

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

222-H23

Roll Update

November 2022



QUARTERLY ROLL Summary

First Notice day is November 29th for the December contracts which would normally mean the roll should start on November 24th and finish on the 26th or 27th, leaving a reasonable buffer before the delivery period begins. However, with the US Thanksgiving holiday on the 24th and, in all likelihood, many market participants taking the following day as a bridge to the weekend, there is a good argument for the roll to begin a day or two early, especially in the Ten-Year Government of Canada Bond Futures (CGB™) contract which has good international participation.

Once again, this quarter, every physical delivery fixed income contract listed on Montréal Exchange will be negative carry during delivery and, barring exceptional circumstances such as value to the Wildcard option in CGB and the 30-Year Government of Canada Bond Futures (LGB™), short positions will avoid the negative carry by delivering early. This situation will probably continue for multiple quarters as the Bank of Canada holds the target rate higher than coupon rates on the 5-year, 10-year, and 30-year cheapest-to-deliver bonds. By now, investors are aware that contracts will price assuming delivery will occur (which it probably will... although it is still at the discretion of the owner of the short position) on or near the First Delivery date, rather than on the Last Delivery date.

The Two-Year Government of Canada Bond Futures (CGZ™) and CGB (10-year) contracts trade close to fair value currently when the Wildcard value is incorporated in the CGB price. The Five-Year Government of Canada Bond Futures (CGF™) contract trades cheap for no apparent reason as the Wildcard has very little value in that contract. LGB (30-year), as has become normal, trades very cheap to the cheapest-to-deliver bond, a phenomenon that should not be repeated in future as the specifications are changed starting with the March 2023 LGB contract¹.

Little can be said about speculative positioning except that a lot of risk was probably removed by trend following models responding to the end of a strong selloff in mid-October. That risk has probably not been replaced.

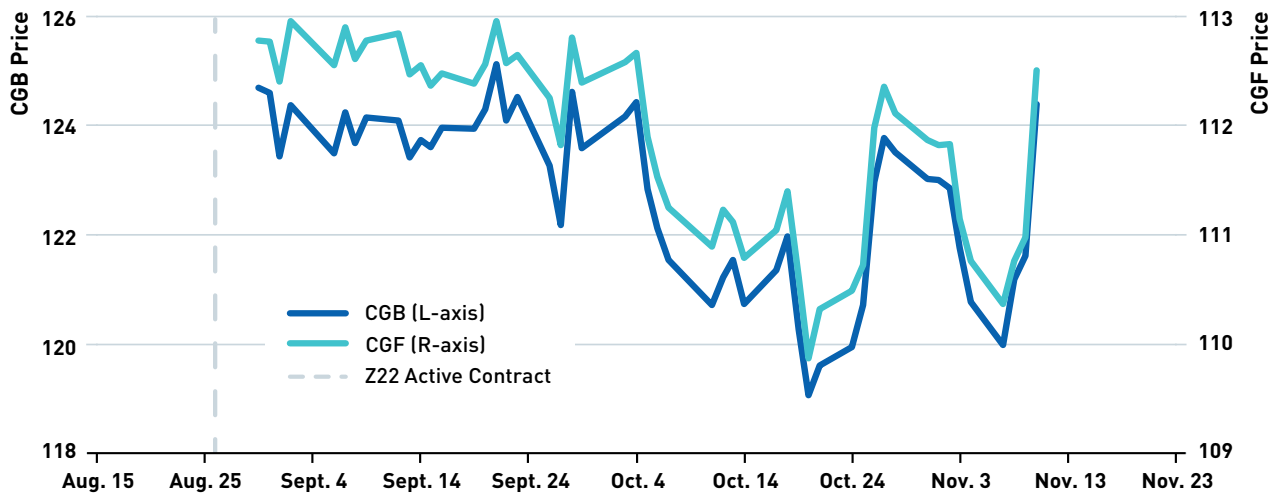
¹ See the LGBZ22 to LGBH23 section of this article for more details.

Speculative Positioning

Trend following models made good profits this quarter as futures prices trended downward by up to \$4 for the CGB contract until mid-October, as shown in Figure 1. The middle of last month brought, we suspect, a very serious de-risking as futures prices reversed a couple of times by over \$2. That price action probably caused many models to reduce risk positions in Canadian futures, and other fixed income products as well, so we suspect speculative accounts are now very lightly positioned.

No trend following model would include the LGB contract currently, but there is some possibility that CGZ is now incorporated in some models as the open interest rises.

FIGURE 1
CGF & CGB Price, Z22s

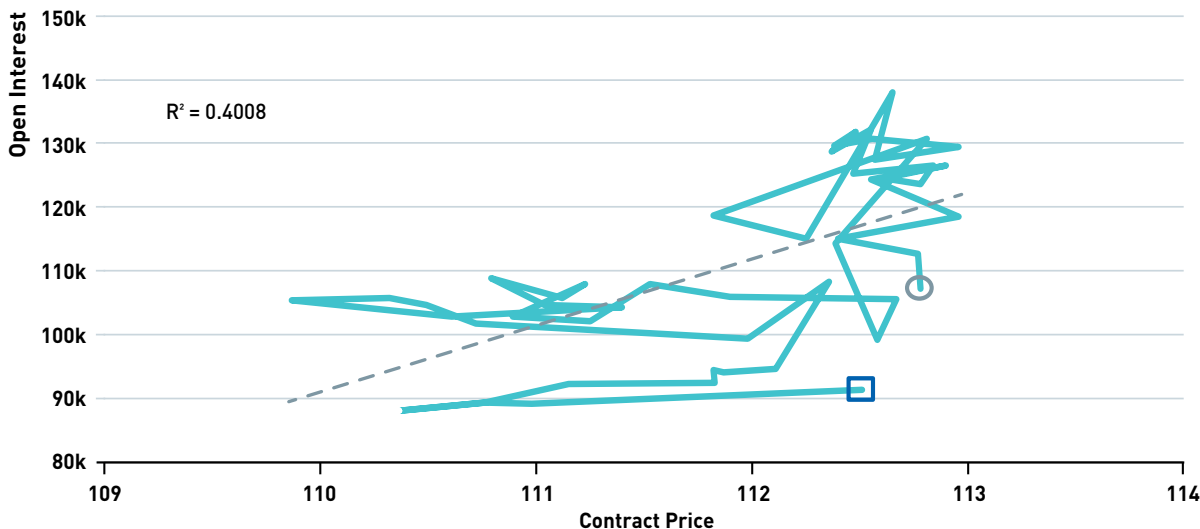


Source: Montréal Exchange

Figure 2 shows that open interest on CGFZ22 [5-year] has correlated reasonably closely with the price this quarter, but also confirms our suspicion that a lot of risk has been taken off the table as open interest has fallen from 130,000 contracts to 90,000 since the selloff trend was broken. Strangely, CGF now shows more correlation to prices than does CGB, an interesting change that warrants further study as the opposite is usually true.

An r-squared above 0.40, for a regression of this contract’s open interest against price during the life of the contract, points either to rising open interest in a bullish market – an indication of trend models adding to long positions as the trend is more firmly established – or the opposite, both good predictors of speculative account involvement, risk allocation, and positioning. With open interest so much lower than it was mid-contract, we conclude that a large amount of risk was removed by most models as the selloff ended abruptly and has not been added back. CGBZ22 open interest is also almost 100,000 below the highs it reached when the selloff was still a strong trend.

FIGURE 2
CGFZ22 Price versus Open Interest



Source: Montréal Exchange

Despite the looming threat of early delivery, we suspect there aren't a lot of speculative positions left to influence the roll from a predictable direction this quarter.

Cheapest-to-Deliver Switch

Higher interest rates have made the possibility of a switch between bonds in the delivery basket more probable, but it remains implausible in reasonable scenarios.

Earlier this year we wrote that market conditions had created some chance of a switch in the CGB contract (CGBU22 and CGBZ22 contracts) due to a 0.5% coupon cheapest-to-deliver (CTD) bond while the next bond issued has a coupon of 1.5%. The higher probability of a switch didn't come to pass as rates didn't rise high enough nor did the curve steepen enough to make it happen. The CGBH23 becoming an active contract in late November will result in considerably less switch risk for this contract as the coupon on the new CTD bond is much higher ensuring the June 2031 is the shortest duration bond which is usually favored to be the cheapest-to-deliver bond.

Although remote, the chance of a CTD switch is still probably higher in CGB contracts than in any of the others. Figure 3 shows the conditions that would result in the December 1.5% 2031 becoming cheaper to deliver than the June 1.5% 2031 for the CGBH23, which would be considered the "normal" CTD bond since it has the shortest term to maturity. As shown in Figure 3, the 10-year point would need a drastic steepening AND selloff to cause the CTD to switch. We judge those conditions extremely remote for CGB and, as usual, even more remote for the CGF (5-year), CGZ (2-year), and LGB (30-year) contracts.

FIGURE 3

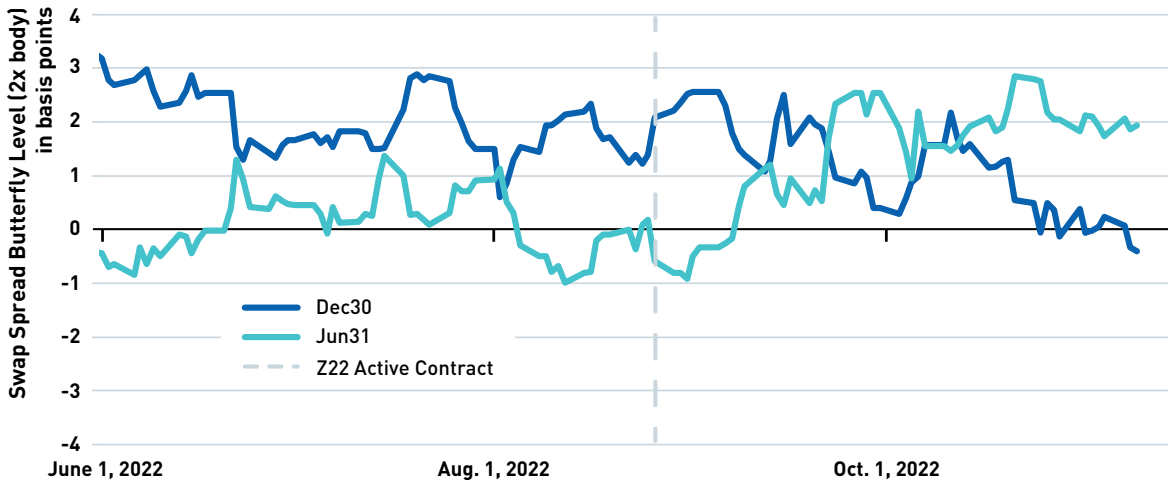
		Jun31 Yield															
SLOPE		2.55%	2.70%	2.85%	3.00%	3.15%	3.40%	3.65%	3.90%	4.15%	4.40%	4.65%	4.90%	5.15%	5.40%	5.65%	5.90%
-2.0	Jun31	Jun31	Jun31	Jun31	Jun31	Jun31	Jun31	Jun31	Jun31	Jun31	Jun31	Jun31	Jun31	Jun31	Jun31	Jun31	Jun31
-1.8	Jun31	Jun31	Jun31	Jun31	Jun31	Jun31	Jun31	Jun31	Jun31	Jun31	Jun31	Jun31	Jun31	Jun31	Jun31	Jun31	Jun31
-1.5	Jun31	Jun31	Jun31	Jun31	Jun31	Jun31	Jun31	Jun31	Jun31	Jun31	Jun31	Jun31	Jun31	Jun31	Jun31	Jun31	Jun31
-1.3	Jun31	Jun31	Jun31	Jun31	Jun31	Jun31	Jun31	Jun31	Jun31	Jun31	Jun31	Jun31	Jun31	Jun31	Jun31	Jun31	Jun31
-1.0	Jun31	Jun31	Jun31	Jun31	Jun31	Jun31	Jun31	Jun31	Jun31	Jun31	Jun31	Jun31	Jun31	Jun31	Jun31	Jun31	Jun31
-0.8	Jun31	Jun31	Jun31	Jun31	Jun31	Jun31	Jun31	Jun31	Jun31	Jun31	Jun31	Jun31	Jun31	Jun31	Jun31	Jun31	Jun31
2.4	Jun31	Jun31	Jun31	Jun31	Jun31	Jun31	Jun31	Jun31	Jun31	Jun31	Jun31	Jun31	Jun31	Jun31	Jun31	Dec31	Dec31
5.5	Jun31	Jun31	Jun31	Jun31	Jun31	Jun31	Jun31	Jun31	Jun31	Jun31	Jun31	Jun31	Jun31	Dec31	Dec31	Dec31	Dec31
8.7	Jun31	Jun31	Jun31	Jun31	Jun31	Jun31	Jun31	Jun31	Jun31	Jun31	Dec31	Dec31	Dec31	Dec31	Dec31	Dec31	Dec31
11.8	Jun31	Jun31	Jun31	Jun31	Jun31	Jun31	Jun31	Jun31	Dec31	Dec31	Dec31	Dec31	Dec31	Dec31	Dec31	Dec31	Dec31
15.0	Jun31	Jun31	Jun31	Jun31	Jun31	Dec31	Dec31	Dec31	Dec31	Dec31	Dec31	Dec31	Dec31	Dec31	Dec31	Dec31	Dec31

Relative Value of the CTD Bonds

For some contracts, a change in the bonds that qualify for the delivery basket can result in relative value changes in the bond basket, and that appears to have happened via the CGB contract this quarter as the June 2031 bond will become CTD for the CGBH23 contract while the December 2030 bond will fall out of the delivery basket.

As shown below in Figure 4, the swap spread butterflies, our preferred measure of relative value between bonds, for the December 2030 and June 2031 bonds have diverged a couple of basis points already, with the December 2030 becoming historically rich versus its neighbouring bonds and the June 2031 becoming relatively cheap. The two butterfly measures have a tendency to move in opposite directions as a richening of the butterfly body for the December 2030 is a richening of the front wing of the June 2031 butterfly and we believe there is only one story here; a richening of the December 2030 bond relative to the curve as large-scale short positions were bought back when the selloff trend was broken in mid-October. Excess demand for the CGBZ22 contract may have caused the CTD for the contract to richen as sellers of contracts hedged in the bond market.

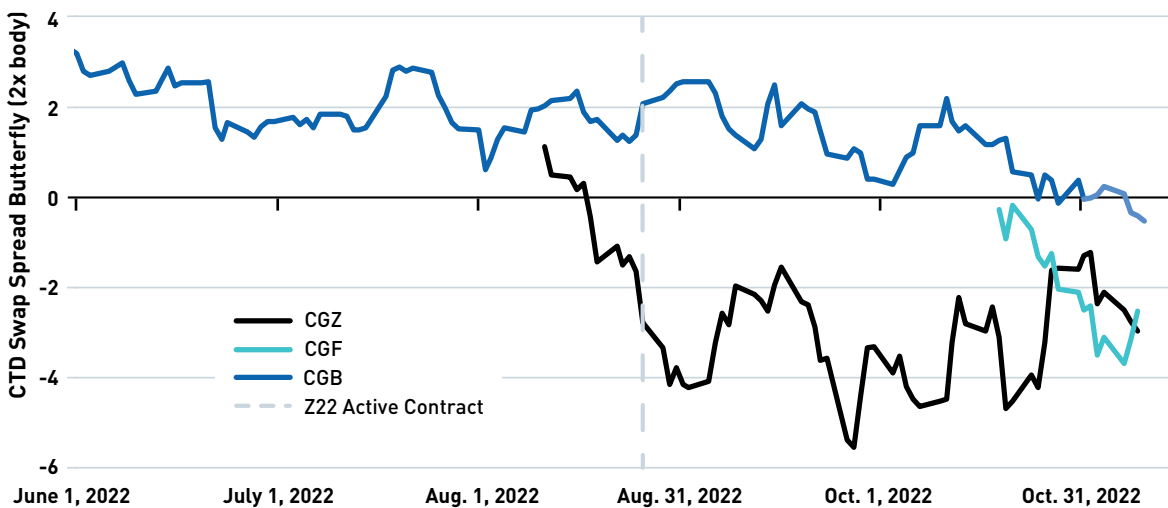
FIGURE 4
Dec30 versus Jun31 Swap Spread Butterfly



Source: BMO Capital Markets' Fixed Income Sapphire database

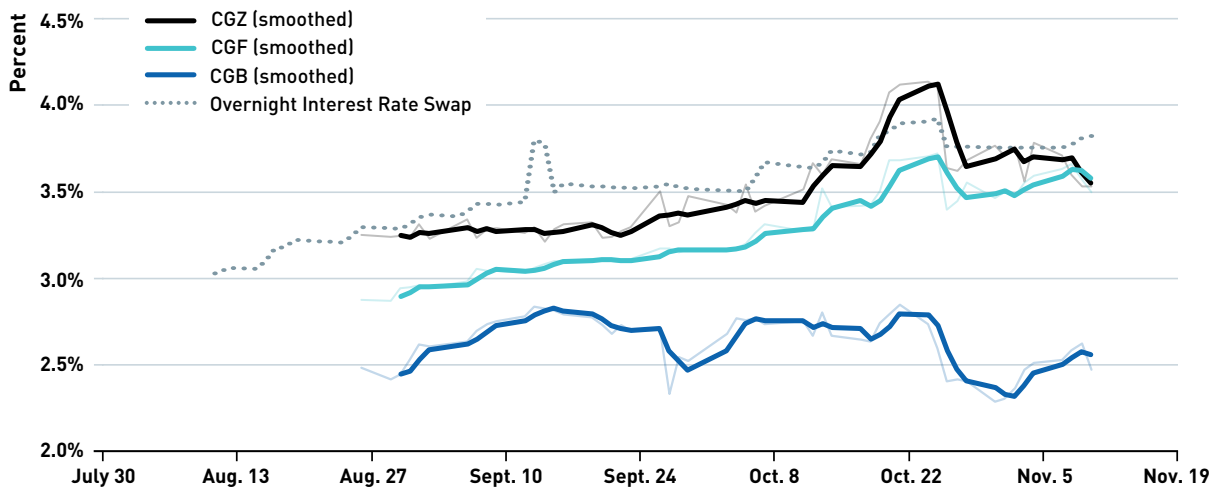
Most of the swap spread butterflies for December contract cheapest-to-deliver bonds have displayed some sort of richening, except for the CGZ (2-year) contract which bounced in a fairly wide range during the life of the Z22 contract. The remaining contracts, except LGBZ22, are shown in Figure 5, although the history available for the CGF (5-year) contract is quite limited.

FIGURE 5
Z22 CTD Swap Spread Butterflies



Source: BMO Capital Markets' Fixed Income Sapphire database

All contracts this quarter have been cheap relative to their CTD bond when measured by gross basis or implied repo, with the notable exception of the CGZ contract, which has traded much closer to its fair value. Figure 6 shows that the implied repo level of CGFZ22 and CGBZ22, shown in the figure on the left axis, have been far below the overnight interest rate swap level to the expected delivery date. The cheapness of about 7-8 cents relative to bonds for the CGB contract is completely appropriate and is about the fair value of the Wildcard option embedded in the contract (see below). However, the Wildcard in CGF contracts is rarely worth much of anything and we struggle to understand why 5-year contracts have remained so cheap relative to bonds for so long, especially with the trend reversal in mid-October that was discussed above.

FIGURE 6**Implied Repo: CGZ, CGF, CGB**

Source: BMO Capital Markets' Fixed Income Sapphire database, Montréal Exchange

Key Metrics & Expectations

In most cases this quarter, the owners of short positions will exercise their timing option, fully priced already, to deliver early and avoid negative carry. This is certainly true of CGZ and CGF contracts, but many CGB contracts will be taken into the delivery period with the hopes of making a profitable Wildcard exercise. Inevitably, the same will happen with LGB (30-year) contracts as for both contracts, the Wildcard is valuable due to low conversion factors on the CTD bond. With both contracts now quite solidly negative carry, shorts will need to be vigilant each afternoon to not miss an early opportunity for Wildcard delivery. Waiting becomes more painful each quarter as the Bank of Canada delivers higher rates. This quarter, taking a long basis position of 100 contracts to the final trading day costs about \$20,000 of negative carry, up from \$13,000 for the same number of contracts in the September delivery period.

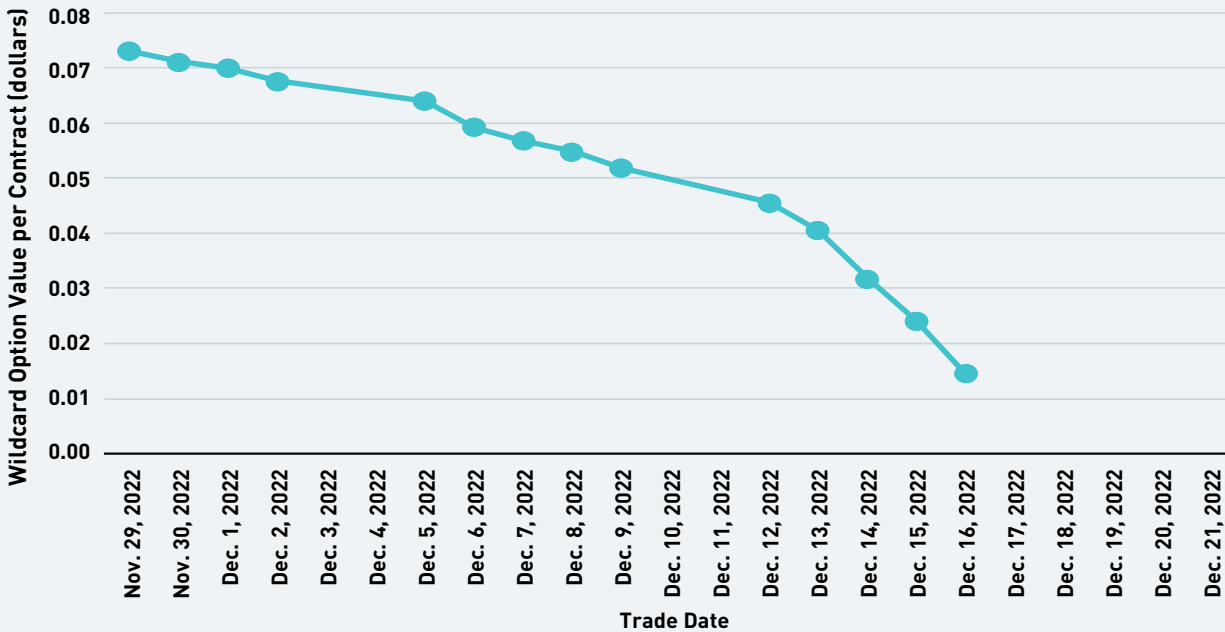
We show some Key Metrics of importance to managers with Z22 positions in Figure 8, Figure 9, Figure 10, and Figure 12. We used closing prices on November 10th and have reduced the number of CTD bonds outstanding by the holdings of the Bank of Canada, where applicable². As is usual with the back contracts, none of the March contracts had traded on our price capture date so the indicated prices for the H23 contracts, and any analysis driven by the price of those contracts, are not based on a tradeable market level at this time.

CGBZ22 to CGBH23

The CTD for CGB (10-year) contracts will change as the H23 becomes the active contract. The 1.5% June 2031 will be the new CTD which is interesting because the higher coupon means the duration extension is minimal despite the 6-month maturity extension. This should be a remarkably stable roll in terms of intraday price changes.

When the 7-8 cents of value from the Wildcard option is included, the CGBZ22 trades right around fair value. Like last quarter, we expect thousands of contracts to be taken into delivery as shorts angle for a Wildcard option payoff. Although the option has a theoretical value of 7 cents, we doubt the holder (the short futures position) will have a great deal of patience with this negative carry position this quarter as the position decays in option value, shown in Figure 7, and costs about 1 cent per contract per day of negative carry. After a few days of negative carry, the option will probably be exercised at the first upside bond price move after 3pm.

² The Bank lends their holdings, so the bonds are still available to deliver. The Bank does not hold some of the newer bonds that are now cheapest-to-deliver into some of the December and March contracts.

FIGURE 7**CGBZ22 Wildcard Option Value**

We expect there to be some excess liquidity demands on CGBZ22 from the selling side as the roll period approaches since most long CGB positions will want to exit before facing the uncertainty of the Wildcard while, we suspect, many thousands of short positions will want to enter the delivery period seeking potential outsize profits. With December contract trading exactly at our calculated fair value, the contract will need to cheapen if existing longs that wish to avoid early delivery and/or a late-day Wildcard delivery are to buy their way out of the option they are short.

FIGURE 8**CGB Key Metrics**

10-NOV-2022	FRONT (DEC22)	BACK (MAR23)	DIFFERENCE
Closing Price	124.400	123.660	0.740
Cheapest-to-Deliver (CTD)	CAN 0.500% Dec 2030	CAN 1.500% Jun 2031	Change!
Delivery Years (Last delivery)	7.9	8.2	0.2
CTD Conversion Factor	0.6546	0.7105	
CTD Clean Price	81.3650	87.7267	
CTD Yield	3.140%	3.150%	0.010%
Gross Basis (cents)	-6.7	-13.4	
Probable Delivery Date	01-Dec-22	01-Mar-23	
Net Basis (cents)	4.5	39.3	34.8
Implied Repo (to Prob. Delivery)	2.47%	2.23%	-0.25%
DV01/100 of CTD	6.3	6.9	0.6
Open Interest	559,070	0	
CTD Outstanding (millions)	22,949	31,144	8,195
CTD Notional of Front OI	55,907	55,907	
Front OI Multiple of CTD	2.4x	1.8x	-0.6x

Source: BMO Capital Markets¹ Fixed Income Sapphire database, Montréal Exchange

CGZZ22 to CGZH23

CGZU22 is currently trading just a penny cheap to fair value with a 3.55% implied repo to First Delivery.

CGZZ22 contracts will be delivered early as overnight interest rates now exceed the CTD coupon by over 100 basis points. As the active contract moves from the Z22 to H23 in late November, the CTD will change from the August 2024 bond to the November 2024 bond, a relatively unimportant maturity extension as is usual with the 2-year contract. The DV01 extension of 13% is roughly normal for the contract but the fair value of the roll will be dependent on the overall level of interest rates due to the DV01 difference. Managers should be wary of leaving standing orders in today's volatile rate environment as the price difference on the roll can be more than a cent on a volatile day.

The 3% coupon on the November 2024 bond means long basis positions in CGH23 will carry negatively as well and the contract will initially be priced to First Delivery with a negative basis level. A large reduction of the target rate by the Bank of Canada might change that but is obviously very unlikely at this time. Fair value on the CGZ roll assuming 3.8% implied repo to December 1st and 4.1%³ to March 1st is -12.4 cents as none of the options embedded, except the fully priced timing option, have any value.

FIGURE 9
CGZ Key Metrics

10-NOV-2022	FRONT (DEC22)	BACK (MAR23)	DIFFERENCE
Closing Price	103.495	103.525	-0.030
Cheapest-to-Deliver (CTD)	CAN 2.750% Aug 2024	CAN 3.000% Nov 2024	Change!
Delivery Years (Last delivery)	1.6	1.6	0.0
CTD Conversion Factor	0.9491	0.9530	
CTD Clean Price	98.1924	98.4650	
CTD Yield	3.849%	3.818%	-0.031%
Gross Basis (cents)	-3.5	-19.4	
Probable Delivery Date	01-Dec-22	01-Mar-23	
Net Basis (cents)	1.0	1.0	0.0
Implied Repo (to Prob. Delivery)	3.53%	3.72%	0.18%
DV01/100 of CTD	1.6	1.9	0.2
Open Interest	81,507	0	
CTD Outstanding (millions)	16,500	16,000	-500
CTD Notional of Front OI	8,151	8,151	
Front OI Multiple of CTD	0.5x	0.5x	0.0x

Source: BMO Capital Markets' Fixed Income Sapphire database, Montréal Exchange

CGFZ22 to CGFH23

The CTD for the CGF contract will not change between the CGFZ22 and CGH23 contracts. The Bank of Canada target rate therefore exceeds the coupon on the CTD for both contracts. Both will price to early delivery (again, a negative basis to the CTD bond) given existing market expectations.

For no apparent reason, CGFZ22 is trading cheap to bonds with an implied repo of just 3.5% to First Delivery at time of writing; that's only 1.6 cents cheaper than one would expect given the virtually non-existent value of embedded options in this contract but is somewhat surprising given the liquidity and participation at this point in the curve. Short positions should try to roll early and may put upward pressure on the front contracts relative to the back.

³ The overnight index swap levels on November 10th to those dates.

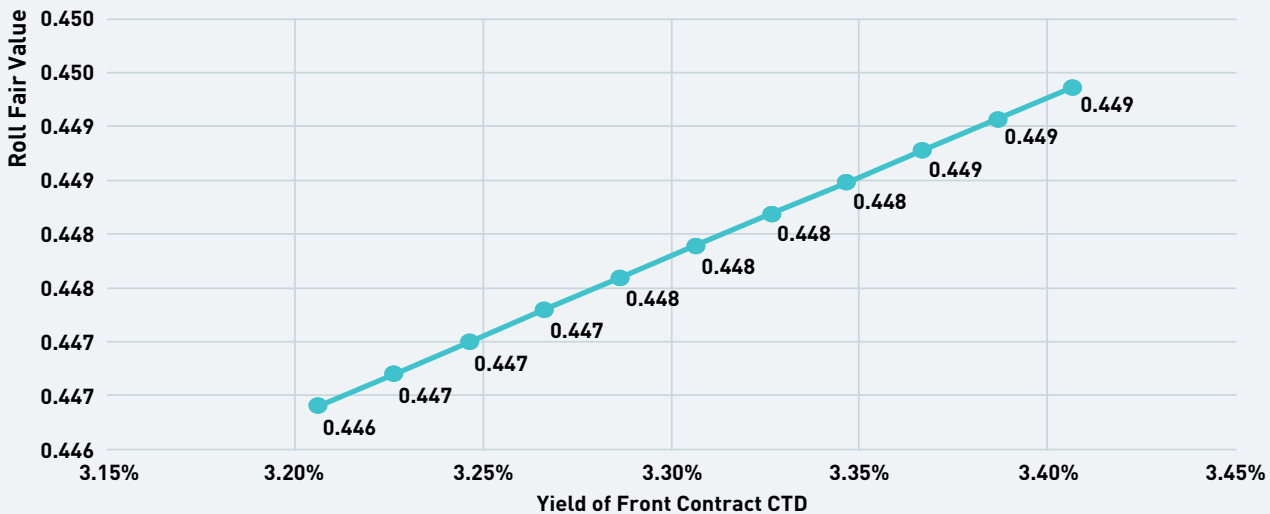
FIGURE 10
CGF Key Metrics

10-NOV-2022	FRONT (DEC22)	BACK (MAR23)	DIFFERENCE
Closing Price	112.510	111.960	0.550
Cheapest-to-Deliver (CTD)	CAN 2.750% Sep 2027	CAN 2.750% Sep 2027	No change
Delivery Years (Last delivery)	4.7	4.4	-0.2
CTD Conversion Factor	0.8673	0.8735	
CTD Clean Price	97.5500	97.5500	
CTD Yield	3.306%	3.306%	0.000%
Gross Basis (cents)	-3.0	-24.7	
Probable Delivery Date	01-Dec-22	01-Mar-23	
Net Basis (cents)	1.1	2.3	1.2
Implied Repo (to Prob. Delivery)	3.50%	3.71%	0.21%
DV01/100 of CTD	4.3	4.3	0.0
Open Interest	91,405	0	
CTD Outstanding (millions)	16,000	16,000	0
CTD Notional of Front OI	9,141	9,141	
Front OI Multiple of CTD	0.6x	0.6x	0.0x

Source: BMO Capital Markets' Fixed Income Sapphire database, Montréal Exchange

With no CTD change between contracts, the CGF roll should be stable and very smooth. Managers will probably leave standing orders with dealers to trade at a certain level ensuring a liquid and easy roll period. As we show in Figure 11, a 20 basis points wide intraday move in the 5-year yield would result in a change of only 0.3 cents on the roll, much less than the minimum price increment.

FIGURE 11
CGFZ22/CGFH23 Roll Fair Value v. Rate Level, Nov 24/22



LGBZ22 to LGBH23

There is an important change to the specifications⁴ of the LGBH23 contract, and all LGB contracts going forward, that eliminates nearly all the options embedded in the 30-year contract.

Essentially, all notices to deliver will take place on the last trading day, without exception, a change that results in no opportunities to deliver early for those with short positions and thus eliminates the timing option, the Wildcard option, and the rarely discussed End-of-Month option. The only optionality that will remain in the LGB contract is the quality or switch option which is currently almost worthless. As a result, the extreme cheapness observed in LGB contracts during 2022 should disappear and prices should stabilize around fair value where the basis between futures and bonds results in an implied repo level very close to the short-term interest rates available in other markets to similar dates. Although valuing the Wildcard was sometimes problematic, we suspect that every market participant will be able to calculate a fair value based on the new contract specifications⁵ and LGBH23 contracts will trade at a negative gross basis just like all the other contracts that are negative carry in delivery.

For now, the LGBZ22 contract has a very low conversion factor for the June 2051 CTD, and the result is a very high Wildcard option value embedded in the contract. As has become normal for the contract, gross basis is very high and the contract is very, very cheap relative to bonds. On November 10th the contract traded over 170 cents cheap to an option-less fair value even though the Wildcard option fair value is just over 50 cents per contract. This incredible discount again seems like an anomaly although we understand that market participants in the long end aren't the type of client that is normally attracted to selling volatility via difficult-to-value options.

As with past contracts, the option value has been bid higher than fair value (i.e., the futures price is lower than it should be) as the option is challenging to value and, even with a perfect valuation model, there remains uncertainty and additional work to manage this short-term recurring option each afternoon. Open interest is quite low but most existing positions are probably poised for a Wildcard play. Note that in Figure 12 for the March 2023 LGB contract, the line labelled Probable Delivery Date is the delivery date with absolute certainty. All open contracts will be delivered on this date, without exception.

FIGURE 12
LGB Key Metrics

10-NOV-2022	FRONT (DEC22)	BACK (MAR23)	DIFFERENCE
Closing Price	165.500	164.410	1.090
Cheapest-to-Deliver (CTD)	CAN 2.000% Dec 2051	CAN 2.000% Dec 2051	No change
Delivery Years (Last delivery)	28.9	28.7	-0.2
CTD Conversion Factor	0.4534	0.4551	
CTD Clean Price	75.7777	75.7777	
CTD Yield	3.303%	3.303%	0.000%
Gross Basis (cents)	74.0	95.5	
Probable Delivery Date	01-Dec-22	24-Mar-23	
Net Basis (cents)	77.8	126.4	48.6
Implied Repo (to Prob. Delivery)	-19.49%	-0.94%	18.55%
DV01/100 of CTD	15.6	15.6	0.0
Open Interest	1,204	0	
CTD Outstanding (millions)	33,810	33,810	0
CTD Notional of Front OI	120	0	
Front OI Multiple of CTD	0.0x	0.0x	0.0x

Source: BMO Capital Marketsⁱ Fixed Income Sapphire database, Montréal Exchange

⁴ For precise details, refer to [Circular 124-22](#).

⁵ In case you don't want to, fair value was -39.8 for LGBH23 gross basis on November 10th.

Wildcard Option Comments

Wildcard exercise is possible in CGBZ22 contracts since the low conversion factor of 0.6546, due to the low coupon on the CTD bond, makes the option more valuable. This effect will continue but is waning as a long basis position, which is the method to trade the embedded Wildcard option, is even more negative carry during delivery this quarter than last quarter and future contracts will have higher CTD conversion factors of about 0.71 or more which makes the option less valuable. Wildcard option holders in CGBZ22 may lose patience with their trade rather quickly. We suspect outstanding contracts will be delivered at the first sign of a reasonable uptick after 3pm during the delivery period.

In the LGB contract, we calculate the expected value of the embedded Wildcard option to be about 52 cents before delivery begins, about the same as the value last quarter. There will certainly be some long basis positions attempting to play the option this quarter, as there were last quarter. While we can't know what prices were paid for these positions, current pricing for a basis trade in LGB puts the price of the futures contract at about \$1.00 cheap to bonds after including the fair value of the option.

Last quarter we wrote of the opportunity that this presented as it would take an incredibly large price move to justify such a Wildcard option price. Ultimately, during delivery, the market offered less than half the price increase between 3pm and 5pm to justify the Wildcard option value last quarter, a phenomenon that is likely to be repeated given the outsized cost of the Wildcard currently implied in the LGBZ22 price.

September Delivery Summary

Prior to the U22 delivery period we wrote that the Wildcard option is almost never optimally exercised and, as a result, should be called the Option of Maximum Regret⁶. The September delivery cycle, however, served up little to no regret for Wildcard holders in CGBU22 as a 14 cent price increase in CGB contracts triggered 12,394 contracts to give delivery notice on September 1st, probably⁷ as a Wildcard exercise. Given the negative carry of the long basis position, this was very opportune since price increases after the settlement of futures is established are more valuable, from a P(L) standpoint, when they occur early in the delivery cycle. The CGBU22 contracts delivered were almost 93% of the total contracts that were taken into delivery and, we can observe with hindsight, were optimally exercised; there were no better opportunities later in the month to achieve a better outcome. Well played!

A similar dynamic occurred in the LGBZ22 contract. A 40 cent rise⁸ in the value of the hedge tail on September 1st caused some contracts to give notice of delivery on that date. Most contracts waited for a later date but were disappointed as negative carry slowly eroded potential profits until the market delivered a second opportunity on September 13th, when all remaining contracts gave notice. Just 18% of all LGB contracts were delivered on the optimal date⁹.

⁶ "Wildcard Options: The Option of Maximum Regret", August 2022.

⁷ We can only speculate as we don't know, from public data, whether the client(s) gave delivery notice after 3pm. We have no access to internal Montréal Exchange data or non-public information.

⁸ Not nearly enough to justify the price of the Wildcard option embedded in LGBU22 going into the roll period!

⁹ To be fair, the optimal date can only be identified in hindsight. Managers obviously must make their delivery decision without knowing future prices.

LOOKING FORWARD & Opportunities

- LGB contracts will stabilize, and open interest should rise for March 2023 and later contracts. Fair value should be obvious, but basis will still fluctuate from rich to cheap at times due to relative demand for contracts versus bonds. We hope, and firmly believe, that the huge discount on LGB contracts relative to the CTD will disappear as the uncertainty of the Wildcard option is removed for a group of investors that was uncomfortable with that genre of risk.
- Watch for early pressure on all rolls, but especially CGB, as US investors seek to exit positions early due to their holiday.
- For the final time, due to the coming change in LGB contract delivery specifications, the most obvious opportunity this quarter is the apparent cheapness of the LGB contract despite a valuable Wildcard option. As with last quarter, we doubt a volatile enough scenario will play out during the delivery period to justify the current valuation but investors who go short the basis must be willing to be delivered the bonds and react the next day by buying their tail hedge for an unknown price. It is an opportunity only for sophisticated clients comfortable with short option risk and delivery.
- Roll prices will be less volatile now that Bank of Canada actions have established that all contracts will be negative carry during delivery for the foreseeable future. Timing options should now be fully priced. However, with front end rates still in play, a change in the implied repo rate of either the front or back contract, to reflect new expectations of overnight rates, changes the fair value of all the futures rolls.



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