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

U22-Z22

Roll Update

August 2022

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QUARTERLY ROLL Summary

First Notice day is August 30th for the September contracts and the Labour Day holiday occurs on the first Monday of the delivery period. With no holidays during the roll period, the U22/Z22 futures contract roll should begin on the 25th of August.

For the first time in perhaps a decade or more, 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, short positions will probably deliver early, especially when the negative carry is significant. This situation is entirely due to a sharp rise in the Bank of Canada target rate after a long period of very low interest rates, a situation that will probably continue for several quarters. Eventually, the phenomenon will abate, first in the contracts with cheapest-to-deliver bonds of shorter maturity and then in the CGB™ and LGB™ contracts where fewer bond maturities fall into the deliverable basket. Investors should be aware that contracts will price assuming delivery will (in all likelihood as it is still at the discretion of the owner of the short position) occur on or near the First Delivery date, not the Last Delivery date.

Speculative accounts may have less risk allocated to their models after a bruising price inflection in mid-June but are long Canadian bond futures contracts which could introduce pricing pressure while looking for liquidity in the roll period. No contract is rich to bonds this quarter, but CGF™ contracts are currently trading cheap to bonds for no apparent reason. The LGB Wildcard option is very valuable but not nearly as valuable as current pricing implies and the CGB Wildcard option is worth less than the cost to carry it through the entire delivery period. As we will outline below, opportunities abound in this volatile bond market.

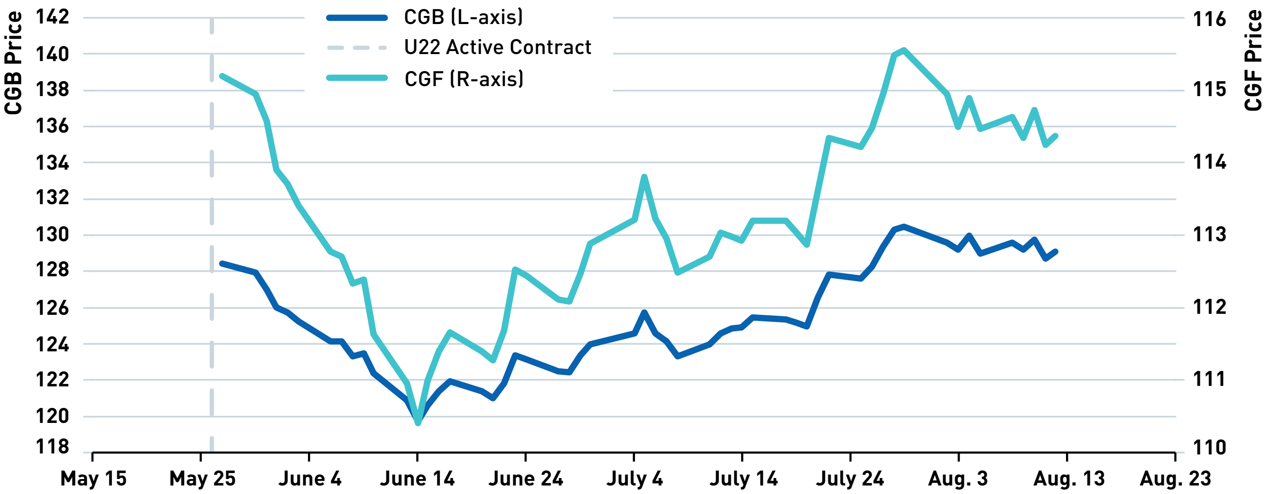
Speculative Positioning

Often, we reference the MacroHive/Montréal Exchange Canada CTA Trading model to gauge how momentum models have behaved during the quarter but see no need for it this edition. A mere glance at the price action in the active life of the CGF and CGB U22 contracts in Figure 1 is enough to see that a trend-following model most likely suffered severely in mid-June. Following a period of stop-outs/de-risking from previously profitable short positions, these models likely established long positions as the trend shifted to rising bond prices and, we speculate, are probably still long but in less than full risk positions.

It is unlikely that any algorithm models incorporate either CGZ™ or LGB contracts currently, although the former is more likely than the latter.

FIGURE 1

CGF & CGB Price, U22s

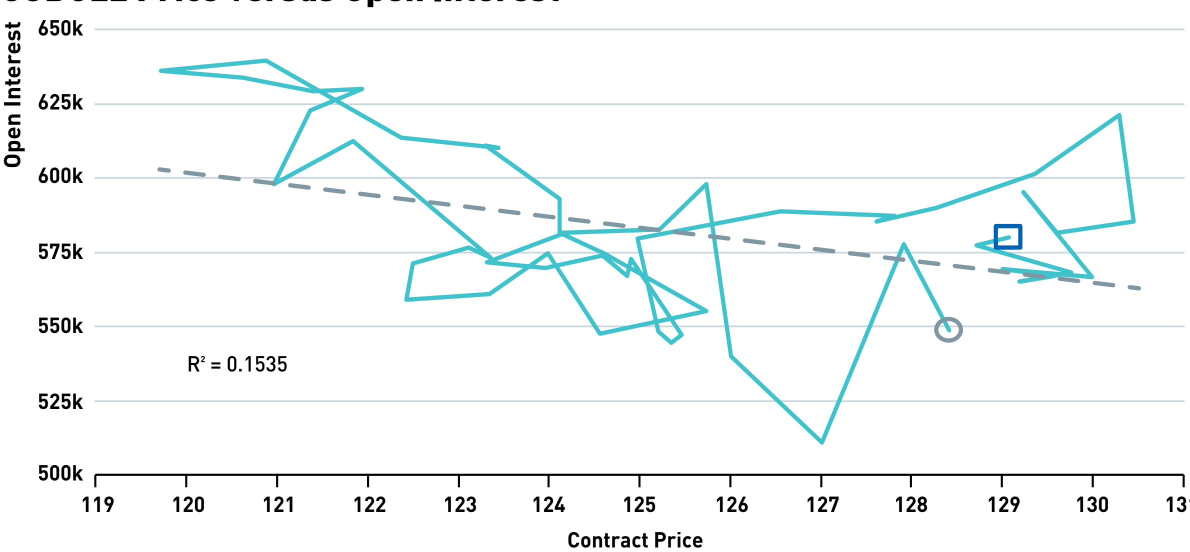


Source: Montréal Exchange

Somewhat surprisingly, Figure 2 shows that open interest has been mostly unrelated to price for CGB (10-year) contracts this quarter, even when performing partial regressions (not shown) on the period after the Bank of Canada meeting. Normally, the r-squared 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. We conclude that some portion of risk was removed by most models as the selloff ended abruptly and that not all risk has been added back.

FIGURE 2

CGBU22 Price versus Open Interest



Source: Montréal Exchange

Most algorithmic models have a strong preference to avoid the delivery period and any long positions that do exist may lead to early selling pressure in CGFU22 and CGBU22 contracts accompanied by buying pressure in Z22 as positions are rolled. This could be exacerbated by the threat of early delivery to participants that tend to avoid delivery at all costs.

Cheapest-to-Deliver Switch

Interest rates are, of course, much higher today than they were a year ago. However, even the 2% or more rise in yields for various segments of the yield curve has not been enough to make a CTD switch plausible in most contracts.

Unlike CGZ, CGF, and LGB contracts, economic and market conditions have conspired to introduce some chance of a switch in the December 10-year (CGBZ22) contract, similar to what is being experienced with the September contract that will become active during this roll. The 10-year CTD has a very low coupon of just 0.5% while the next bond issued has a coupon of 1.5%. The math to calculate the cheapest-to-deliver bond favors higher coupons and shorter maturities, suggesting some chance that a CTD switch could occur during the life of the CGBZ22 contract.

Figure 3 shows the conditions that would result in the June 1.5% 2031 becoming cheaper to deliver than the December 0.5% 2030, which would be considered the "normal" CTD bond since it has the shortest term to maturity. The steepness of the curve will be essential in determining the CTD bond during the final quarter of the year. At today's yield of 2.75% and -0.5 basis points of yield difference between the two bonds, the December 2030 will remain CTD unless the curve steepens by about five basis points. In this case, the CGBU22 would behave more like the June 2031 bond than the December 2030 bond and the "fair value" of the implied repo for the contract would be associated to a basis trade versus the June 2031 bond rather than the December 2030.

FIGURE 3

	Dec30 Yield															
SLOPE	2.15%	2.30%	2.45%	2.60%	**2.75%**	3.00%	3.25%	3.50%	3.75%	4.00%	4.25%	4.50%	4.75%	5.00%	5.25%	5.50%
-2.0	Dec30	Dec30	Dec30	Dec30	**Dec30**	Dec30	Dec30	Dec30	Dec30	Dec30	Dec30	Dec30	Dec30	Dec30	Dec30	Dec30
-1.7	Dec30	Dec30	Dec30	Dec30	**Dec30**	Dec30	Dec30	Dec30	Dec30	Dec30	Dec30	Dec30	Dec30	Dec30	Dec30	Dec30
-1.4	Dec30	Dec30	Dec30	Dec30	**Dec30**	Dec30	Dec30	Dec30	Dec30	Dec30	Dec30	Dec30	Dec30	Dec30	Dec30	Dec30
-1.1	Dec30	Dec30	Dec30	Dec30	**Dec30**	Dec30	Dec30	Dec30	Dec30	Dec30	Dec30	Dec30	Dec30	Dec30	Dec30	Dec30
-0.8	Dec30	Dec30	Dec30	Dec30	**Dec30**	Dec30	Dec30	Dec30	Dec30	Dec30	Dec30	Dec30	Dec30	Dec30	Dec30	Dec30
-0.5	**Dec30**	**Dec30**	**Dec30**	**Dec30**	**Dec30**	**Dec30**	**Dec30**	**Dec30**	**Dec30**	**Dec30**	**Dec30**	**Dec30**	**Dec30**	**Dec30**	**Dec30**	**Dec30**
0.6	Dec30	Dec30	Dec30	Dec30	**Dec30**	Dec30	Dec30	Dec30	Dec30	Dec30	Dec30	Dec30	Dec30	Dec30	Dec30	Jun31
1.7	Dec30	Dec30	Dec30	Dec30	**Dec30**	Dec30	Dec30	Dec30	Dec30	Dec30	Dec30	Dec30	Jun31	Jun31	Jun31	Jun31
2.8	Dec30	Dec30	Dec30	Dec30	**Dec30**	Dec30	Dec30	Dec30	Dec30	Jun31	Jun31	Jun31	Jun31	Jun31	Jun31	Jun31
3.9	Dec30	Dec30	Dec30	Dec30	**Dec30**	Dec30	Jun31	Jun31	Jun31	Jun31	Jun31	Jun31	Jun31	Jun31	Jun31	Jun31
5.0	Dec30	Dec30	Dec30	Jun31	**Jun31**	Jun31	Jun31	Jun31	Jun31	Jun31	Jun31	Jun31	Jun31	Jun31	Jun31	Jun31

Although a theoretical switch is interesting and a risk for long positions (short futures positions benefit, long positions suffer unexpected losses), five basis points of yield difference over just six months of maturity in the 10-year point would be unusual. In fact, as yields have risen recently, the curve has flattened, not steepened; a normal occurrence in Canadian bonds. Nonetheless, the December CGB contract does have some plausible risk of a CTD switch, unlike the other December contracts.

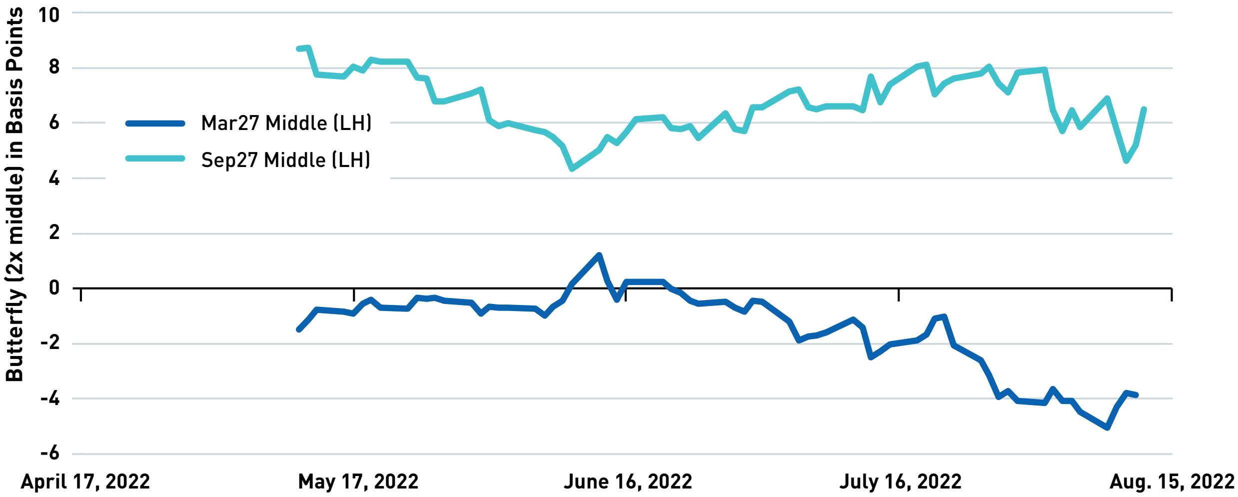
Relative Value of the CTD Bonds

A cheapest-to-deliver change will often result in relative value changes in the bond basket, and that appears to have happened via the CGF contract this quarter.

As shown below in Figure 4, the swap spread butterfly, our preferred measure of relative value between bonds, for the March 2027 bond - considered CTD for the September CGF (5-year) contract but not the December contract - has richened four or five basis points since mid-June. Similarly, the September 2027 bond, CTD to the December CGF contract, has tended to cheapen during the same time. This may indicate that demand for CGF liquidity has outstripped supply forcing the March bond to richen relative to neighbouring bonds.

FIGURE 4

Mar27 versus Sep27 Bond Yield Butterflies

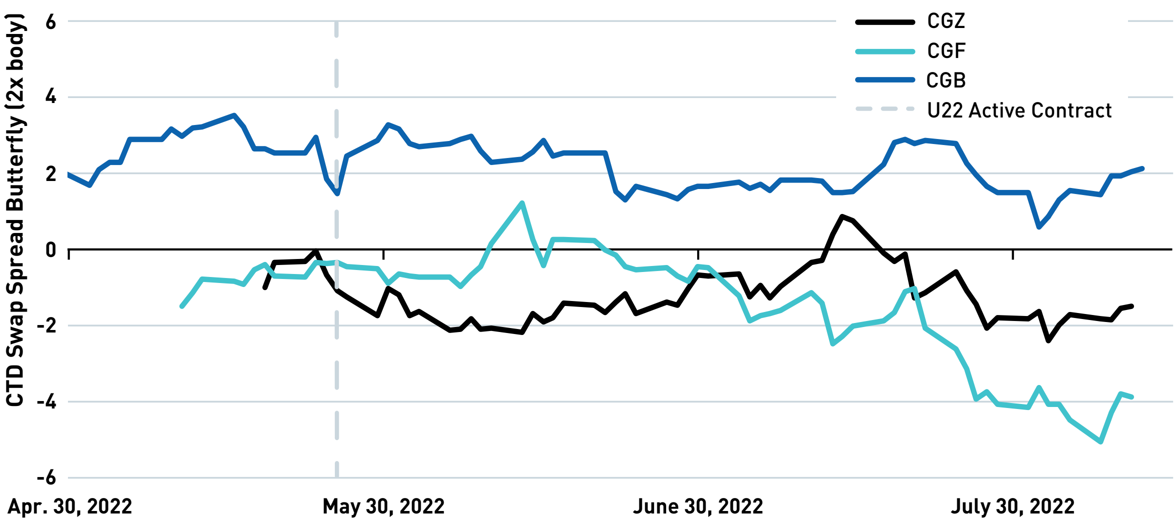


Source: BMO Capital Markets[i] Fixed Income Sapphire database

The above remarks on the two CGF CTD bonds are more interesting in the context of all the CTD swap spread butterflies this quarter which have been, for the most part, well behaved. As can be seen below in Figure 5, the CGBU22 CTD was essentially in a tight range for the entire life of the contract, a comment that could also apply to the CGZ contract save for a small spike cheaper in mid-July that was quickly reversed. Only the CTD for CGFU22 was steadily richening versus neighbour bonds this quarter.

FIGURE 5

U22 CTD Swap Spread Butterflies

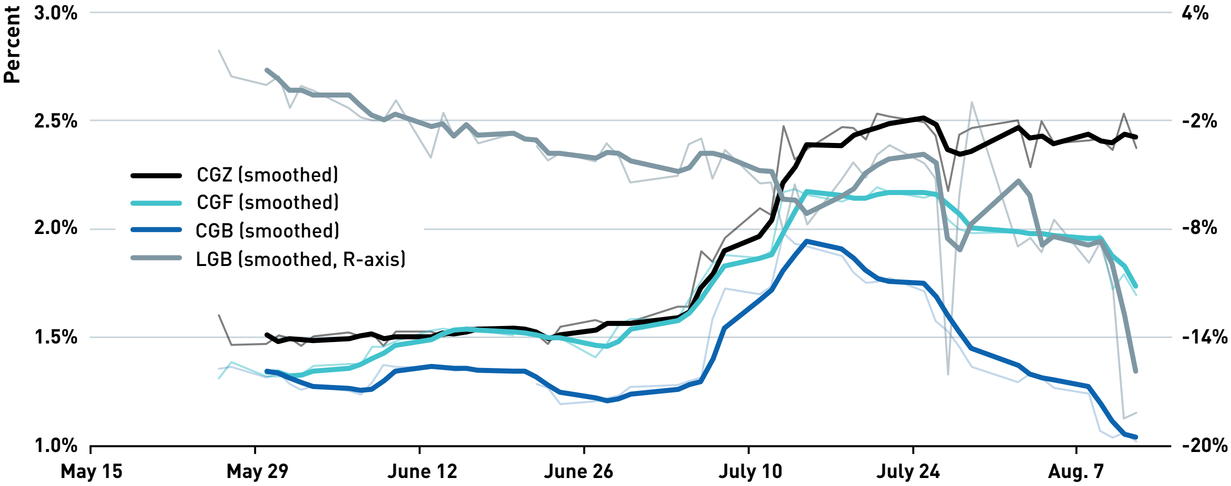


Source: BMO Capital Markets[i] Fixed Income Sapphire database

Some futures contracts this quarter are cheap relative to their CTD bond when measured by gross basis or implied repo, with the notable exception of the CGZ contract which trades at about the same implied repo level (2.5%) as the overnight index swap to the first delivery date. Figure 6 shows that the implied repo level of CGFU22 and CGBU22, shown in the figure on the left axis, are far below 2.5%. The cheapness of about 5 cents relative to bonds for the CGF contract appears undeserved while the low implied repo levels of the CGB and LGB contracts reflect some value of the Wildcard option embedded in these bonds. However, as we will argue below, we believe the market is giving too much value to both options this quarter.

FIGURE 6

Implied Repo: CGZ, CGF, CGB, LGB (Right)



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

Key Metrics & Expectations

The timing option, the right of the short to deliver early to avoid negative carry, should be fully priced , and short positions entering the delivery period will deliver at first opportunity for CGF and CGZ contracts. While the 30-year contract (LGB) will be just slightly negative carry due to the higher coupon on the CTD bond, short positions in the CGB contract will be paying away about 0.7 cents per day during delivery which will add up quite quickly.

We show some key metrics of importance to managers with U22 positions in Figure 7, Figure 8, Figure 9, and Figure 11. We used closing prices on August 12th and have reduced the number of CTD bonds outstanding by the holdings of the Bank of Canada, where applicable[1]. As is usual with the back contracts, none of the December contracts had traded on our price capture date so the indicated prices for the Z22 contracts, and any analysis driven by the price of those contracts, are not based on a tradeable market level at this time.

CGBU22 to CGBZ22

Due to the large open interest, the CGB roll will be important even though there is no change in the cheapest-to-deliver bond this quarter. The December 2030 bond will probably be the cheapest-to-deliver for the Z22 contract, and the new contract will also trade at a negative basis.

At a gross basis level of about -1.5 currently, the September CGB contract is trading cheap to bonds by about 9 cents which is almost completely accounted for by the 8-cent value that we calculate for the embedded Wildcard option in this contract. Although the option has a theoretical value of 8 cents, it remains to be seen whether the holder (the short futures position) will have a great deal of patience with this negative carry position this quarter. After a few days of negative carry, the option will probably be exercised at the first upside bond price move after 3pm.

However, during the roll, long positions should be wary of patient short investors who may seek to exploit the Wildcard option by taking some short positions into the delivery period, although we again believe those shorts would be better served by simply taking profits early by buying back the contract at current prices. Nevertheless, speculative long positions that seek to avoid the delivery period will likely collide with some short positions that resist closing their contracts in an attempt to exploit the Wildcard option. Expect selling pressure on CGBU22 accompanied by early buying pressure on CGBZ22 as model-driven longs look for the liquidity to roll early and end up paying a premium due to some short positions that aren't in a rush to close.

1 The Bank lends their holdings, so the bonds are still available to deliver. Additionally, for the first time in almost two years, the Bank does not hold some of the newer bonds that are now cheapest-to-deliver into some of the December contracts.

FIGURE 7

CGB Key Metrics

12-AUG-2022	FRONT (SEP22)	BACK (DEC22)	DIFFERENCE
Closing Price	129.080	128.130	0.950
Cheapest-to-Deliver (CTD)	CAN 0.500% Dec 2030	CAN 0.500% Dec 2030	No change
Delivery Years (Last delivery)	8.2	7.9	-0.3
CTD Conversion Factor	0.6462	0.6546	
CTD Clean Price	83.3960	83.3960	
CTD Yield	2.753%	2.753%	0.000%
Gross Basis (cents)	-1.5	-47.8	
Probable Delivery Date	01-Sep-22	01-Dec-22	
Net Basis (cents)	5.4	-1.3	-6.7
Implied Repo (to Prob. Delivery)	1.02%	2.55%	1.53%
DV01/100 of CTD	6.7	6.7	0.0
Open Interest	580,054	0	
CTD Outstanding (millions)	22,949	22,949	0
CTD Notional of Front OI	58,005	58,005	
Front OI Multiple of CTD	2.5x	2.5x	0.0x

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

CGZU22 to CGZZ22

The CTD will change from the May 2024 bond for the U22 contract to the August 2024 bond for the Z22 contract, a relatively unimportant maturity extension as is usual with the 2-year contract. The DV01 extension of 13% is unlikely to cause anyone any distress but the fair value of the roll will be dependent on the overall level of interest rates. For CGZ, the price difference on the roll is negligible[2] for reasonable intraday changes in rates.

CGZU22 is currently trading near fair value with a 2.4% implied repo to First Delivery. The contract is negative carry in delivery and any remaining positions will probably be delivered on the First Delivery date or shortly thereafter.

The 2.75% coupon on the August 2024 bond means long basis positions in CGZZ22 will probably carry negatively as well and the contract will be priced to First Delivery with a negative basis level. Obviously, a Bank of Canada rate change is necessary to make this prediction come about but, at present, almost no one expects the Bank to pause at 2.5%. Fair value on the CGZ roll assuming 2.63% implied repo to September 1st and 3.06%[3] to December 1st is 3.5 cents as none of the options embedded, except the fully-priced timing option, have any value.

2 Usually less than the minimum price increment.

3 The overnight index swap levels on August 12th to those dates.

FIGURE 8

CGZ Key Metrics

12-AUG-2022	FRONT (SEP22)	BACK (DEC22)	DIFFERENCE
Closing Price	104.475	104.215	0.260
Cheapest-to-Deliver (CTD)	CAN 1.500% May 2024	CAN 2.750% Aug 2024	Change!
Delivery Years (Last delivery)	1.6	1.6	0.0
CTD Conversion Factor	0.9296	0.9491	
CTD Clean Price	97.0819	99.0530	
CTD Yield	3.268%	3.252%	-0.016%
Gross Basis (cents)	-3.8	14.3	
Probable Delivery Date	01-Sep-22	01-Dec-22	
Net Basis (cents)	0.6	6.2	5.7
Implied Repo (to Prob. Delivery)	2.38%	2.29%	-0.09%
DV01/100 of CTD	1.6	1.9	0.3
Open Interest	61,120	0	
CTD Outstanding (millions)	14,995	12,500	-2,495
CTD Notional of Front OI	6,112	6,112	
Front OI Multiple of CTD	0.4x	0.5x	0.1x

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

CGFU22 to CGFZ22

The CTD for the 5-year contract (CGF) will change between the CGFU22 and CGFZ22 contracts. The Bank of Canada target rate exceeds the coupon on the CTD for the U22 contract and that will likely also be the case for the Z22 contract by the time delivery happens in December. Both will price to early delivery (again, a negative basis to the CTD bond) given existing market expectations.

As with some other contracts this quarter, CGFU22 is trading cheap to bonds with an implied repo of just 1.7% to First Delivery at time of writing; that's almost 5 cents cheaper than one would expect given the virtually non-existent value of embedded options in this contract, which is unusual given our belief that speculative models are long this contract after the sustained rally. Given the contract is oddly cheap to bonds, short positions should try to roll early into new Z22 positions to capture some of that value.

FIGURE 9

CGF Key Metrics

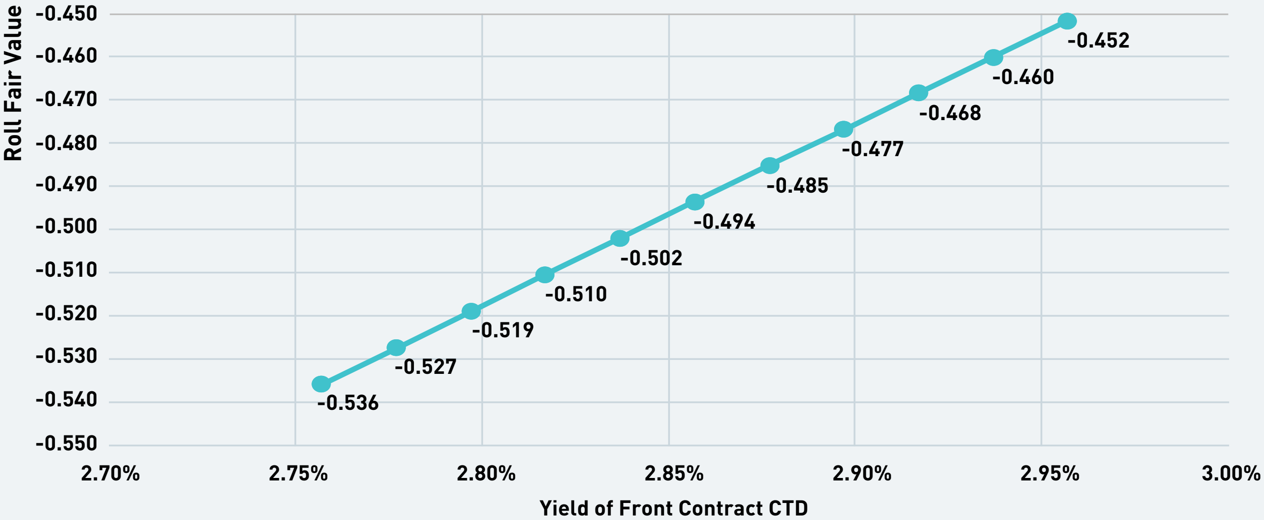
12-AUG-2022	FRONT (SEP22)	BACK (DEC22)	DIFFERENCE
Closing Price	114.370	114.300	0.070
Cheapest-to-Deliver (CTD)	CAN 1.250% Mar 2027	CAN 2.750% Sep 2027	Change!
Delivery Years (Last delivery)	4.4	4.7	0.3
CTD Conversion Factor	0.8151	0.8673	
CTD Clean Price	93.2030	99.5812	
CTD Yield	2.857%	2.840%	-0.017%
Gross Basis (cents)	-2.0	44.9	
Probable Delivery Date	01-Sep-22	01-Dec-22	
Net Basis (cents)	2.8	38.2	35.4
Implied Repo (to Prob. Delivery)	1.69%	1.18%	-0.51%
DV01/100 of CTD	4.1	4.7	0.6
Open Interest	135,489	0	
CTD Outstanding (millions)	14,806	8,000	-6,806
CTD Notional of Front OI	13,549	13,549	
Front OI Multiple of CTD	0.9x	1.7x	0.8x

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

The combination of price insensitive, model-driven, long positions that want to avoid early delivery and shorts that want to capture the cheapness of the September contract should result in a very liquid and easy roll. One caveat we note is that it will be difficult for managers to leave standing limit orders given the fact that the contract extends DV01 by almost 8%. As a result of the DV01 extension, the roll price will be unstable intraday as a 5 basis point rise or fall in yield at the 5-year point could change the roll fair value by up to 2 cents, as shown in Figure 10.

FIGURE 10

CGFU22/CGFZ22 Roll Fair Value v. Rate Level, Aug 25/22



LGBU22 to LGBZ22

The LGBU22 to LGBZ22 roll will be closely watched, despite limited open interest at this time. There is no change to the CTD for the 30-year contract this quarter.

The LGBU22 contract (and 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. Due to this high embedded option value, and as shown in Figure 6, the implied repo on this contract is very negative, reflecting a gross basis level that is very high and a relative value for the contract that is very cheap relative to bonds. Although the Wildcard option is valuable, the contract trades way too cheap relative to bonds, even when including the value of the option. We calculate a value of just 52 cents per contract for the LGBU22 Wildcard but the contract, at a gross basis of 75 basis points at time of writing, is trading 115 cents cheaper, much like it did for the M22 contract.

Like June, we believe the option value has been bid higher than fair value by participants that insist on closing their position before the option becomes exercisable in delivery. There is some sense to this as the option is difficult to value and, even with a perfect model to value it, there remains uncertainty and additional work to manage this short-term recurring option each afternoon. Long positions unwilling to take their chances during the delivery period may continue to bid up the price of this option by offering their long LGBU22 positions at lower and lower prices to attract buyers. Selling at current prices implies a 3pm-5:30pm price move that has never happened since the pandemic began, including during the recent high volatility regime.

FIGURE 11

LGB Key Metrics

12-AUG-2022	FRONT (SEP22)	BACK (DEC22)	DIFFERENCE
Closing Price	181.950	180.800	1.150
Cheapest-to-Deliver (CTD)	CAN 2.000% Dec 2051	CAN 2.000% Dec 2051	No change
Delivery Years (Last delivery)	29.2	28.9	-0.3
CTD Conversion Factor	0.4516	0.4534	
CTD Clean Price	82.9186	82.8688	
CTD Yield	2.866%	2.868%	0.003%
Gross Basis (cents)	75.0	89.4	
Probable Delivery Date	01-Sep-22	01-Dec-22	
Net Basis (cents)	75.4	91.8	16.5
Implied Repo (to Prob. Delivery)	-18.13%	-1.27%	16.86%
DV01/100 of CTD	17.6	17.6	0.0
Open Interest	768	0	
CTD Outstanding (millions)	33,810	33,810	0
CTD Notional of Front OI	77	0	
Front OI Multiple of CTD	0.0x	0.0x	0.0x

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

Wildcard Option Comments

Wildcard exercise is possible in CGBU22 contracts since the low conversion factor of 0.6462, due to the low coupon on the CTD bond, makes the option more valuable. Since a long basis position, which is the method to trade the embedded Wildcard option, is negative carry during delivery, we suggest that anyone trying to play the Wildcard option in CGBU22 will lose patience with their trade rather quickly. Specifically, we calculate that the CGBU22 Wildcard option has an expected value of about 8 cents – higher than it was historically due to slightly higher volatility and a low conversion factor – but that the total negative carry until the option expires is 13.5 cents. In other words, attempts to capitalize on price moves between 3pm and 5:30pm are, on average, likely to result in losses. Of course, someone who owns the option may have luck on their side and get a payoff early in the delivery cycle thus avoiding the bulk of the negative carry and option decay… but if they were to play that game multiple times, they are bound to lose. We suspect any outstanding contracts will be delivered at the first sign of an 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. There will certainly be many long basis positions attempting to play the option this quarter, as there were last quarter. However, current pricing for a basis trade in LGB puts the price of the futures contract at over $1.60 cheap to bonds. If the value of the option embedded is 52 cents, or let's say 60 cents just to make the math easy, a seller of futures basis in LGBU22 right now could make $1 in (expected) profit by entering the trade right now. Expected profit is not actual profit, especially in this case, as an outsized and ill-timed price increase in long maturity bonds after 3pm could hand an investor a larger loss (in theory), but the option is currently priced such that the largest after-hours move in price in the past 30 months[4] would put the basis seller at scratch on their option sale. So, the worst possible thing that could have happened, as observed in the past 2.5 years, does happen… and you still don't lose any money. In all other scenarios the option seller (futures buyer and/or basis seller) makes profits.

June Delivery Summary

CDCC Delivery Reports[5] for June contracts show a smattering of CGZ contracts were delivered immediately due to their negative carry, as was expected.

Unusually, we observe a very small position of CGFM22 was delivered mid-cycle, likely as part of a Wildcard exercise, activity we don't recall observing in this contract before. The position was small, and the delivery notice was given on June 15th, one of the most volatile days of the delivery period, but it is interesting to see investors begin using the 5-year contract in a sophisticated manner.

4 February 26th, 2021. No one made or lost anything on LGB Wildcard options, though, as the contract didn't exist in its current form and the price move occurred outside of the quarterly futures delivery period.

5 CDCC Delivery Reports available on the CDCC website (Delivery Reports page).

The delivery period was important for 10-year (CBG) and 30-year (LGB) investors due to the more valuable embedded Wildcard options in those contracts. We believe[6] clients successfully exercised the Wildcard option on about 6,000 CGBM22 contracts on June 9th for delivery on the 13th, then another 3,500 or so on June 17th and 18th. To demonstrate how difficult the decision can be when playing this option, these investors made "right" decision on those days, but are probably extremely disappointed. The reason is that the optimal date to exercise was June 16th when the price of the 10-year moved higher by 62 cents after 3pm. However, only 325 contracts gave notice on this date because the vast majority of CGB Wildcard options had already been exercised on previous days for far inferior profits. Of course, profits are better than losses, but one can't help but wonder if these investors have some regret at giving notice on June 9th for less than 20% of the profit that they could have generated just a few days later. Such is the nature of Wildcard option trades[7].

A similar, but even more extreme dynamic occurred in the LGBM22 contract. On June 9th, holders of the Wildcard option saw a 73 cent rise in the value of their hedge tail, the amount of bond they owned that would be "extra" if they gave notice before 5:30pm, and all short positions remaining leapt at the chance for a profitable exercise. Little did these managers know, but we can examine with the 20/20 vision of hindsight, that a week later an opportunity more than twice as valuable would present itself. Sadly, for the short positions, but very happily for the long LGB positions, not a single LGBM22 contract remained outstanding to capture the huge $1.50 price increase in long bonds after 3pm on the 16th of June.

6 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.

7 And, more generally, European exercise options as opposed to American exercise.

LOOKING FORWARD & Opportunities

- Nimble investors may be able to capitalize on the intraday instability of the CGF roll as rates fluctuate.
- Once again this quarter, the most obvious opportunity, but not for the uninitiated, is the apparent cheapness of the LGB contract despite a valuable Wildcard option. 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.
- The slope of the 2-10 yield curve is deeply inverted, as discussed recently in "2-10 Yield Curve Inversion: How Low Will It Go?"[8] published by Montréal Exchange in August. Another trade for risk takers, the inversion is now greater than we can recall or find data points for.
- Roll prices will be less volatile now that the 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.

8 https://www.m-x.ca/f_publications_en/futures_flash_article9_en.pdf

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.

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