

MONTRÉAL EXCHANGE

June 2024

Awful April: Better Cross Currency Spread Opportunities?

A 30 basis point selloff in 5-year bonds in April has brought a widening of spreads between Canadian and US bonds. We examine here¹ the historical prospect of two highly interconnected economies diverging for long periods of time.

Markets Don't Know What Most Investors Do

Most institutional investors in Canada are familiar with the enormous influence the American economy and economic policies have on our economy. From catchy quotes such as Trudeau's (Pierre, not Justin) "like sleeping with an elephant" to economic statistics that show each country to historically be the other's largest trade partner, the correlation of the two economies is rarely in question.

However, at times, and especially recently, market prices of some securities, and the implied future scenarios that follow from those prices, seem to ignore this fact, or, perhaps, come to believe that the historical relationship is on the cusp of a major change. Figure 1 plots the extreme divergence of Canadian 10-year bonds versus the US treasuries of similar maturity for almost 30 years. The period shown, we remind readers, depicts more than a generation of yields that traverse an enormous real estate boom (and bust) in both countries, an ensuing financial crisis, an additional sovereign bond crisis in Europe, two periods of commodity inflation, oil prices ranging from \$12 a barrel to almost \$140, a global pandemic and corresponding economic downturn, two periods of hyper monetary policy to avoid global depression(s), many bull and bear equity market cycles, and, most recently, the worst performing bond market in the last four decades. Despite the severity of all those events and the resulting volatile markets, the difference in 10-year yields between Canada and the USA is at or near an all-time wide where US 10-year yields exceed those of Canada by about 90 basis points.



FIGURE 1

¹ Investors may also refer to our last examination of this topic six months ago in <u>Cross Currency Opportunities Created by Higher Rates</u>, published by Montréal Exchange in November 2023.

Of course, the 10-year yield difference isn't the only point on the yield curve that seems attractive after the April price action. The 5-year yield spread is touching or exceeding new lows as well with recent yield differences of about 100 basis points. The 5-year yield differential is plotted in Figure 2.

FIGURE 2 CAN, UST 5y CM Bond Yields



Is It Justified?

There are two reasons for a wide divergence between US and Canadian yields; one stems from the expectations theory of interest rates and the other from liquidity preference.

The liquidity preference story is easy to explain using Canadian fixed income examples; we need only look at the long end of the yield curve where the liability hedging aspect of very long duration bonds has historically been so valuable to large domestic insurance and pension funds that the long bond yield in Canada almost never exceeds that of the USA except very temporarily and only in times of extreme economic stress (financial crisis, pandemic, 2021 inflation event). However, there is scant evidence that this effect from the 30-year sector is applicable to any other part of the yield curve in Canada given the specific long-duration nature of this excess demand in Canadian fixed income.

The second possibility, market expectations, shares the attribute of easy explanation, in theory. Although market participants often refer to "what the market thinks", we know that market pricing is just the result of price discovery among all participants that utilizes all currently available information. The market may not "think" anything, but it can imply certain scenarios, even though the implied scenarios have little probability of occurring. The expectations theory here would indicate that Canadian overnight interest rates will average about 100 basis points² less than those of the US for the next five years.

History Says Otherwise (Sort Of)

With a history of high dependency and freely floating currencies, it isn't surprising that monetary policy in Canada has not diverged wildly from that of the US. We plot the US Federal Funds rate versus the Bank of Canada Target Rate in Figure 3 and note that there is a correlation of over 93% since 1995 (R²=0.87).

2 More like 98 basis points due to compounding differences between semi-annual and annual compounding for bonds and overnight rate quotations, respectively.

FIGURE 3 US Federal Funds v. Canada Target Rate



Source: Federal Reserve Bank of St. Louis, BMO Capital Marketsⁱ Fixed Income Sapphire database

Of course, high correlation doesn't necessarily mean that the spread isn't large. However, Figure 4, a history of the US-Canada overnight spread since 1996, shows that a "limit" of about 100 basis points (Canada lower) has been the extent of monetary policy differences in this direction for at least 25 years. The large deviation in 1996-97 represents the Bank of Canada response to an abrupt fiscal tightening event as then Finance Minister Paul Martin brought several changes to the fiscal structure weakening the Canadian economy relative to that of the US. That abnormally large deviation in overnight rates, a response to the most extreme fiscal policy event, excluding the global pandemic of 2024, in Canadian modern economic history, lasted a mere 15 months.





We note that, in Figure 4, the average differential between the Bank of Canada Target Rate and the Federal Funds rate has been about +7 (Bank of Canada higher) for the post-1996 period and about +17 if we exclude Paul Martin's historic fiscal tightening period in the mid-90s. Additionally, the lowest 5-year average of the time period in Figure 4 is +21 (Canada higher), a period that does encompass the historic fiscal disruption³. These average spreads are much, much, higher than the spread implied by the market for the next half decade.

³ A reminder may be in order that the debt binge of the early 1990s wasn't caused by a global pandemic response. One could argue that a similar fiscal tightening may be in order today but, despite the emergency fiscal response to the COVID-19 event of 2020, Canada federal debt to GDP is already considerably lower in 2023 than it was in 1993-4.

Economic Factors

We don't plan to rehash all the differences between the two economies but do consider several factors worthy of mention when evaluating this type of trading opportunity.

First, and perhaps most important, is the reputation that Canada's free-floating currency has on the ability of the Bank of Canada to wait for the Federal Reserve to lead on monetary policy. Take the current case where the yield on Canadian bonds has been consistently below that of US treasuries for some time. The Canadian currency has suffered a decline which tends to improve the competitiveness of Canadian exports which, in a country focused on exporting natural resources, tends to boost the domestic economy and thus reduces the need for the Bank of Canada to introduce expansionary monetary policy. The expectation of lower interest rates in Canada relative to the USA can eliminate the need to reduce interest rates in a type of virtuous cycle. For this reason, the central bank of Canada is rarely more active than the Federal Reserve, although there are some large historical exceptions to this rule of thumb.

From another perspective, there are some good reasons to believe that the Canadian economy is weaker than that of the US and that high interest rates could work to reduce excess aggregate demand in Canada (i.e. inflationary pressures) faster than in the economy of our southern neighbour.

First, Canada's GDP per capita has vastly underperformed that of our neighbour for at least two decades. Canadian GDP per capita is now 37% lower than that of the US⁴, primarily due to the slow growth of productivity per capita. A resource-based economy struggles to improve productivity vastly from automation, artificial intelligence, networks, or digitization when compared to economies with a greater degree of advanced industrialization and it has shown in the economic statistics.

Additionally, Canada's population is older (42.4 versus 38.5) than that of the USA⁵, and the country as a whole continues to have a carbon emission problem, where each Canadian is responsible for about 15% more CO_2 emissions than Americans⁶. Neither of these conditions is likely to lead to vigorous innovation and growth soon in Canada.

Finally, Canadian households are far more indebted than American households with household debt to GDP in Canada at about 104% versus just 76.1% in the USA⁷. Given the growth in consumer credit recently in Canada, one could wonder how much of recent economic growth was fueled by credit and how fast will it go away now that interest rates are no longer low.

Potential Trade Ideas

One trade idea fixed income investors may consider is to buy the US five-year bond and sell the Canadian equivalent to attempt to capitalize on the historic differential between the two rates that we showed above in Figure 2. For large investors with trading infrastructure to handle foreign exchange exposure and/or US dollar funding, the trade could easily be conducted in the cash bond market. For a version with less hassle and currency exposure, consider buying the 5-year US treasury futures contract versus selling the Five-Year Government of Canada Bond Futures (CGF™) contract on Montréal Exchange. The futures contract version requires no funding in US dollars but does require a quarterly roll to the new active contract to maintain the trade longer term.

Another possibility, this one for very sophisticated investors, may be to use futures contracts (or bonds, but that might be too labour-heavy for many funding desks) to construct a 2-year forward, 3-year rate spread trade between Canadian yields and US yields, which also looks attractive and is depicted in Figure 5⁸. The figure shows a differential of about -115 basis points currently versus a differential of just -84 basis points for the 3-year spot yields right now giving about 30 basis points of rolldown in the investors' favor. A 3-year rate two years in the future implies that the 3-year bond in Canada would yield, in this case, 115 basis points less than that of the US starting in 2026, or a wide divergence between the monetary policies of the two economies that persists for a very long time.

One would construct this trade by purchasing the Two-Year Government of Canada Bond Futures (CGZ™) contract on Montréal Exchange and selling an equal underlying notional amount of the CGF (5-year) contract to get short the Canadian 2-year forward, 3-year rate. The opposite transaction would be done in the US contracts⁹.

- 4 World Bank
- 5 Worlddata.info
- 6 Ourworldindata.org
- 7 Federal Reserve Economic Data (FRED), Federal Reserve of St. Louis.
- 8 We constructed the implied rate using 2-year and 5-year constant maturity bond yields in both countries and ignored convexity effects on the forward yield.
- 9 Note that, on Montréal Exchange, the notional amounts of the CGF (5-year) and CGZ (2-year) contracts are the same. There is a notional difference between the similar contracts for US treasuries. Use caution to avoid getting double the exposure needed on the 2-year US futures contract.

FIGURE 5 CAN, UST 2yf3y Yields, Forward Difference, 3y Actual





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



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 © 2024 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 article reflect those of the individual 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 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. CGZ, CGF, 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.