Futures Flash Series ARTICLE 7

THE FUTURE IS YOURS TO SEE.®

MONTRÉAL EXCHANGE

April 2022

Potential Opportunity: Wide 2-Year Swap Spreads

Since the announcement of the termination of the Bank of Canada's Government Bond Purchase Program October 2021, the widening of Canadian 2-year swap spreads has wavered and may now present an opportunity for speculative investors.

Program History and Effect

The Government of Canada Bond Purchase Program (GBPP), Canada's implementation of quantitative easing was initiated in April 2020 as a response to the growing Covid-19 pandemic. Briefly, the Bank of Canada (BoC) routinely purchased Government of Canada Bonds of almost all maturities to drive term yields lower than could be achieved through normal monetary policy methods such as the setting of overnight interest rates. Although the formal announcement that the program was ending did not come until October 2021, the amount of 2-year bonds purchased had dwindled from over $2 billion in frequent operations in the months between April and July 2020 to less frequent operations of $1-1.5 billion in 2021 as shown in Figure 1.

FIGURE 1

Bank of Canada GBBP, 2y bonds only

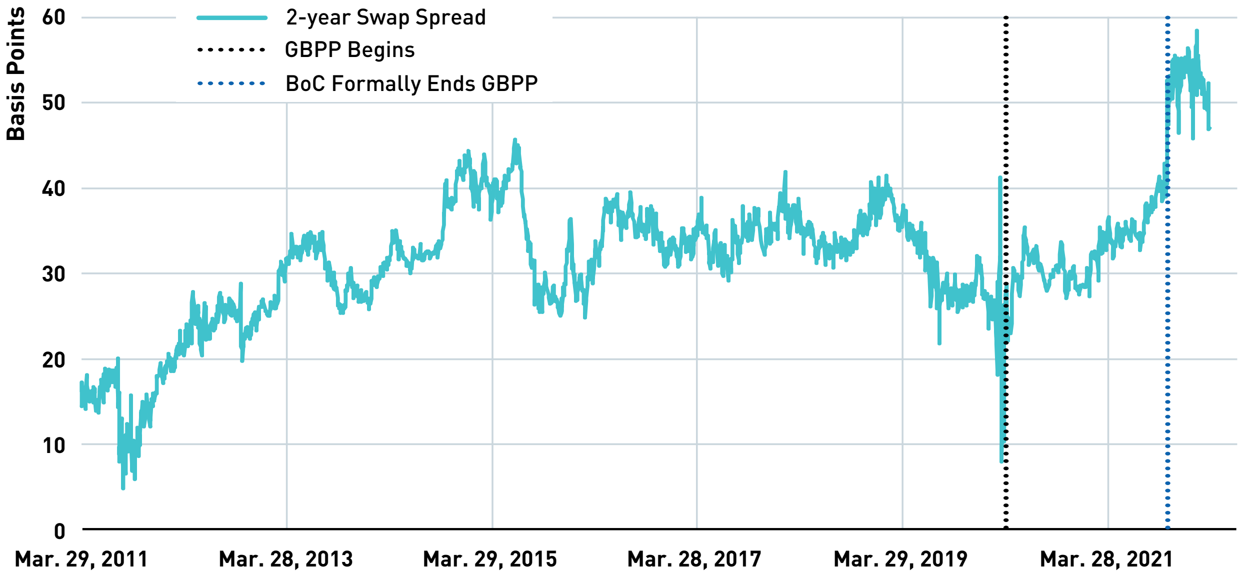
Source: Bank of Canada

The effect of the emergency policy was to disrupt the normal supply/demand of bonds, driving bond yields downwards. Importantly, quantitative easing has no direct impact on the supply/demand of over-the-counter interest rate swaps, although indirect pressure is applied through various relative price impacts. Bond yields driven relatively lower than swap rates widened the swap spread (the swap rate less a government bond yield to the same maturity) from about 22 basis points[1] to more than 50 basis points as shown in Figure 2.

1 22 basis points for a 2-year swap spread is a very low, abnormal, level which was primarily due to the market reaction to the pandemic.

FIGURE 2

2-year Constant Maturity Swap Spreads



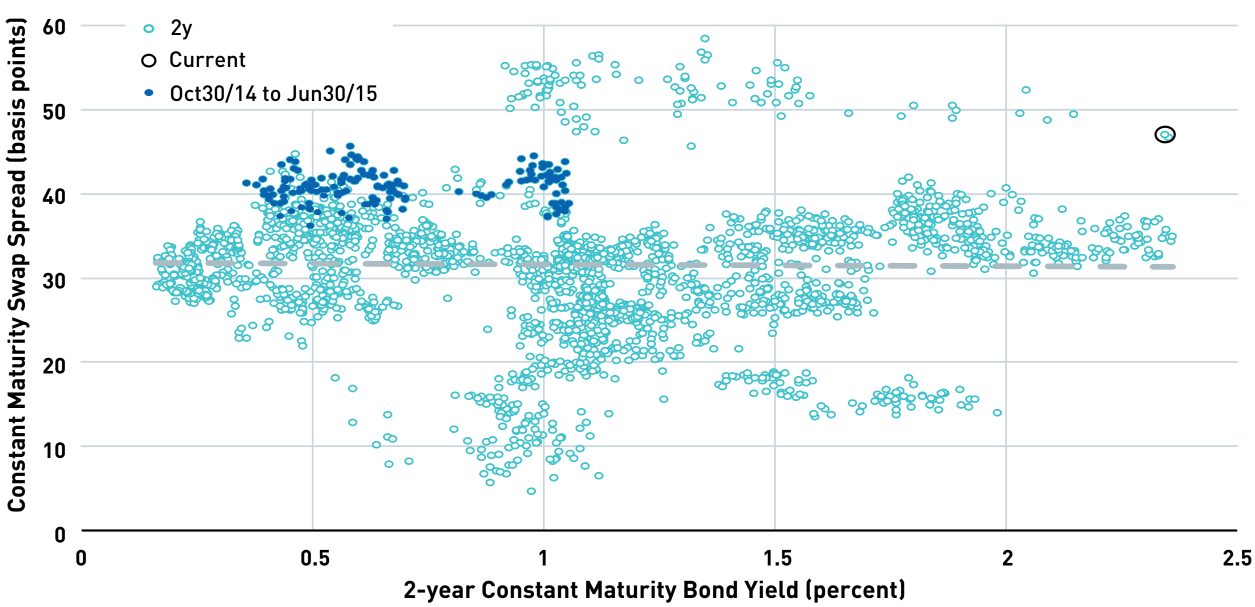
Source: BMO Capital Markets[i] Fixed Income Sapphire database

Potential Opportunity

Recently, 2-year swap spreads have stabilized at a wide level and even begun to tighten. With the end of the GBPP, some investors may expect this trend to tighter spreads to continue given that the hurdle for the BoC to begin quantitative easing anew, should be quite high. The supply of bonds relative to swaps may stabilize and bring swap spreads back to normal levels. In Figure 3, the most recent observation of the 2-year swap spread is shown (circled) relative to the rest of the observations, including the period in late 2014 and early 2015 during which swap spreads were last consistently above 40, before rapidly tightening to around 25. There were other factors at play in 2014, of course, but there are few reasons to expect that spreads will remain as wide as they are currently. A move back to the trendline, which actually indicates no long term trend, would be a tightening of about 15-17 basis points.

FIGURE 3

2-year Swap Spreads v. 2-year Bond Yields



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

Trade Construction/Execution

Investors who hold the view that 2-year swap spreads will normalize could sell Two-Year Government of Canada Bonds and receive fixed in a matched-maturity swap[2]. This trade construction would generate profits if swap spreads fell from their current lofty levels but would require borrowing bonds in the repo/reverse repo funding markets, as well as a swap agreement with a Canadian counterparty.

Alternatively, an all-futures trade construction can be created where the investor sells CGZM22 and buys the first eight Three-Month Canadian Bankers' Acceptance Futures (BAX™). Doing so would closely mimic the performance of the asset swap described above but would avoid the financing hassle and legal technicalities of a swap. Additionally, the gains/losses on the various contracts would be netted when calculating margin to maintain the trade.

Further, the new Covered Trade functionality at Montréal Exchange (activation projected in Nov 2022) allows investors to carry out contingent trades, such as this one where the investor may want to place an order at a "BA minus X" level, while eliminating the execution risk. With this new functionality, the number of contracts[3] and change in price from the previous day on the BA contracts can be fixed, say at +0 cents if the manager wanted to enter the trade at no worse than yesterday's levels. The manager then specifies the price at which they would sell the CGZM22 contract. If the contingencies are met, the strategy would be filled with no risk of the market moving while "legging" or buying BA contracts piecemeal after the bond sale (or vice versa).

An example for this trade construction is depicted in Figure 4 for a trade size of $10,000 per basis point. A sale of 515 CGZM22 can be executed at no worse than yesterday's spread level by fixing the BAX purchase at +0 cents and entering yesterday's settle price for the sale of CGZM22. Of course, the manager does not have to target yesterday's spread level. They could specify a cent better on the spread by fixing the BAX contracts at -1 cent or even less and then wait for the market to come to them just like any other limit order. Note that the Covered Trade functionality does not utilize implied pricing.

FIGURE 4

POSITION	SECURITY	QUANTITY	PRICE (MARCH 30)	SECURITY DV01	POSITION DV01	ORDER ENTRY PRICE
Sell	CGZM22	-515	105.88	1.943	-10,000	105.88
CTD equivalent	Canada 0.75% Feb24	-56,066,375	97.188	1.784	-10,000	NA
Buy	BAXM22	50	98.14	0.250	1,250	+0
Buy	BAXU22	50	97.425	0.250	1,250	+0
Buy	BAXZ22	50	97.015	0.250	1,250	+0
Buy	BAXH23	50	96.785	0.250	1,250	+0
Buy	BAXM23	50	96.67	0.250	1,250	+0
Buy	BAXU23	50	96.62	0.250	1,250	+0
Buy	BAXZ23	50	96.63	0.250	1,250	+0
Buy	BAXH24	50	96.7	0.250	1,250	+0
				Net DV01	0	

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

2 A yield-yield asset swap.

3 Although the investor could specify different weights for each BAX contract based on regression analysis, we've chosen to replicate the spot rate through chained forward (BAX) rates here and have used an equal amount of each BAX contract.

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

i BMO Capital Markets is a trade name used by BMO Financial Group for the wholesale banking business of Bank of Montreal, BMO Harris Bank N.A. (member FDIC), Bank of Montreal Ireland plc., and Bank of Montreal (China) Co. Ltd and the institutional broker dealer businesses of BMO Capital Markets Corp. (Member SIPC) in the U.S., BMO Nesbitt Burns Inc. (Member Canadian Investor Protection Fund) in Canada and Asia and BMO Capital Markets Limited (authorized and regulated by the Financial Conduct Authority) in Europe and Australia. "BMO Capital Markets" is a trademark of Bank of Montreal, used with permission.

Copyright © 2022 Bourse de Montréal Inc. All rights reserved. Do not copy, distribute, sell or modify this document without Bourse de Montréal Inc.'s prior written consent. This information is provided for information purposes only. The views, opinions and advice provided in this publication reflect those of the author. Neither TMX Group Limited nor any of its affiliated companies guarantees the completeness of the information contained in this publication, and we are not responsible for any errors or omissions in or your use of, or reliance on, the information. This publication is not intended to provide legal, accounting, tax, investment, financial or other advice and should not be relied upon for such advice. The information provided is not an invitation to purchase securities or derivatives listed on Montreal Exchange, Toronto Stock Exchange and/or TSX Venture Exchange. TMX Group and its affiliated companies do not endorse or recommend any securities referenced in this publication. BAX, CGZ, Montréal Exchange and MX are the trademarks of Bourse de Montréal Inc. TMX, the TMX design, The Future is Yours to See., and Voir le futur. Réaliser l'avenir. are the trademarks of TSX Inc. and are used under license.