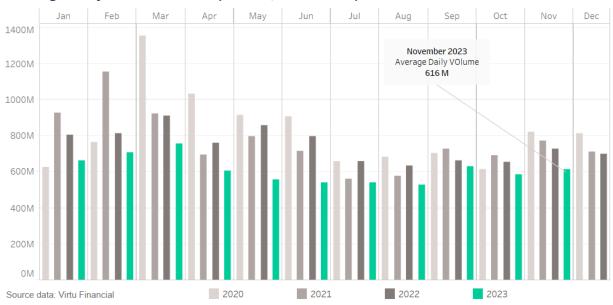
Comments can be submitted until December 18, 2023.

https://www.osc.ca/en/securities-law/instruments-rules-policies/1/11-798/osc-notice-11-798statement-priorities-request-comments-regarding-statement-priorities-fiscal-year

# Notice of Cessation of ATS Business – TriAct Canada Marketplace LP (operating as MATCHNow)

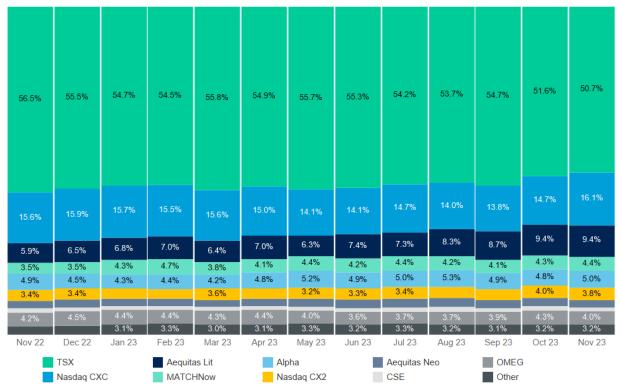
On November 30, 2023, TriAct Canada Marketplace LP has indicated that it will cease to carry on business as an alternative trading system (ATS) on January 1, 2024. Pending approval, MATCHNow will cease to exist as a separate legal entity and ATS and its operation will be incorporated, as an order book, into a new amalgamated corporation to be known as Cboe Canada Inc. Cboe Canada Inc. will be a recognized exchange under a varied version of the recognition order that currently applies to MATCHNow's sister marketplace, Neo Exchange Inc.

https://www.osc.ca/en/industry/market-regulation/marketplaces/alternative-trading-systemsatss/atss-operating-ontario/match-now-operated-triact-orders-notices/notice-29

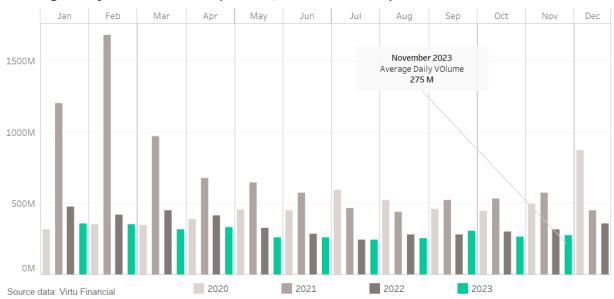


#### Average Daily Market Volume (Shares, TSX Listed)

### Venue Market Share (TSX Listed)



Source data: Virtu Financial

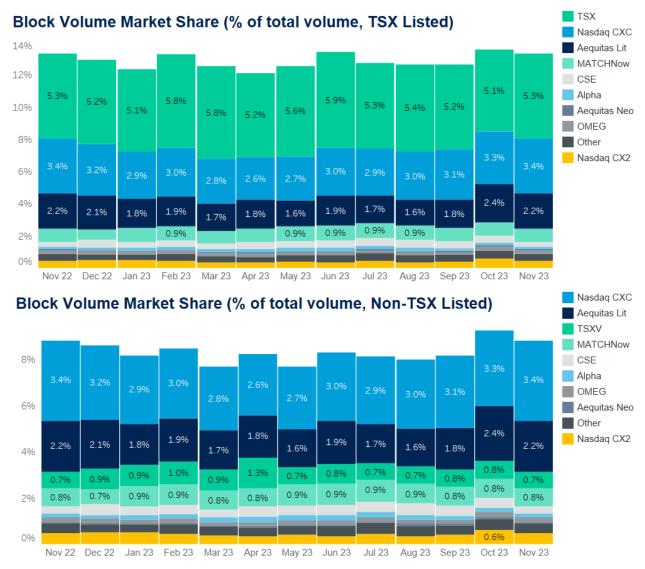


#### Average Daily Market Volume (Shares, Non-TSX Listed)

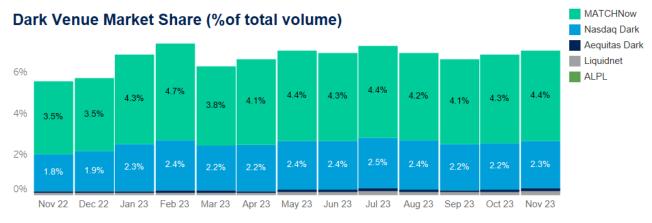
## Venue Market Share (Non-TSX Listed)

40.8%	38.5%	40.1%	38.4%	38.8%	39.1%	38.0%	38.0%	40.0%	40.0%	39.4%	39.7%	40.7%
19.6%	19.7%	19.5%	21.1%	20.9%	21.9%	22.4%	22.4%	21.5%	21.3%	19.7%	16.8%	16.8%
8.2%	11.1%	9.8%	10.2%	9.1%	9.2%	8.7%	9.2%	9.0%	8.6%	8.7%	9.7%	8.1%
5.7%	5.6%	5.6%	5.5%	5.5%	5.2%	5.2%	5.0%	5.000	6.1%	6.0%	5.6%	5.5%
7.0%	6.7%	6,5%	6.5%	6.8%	5.9%	5.5%	5.9%	5.9%		6.8%	9.7%	11.2%
	0.170	0.078	0.076			8.7%	0.40/	6.0%	6.5%	7.8%		
8.3%	8.5%	8.5%	8.7%	8.4%	8.3%		8.1%	7.2%	7.5%		7.9%	7.8%
5.7%	5.4%	5.1%	5.1%	5.4%	5.4%	5.5%	5.3%	5.1%	4.9%	4.8% 3.5%	4.1% 3.1%	3.5%
										0.078	0.170	
Nov 22	Dec 22	Jan 23	Feb 23	Mar 23	Apr 23	May 23	Jun 23	Jul 23	Aug 23	Sep 23	Oct 23	Nov 23
	TSXV CSE		Aed	quitas Lit	Nasdaq CX2			Aequit	as Neo	M		

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**

		4Q	22		1Q 23			2Q 23			3Q 23		4Q	23
		Nov 22	Dec 22	Jan 23	Feb 23	Mar 23	Apr 23	May 23	Jun 23	Jul 23	Aug 23	Sep 23	Oct 23	Nov 23
First 30 Min	S&P/TSX 60	855	916	854	798	840	892		889	897	895	911	865	875
	S&P/TSX Composite		1,099	1,118	1,002	1,056	1,122	1,079	1,094	1,041	1,016	1,024	1,014	1,027
	Non-TSX-Listed	4,778	4,969	4,945	4,969	4,763	6,191	5,930		5,021	5,261	6,182	5,950	5,650
Mid Day	S&P/TSX 60	1,008	1,057	1,025	953	1,017	1,104	1,106	1,112	1,114	1,100	1,115		1,082
	S&P/TSX Composite	1,278	1,325	1,350	1,221	1,294	1,424	1,359	1,365	1,326	1,255	1,281	1,246	1,231
	Non-TSX-Listed	4,421	4,650	4,650	4,477	4,464	5,650	5,631	5,000	4,583		5,498	5,281	5,258
Last 30 Min	S&P/TSX 60	1,174	1,165	1,192	1,084	1,150	1,222	1,191	1,209	1,280	1,245	1,268	1,215	1,219
	S&P/TSX Composite	1,497	1,482	1,566	1,415	1,500	1,596	1,534	1,541	1,583	1,507	1,528	1,507	
	Non-TSX-Listed	4,394	4,586	4,582	4,634	4,803	5,988	5,747	5,000	4,456	4,781	5,494	5,308	5,661

## Spread Bps

First 30 Min	S&P/TSX 60	6.6	6.2	6.2	6.1	6.1	5.3	6.2	6.3	5.8	6.3	6.3	6.9	6.7
	S&P/TSX Composite	13.9	13.4	13.4		13.5	11.7	12.7	12.5	11.9	12.4	12.4	13.9	13.9
	Non-TSX-Listed	218.1	215.1	210.5	203.5	212.6	198.5	184.3		182.5	180.4	186.6	190.4	188.4
Mid Day	S&P/TSX 60	3.8	3.7	3.6	3.7	3.7	3.3		3.8	3.5	3.9	3.9	4.2	4.0
	S&P/TSX Composite	8.3	8.3	8.4	8.4		7.6	8.2	8.1	7.7	8.1	8.2	9.3	9.1
	Non-TSX-Listed	156.6	157.1	149.3	137.1	149.3	138.9	126.0		124.2	124.9	120.5	124.5	126.8
Last 30 Min	S&P/TSX 60	2.9	2.8	2.8	2.9	2.8	2.5	2.8		2.6	2.7	2.8	3.0	2.8
	S&P/TSX Composite	7.1	7.2	7.4	7.4	7.2	6.8	7.2	7.4	7.0		7.5	8.0	7.6
	Non-TSX-Listed	146.4	144.6	137.8	135.0	140.4	133.3	122.8		123.6	121.2	119.7	126.6	125.0

### **One Minute Volatility Bps**

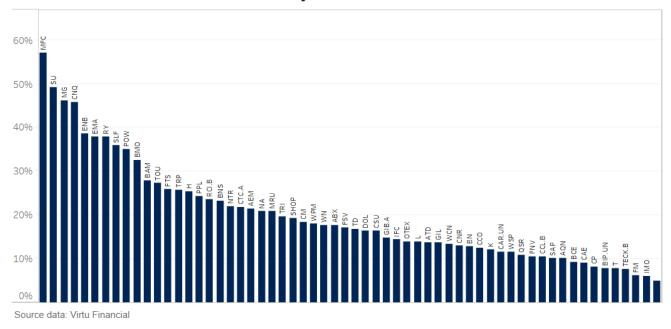
First 30 Min	S&P/TSX 60	14.2	13.5	11.9	12.1	13.6	11.0	11.8	10.6	9.9	10.9	10.7	14.0	12.3
	S&P/TSX Composite	18.2	16.6	15.1	15.5	17.3	13.5	14.2	12.4	11.9	13.0	12.5	16.2	
	Non-TSX-Listed	20.7	22.8	17.7	17.9	21.4	15.7	15.1	13.6	13.0	14.6	15.6	17.0	15.6
Mid Day	S&P/TSX 60	5.2	4.7	4.0	4.4	5.5	3.7		3.5	3.2	4.0	3.8	5.2	4.2
	S&P/TSX Composite	5.6	4.8	4.1	4.4	5.7	3.5	3.9	2.9	2.7	3.5	3.3	4.8	4.1
	Non-TSX-Listed	6.3	5.7	4.5	5.3	7.3	5.0	4.8	4.4	4.4		4.8	6.0	4.3
Last 30 Min	S&P/TSX 60	5.0	4.9	4.0	4.7	5.1	3.8	4.2	3.7	3.4	3.7	3.8	4.5	4.1
	S&P/TSX Composite	4.9	4.5		4.3	4.7	3.1	3.6	3.0	2.6	3.1	3.1	4.0	
	Non-TSX-Listed	5.4	5.4	3.8	4.7	6.2	4.0	4.0	3.5	2.9	3.8	3.9	4.4	3.4

## Percent MDV by Time of Day

Open	S&P/TSX 60	0.5%	0.5%	0.5%		0.5%	0.5%	0.5%	0.4%		0.4%	0.5%	0.5%	0.5%
	S&P/TSX Composite	0.4%	0.4%	0.4%	0.5%	0.4%	0.4%	0.3%	0.4%	0.4%	0.4%	0.5%	0.5%	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	10.1%	10.1%	8.9%	9.7%	9.5%	9.4%	9.9%	8.9%		8.9%	8.1%	8.8%	8.6%
	S&P/TSX Composite	11.3%	10.5%	10.0%	10.7%	10.2%		10.6%	10.1%	9.9%	9.9%	8.9%	9.8%	9.7%
	Non-TSX-Listed	19.4%	17.5%	17.6%	17.0%	18.0%	18.0%	16.4%	17.4%	18.8%	19.2%		16.8%	18.2%
Last 30 Min	S&P/TSX 60	13.3%	13.6%	13.3%	13.1%	13.5%	13.1%	15.0%	14.5%		14.3%	14.4%	14.6%	14.7%
	S&P/TSX Composite	13.8%	13.7%	13.8%	13.9%	13.8%	13.4%	14.5%	14.6%	14.3%	14.8%	14.6%	15.1%	15.3%
	Non-TSX-Listed	10.9%	10.8%	10.3%		10.8%	10.0%	10.7%	11.3%	12.1%	12.4%	12.4%	12.1%	11.8%
Close	S&P/TSX 60	12.8%	18.2%	15.2%	18.5%	18.1%	19.3%	13.8%	19.1%	19.9%	19.3%	21.5%	15.1%	15.3%
	S&P/TSX Composite	6.3%	7.2%	6.5%	8.1%	7.9%	9.1%	6.9%	8.7%	8.2%		9.1%	6.9%	7.1%
	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



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

#### **ABOUT VIRTU**

Virtu is a leading financial services firm that leverages cutting-edge technology to provide execution services and data, analytics and connectivity products to its clients and deliver liquidity to the global markets. Leveraging its global market making expertise and infrastructure, Virtu provides a robust product suite including offerings in execution, liquidity sourcing, analytics and broker-neutral, multi-dealer platforms in workflow technology. Virtu's product offerings allow clients to trade on hundreds of venues across 50+ countries and in multiple asset classes, including global equities, ETFs, foreign exchange, futures, fixed income and myriad other commodities. In addition, Virtu's integrated, multi-asset analytics platform provides a range of pre and post-trade services, data products and compliance tools that clients rely upon to invest, trade and manage risk across global markets.

#### To learn more, contact your sales representative or call our desk at: **APAC** +852.2846.3592 | **CAN** +1.416.874.0800 | **EMEA** +44.20.7670.4066 | **US** +1.646.682.6199 info@virtu.com | www.virtu.com

© 2023 Virtu Financial, Inc. All rights reserved. Not to be reproduced or retransmitted without permission. These materials are for informational purposes and are not intended to be used to make trading or investment decisions, they are not intended as an offer to sell or the solicitation of an offer to buy any security or financial product, and are not intended as advice (investment, tax or legal). The information contained herein includes Virtu proprietary information and/or has been taken from sources we believe to be reliable, but we do not represent or warrant that such information is accurate or complete and it should not be relied upon as such.

Securities products and services are offered by the following subsidiaries of Virtu Financial, Inc. In the U.S., Virtu Americas LLC, member FINRA and SIPC; in Canada, Virtu Canada Corp., member Canadian Investor Protection Fund and Canadian Investment Regulatory Organization; in Europe, Virtu Europe Trading Limited, registered in Ireland No. 283940 ("VETL") (VETL is authorized and regulated by the Central Bank of Ireland), and Virtu Financial Ireland Limited, registered in Ireland No. 471719 ("VFIL") (VFIL is authorized and regulated by the Central Bank of Ireland), and Virtu Financial Ireland. The registered office of VETL and VFIL is North Dock One, Fifth Floor, 91-92 North Wall Quay, Dublin 1, Ireland, D01 H7V7; in Asia, Virtu ITG Hong Kong Limited (SFC License No. AHD810), Virtu ITG Singapore Pte Limited (CMS License No. 100138-1), and Virtu ITG Australia Limited (AFS License No. 219582)