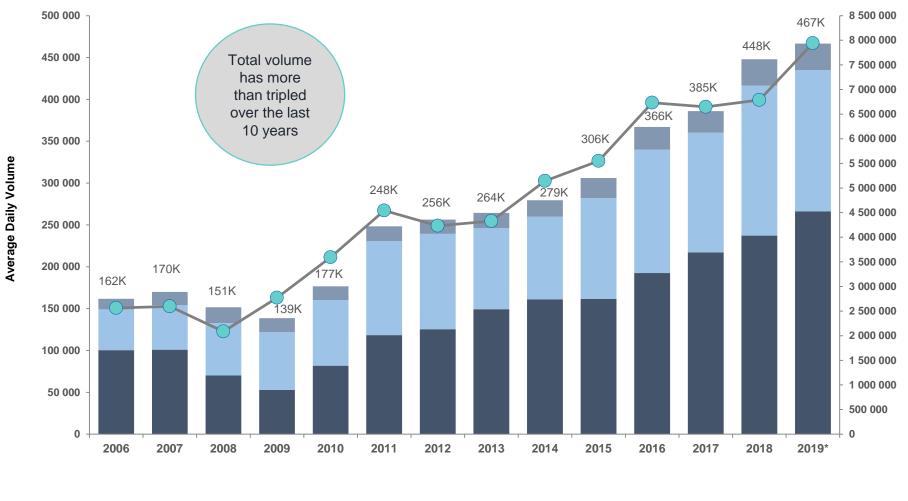
TMX | Montréal Exchange

Montréal Exchange Quarterly Interest Rates Derivatives Update

Q3 2019



Overall Average Daily Volume & Open Interest



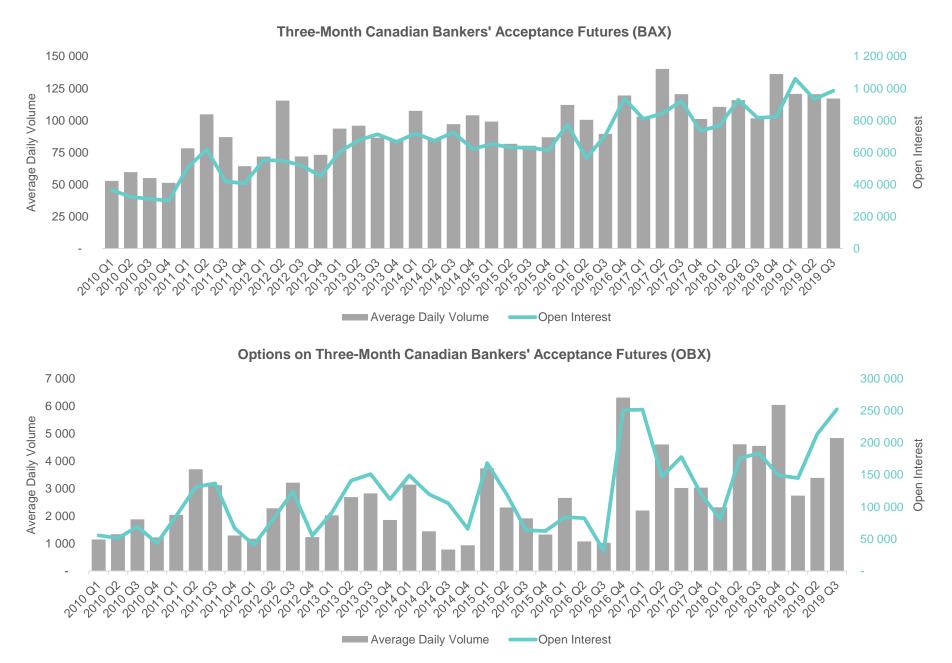
Equity Index Derivatives Equity & ETF Options Interest Rate Derivatives

Note: Statistics for 2019 are representative of YTD 2019, as at September 30, 2019.

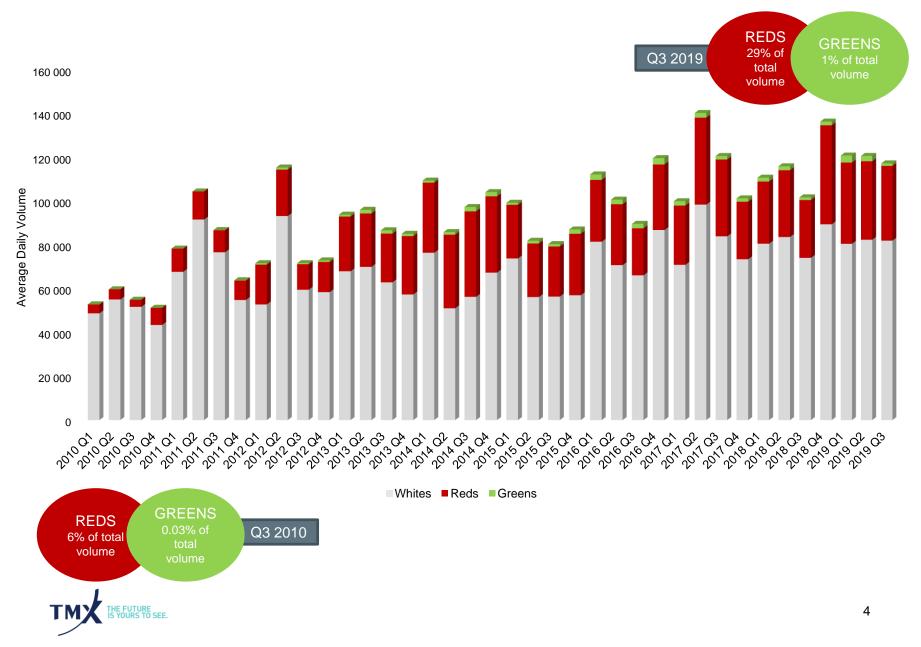
----- Total Open Interest

Open Interest

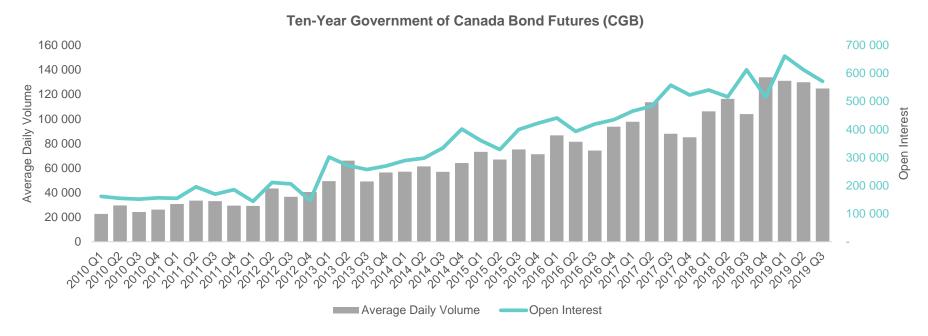
Short-Term Interest Rate Derivatives



BAX Reds and Greens Volume



Government of Canada Bond Futures



Five-Year Government of Canada Bond Futures (CGF)



Exchange for Physical, Exchange for Risk & Riskless Basis Cross Trades

Exchange for Physical (EFP)

Transaction whereby two parties enter into an agreement in which one party purchases a cash market position and simultaneously sells a corresponding futures contract position and the other party sells the cash market position and simultaneously purchases the corresponding futures contract position.

Exchange for Risk (EFR)

Transaction whereby two parties enter into an agreement in which one party purchases an over-the-counter derivative instrument and simultaneously sells a corresponding futures contract and the other party sells the over-the-counter derivative instrument and simultaneously purchases the corresponding futures contract.

EFP and EFR transactions permitted on following instruments:

• Interest rate futures contracts

- Futures contracts on S&P/TSX
- Canadian Share Futures Contracts

Riskless Basis Cross Transactions

- Riskless basis cross transactions on listed futures contracts on S&P/TSX indices and on listed Share Futures contracts
- An Approved Participant and the customer may prearrange a transaction outside of the electronic trading system in which the price of a stock index futures contract or a share futures contract to the customer is determined to be the average price of cash market transactions entered into by and for the account of the Approved Participant in the components of the underlying index or the underlying security, respectively, plus a spread (basis) as mutually agreed between the Approved Participant and the customer.



Block Trades and Cross Transactions

BLOCK TRADES	ELIGIBLE PRODUCTS	MINIMUM VOLUME THRESHOLD (from 6AM until the end of the Trading D	ay)	MINIMUM VOLUME THRESHOLD (from 2AM until 5h59m59s)
	ONX	1,000 contracts		250 contracts
	OIS	200 contracts		50 contracts
	BAX (Whites)	N/A		500 contracts
	BAX (Reds and Greens)	Reds: 1,000 contracts / Greens: 500 contracts		Reds: 250 contracts / Greens: 100 contracts
	OBX	2,000 contracts		500 contracts
	CGB	1,500 contracts		350 contracts
	CGZ	250 contracts		100 contracts
	CGF	500 contracts		100 contracts
	LGB	100 contracts		100 contracts
	Futures Contracts on S&P/TSX Indices (Only block trades priced at a basis to the index close, BIC)*	100 contracts (execution of block trades priced at a BIC)		N/A
	Prescribed Time Delay	15 MINUTES FOR ALL ELIGIBLE PRODUCTS		1 HOUR FOR ALL ELIGIBLE PRODUCTS
CROSS TRANSACTI	ELIGIBLE PRODUCTS	MINIMUM VOLUME THRESHOLD		PRESCRIBED TIME DELAY
	ONX/OIS	No Threshold	 5 seconds (front month) 15 seconds (remaining expiry months & strategies) 	
	ВАХ	No Threshold	 5 seconds (first four quarterly months, excluding serials) 15 seconds (remaining expiry months & strategies) 	
		 ≥ 250 contracts < 250 contracts 		econds (all expiry months & strategies) econds (all expiry months & strategies)
	GoC Bond Futures Contracts	No Threshold	• 5 s	econds
	Futures Contracts on S&P/TSX & BTC	 ≥ 100 contracts < 100 contracts 		econds (all expiry months & strategies) econds (all expiry months & strategies)
	Canadian Share Futures Contract	• ≥ 100 contracts • < 100 contracts		econds (all expiry months & strategies) econds (all expiry months & strategies)

For more information, visit https://www.m-x.ca/f_regles_en/06_en.pdf

Note: Cross transactions available on other products

BAX Specifications

Introduction to BAX

- First interest rate futures contract listed on the Montréal Exchange in 1988
- Reference for Canadian short term interest rates

Contract Specs

Underlying

• C\$1,000,000 nominal value of Canadian bankers' acceptances with a three-month maturity

Expiry Cycle

- Quarterlies: March, June, September and December
- Serials: two (2) nearest non-quarterly months

Price Quotation

• Index: 100 minus the yield in percentage point on an annual basis for a 365-day year on Canadian bankers' acceptances with a three-month maturity

Minimum Price Fluctuation

- 0.005 = C\$12.50 per contract for the ten (10) nearest listed contract months, including serials
- 0.01 = C\$25.00 per contract for all other contract months

Contract Type: Cash-settled

Last Trading Day

• Trading ceases at 10:15 a.m. (Montréal time) on the second London (Great Britain) banking day preceding the third Wednesday of the contract month, provided it is a business day. If it is not a business day, trading will cease on the first preceding business day.

Final Settlement Price

 100 minus the average of the bid rates for the underlying as quoted on the CDOR page of Reuters Monitor Service on the Expiry Date at 10:15am (Montreal time) excluding the highest and lowest values

Position reporting threshold: 300 contracts

Objectives

- Hedge your exposure to changes in interest rates or to seek a return on the product depending on your view of future interest rates
- Enable you to fix the price of an interest bearing asset to be purchased or sold by you (cash-settled) at a specified date in the future
- For each long (short) futures contract that you hold, on the Expiry Date, you will be entitled to purchase (sell) CAD\$ 1,000,000 in nominal value of three-month Canadian Bankers' acceptances at the Futures Price
- Cash settled means that you do not actually purchase (sell) the underlying
- If the Final Settlement Price is greater than the Futures Price, the long (short) will receive (pay) the difference between the two and vice-versa*



OBX, OBW, OBY, OBZ Specifications

Introduction to OBX

- Listed on the Montréal Exchange in 1994
- Similar concept to equity options. However, the underlying is a Three-month Canadian bankers' acceptance (BAX) futures contract.

Contract Specs

Underlying

- OBX: Three-month Canadian bankers' acceptance futures contract (BAX) that expires during the month in which the option expires
- OBW: BAX contract that expires one year from the next quarterly month that is nearest to the expiration of the option (serial mid-curve options)
- OBY: Corresponding BAX contract that expires one year after the option expires (one-year quarterly mid-curve options)
- OBZ: Corresponding BAX contract that expires two year after the option expires (two-year quarterly mid-curve options)

Expiry Cycle

- OBX: The eight (8) nearest months in the March, June, September, December quarterly cycle
- OBW: The two (2) nearest non-quarterly months (serials) in the January, February, April, May, July, August, October, November cycle
- OBY & OBZ: The four (4) nearest months in the March, June, September, December quarterly cycle

Premium Quotation

- Quoted in points where each 0.01 point (1 basis point) represents C\$25
- Cabinet trades (options with a premium below 0.01) are quoted in 0.001 point (one-tenth of a basis point) where each 0.001 point represents C\$2.50

Minimum Price Fluctuation

- 0.005 = C\$12.50 per contract
- 0.001 = C\$2.50 per contract for cabinet trades

Strike Prices

Set at a minimum of 0.125 points intervals per Three-month Canadian bankers' acceptance futures contract

Contract Type: American style

Objectives

Hedge your exposure to changes in interest rates or to seek a return on the product depending on your view of future interest rates

Call Option Buyer

- Offer you the right to purchase one BAX contract at a fixed price on or before a specified date in the future
- Option premium to pay

Call Option Seller

• Receive an option premium up-front in return for taking the risk of being obliged to sell a BAX contract at a fixed price, at a loss, on or before a specified date in the future

Put Option Buyer

- Offer you the right to sell one BAX contract at a fixed price on or before a specified date in the future
- Option premium to pay

Put Option Seller

 Receive an option premium up-front in return for taking the risk of being obliged to buy a BAX contract at a fixed price, at a loss, on or before a specified date in the future if the option is exercised

CGF Specifications

Introduction to CGF

Five-Year Government of Canada Bond Futures listed on the Montréal Exchange in 1995

Canadian mid-term interest rates

Contract Specs	Objectives			
 Underlying C\$100,000 nominal value of a Government of Canada bond with a 6% notional coupon Expiry Cycle March, June, September and December Price Quotation 	 Hedge your exposure to changes in interest rates or to seek a return on the product depending on your view of future interest rates Enable you to fix the price of an interest bearing asset to be purchased or sold by you at a specified date in the future If you close-out your position in the product without being subject to the delivery process, the contract is cash settled CGF Buyer 			
Per C\$100 nominal value	 If you are holding the product between the First Notice Day for Delivery and the Expiry Date (inclusive) you must be prepared to 			
 Minimum Price Fluctuation 0.01 = C\$10 per contract 	purchase and take delivery of a designated nominal value of designated deliverable Government of Canada			
Contract TypePhysically-delivered: delivery of eligible Government of Canada bonds	 You will be required to do so if a delivery notice is served on you during such time by an investor holding a corresponding seller position If the Close-Out Futures Price is greater than the Futures Price, you will receive the difference between the two and vice-versa* 			
Last Trading Day	CGF Seller			
 Trading ceases at 1:00 p.m. on the seventh business day preceding the last business day of the delivery month 	 If you are holding the product between the First Notice Day for Delivery and the Expiry Date (inclusive) you may sell and make delivery of a designated nominal value of designated deliverable 			
First Notice Day for Delivery: The second business day preceding	Government of Canada bonds			
the first business day of the Delivery Month	 You may do so if you submit a delivery notice during such time to an investor holding a corresponding buyer position 			
Position reporting threshold	If the Close-Out Futures Price is lower than the Futures Price, you will			
250 contracts	receive the difference between the two and vice-versa*			



* Note: Scaled by a factor of CAD\$ 10 to account for the value of one point or a half-point (as specified in the futures contract) and further scaled by a factor of 100 to account for the pricing quotation

CGB Specifications

Introduction to CGB

> First bond futures contract listed on the Montréal Exchange in 1989

Ten-Year Government of Canada Bond Futures

Contract Specs	Objectives			
 Underlying C\$100,000 nominal value of a Government of Canada bond with a 6% notional coupon Expiry Cycle March, June, September and December 	 Hedge your exposure to changes in interest rates or to seek a return on the product depending on your view of future interest rates Enable you to fix the price of an interest bearing asset to be purchased or sold by you at a specified date in the future If you close-out your position in the product without being subject to the delivery process, the contract is cash settled 			
 Price Quotation Per C\$100 nominal value Minimum Price Fluctuation	 CGB Buyer If you are holding the product between the First Notice Day for Delivery and the Expiry Date (inclusive) you must be prepared to purchase and take delivery of a designated nominal value of 			
 0.01 = C\$10 per contract Contract Type Physically-delivered: delivery of eligible Government of Canada bonds 	 designated deliverable Government of Canada You will be required to do so if a delivery notice is served on you during such time by an investor holding a corresponding seller position If the Close-Out Futures Price is greater than the Futures Price, you will receive the difference between the two and vice versa* 			
 Last Trading Day Trading ceases at 1:00 p.m. on the seventh business day preceding the last business day of the delivery month 	 CGB Seller If you are holding the product between the First Notice Day for Delivery and the Expiry Date (inclusive) you may sell and make delivery of a designated nominal value of designated deliverable 			
First Notice Day for Delivery: The second business day preceding the first business day of the Delivery Month	 Government of Canada bonds You may do so if you submit a delivery notice during such time to an investor holding a corresponding buyer position 			
Position reporting threshold250 contracts	 If the Close-Out Futures Price is lower than the Futures Price, you will receive the difference between the two and vice-versa* 			



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