MONTRÉAL EXCHANGE

May 2024

Delivery Basket Preview: June 2024 – March 2025

Annually we examine factors inherent in physical delivery fixed income futures contracts to forewarn participants of any developments that may be coming. In theory, since these developments pertain to the very predictable changes in the delivery baskets for the contracts, investors would have plenty of time to learn or relearn the intricacies of the contracts to ensure that there are no unpleasant surprises.

Last year[1] we wrote at length about a possible switch in the LGB® cheapest-to-deliver bond due to a new 30-year bond issue (didn't happen!) as well as the unrelenting march toward acceptance of the CORRA-based (Canadian Overnight Repo Rate Average) contract as a replacement for the soon-to-be-extinct CDOR-based BAX® (Three-Month Canadian Bankers' Acceptance Futures) contract (happened!).

Fortunately, the 2024 and early 2025 contracts have very few upcoming issues that could prove disruptive to futures contracts and investors that utilize futures contracts will probably not need to focus on the minutiae of futures complexities but can focus instead on markets in general.

Basis (Probably) Negative All Year

As with all recent fixed income contracts, CGZ® (2-year), CGF® (5-year), CGB® (10-year), and LGB (30-year) contracts will all trade at a negative basis in 2024 and into March 2025. Readers will recall that a negative basis is simply a byproduct of the timing option, or option for the short position to deliver bonds early to satisfy their contract obligations and avoid about a month of negative carry.

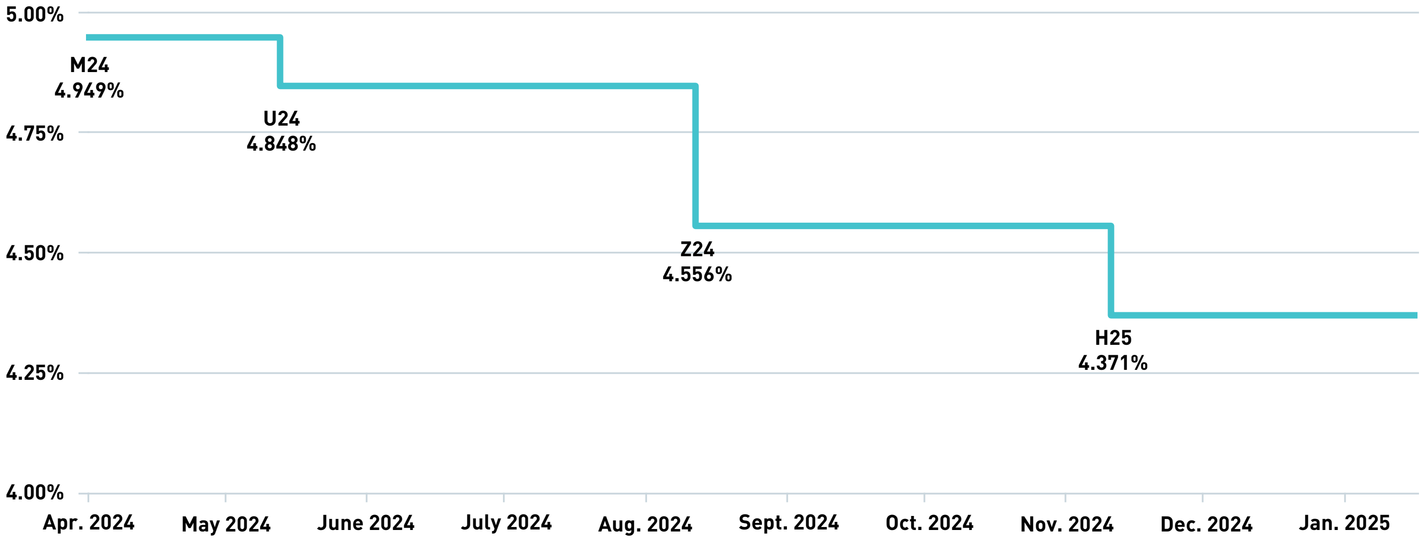
We used CRA™ (Three-Month CORRA Futures) contracts to extract the market expectation for Bank of Canada overnight target rates[2] for the active dates of each of the June 2024 to March 2025 contracts, shown in Figure 1. Although expectations for policy easing were much more aggressive earlier in the year, the recent rise of US interest rates has restricted expectations of easier policy in Canada to just two or three 25 basis point reductions in the overnight rate.

1 2023: The Future of Futures published in January 2023.

2 Methodology available here: https://www.m-x.ca/f_publications_en/futures_flash_article16_en.pdf.

FIGURE 1

CRA Implied Forward Rates, Contract Active Dates



Source: Montréal Exchange

Bank of Canada policy expectations are important for futures contracts since the contracts trade at a negative gross basis[3] or are expected to be delivered early by futures short positions, when the overnight rate is higher than the coupon on the cheapest-to-deliver bond for the contract[4]. We created three scenarios for each of the June 2024 to March 2025 contracts using the current CORRA rate for the contract life, 50 basis points lower than the rate implied by market pricing, and 25 basis points higher than the implied rate.

Figure 2 shows the results of that scenario testing where, due to persistent low coupons on the coming CTD bonds for 5-year, 10-year, and 30-year futures contracts over the next year, only a 50 basis point "miss" by the front-end of the curve could result in positive futures gross basis and then only for the 2-year contract (CGZ).[5] Even an easing cycle 50 basis points more aggressive than implied by the CORRA market today wouldn't result in a positive basis for any of the other contracts making the coming year another year in which most, or all, of the Canadian bond futures contracts trade at negative gross bases.

FIGURE 2

	JUNE (M24)			SEPTEMBER (U24)			DECEMBER (Z24)			MARCH (H25)		
	-50 bps	Implied	+25 bps	-50 bps	Implied	+25 bps	-50 bps	Implied	+25 bps	-50 bps	Implied	+25 bps
CGZ	+Basis	-Basis	-Basis	-Basis	-Basis	-Basis	+Basis	-Basis	-Basis	+Basis	-Basis	-Basis
CGF	-Basis	-Basis	-Basis	-Basis	-Basis	-Basis	-Basis	-Basis	-Basis	-Basis	-Basis	-Basis
CGB	-Basis	-Basis	-Basis	-Basis	-Basis	-Basis	-Basis	-Basis	-Basis	-Basis	-Basis	-Basis
LGB	-Basis	-Basis	-Basis	-Basis	-Basis	-Basis	-Basis	-Basis	-Basis	-Basis	-Basis	-Basis

Source: Montréal Exchange

3 For more detail, refer to Forecasting/Understanding Negative Basis in Futures, published by Montréal Exchange in April 2021.

4 In much more technical jargon, gross basis is negative when a futures/bond cash-and-carry arbitrage is negative carry for the seller of futures contracts.

5 For December and March, we had to speculate using today's yield curve about what the coupon would be for bonds that have not yet been issued. Lower yields would reduce the coupon on hypothetical 2-year bonds and make positive basis even less likely than depicted here.

Wildcard Profit Erosion

Geopolitical risk is an important factor in the valuation of the wildcard option embedded in futures contracts since developments in politics, natural disasters, and armed conflict occur at random times unlike the release of economic indicators. Readers will recall that anything that increases the volatility of interest rates between 3:00 pm and 5:30 pm during the delivery period should make wildcard options more valuable[6]. Most economic indicator releases - announcements by the Federal Reserve being the important exception - don't occur during this time period, but geopolitical events easily can and will, especially during a US election year and with heightened tensions in Europe and the Middle East.

Increased geopolitical risk notwithstanding, the profitability of the CGB (10-year) wildcard option will continue to erode via the increase in coupon rates on coming cheapest-to-deliver bonds. Higher coupon bonds result in higher conversion factors for the bond to satisfy the contract obligations which, in turn, results in smaller hedge tails on a wildcard option exercise and less profits for the party delivering early at the end of the day.

Figure 3 shows the hedge tail resulting from the (very) likely cheapest-to-deliver bond for each of the contracts[7] between June 2024 and March 2025. While the 5-year (CGF) contract hedge tail does increase somewhat, especially for the December 2024 contract, few players have found even fewer profits trying to play the wildcard option in this contract. For 10-year contracts, where almost all of the activity around wildcard options has been focused in Canada since the revision to the LGB contract specifications in 2022, higher coupons on the CTD bond continue to chip away at potential profits for wildcard deliveries. By March 2025, the hedge tail will fall to just over 25% from a hedge tail of just under 55% for the September 2022 CGB contract. If late-day volatility were a constant (see paragraph above regarding increased geopolitical risk), profit potential for wildcard exercise attempts would have fallen by about 50% in just over two years on CGB contracts.

FIGURE 3

	JUNE (M24)	SEPTEMBER (U24)	DECEMBER (Z24)	MARCH (H25)
CGZ	2.4%	3.2%	2.8%	3.2%
CGF	8.9%	8.4%	11.4%	10.8%
CGB	33.5%	29.1%	28.2%	26.4%

Source: Montréal Exchange

Other Developments

Budget 2024, switch risk and the changeover from BAX to CRA will probably not be considered issues in 2024.

Canada Budget & Borrowing Program

There was no shortage of political commentary, polite and otherwise, about budget 2024, as is the norm in Canada. We leave politics to others, but note the following about the future borrowing program:

1. Borrowing requirements continue to rise, albeit at a slower pace. Issuance has been increased in all the sectors that are important to Montréal Exchange futures contracts so there should be more bonds available for delivery, a positive development when viewed through the myopic lens of fixed income futures markets.
2. As announced in 2023, the treasury has recognized that there is no unique appetite for 3-year duration. Although not explicitly stated, it appears that any prior borrowing that would have been in the now discontinued 3-year benchmark has been added into the more popular 2-year benchmark.
3. Treasury responded to market participant requests for more issuance in the long end with the percentage of 10-year and 30-year bonds issued rising far more than 2-year and 5-year bonds when measured by duration.
4. A 1-month treasury bill program has been created, for now on a temporary basis, to facilitate the discontinuation of the Bankers' Acceptance market. Another positive development, the creation of this ultra-short-term bill, is insurance against any supply/demand imbalance in the front end of the yield curve during a time of change. The first issuance will be in May and money market participants may find opportunities when looking at the relative value between these new 1-month bills and the 1-Month CORRA Futures contract (COA™)[8].

6 For more detail on wildcard options, refer to CGB Case Study: Wildcard Option Exercise published by Montréal Exchange in July 2019 and/or Wildcard Options: The Option of Maximum Regret, August 2022.

7 Except LGB (30-year) contracts which have no possibility for early delivery and, therefore, no wildcard option.

8 Specifications for One-Month CORRA Futures accessible here.

Switch Risk

Despite higher interest rates today versus a year ago, and especially two years ago, yields are not yet high enough to warrant an in-depth discussion of elevated switch risk. With the exception of the LGB (30-year) contract, the shortest maturity bond in the delivery basket is almost certain to be the cheapest-to-deliver bond for all of the coming contracts unless Canadian bond yields move higher at least a hundred basis points or more.

BAX Era Ends

BAX contracts will stop trading in June and all post-June contracts have been converted, using a standardized and well-publicized process[9], to the equivalent CRA contracts. About 130,000 contracts went into the conversion process, even though the pricing between BAX and CRA contracts had already converged to the pre-announced formula. It is expected that most participants who still have a position in the June contract (~100k of open interest) will hold it until expiry on June 17th. On the other hand, following the conversion, the CRA contract has seen its open interest reach more than a million contracts, successfully establishing itself as the new Go-To contract to manage Canadian short-term rate exposure. Remarkably, the CRA volume in April 2024 (2.7M contracts traded) represents a record month of April in the history of listed Canadian STIR futures.

9 More details available at: https://www.m-x.ca/f_publications_en/bax_fallback_provision_implementation_plan_en.pdf

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