MONTRÉAL EXCHANGE



Q3 2022 Derivatives Highlights



Strong performance in Bond Futures and equity/ETF Options led the way in Q3

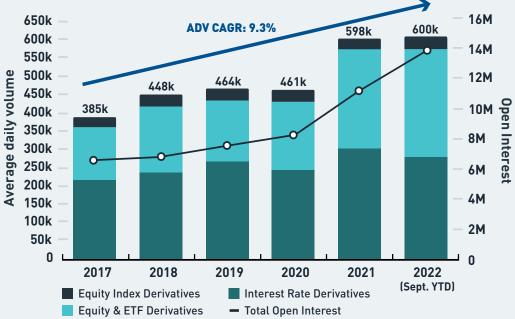
TOTAL ADV of 600k contracts

In 2022, up 3.4% vs 2021 Total open interest reaching 13.8M contracts, up **21%** vs 2021

Q3 ADV of 588k contracts, up 6% vs Q3 2021

Daily volume record for 5Y CGF and 10Y CGB™ (non-roll period) Accelerated growth for CORRA Futures Robust Q3 volume in key IRD and EQD products helpedclients navigate through volatile market environment2Y GoC bond futures (CGZ™): 24k contracts ADV5Y GoC bond futures (CGF™): 40k contracts ADV5&P/TSX 60 Index* futures (SXF™): 33k contracts ADVEquity and ETF Options: 223k contracts ADV

Average Daily Volume and Open Interest (all products)



| Segment | Product | 2022 YTD ADV | YoY CHG (%) |
|---------|------------------|-----------------|----------------|
| | ЗМ ВАХ™ | 67k | -37% |
| | 3M 0BX™ options | 1k | -47% |
| | 3M CORRA (CRA™) | 2k ¹ | +956% |
| IRD | 2Y CGZ | 21k | 169% |
| | 5Y CGF | 41k | 34% |
| | 10Y CGB | 148k | 1% |
| | All IRD products | 280k | -5% |
| EQD | Index futures | 33k | 17% |
| | Share futures | 59k | -28% |
| | ETF options | 76k | 77% |
| | Equity options | 147k | 16% |
| | All EQD products | 326k | 12% |

1 Since the start of the new market-making program in May 2022

Market Observations

- Interest rates: Continued strong inflation and employment data triggered consecutive rate hike by the BoC in July (+100bps) and September (+75bps). The Canadian yield curve has been very volatile this summer and is now inverted past the 2Y term to levels unseen in over a decade. Market conditions drove bond futures activity, including blocks, to new highs, while STIR Futures composed of BAX and CRA attracted a fair amount of volume. Monetary policies and concerns over recession are expected to sustain these conditions in Q4.
- Equity: The S&P/TSX Composite Index* was down 2.2% during the quarter but continued to demonstrate resilience to higher interest rates. Volatility trended lower in July and August before bouncing back in the 2nd half of the quarter on the back of a challenging earnings outlook and tighter monetary policy.

Product Highlights

CORRA Futures liquidity is building up

- CRA open interest at quarter end: ~27k contracts
- ADV up 1000% vs 2021, reflecting a growing demand
- More than 17 exchange participants transacting CORRA Futures
- Pick up in BAX-CRA spread strategies volume
- Activity developing in all 12 quarterly expiries

Strong quarter for 2Y (CGZ), 5Y (CGF) and 10Y (CGB) GoC Bond Futures

Combined ADV of 211k contracts in Q3, up 14% vs Q3 2021 Daily volume record for CGF: 101k contracts (Sep 29, non-roll record) Daily volume record for CGB: 241k contracts (Sep 28, non-roll record) CGF open interest at quarter end: 100k contracts, up 37% vs Q3 2021

Active basis trading:

- CGZ EFP volume in Q3: 4k contracts ADV (14% of CGZ volume)
- CGF EFP volume in Q3: 6k contracts ADV (14% of CGF volume)

5Y/10Y curve spread actively traded in Q3: 7k contracts ADV, up 200% YTD

S&P/TSX 60 Index Futures (SXF)

Healthy volumes despite persistent market headwinds SXF ADV in Q3: 33k contracts (up 14% vs Q3 2021)

Robust growth in Canadian equity and ETF Options

- Equity Options open interest: 6.5M contracts (up 19% YoY)
- ETF Options open interest: 4.5M contracts (up 82% YoY)

Institutional Content

The rise of retail investing in Canadian DerivativesUnderstanding the future of short-term interest rates in CanadaWildcard options: the option of maximum regret2-10 yield-curve inversion: how low will it go?Canadian yields could underperform US yieldsUnderstanding the impact of inflation on fixed income investing in CanadaWhy Australian pension funds should trade CanadaArticle alert: New oil trade insightsLong Canadian Futures for 'outperformance' amidst volatilityCORRA Futures (CRA): Learn more

Key Milestones and Facts

Overnight trading in flagship products

- Global participants took advantage of the **Overnight Trading Hours** (8 p.m to 6 a.m (ET)) to manage their Canadian exposure during non-local business hours. As of Q3 2021, MX is now open 20.5 hours a day. Visit <u>m-x.ca/yourtime</u> for more information.
- Overnight Trading Hours statistics:

| Products | Q3 2022 ADV | |
|------------------|-------------|--|
| All products | 16k | |
| BAX ² | 1k | |
| CGB | 12k | |
| CGF | 1k | |
| SXF | 2k | |

2 BAX opening time was moved to 2:00 am. ET at the beginning of October.

The activity taking place during the overnight trading hours represents about 5% of MX daily volume on average for eligible products.

New!

- Trading in 3M CORRA Futures has been observed overnight in recent months!
- MX implemented new market making programs on key flagship products (2Y/5Y/10Y Bond Futures and SXF) at the start of Q4.

New delivery period coming up on the 30-Year GoC Bond Futures (LGB™)

A redesigned LGB contract is now available for trading, as the delivery period of the contract is changed from a full month to a single day for the March 2023 expiry and onwards. Benefits from the liquidity provided by National Bank Financial and Desjardins Securities include:

- Robust quotes in the front contract and quarterly calendar roll
- Strong basis market offering
- More trading opportunities

Visit the <u>LGB landing page</u> for additional resources on the LGB product and refer to the <u>Circulars</u>' section for the latest updates including specification changes.

Benchmark transition roadmap for MX products (CDOR to CORRA)

MX is committed to facilitate the access and transition to CORRA, by developing a robust and efficient market for 3M CORRA Futures. In Q3, MX provided a roadmap covering the future of BAX and CORRA Futures ecosystems along with upcoming market structure changes, including:

- Modification to BAX and CRA opening time (2 a.m ET as of October)
- New BAX market-making program
- New minimum price fluctuation for BAX Reds and Greens (<u>Circular</u>)

Guaranteed cross/price improvement auction for equity and ETF Options

The design of the guaranteed cross/price improvement auction is now completed. This will significantly automate the execution of large institutional option transactions. The TMX team will reach out to you to cover the specs. **Launch date is Q4 2023.**

Position limits of narrow-based Index Futures Contracts

As of September 26, 2022, new position limits defined on a per product basis are effective for narrow-based index Futures Contracts (versus the previous fixed level of 20,000 contracts). See the self-certification <u>document</u> for more information.

News from the Regulatory Division

• Publication of the H1 2022 Newsletter and Participant Scorecard

The newsletter contains updates on the regulatory activities and shares best practice in regulatory compliance.

• Release of new Cybersecurity module

This module, available on the Participant Portal, facilitates the transmission of the information required by the new Article 3.113 (Notification to the Regulatory Division of a cybersecurity incident) of the Rules of the Bourse in a secure environment.

Last MX Technical User Roadmap Group Webinar

The Technology Quarterly Roadmap for Q4 2022 was conducted on October 5, 2022 with over 60 people signed up and 35 live attendees. The turnout was smaller but many requests for slides and records were received. All major Vendors attended with the main topics focused heavily on new Covered Trade and Web TMS delivery.

Covered Trade functionality coming up in Q4

In response to client demand, in Q4, MX will be launching the Covered Trade feature used to trade delta neutral strategies between futures options and their underlying (ex. OBX and BAX) or futures vs futures (ex. CGZ vs a Strip of BAX or CRA). Please reach out to your MX representatives for more information.

Upcoming Option Education Events!

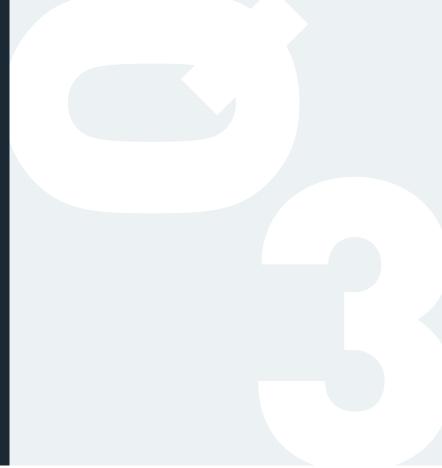
MX offers multiple options education events designed to provide retail investors with the knowledge needed to successfully navigate the options market. Check out the periodic updates on upcoming events on the <u>Option Matters</u> blog!

Key Exchange Notices

- Advisory Notice 22-009: <u>Update on Canadian benchmark transition and</u> <u>roadmap for BAX and CORRA Futures</u>
- Advisory Notice 22-010: <u>Upcoming change to BAX, OBX and CORRA Futures</u> <u>opening time and BAX tick size</u>
- Advisory Notice A22-011: <u>Simplification of current, à-la-carte service fees into</u> <u>service packages</u>
- Advisory Notice A22-012: <u>Client Portal - TMX AXIS mandatory for access to</u> <u>MX services</u>
- Technical Notice 22-008: <u>MX participation in the SIFMA and FIA 2022 disaster</u> <u>recovery</u>
- Technical Notice 22-009: Clearing API becomes TM FIX API
- Technical Notice 22-010:
 <u>Reminder Participant Activity Report (PAR) and</u>
 Datalinx Reports for MX Update

Did you know?

- MX offers <u>listed options</u> on four Bitcoin ETFs and four Ether ETFs from different ETF providers, enabling investors to access diversification and growth potential of cryptocurrencies.
- Put/Call ratios are available on a daily basis on the trading activity section of the <u>MX website</u>.
- Real-Time bid/ask quotes are available on the MX website for Canadian options and futures contracts. <u>Sign up</u> for a free account and create a "My Quotes" portfolio to easily keep track of your options and future positions.



For more information

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