CGZ Two-Year Government of Canada Bond Futures

CGF Five-Year Government of Canada Bond Futures

CGB Ten-Year Government of Canada Bond Futures

LGB Thirty-Year Government of Canada Bond Futures

MONTRÉAL EXCHANGE

Z23-H24 Roll Update

November 2023

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QUARTERLY ROLL Summary

Most client interest will be in the Ten-Year Government of Canada Bond Futures (CGB™) roll this quarter given the semi-annual change to the cheapest-to-deliver (CTD) bond. Despite volatile interest rates this quarter, yields are no longer appreciably higher than they were in August. Combined with unique characteristics of Montréal Exchange contracts and an inverted yield curve, unchanged rates mean a CTD switch is still an unlikely event in all contracts.

First Notice day is November 29th, and the liquid part of the roll period would ordinarily begin on November 24th but that is the bridge day between US Thanksgiving and the weekend which is often taken as a holiday. We suspect the roll begins early, therefore, perhaps as early as the 21st even though there will be two days after the weekend to resolve positions prior to first notice. Be ready for an early start if you need a lot of liquidity to roll your positions.

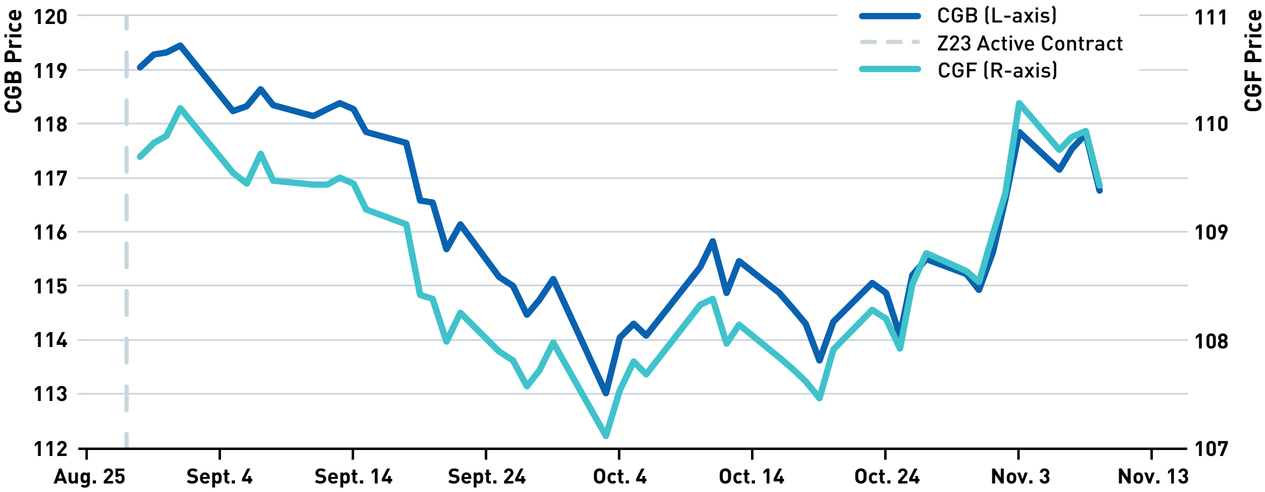
Model driven portfolios appear to be very involved in the CGB (10-year) contract and remain short contracts but don't seem to be involved at any other points of the futures yield curve in Canada at this time. They may have shifted outward on the curve during the long-end selloff, effectively shifting risk from the 5-year point to the 10-year point. Their presence in CGB will probably lead to significant buying pressure on CGBZ23, relative to the new contract, early in the roll.

Speculative Positioning

Bond prices have fluctuated wildly this quarter, even by recent standards, but prices are only slightly lower in both the active Five-Year Government of Canada Bond Futures (CGF™) and CGB (10-year) contracts. Figure 1 shows the puzzle we'll try to solve during the roll this quarter: Have speculative, momentum driven, clients been washed out of short positions accumulated during the extreme selloff in September? While the reversal in early October was abrupt, the well-established trend was broken up by two more minor reversals which may be important to some momentum models.

FIGURE 1

CGF & CGB Price, Z23s

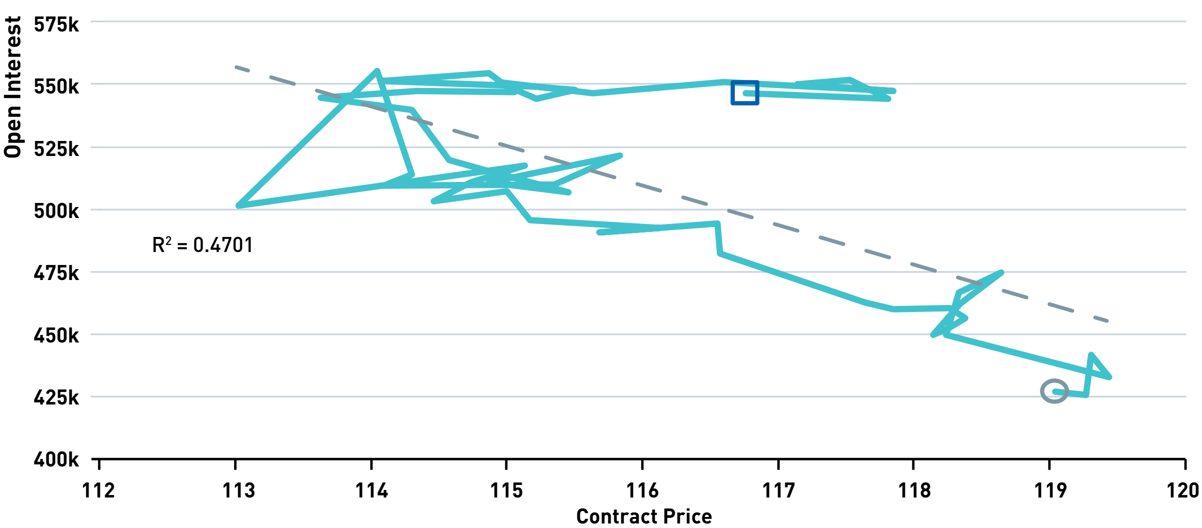


Source: Montréal Exchange

Since the CGB contract has one of its semi-annual changes to the cheapest-to-deliver bond this month and has, by far, the largest open interest of any of the Canadian contracts, let's focus on the 10-year contract. We chart open interest and price level for CGBZ23 in Figure 2 where the r-squared of the regression is a relatively high 0.47. Further, during the selloff (a move left on the x-axis), positions were being built steadily and, as can easily be observed by the constant open interest at 550,000, these positions don't seem to have been removed despite a trend reversal. Open interest is still as high as it was when the trend was broken.

FIGURE 2

CGBZ23 Price versus Open Interest



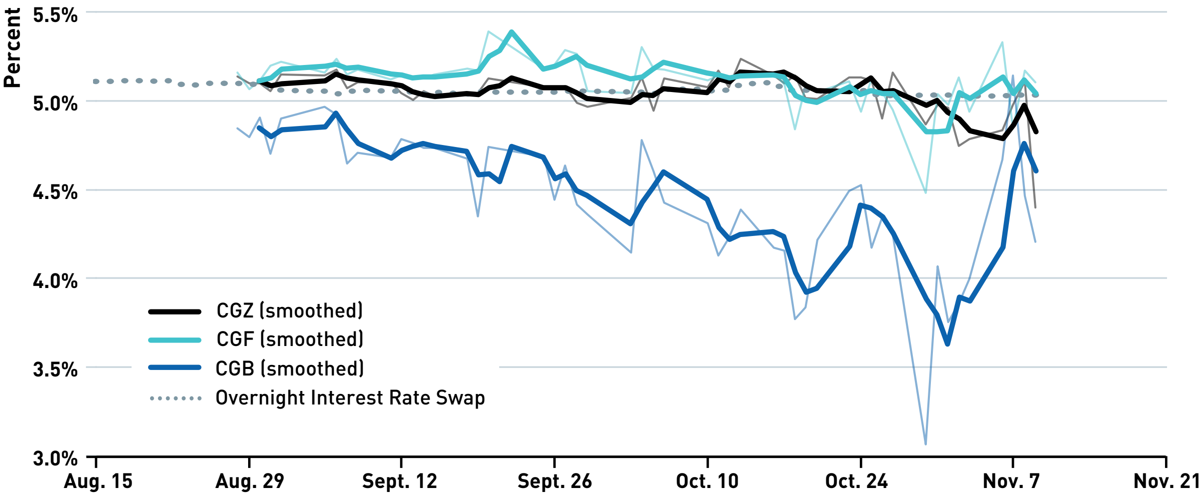
Source: Montréal Exchange

We conclude that speculators are still in short positions, although we are somewhat puzzled why a reversal of several dollars of the CGB price didn't cause them to reduce risk. Of course, it is possible that these accounts did reduce risk but that their closing trades were exactly offset by opening trades from other clients… but we doubt such neat coincidences occur very often.

Figure 3, however, gives us pause for thought on our conclusion that speculative trend followers, often oblivious to the relative value difference between futures contracts and bonds since they can only use the former, remain in their positions. For much of the CGBZ23 contract life, it has traded very cheap relative to bonds with an implied repo valuation well below what would be considered fair value[1]. This is often a legacy of extreme liquidity demands from clients to sell contracts but the "cheap relative to bonds" story ended rather abruptly, as can be observed in the figure, at the very end of October; a date that exactly corresponds to the final push (for now) of the October bond rally. However, it also exactly corresponds to the accounting year end for all domestic Canadian banks and their bond trading desks which muddies the waters even more. We thus believe only that there is a fairly strong likelihood that most trend following algorithms that are dealing in CGB contracts remain short contracts and may be anxious to buy back these positions during the roll.

FIGURE 3

Implied Repo: CGZ, CGF, CGB



Source: BMO Capital Markets[i] Fixed Income Sapphire database, Montréal Exchange

Correlations between price and open interest were insignificant for the Two-Year Government of Canada Bond Futures (CGZ™) and the 30-Year Government of Canada Bond Futures (LGB™) contracts this quarter. Although we believe some market participants have shifted from a 5-year focus, prevalent for at least the past two quarters, to a trading focus that is farther out the yield curve, correlation dynamics for CGF were similar to, but weaker than, those of CGB contracts.

Cheapest-to-Deliver Switch

Although yields have been volatile since we last wrote about the roll in August, 10-year and 30-year yields were only about 20 basis points higher on November 9th than they were in mid-August. In addition, 2-year and 5-year benchmark yields have fallen during the quarter. As a result, there appears to be no notable increase in switch risk for the March 2024 contracts versus the December 2023 contracts[2].

Three important factors continue to keep switch risk at bay for Canadian physical delivery fixed income contracts. First, bond yields are still at least a hundred basis points lower than the conventional "switch point" of 6% despite almost two years of rising interest rates. Second, Canadian contracts, in contrast to US treasury bond contracts traded on CME, don't usually have extreme differences in coupon rates for bonds that fall into the potential delivery basket. Deliverable bonds in Canada, with some potential exceptions, must have been issued as an original 5-year maturity bond to qualify for the CGF (5-year) delivery basket, for example[3]. As such the bonds competing for CTD status are almost never extremely old bonds from entirely different interest rate regimes as can happen when an old 30-year US treasury bond falls into the delivery basket for the Treasury Note (TY) with just seven to eight years remaining to maturity. And finally, the tendency for the yield curve to invert at levels much lower than the US curve, especially at and past the 10-year point, ensures that newer bonds with higher coupons probably won't become cheaper to deliver than the qualifying bond of shortest maturity.

1 An abnormally low implied repo is equivalent to an abnormally high gross basis.

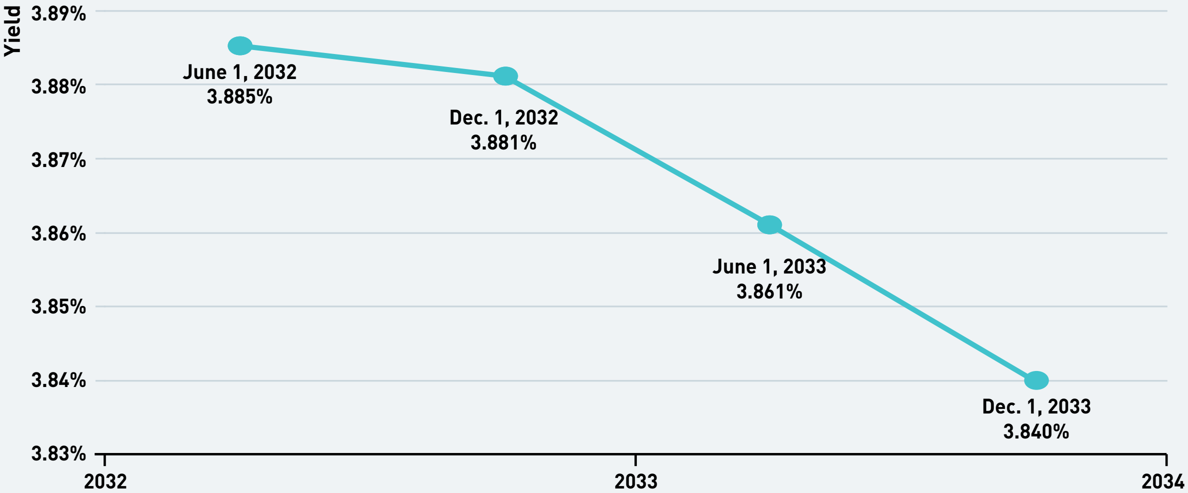
2 We published an update on switch risk during the rapid steepening in October.

3 Older bonds can qualify for the delivery basket in Canada only if they have been re-opened in reasonable size (see the contract specifications for details) within the 12-months prior to the delivery month. Historically, this is rare and will become even more rare now that the 3-year benchmark, which had occasionally qualified for the CGZ delivery basket, has been cancelled.

We direct readers to Figure 4, a visual depiction of the current yields on the qualifying bonds for delivery into the CGBH24 (10-year) contract. The inversion of this segment of the yield curve ensures that no switch of CTD can occur unless 1) yields rise to OVER 6% or 2) yields rise TO 6% AND the yield curve steepens to essentially flat levels. Inverted curves make switches considerably more unlikely.

FIGURE 4

CGBH24 (10-year) Deliverable Basket



Source: BMO Capital Markets[i] Fixed Income Sapphire database

Since the CGB roll is likely to attract a lot of attention this quarter, we show in Figure 5 the combinations of yields and steepness between the June 2032 and December 2032 bonds that would be required to achieve an unlikely switch to a bond with longer maturity than the June 2032. Both the 100+ basis points between current yields and 6% as well as the almost 8 basis points of steepening with no change in the overall level of yields seem unlikely even after recent market moves.

FIGURE 5

	Jun32 Yield															
SLOPE	3.29%	3.44%	3.59%	3.74%	**3.89%**	4.09%	4.29%	4.49%	4.69%	4.89%	5.09%	5.29%	5.49%	5.69%	5.89%	6.09%
-5.0	Jun32	Jun32	Jun32	Jun32	**Jun32**	Jun32	Jun32	Jun32	Jun32	Jun32	Jun32	Jun32	Jun32	Jun32	Jun32	Jun32
-4.1	Jun32	Jun32	Jun32	Jun32	**Jun32**	Jun32	Jun32	Jun32	Jun32	Jun32	Jun32	Jun32	Jun32	Jun32	Jun32	Jun32
-3.2	Jun32	Jun32	Jun32	Jun32	**Jun32**	Jun32	Jun32	Jun32	Jun32	Jun32	Jun32	Jun32	Jun32	Jun32	Jun32	Jun32
-2.2	Jun32	Jun32	Jun32	Jun32	**Jun32**	Jun32	Jun32	Jun32	Jun32	Jun32	Jun32	Jun32	Jun32	Jun32	Jun32	Jun32
-1.3	Jun32	Jun32	Jun32	Jun32	**Jun32**	Jun32	Jun32	Jun32	Jun32	Jun32	Jun32	Jun32	Jun32	Jun32	Jun32	Jun32
-0.4	**Jun32**	**Jun32**	**Jun32**	**Jun32**	**Jun32**	**Jun32**	**Jun32**	**Jun32**	**Jun32**	**Jun32**	**Jun32**	**Jun32**	**Jun32**	**Jun32**	**Jun32**	**Jun32**
1.7	Jun32	Jun32	Jun32	Jun32	**Jun32**	Jun32	Jun32	Jun32	Jun32	Jun32	Jun32	Jun32	Dec32	Dec32	Dec32	Dec32
3.8	Jun32	Jun32	Jun32	Jun32	**Jun32**	Jun32	Jun32	Jun32	Jun32	Dec32	Dec32	Dec32	Dec32	Dec32	Dec32	Dec32
5.8	Jun32	Jun32	Jun32	Jun32	**Jun32**	Jun32	Dec32	Dec32	Dec32	Dec32	Dec32	Dec32	Dec32	Dec32	Dec32	Dec32
7.9	Jun32	Jun32	Dec32	Dec32	**Dec32**	Dec32	Dec32	Dec32	Dec32	Dec32	Dec32	Dec32	Dec32	Dec32	Dec32	Dec32
10.0	Dec32	Dec32	Dec32	Dec32	**Dec32**	Dec32	Dec32	Dec32	Dec32	Dec32	Dec32	Dec32	Dec32	Dec32	Dec32	Dec32

An exception currently is the LGB contract where the 2055, the current cheapest-to-deliver bond due to its considerably higher coupon than the 2053, is already a longer maturity bond. In this case, further inversion of the yield curve would make the 2055 more expensive to deliver relative to the 2053 so more inversion increases the probability of a CTD switch. However, this possibility remains remote given the very large additional inversion required to achieve the switch. Figure 6 depicts the yield and slope combinations that would result in a switch of CTD back to the 2053 bond.

FIGURE 6

	Dec55 Yield															
SLOPE	3.07%	3.22%	3.37%	3.52%	**3.67%**	3.87%	4.07%	4.27%	4.47%	4.67%	4.87%	5.07%	5.27%	5.47%	5.67%	5.87%
-20.0	Dec53	Dec53	Dec53	Dec53	**Dec53**	Dec53	Dec53	Dec53	Dec53	Dec53	Dec53	Dec53	Dec53	Dec53	Dec53	Dec53
-16.7	Dec55	Dec55	Dec55	Dec53	**Dec53**	Dec53	Dec53	Dec53	Dec53	Dec53	Dec53	Dec53	Dec53	Dec53	Dec53	Dec53
-13.3	Dec55	Dec55	Dec55	Dec55	**Dec55**	Dec55	Dec55	Dec53	Dec53	Dec53	Dec53	Dec53	Dec53	Dec53	Dec53	Dec53
-10.0	Dec55	Dec55	Dec55	Dec55	**Dec55**	Dec55	Dec55	Dec55	Dec55	Dec53	Dec53	Dec53	Dec53	Dec53	Dec53	Dec53
-6.6	Dec55	Dec55	Dec55	Dec55	**Dec55**	Dec55	Dec55	Dec55	Dec55	Dec55	Dec55	Dec55	Dec53	Dec53	Dec53	Dec53
-3.3	**Dec55**	**Dec55**	**Dec55**	**Dec55**	**Dec55**	**Dec55**	**Dec55**	**Dec55**	**Dec55**	**Dec55**	**Dec55**	**Dec55**	**Dec55**	**Dec55**	**Dec53**	**Dec53**
0.4	Dec55	Dec55	Dec55	Dec55	**Dec55**	Dec55	Dec55	Dec55	Dec55	Dec55	Dec55	Dec55	Dec55	Dec55	Dec55	Dec55
4.0	Dec55	Dec55	Dec55	Dec55	**Dec55**	Dec55	Dec55	Dec55	Dec55	Dec55	Dec55	Dec55	Dec55	Dec55	Dec55	Dec55
7.7	Dec55	Dec55	Dec55	Dec55	**Dec55**	Dec55	Dec55	Dec55	Dec55	Dec55	Dec55	Dec55	Dec55	Dec55	Dec55	Dec55
11.3	Dec55	Dec55	Dec55	Dec55	**Dec55**	Dec55	Dec55	Dec55	Dec55	Dec55	Dec55	Dec55	Dec55	Dec55	Dec55	Dec55
15.0	Dec55	Dec55	Dec55	Dec55	**Dec55**	Dec55	Dec55	Dec55	Dec55	Dec55	Dec55	Dec55	Dec55	Dec55	Dec55	Dec55

Relative Value of the CTD Bonds

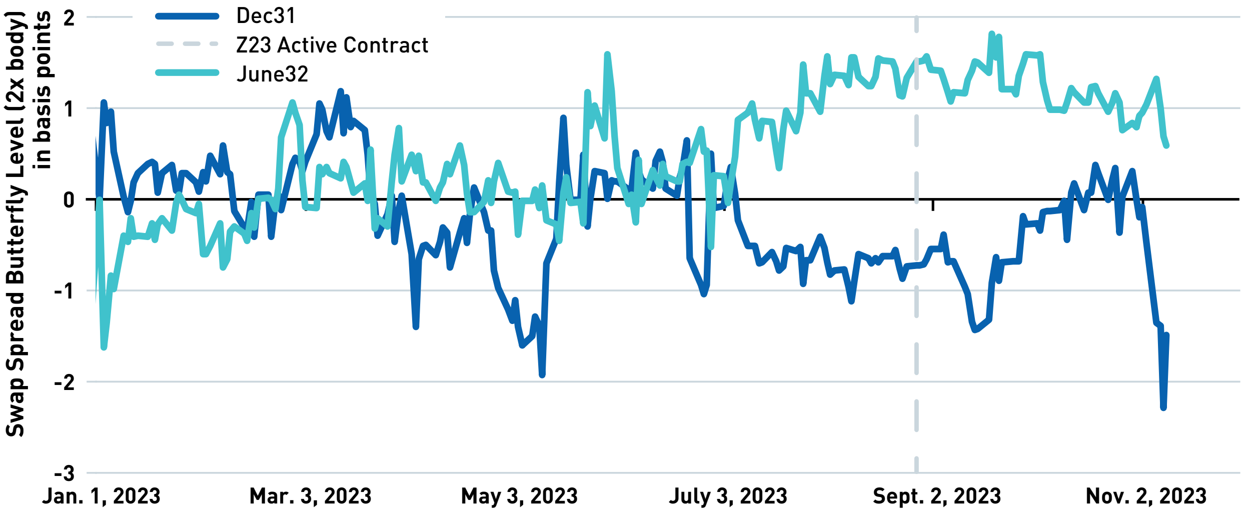
The end of May and November have been interesting roll periods recently since the highly utilized CGB contract has a CTD change during those rolls. As is normal every quarter, there is also a change of CTD for CGZ (2-year) but the price dynamic on that roll seems to attract a lot less interest.

The March 2024 CGB contract will be the first for which the June 2032 bond is the (very likely) CTD as the December 2023 contract bids goodbye to the 6-month run of December 2031 bonds being the cheapest-to-deliver. Notably, the December 2031 appeared to be ending its time as CTD pricing very rich versus neighbour bonds, as shown in Figure 7 which depicts our preferred measure of bond relative value, the swap spread butterfly. Readers are cautioned to verify current pricing as the recent richening was drastic and may not remain by the publishing date. However, unlike the December 2031, the June 2032 saw little richening and may reflect some harvestable value as it moves rapidly into CTD status for the CGB24 contract.

The richening of December 2031 versus its neighbours was no doubt related to the extreme rally that occurred early in November in 10-year bonds; excess demand for CGB likely drove the CTD for that contract rich versus peers as dealer desks struggled to accommodate the demand. Post-roll this richness is unlikely to persist as the December 2031 is headed into the long decline to obscurity that faces all Canada 10-year bonds after they gradually fall from the auction bond to the benchmark bond to the cheapest-to-deliver bond and then to... a very far off-the-run old 10-year bond.

FIGURE 7

Dec31 v. Jun32 Swap Spread Butterfly



Source: BMO Capital Markets[i] Fixed Income Sapphire database

Key Metrics & Expectations

We show some Key Metrics of importance to managers with December 2023 positions in Figure 9, Figure 10, Figure 11, and Figure 12. We used closing prices on November 9th and have reduced the number of CTD bonds outstanding on the CGB contract by the holdings of the Bank of Canada[4]. As always, the back contracts have not yet traded so we use the exchange settlement price which may or may not be a tradeable price at this time.

CGBZ23 to CGBH24

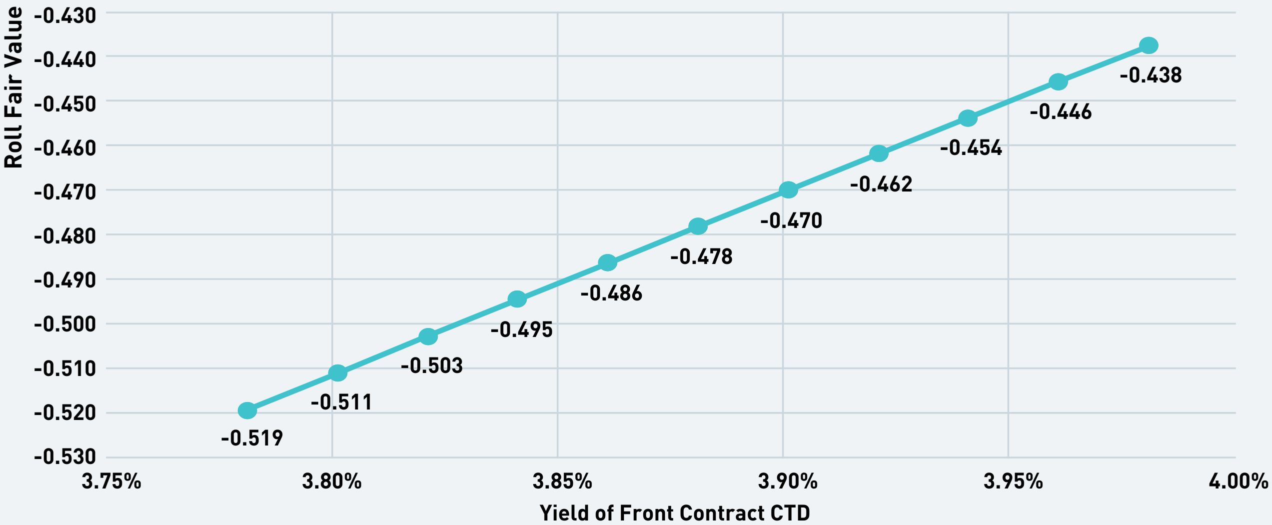
Most client interest will probably be in the CGB roll this quarter as there is a change of cheapest-to-deliver bond and, as usual, open interest is very substantial. Due to the higher coupon on the new CTD relative to the old one, the DV01 extension will not be very substantial at just under 3.5%. Relative to other rolls where the extension is often more than 8%, roll pricing will be more stable intra-day unless recent interest rate volatility continues. Volatile days of wild swings upward and/or downward in overall interest rate levels make the fair value of the roll unstable and discourage clients from leaving standing orders, thus reducing liquidity, and amplifying intraday supply and demand imbalances for each contract during the roll period. Figure 8 shows the potential for the fair value[5] of the CGB roll to fluctuate by up to 6 cents around a midpoint on volatile days.

4 The Bank of Canada lends its holdings, so the bonds are still available to deliver. The Bank of Canada holds a small amount of the CTD for both the December and March CGB contract but none of the bonds that are CTD for the other contracts.

5 For fair value of the roll in this test, we assume the wildcard option in the September and December contracts have equal value which is, in our view and experience, a mostly safe assumption before either of the delivery periods begin.

FIGURE 8

CGBZ23/CGBH24 Roll Fair Value v. Rate Level, Nov 24/23



On our price capture date, CGBZ23 was trading at less than fair value by about 1.5 cents per contract when compared to the Overnight Interest Rate Swap curve, even after accounting for the 4.8 cents of value that the CGB wildcard option represents[6]. As recently as three days before, it had been trading relatively rich compared to its CTD bond, so this observation is obviously very dynamic at this time. Short positions should probably try to roll early if they are concerned about relative value.

We believe trend following models are still short contracts this quarter, as discussed above, and probably at full or nearly full risk allocations despite the recent rally. If that is the case, there should be early pressure to buy December contracts by speculative clients, who are typically eager to roll and who generally ignore relative pricing versus bonds. Combined with a cheap valuation, if it persists into the roll period, there should be substantial pressure to richen CGBZ23 relative to CGBH24. If this dynamic plays out, December contracts should appreciate relative to March contracts at busy times during the roll period as dealers struggle to meet liquidity demands.

FIGURE 9

CGB Key Metrics

9-NOV-2023	CGBZ23	CGBH24	DIFFERENCE
Closing Price	116.760	117.230	-0.470
Cheapest-to-Deliver (CTD)	CAN 1.500% Dec 2031	CAN 2.000% Jun 2032	Change!
CTD Conversion Factor	0.7174	0.7426	
Probable Delivery Date	01-Dec-23	01-Mar-24	
Gross Basis (cents)	-8.4	-65.3	
Net Basis (cents)	4.3	4.7	
Implied Repo (to Prob. Delivery)	3.85%	4.85%	
DV01/100 of CTD	6.2	6.6	7.1%
Open Interest	546,271	0	
CTD Outstanding (millions)	28,352	23,405	-4,947
Front OI Multiple of CTD	1.9x	2.3x	

Source: BMO Capital Markets[i] Fixed Income Sapphire database, Montréal Exchange

6 Buyers of futures contracts need a lower price to compensate them for going short the wildcard (and any other) embedded option.

CGZZ23 to CGZH24

Although there is a CTD change for CGZ (2-year) contracts this quarter, as there is every quarter, there is unlikely to be much action around the roll. Typically, nearly 10% of all positions in CGZ are taken into delivery indicating a clientele that is relatively indifferent between closing positions and taking/making delivery. We believe many clients are using this contract as a bond substitute, few speculative positions exist among algorithm driven models, and that many managers using this category are able (and willing) totake or make delivery of bonds. The combined effect means the roll price should rarely move too far from fair value.

The DV01 of the contract will extend by almost 14% but that is normal for this contract. In fact, the DV01 extension is slightly less than normal due to the considerably higher coupon on the new CTD. One interesting item to note is that, at 4.5%, the CGZH24 contract has a CTD with a coupon only 50 basis points below the current Bank of Canada target rate. If a cycle of monetary loosening should begin much earlier than is currently forecast, CGZH24 would be the first contract to switch from negative basis to positive. An early cycle of monetary stimulus is not a baseline expectation for any economist that we are aware of currently.

Front end yields have been, somewhat surprisingly, more stable than yields farther out the yield curve recently and with a "higher for longer" mentality sinking into bond markets, there appears to be less belief that the Bank of Canada target rate is in play. Nonetheless, managers should be careful leaving standing orders this quarter as the CGZ roll fair value pricing may fluctuate by up to 2 cents intraday.

We have no insight on trend models this quarter in CGZ as there was no correlation between open interest and prices as well as much less identifiable and sustained price direction.

FIGURE 10

CGZ Key Metrics

9-NOV-2023	CGZZ23	CGZH24	DIFFERENCE
Settle Price	102.175	102.815	-0.640
Cheapest-to-Deliver (CTD)	CAN 3.50% Aug 2025	CAN 4.50% Nov 2025	Change!
CTD Conversion Factor	0.9608	0.9765	
Probable Delivery Date	01-Dec-23	01-Mar-24	
Gross Basis (cents)	-7.7	-47.9	
Net Basis (cents)	0.7	-32.5	
Implied Repo (to Prob. Delivery)	4.88%	6.06%	
DV01/100 of CTD	1.6	1.9	15.5%
Open Interest	130,489	2	
CTD Outstanding (millions)	19,000	19,750	750
Front OI Multiple of CTD	0.7x	0.7x	

Source: BMO Capital Markets[i] Fixed Income Sapphire database, Montréal Exchange

CGFZ23 to CGFH24

There is no CTD change for the 5-year contract (CGF) on the roll to CGFH24. The value of the wildcard option wasn't really reflected in the price of the contract this quarter, even though we calculate that the option does have a value of about one cent per contract, making CGFZ23 about one cent rich as of November 9th when we examined prices. Not many clients have tried to extract any value from this option in the past as better opportunities have always been available in CGB contracts so, at least in our recent observations, the CGF wildcard option is often available for a zero or even slightly negative price.

As mentioned earlier, some speculative trading that was once centred around the 2-year and 5-year points seems to have moved out the curve during the September selloff. Correlation between open interest and CGFZ23 prices this month was only mediocre, and we suspect there is not a lot of risk applied to the 5-year point by speculative models at this time. Delivery will be early, of course, and some demand pressure on the roll may come from long positions that wish to avoid the inevitable early delivery.

FIGURE 11
CGF Key Metrics

9-NOV-2023	CGFZ23	CGFH24	DIFFERENCE
Closing Price	109.430	109.220	0.210
Cheapest-to-Deliver (CTD)	CAN 3.250% Sep 2028	CAN 3.250% Sep 2028	No change
CTD Conversion Factor	0.8877	0.8929	
Probable Delivery Date	01-Dec-23	01-Mar-24	
Gross Basis (cents)	-7.7	-46.3	
Net Basis (cents)	-0.1	2.2	
Implied Repo (to Prob. Delivery)	5.02%	4.94%	
DV01/100 of CTD	4.3	4.3	0.0%
Open Interest	126,917	0	
CTD Outstanding (millions)	20,000	20,000	0
Front OI Multiple of CTD	0.6x	0.6x	

Source: BMO Capital Markets[i] Fixed Income Sapphire database, Montréal Exchange

LGBZ23 to LGBH24

The LGB (30-year) contract has no delivery period or first/last notice dates so there is no threat of early delivery to compel investors to roll to the new contract before the end of November. Investors have recognized this lack of urgency and sometimes keep positions open several days or weeks past the first delivery date for the other contracts.

Since there is no change to the CTD for the LGBH24 contract versus the December, and no wildcard option to contend with, roll pricing will continue to be quite stable. We doubt a Bank of Canada decision comes into the calculus during the roll so there should be little to alter the fair value.

FIGURE 12
LGB Key Metrics

9-NOV-2023	LGBZ23	LGBH24	DIFFERENCE
Closing Price	153.450	153.700	-0.250
Cheapest-to-Deliver (CTD)	CAN 2.750% Dec 2055	CAN 2.750% Dec 2055	No change
CTD Conversion Factor	0.5400	0.5412	
Delivery Date	18-Dec-23	19-Mar-24	
Gross Basis (cents)	-15.3	-47.2	
Net Basis (cents)	-1.8	2.7	
Implied Repo (to Delivery)	5.23%	4.96%	
DV01/100 of CTD	16.5	16.5	0.0%
Open Interest	931	0	
CTD Outstanding (millions)	9,250	9,250	0
Front OI Multiple of CTD	0.0x	0.0x	

Source: BMO Capital Markets[i] Fixed Income Sapphire database, Montréal Exchange

September Delivery Summary

The September delivery period didn't go well for anyone trying to capitalize on wildcard options in Canada even though a relatively large portion of contracts were taken into delivery. CGZ (2-year) saw over 8,000 contracts delivered and almost all gave notice on the first notice date, with a few sporadic positions delivered later in the month. The same is true for CGF (5-year) where no one hung on long enough to capitalize on any of the rare late day rallies to exercise their wildcard option.

CGB (10-year) wildcards were a popular trade in U23 contracts with over 12,000 contracts taken into delivery. We suspect nearly all participants were very disappointed with the lack of opportunities presented by the market as nearly no one delivered on optimal days and almost every position had already delivered before a good opportunity occurred on November 18th.
246 contracts gave notice that day and took home a theoretical profit of just less than $5,000. Other, less attractive opportunities did occur and were capitalized upon, but for far less gains than wildcard plays are usually able to capture.

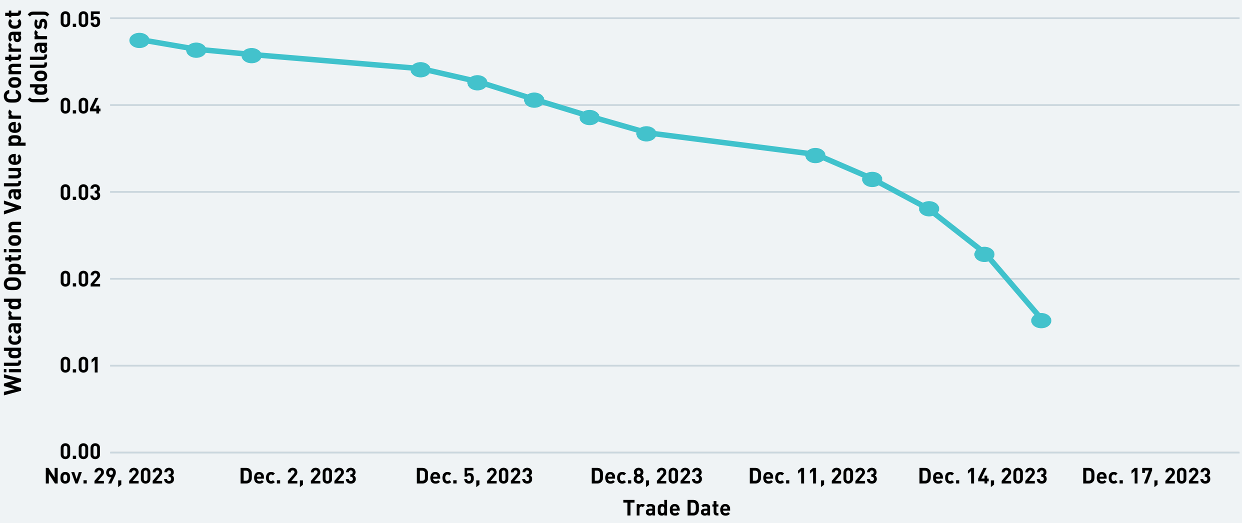
Wildcard Option Value

The LGB (30-year) contract has no embedded wildcard option and the wildcard option embedded in the CGZ (2-year) contract, has almost no value due to the very large conversion factors for the CTD every quarter.

We calculate the value of the CGFZ23 wildcard option at less than one cent per CGF contract, once again lower than most past quarters due to slightly lower afternoon volatility. This option value was not reflected in the price of the contract during much of September and October as the implied repo of the contract was greater than the equivalent short-term rate in other markets. In other words, the embedded wildcard in CGFZ23 was available at a negative price for multiple days. However, this option play is not popular and almost every open position is usually closed on the first possible day of the delivery period.

Long CGBZ23 positions going into delivery could easily experience a Wildcard exercise against their position if it remains open in December. Short positions proved patient in September and waited through about a week and a half of negative carry before finding some marginal opportunities to give delivery notice. We calculate the value of the CGB wildcard option embedded in the December contract to be about 4.7 cents per CGB contract, lower than usual due to calendar effects which dictate only 13 potential days for wildcard exercise this quarter. The option will decay (Figure 13) a little faster as well due to a slightly smaller number of delivery days this quarter.

FIGURE 13
CGBZ23 Wildcard Option Value



LOOKING FORWARD & Opportunities

- There is a Bank of Canada rate decision on December 6th and a Federal Reserve announcement on the 13th, both during the delivery period. Neither has much potential to affect the roll unless overnight rates come back into play. The Federal Reserve won't be a factor this quarter as the announcement comes on the last trading day when there is no longer any wildcard option embedded in these contracts.
- A higher coupon on the CGBH24 CTD versus the Z23 means wildcard options embedded in CGB contracts will become less attractive.
- Many attractive opportunities are occurring between Canadian and US yields, for those seeking relative value ideas. We will soon publish a short piece demonstrating how to identify these opportunities, mostly concentrated at maturities longer than 5 years right now, on the Montréal Exchange website.

Kevin Dribnenki writes about fixed income derivatives and opportunities in Canadian markets. He spent over 10 years managing fixed income relative value portfolios as a Portfolio Manager first at Ontario Teachers' Pension Plan and then BlueCrest Capital Management. During that time he managed domestic cash bond portfolios as well as international leveraged alpha portfolios and has presented at several fixed income and derivatives conferences. He received a BA in Economics from the University of Victoria, an MBA from the Richard Ivey School of Business, and holds the Chartered Financial Analyst designation.

For more information

irderivatives@tmx.com

m-x.ca/futures

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