

MONTRÉAL EXCHANGE

Three-month Canadian Bankers' Acceptance Futures (BAX®)



Cash markets

In the Canadian financial markets, bankers' acceptances are the barometer of short-term commercial interest rates. Introduced in Canada in 1962, bankers' acceptances are commercial drafts or short-term debt obligations that have been "accepted" by one of Canada's major banks. As used here, the wording "accepted" means that the payment of principal and interest is guaranteed by the issuing bank. Bankers' acceptances are issued on behalf of the bank's customer for repayment after a predetermined period of usually 30 days, 60 days, 90 days, 6 months or 1 year and in minimum denominations of C\$100,000. They are quoted at a discount on the basis of yield. In the secondary market, an investor purchasing bankers' acceptances buys them at the discounted price and, at maturity, receives their face value.

Futures market

The BAX was the first interest rate futures product to be listed on the Montréal Exchange. It is recognized as the benchmark for Canadian short-term interest rates.

BAX futures reflect the three-month Canadian Dollar Offered Rate (CDOR), expressed as an interest rate per annum. At all times, 12 quarterly futures contracts are listed in addition to nearest two non-quarterly contract months (serials).

BAX are quoted on an index basis: 100 minus the annualized yield of three-month Canadian bankers' acceptances (three-month CDOR). The size of the trading unit for BAX for a given contract month is the index * C\$2,500. In the futures market, the purchaser of a BAX contract buys it at its trading value. An actual payment is not required; rather, the purchaser deposits security (an initial margin) as a sign of good faith that the contract will be honoured.

The minimum price fluctuation is 0.005 (C\$12.50) per contract for all contract months.

The buyer of BAX futures has a long position in view of falling rates and the seller, a short position in view of rising rates. A long position can be closed by either selling the contract at a later date or waiting until it expires. If the position is closed by the sale of a contract, the difference between the purchase and selling price is the position's profit or loss. If the purchaser waits until the contract expires, the difference between the purchase and final settlement price represents the position's profit or loss. It is important to note that users of derivative products (exchange-traded or over-the-counter) must consider all fees related to the trade.

BAX are cash settled as opposed to some futures where a physical instrument is delivered on expiry. As margin accounts are marked to market daily, the daily settlement price is used to determine each position's daily value. In other words, every day, money is either debited from or credited to an open position account showing the fair value of the position daily.

Trading hours and operations

Orders are executed at the best market price on a "first-in, first-out" (FIFO) basis. As a result, order entry timing is important to ensuring priority in the order book.

The trading session starts with a preopening phase from 1:30 a.m. to 1:59:15 a.m. During this phase, users can enter, modify or cancel their orders while waiting for the market opening. From 1:59:15 a.m. to 2:00* a.m., there is a non-cancellation period during which no cancellation or change is allowed; only entry of

BAX trades from 2:00* a.m. to 4:30 p.m.

new orders is permitted. At 2:00* a.m., the market opens and orders received during the preopening are matched, establishing the theoretical opening price, which becomes the opening price of the futures. The trading session continues without interruption, under normal circumstances, until 4:30 p.m. (Note: On early closing days, the trading session closes at 1:30 p.m.) During the regular trading session, the net price change is established in relation to the previous day's settlement price.

Contracts traded

Quarterly

Three years of quarterly BAX contracts are listed at all times. The standard quarterly cycle consists of March, June, September and December. The first year of contracts is commonly referred to as the front four (whites) and the contracts do not necessarily have to expire in the same calendar year. The second year of contracts is referred to as the reds and the third year as the greens. These three years of quarterly maturities provide portfolio managers with an extended and more precise hedge across the yield curve. The large number of maturities available also provides more opportunities for calendar spreads, allows users to hedge longer-dated interest rate swaps and combine cash and futures to create longer-term synthetic instruments.

Serials

In addition, two near-term contracts are listed at all times so there are always three consecutive front months listed. These contracts expire in months other than the standard quarterly contracts. Referred to as serial futures, they are identical to the standard BAX contracts in all respects except for the expiry months. For example, on September 17, 2018, the October and November serial BAX futures are listed in addition to the BAX December quarterly contract. With the expiry of the October contract, the January serial BAX contract is immediately listed; with the expiry of the November contract, the February serial is added, and so forth.

The use of serial futures alleviates maturity mismatches and provides market participants with opportunities to more precisely manage their short-term interest rate exposure. For example, on October 4, 2018, a treasurer knows that he will have a three-month rate fixing on October 15, 2018. Hedging this risk with a December BAX contract exposes the treasurer to date risk between the three-month rate fixing in 11 days and the three-month rate fixing in 74 days based on the expiry of the December BAX contract. By using the October serial BAX contract, the treasurer is able to match the rate fixing date of the hedge to the risk exposure, thereby greatly reducing the date risk.

Strips

A strip is a simultaneous purchase or sale of an equally weighted series of standard quarterly contracts. There are many benefits to using standardized strips, such as executing multiple contract months in a single transaction, rapid trade execution in an active market, eliminating partial fills and more efficient trading in the back months.

The one-, two- and three-year strips consist of, respectively, the first four, eight and twelve standard quarterly contracts. The front strip consists of the first year of four consecutive standard quarterly contracts. The red strip consists of the second year of four consecutive standard quarterly contracts, and the green strip consists of the third year. In over-the-counter markets, the red strip is commonly referred to as the one-year/one-year forward and the green strip as the one year/two-year forward.

Strips are quoted on an average net change basis from the previous day's settlement price. For example, a red strip bought at +2 indicates the addition of two ticks to the close of the previous day's settlement price for each of the strip's contracts.

Pricing BAX futures

Generally, the price of a futures contract closely tracks the cash price. The relationship between both is called the "basis" and is affected by changes in the yield curve line.

The BAX price tends to reflect the implied forward rate as calculated from the available rates on three-month Canadian bankers' acceptances in the cash market. The price also relies on the prices of Eurodollar futures with the same maturities and the prices of exchange contracts on the Canadian dollar against the U.S. dollar.

Last trading day and final settlement procedures

BAX trading ceases at 10:15 a.m. 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.

The settlement is based on the average bid rate of Canadian bankers' acceptances with a three-month maturity, as quoted on CDOR on the last trading day at 10:15 a.m., excluding the highest and the lowest values.

Required margins

An initial margin is required from all approved participants and their clients. This good faith deposit ensures the financial position of both counterparties to a trade. Deposits are held at the central clearinghouse, the Canadian Derivatives Clearing Corporation (CDCC), and are marked to market on a daily basis. Various types of collateral can be deposited to meet the initial margin requirements including cash, government securities or similar highly liquid instruments. A client's minimum margin deposit is established through the use of a risk-based system and varies for speculators and hedgers.

In recognition of the more limited-risk characteristics of combined strategies (spreads or butterflies), reduced margins are applied for such strategies. For inter-month spreads, the margin applied varies depending on the contract months involved. The implementation of a price scan range methodology for the calculation of the Three-Month Canadian Bankers' Acceptance Futures contract (BAX) margin rates has resulted in different margin rates for each BAX expiry and distinct margin rates for multiple BAX strategies (spreads and butterflies). Detailed information on margin requirements can be obtained from the Montréal Exchange Regulatory Division's Futures Contracts Margin Rates page: https://reg.m-x.ca/en/regulatory/futures_margins.

Position reporting threshold and position limits

The Bourse has a position reporting facility, which requires approved participants to supply details on positions on over 300 futures contracts, referred to as Large Open Positions Reporting (LOPR). More detailed information can be obtained at https://reg.m-x.ca/en/regulatory/lopr.

Information on general position limits can be obtained from the Bourse as they are subject to periodic changes. For more detailed information, refer to: https://reg.m-x.ca/en/regulatory/position_limits.

Strategies using BAX

- Managing money market portfolios
- Hedging over-the-counter derivatives: interest rate swaps (floating rate), basis swaps, FRAs, and interest rate options
- Hedging Canadian/U.S. dollar forwards
- Hedging borrowings/investments
- Creating synthetic instruments
- Cross-market trading (BED spread)
- Spread or butterfly trading
- Arbitrage

Advantages

- **Regulated market:** As a self-regulatory organization recognized by the Quebec Securities Act, the Bourse is required to ensure that approved participants comply with all regulations to safeguard an orderly and efficient market.
- **Electronic trading:** Through SAM (Montréal Automated System), the Bourse offers continuous immediate disclosure of competitive price quotes in real time, ensuring a more transparent market. Trades are executed at the best market price on a "first-in, first-out" (FIFO) basis.
- Market transparency: All market participants have access to quotes as well as market depth (via certain vendors).
- **Liquidity:** Competitive bid and ask spreads resulting from a strong involvement of domestic and global users increase volumes. With higher volumes and greater market depth, trades can be executed more effectively.
- Margins: In contrast to the over-the-counter marketplace, any market participant meeting established margin requirements is allowed to take part in the futures market.
- Central clearinghouse: The Canadian Derivatives Clearing Corporation (CDCC) ensures market integrity
 and stability by matching and clearing all trades and by monitoring all open positions on a daily basis.
 More information can be obtained at https://www.cdcc.ca/index_en.
- Standardized contracts: In contrast to over-the-counter financial products, futures contracts, by being standardized, provide uniformity that enables operational flexibility and rapid execution of positions, in a context of proactive management of interest rate risk.

Canadian Derivatives Clearing Corporation (CDCC)

Canadian Derivatives Clearing Corporation (CDCC), a wholly-owned subsidiary of the Montréal Exchange (MX), acts as the central clearing counterparty for exchange-traded derivative products in Canada and for a growing range of customized financial instruments. CDCC's role is to ensure the integrity and stability of the markets that it supports. The CDCC requires each member to maintain margin deposits with the clearinghouse in order to cover the market risk associated with each member's positions. The assessment of this risk is based on a set of well-defined criteria established by the clearinghouse. Margins are collected daily or more frequently during periods of market volatility.

For more information

Please contact Montréal Exchange if you have any additional questions or require further clarification on BAX futures or any other Montréal Exchange derivatives.

GENERAL ENQUIRIES

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