

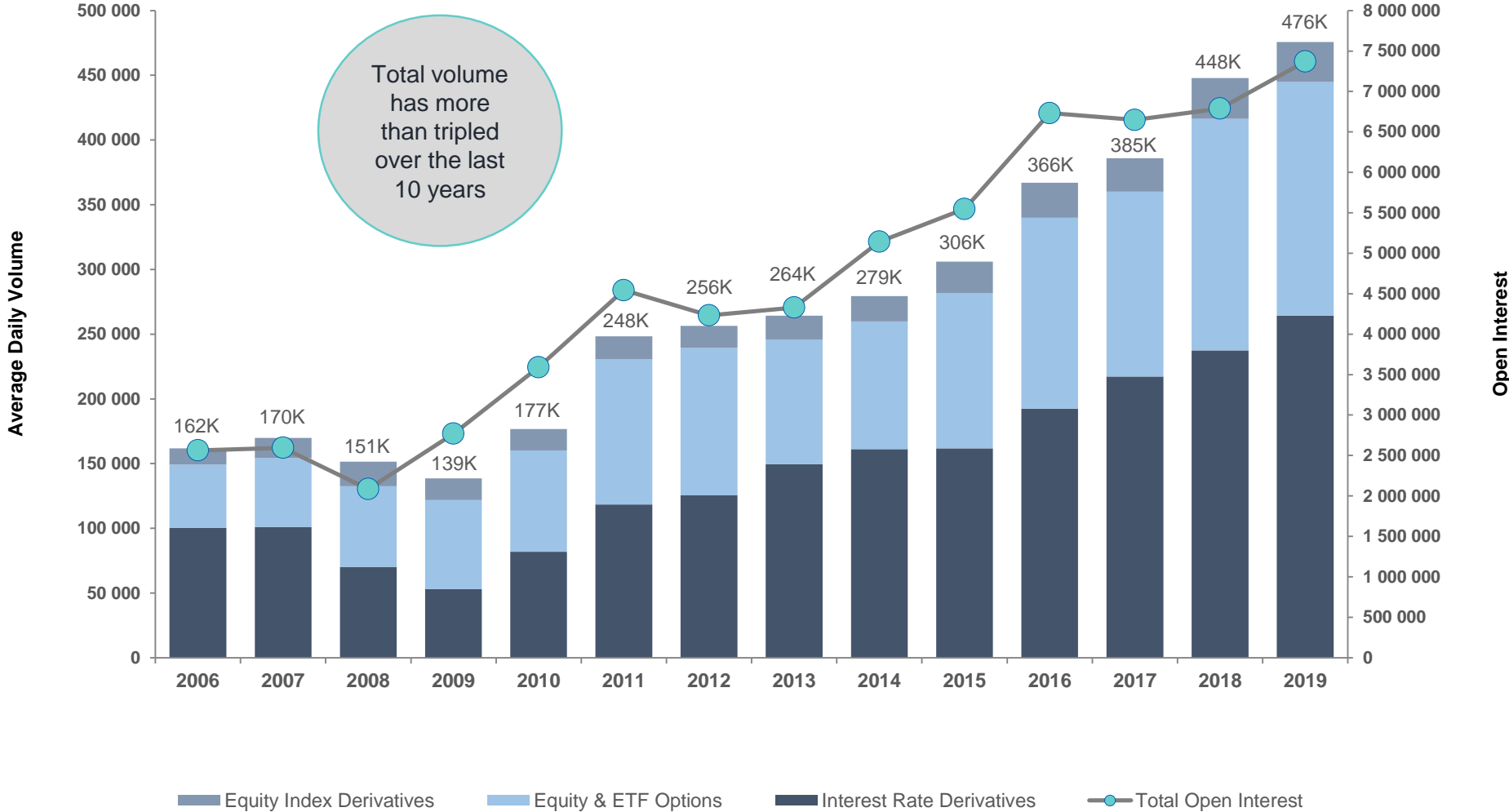
TMX | Montréal Exchange

# Montréal Exchange Quarterly Interest Rates Derivatives Update

Q1 2019



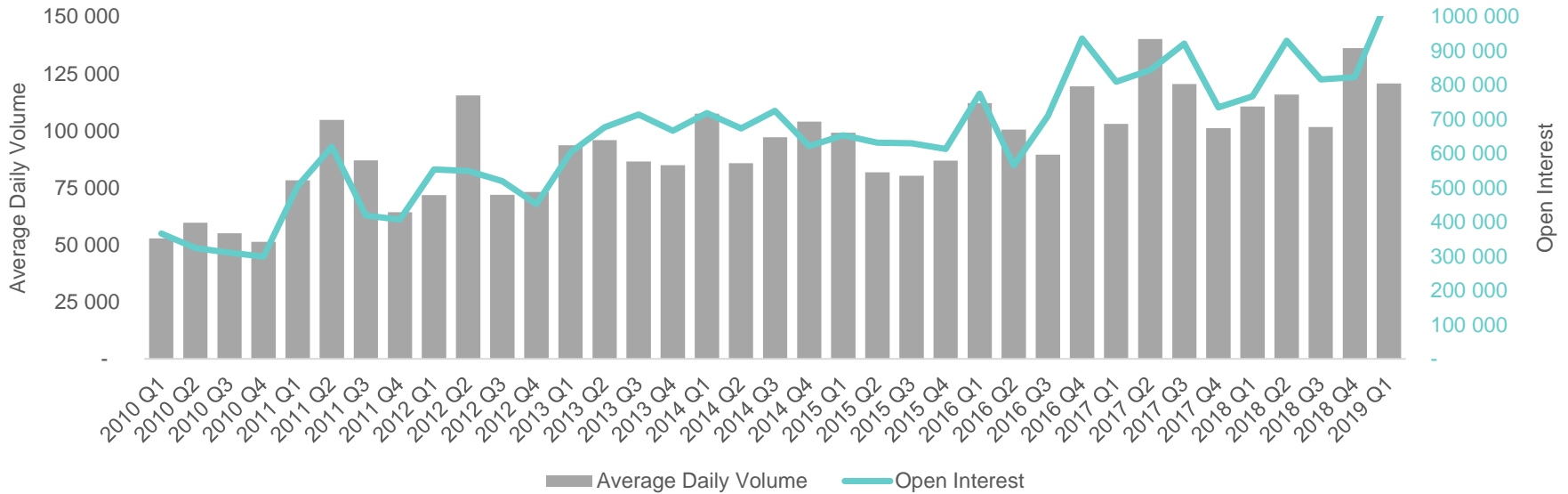
# Overall Average Daily Volume & Open Interest



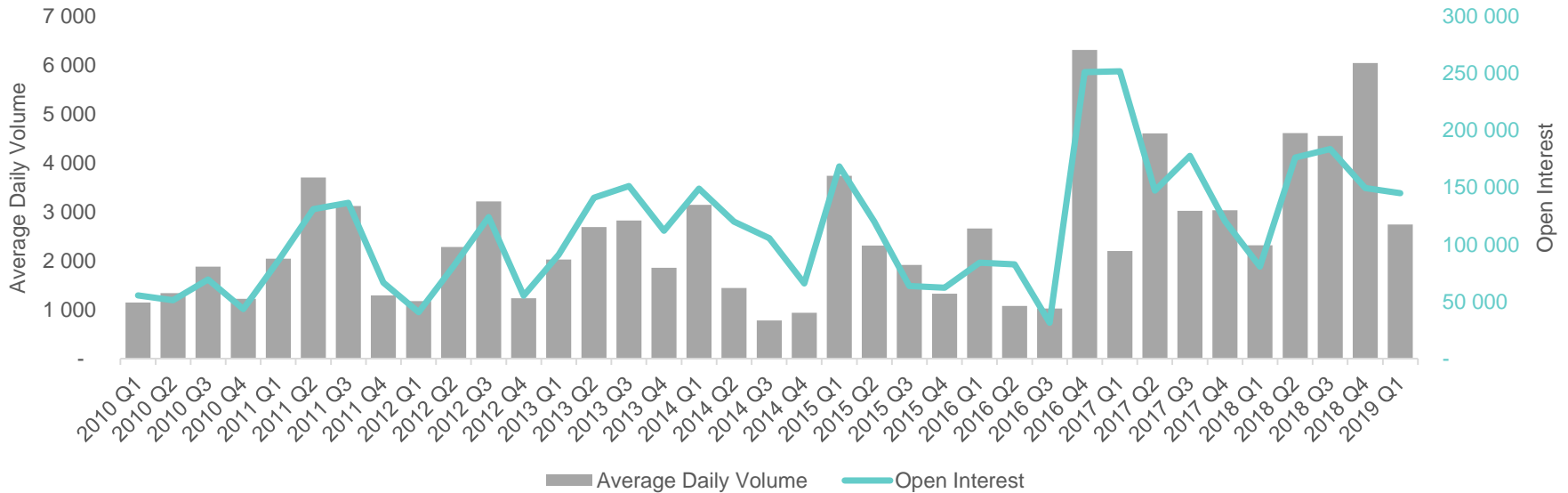
Note: Statistics for 2019 are representative of YTD 2019, as at March 31, 2019.

# Short-Term Interest Rate Derivatives

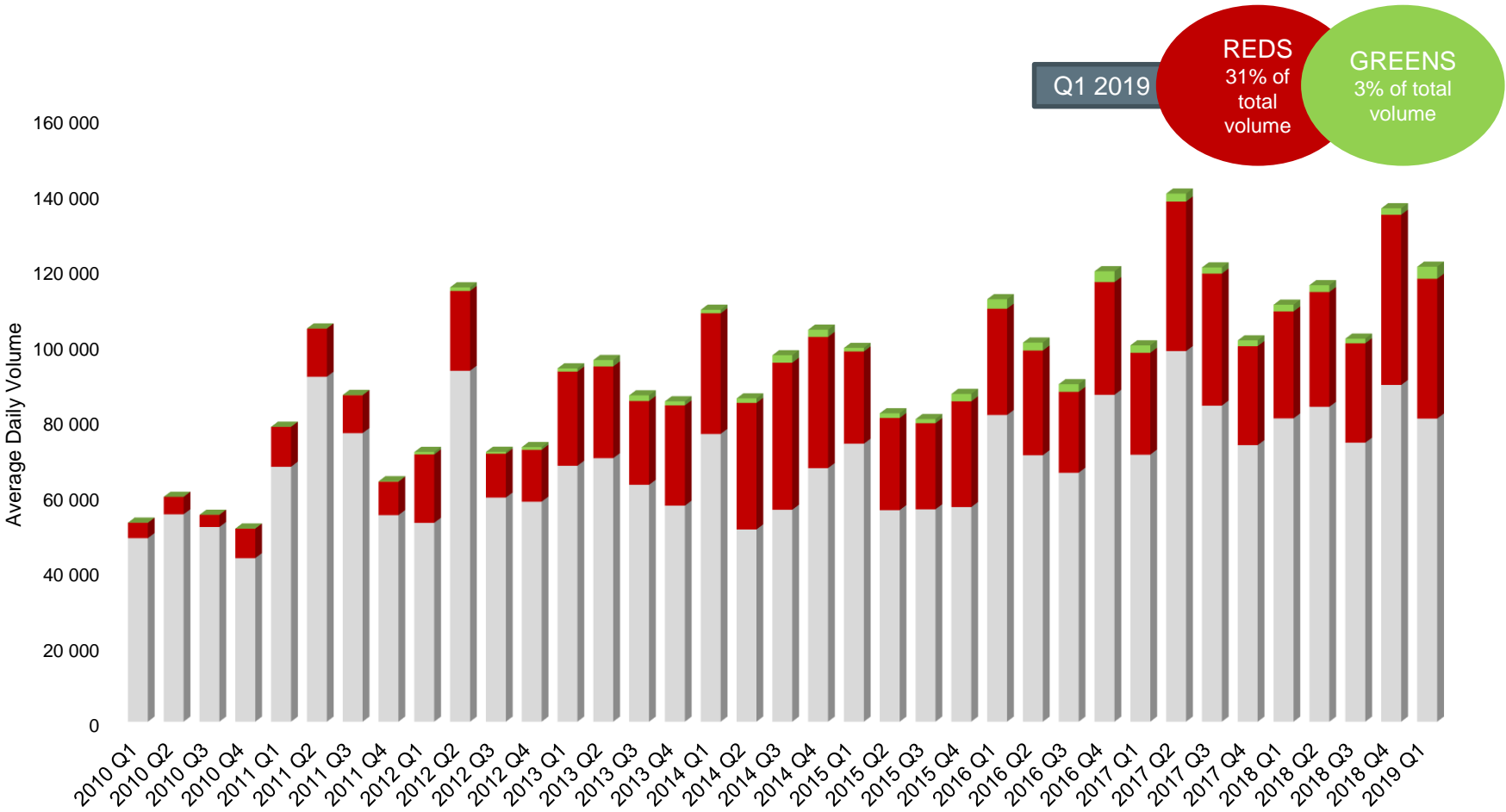
## Three-Month Canadian Bankers' Acceptance Futures (BAX)



## Options on Three-Month Canadian Bankers' Acceptance Futures (OBX)



# BAX Reds and Greens Volume



**REDS**  
8% of total volume

**GREENS**  
0.1% of total volume

Q1 2010

Q1 2019

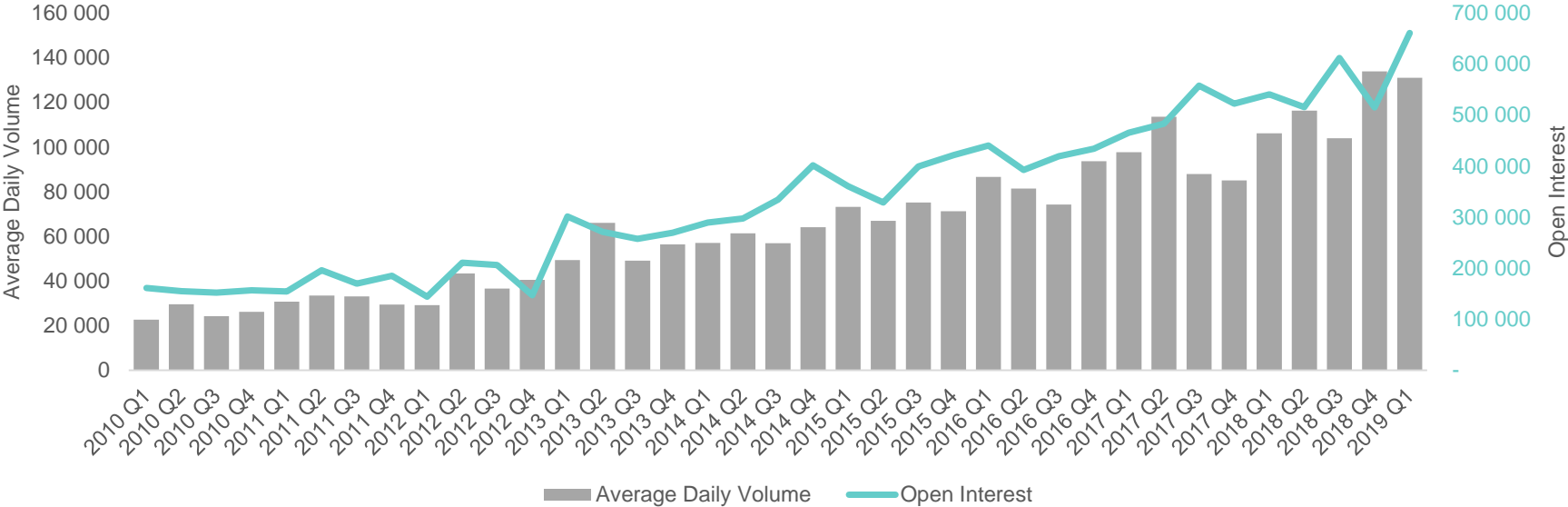
**REDS**  
31% of total volume

**GREENS**  
3% of total volume

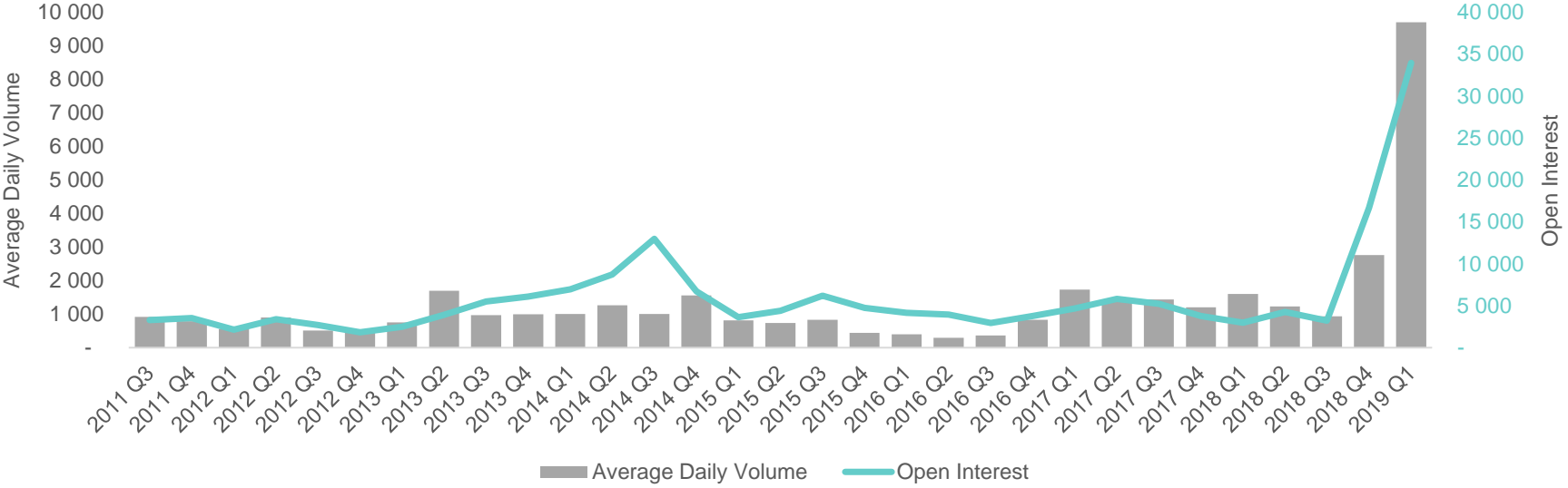
Whites Reds Greens

# Government of Canada Bond Futures

### Ten-Year Government of Canada Bond Futures (CGB)



### Five-Year Government of Canada Bond Futures (CGF)



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

## Exchange for Physical (EFP)

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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)

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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

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- 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 Day)	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
<b>Futures Contracts on S&amp;P/TSX Indices</b> <i>(Only block trades priced at a basis to the index close, BIC)*</i>	100 contracts (execution of block trades priced at a BIC)	N/A	
<b>Prescribed Time Delay</b>	15 MINUTES FOR ALL ELIGIBLE PRODUCTS	1 HOUR FOR ALL ELIGIBLE PRODUCTS	

CROSS TRANSACTIONS	ELIGIBLE PRODUCTS	MINIMUM VOLUME THRESHOLD	PRESCRIBED TIME DELAY
	ONX/OIS	No Threshold	<ul style="list-style-type: none"> <li>• 5 seconds (front month)</li> <li>• 15 seconds (remaining expiry months &amp; strategies)</li> </ul>
	BAX	No Threshold	<ul style="list-style-type: none"> <li>• 5 seconds (first four quarterly months, excluding serials)</li> <li>• 15 seconds (remaining expiry months &amp; strategies)</li> </ul>
	OBX/OGB	<ul style="list-style-type: none"> <li>• ≥ 250 contracts</li> <li>• &lt; 250 contracts</li> </ul>	<ul style="list-style-type: none"> <li>• 0 seconds (all expiry months &amp; strategies)</li> <li>• 5 seconds (all expiry months &amp; strategies)</li> </ul>
	GoC Bond Futures Contracts	No Threshold	<ul style="list-style-type: none"> <li>• 5 seconds</li> </ul>
	Futures Contracts on S&P/TSX & BTC	<ul style="list-style-type: none"> <li>• ≥ 100 contracts</li> <li>• &lt; 100 contracts</li> </ul>	<ul style="list-style-type: none"> <li>• 0 seconds (all expiry months &amp; strategies)</li> <li>• 5 seconds (all expiry months &amp; strategies)</li> </ul>
	Canadian Share Futures Contracts	<ul style="list-style-type: none"> <li>• ≥ 100 contracts</li> <li>• &lt; 100 contracts</li> </ul>	<ul style="list-style-type: none"> <li>• 0 seconds (all expiry months &amp; strategies)</li> <li>• 5 seconds (all expiry months &amp; strategies)</li> </ul>

*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

### 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

- Per C\$100 nominal value

### Minimum Price Fluctuation

- 0.01 = C\$10 per contract

### Contract Type

- Physically-delivered: delivery of eligible Government of Canada bonds

### Last Trading Day

- Trading ceases at 1:00 p.m. on the seventh business day preceding the last business day of the delivery month

**First Notice Day for Delivery:** The second business day preceding the first business day of the Delivery Month

### Position reporting threshold

- 250 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 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

- 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 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\*

### CGF 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 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
- If the Close-Out Futures Price is lower than the Futures Price, you will receive the difference between the two and vice-versa\*

# 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

### 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

- Per C\$100 nominal value

### Minimum Price Fluctuation

- 0.01 = C\$10 per contract

### Contract Type

- Physically-delivered: delivery of eligible Government of Canada bonds

### Last Trading Day

- Trading ceases at 1:00 p.m. on the seventh business day preceding the last business day of the delivery month

**First Notice Day for Delivery:** The second business day preceding the first business day of the Delivery Month

### Position reporting threshold

- 250 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 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

### 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 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\*

### 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 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
- 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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