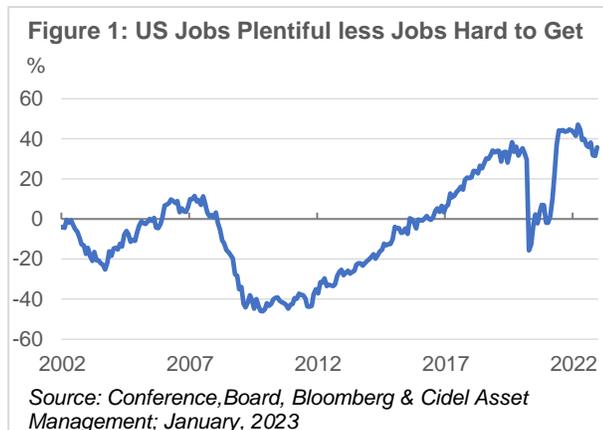


Inflation and Central Banks

In response to deflationary pressures that North American economies were experiencing over the decade prior to the pandemic, both the Fed and the Bank of Canada enhanced their monetary policy frameworks by adding flexibility around inflation targeting and their gauges of unemployment. The Fed was the first to announce changes, when Fed Chair Powell introduced flexible average inflation targeting and continued the retreat from hard employment goals. In 2021, Bank Governor Macklem delivered similar changes for the BoC, indicating that the Bank would utilize the full flexibility inherent in its inflation target range and rely on a variety of labour market factors to pursue full employment. The net of these changes was that both central banks were formally permitting themselves more flexibility around how they would respond to inflation and tight labour markets. In hindsight, at the very worst time.

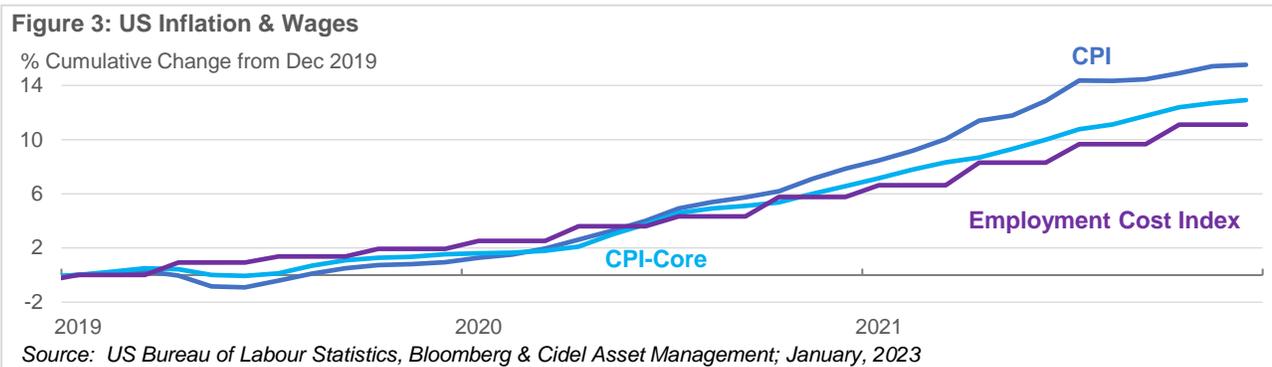
Although wages had been increasing at close to 3% in the US (ECI) and 4% in Canada (AHE) per annum for the three to four years prior to the beginning of the pandemic, inflation was only running around 2% (both overall and core). Labour market signals were flashing red, with unemployment rates at historical lows, job openings at historical highs, and the gap between jobs available and jobs hard to find historically wide (see Figures 1 & 2). Neither central bankers nor investors appeared overly concerned. Instead, the Fed and the Bank of Canada chose to formally adopt more laissez faire approaches to employment (providing room to probe lower unemployment) in their respective policy framework updates released in 2020 and 2021, respectively. It was hard to argue with policy that was supporting real wage growth.



Government and central bank responses to the pandemic were swift and aggressive. While fiscal policy implementation had a more definite duration, monetary policy was open-ended. This was a little peculiar because monetary easing, through drastically lowered policy rates and bond market purchases, was designed to ensure market liquidity and stability. When the threats to liquidity subsided, it is unclear why it was necessary for policy to remain so accommodative. In any event, the combination of liquidity, pandemic savings, deferred consumption, and rising wages contributed to excessive demand – initially for goods, and more recently for services.

Both the Fed and the BoC were late to react to inflation that had risen well beyond their policy targets. Admittedly, the economy had become extremely volatile, but it was a gamble to assume that imbalances would quickly resolve. Once the Fed and BoC conceded inflation was not exactly transitory, it made sense to quickly reverse the accommodation that was put in place at the beginning of the pandemic. Just how much more tightening is necessary is up for debate. It is likely that inflation has peaked this cycle given the correction of commodity markets and the reversal of prices in sectors that have experienced the greatest increases, such as autos and shelter. But service prices are still under pressure due to the substantial

rotation to service consumption and the shortage of workers. Although broadly higher prices and interest rates are hitting household finances, the combination of early pandemic savings and, most importantly, wage increases, are likely to make demand more resilient than widely assumed. Furthermore, very tight labour markets, higher consumer inflation expectations and declining real wages (see Figure 3), make it probable that we have not seen the end of material wage increases this cycle.



In order to hasten the decline of inflation, central banks have found themselves with little choice but to slow household demand through higher policy rates. They are already facing the prospects of higher wages prolonging a period of higher demand. Thus, rates will continue to rise, albeit with reduced trajectory but similar cadence, until inflation is convincingly on its way to 3% (the upper band of their target range). It remains to be seen if central banks will pursue their newly formalised policy flexibility or return to a more conservative approach – the degree to which they have found themselves offside of late is sure to give them pause. The inflationary forces that have been slowly developing over the last few years, including de-globalization, aging workforces (in developed countries) and ESG concerns will continue to evolve. It is unlikely that the deflationary environment that was evident just a few years ago, will re-emerge. For now, bond markets are not expecting inflation to be materially above target, over the long-term; the consensus expect central banks to conduct policy in such a way as to keep inflation expectations anchored. However, it is also conceivable that central banks and investors will have to come to terms with long-term inflation expectations that will be above target.

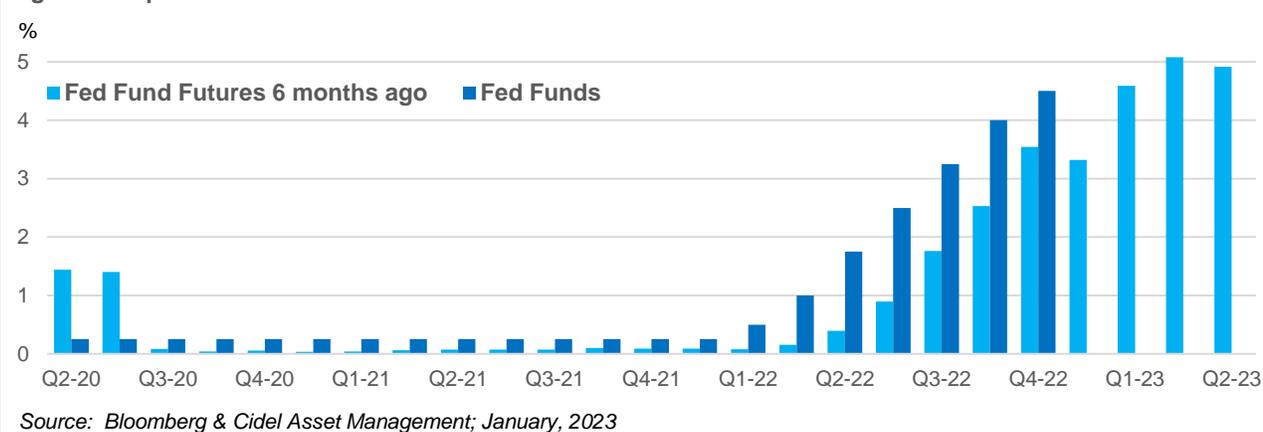
Yields

Bond market yields have been incredibly volatile since the Fed and the Bank of Canada abandoned their transitory inflation narratives and indicated tightening was on the horizon. Although periods of major policy change have always been accompanied by market volatility, the current level is more consistent with a crisis environment. But we are not in a crisis. The extreme volatility of underlying economic data, associated with the pandemic, has been gone for a year, so it is reasonable to have expected market volatility to fall too. But central bank policy has been aggressive and, most importantly, unpredictable. Central banks appear committed to forward guidance, but investors appear unconvinced of their message. Their reaction functions are being questioned given the performance during the current inflation cycle. In the case of the Fed, the message for higher rates for longer is being largely ignored – the derivative markets indicate a significant decline of policy rates next year. We think uncertainty surrounding policy will continue to drive yield volatility.

Canadian bond markets have uncharacteristically been even more volatile than for the US. This has been a bit surprising, given that the Bank of Canada has not deviated much from the Fed's narrative and policy. There had been a slightly less aggressive tone to BoC guidance in late summer which led to a shallower trajectory for implied Canadian policy rates and a widening between Treasury and Government of Canada yield curves; however, there has been a fairly aggressive move in the Canadian bond market starting in late December which has seen some narrowing of the gap. To put the volatility in context, 10-year Government of Canada yields traded within almost a 90 basis points range in Q4, finishing only 16 bps higher than where they started and US Treasuries traded in an 80 bps range, and rising by only 24 bps.

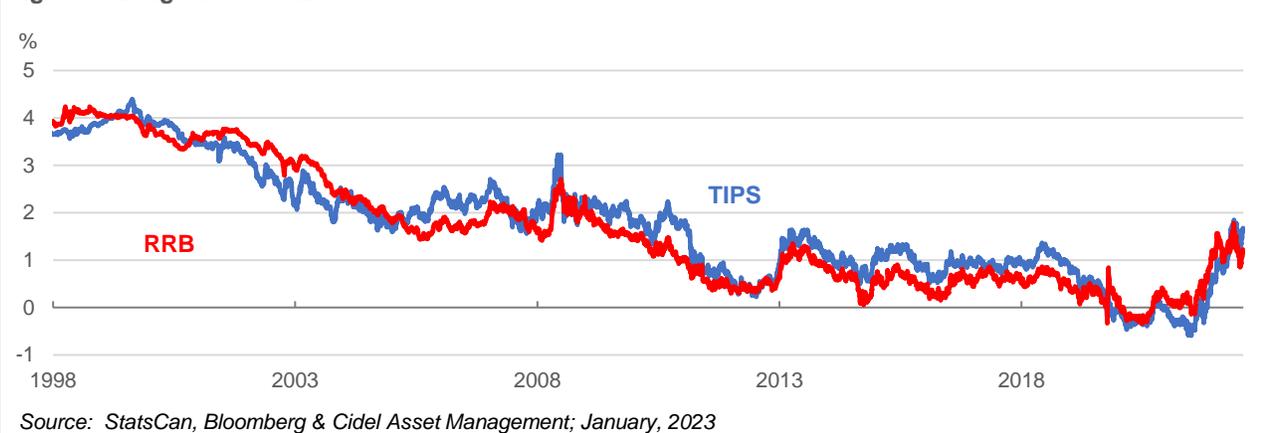
The flattening of the US and Canadian yield curves, which had continued from May 2021, troughed on Dec. 8th. The trigger for the steepening seems to have been the Bank of Canada's 50 bp hike the day before which was interpreted as a pivot in North American monetary policy strategy. The Treasury and Canada's yield curves (2 to 30-year) steepened by 41 and 30 bps, respectively to year-end. The steepening has mostly been the result of lower policy rate expectations due to the forecast of fewer increases followed by more substantial decreases. We think it is too early to declare the endpoint for policy rates, especially given that we have seen a consistent underestimation of terminal rates by the market and the Fed (see Figure 4).

Figure 4: Expected versus Actual Fed Funds



For much of 2020-21, central banks maintained accommodative policy, holding overnight rates close to zero and employing forward guidance that rates would remain low as long as necessary. This resulted in negative long-term yields in the US and Canada between mid 2020 and early 2021. However, the current tightening cycle has seen a dramatic increase in real yields – 10-year TIPS and GoC RRB yields are 1.6% and 1.4%, respectively. While current real yields are high with respect to the last ten years, they are not necessarily so in an historical context (see Figure 5). In the aughts, real yields were generally between 2-3% and in the 1990's above 3%. Economists spend a lot of time studying real yields, trying to determine what the natural rate of interest or r^* (neutral real rate) should be. For decades, their estimates have fallen. It is very possible that estimates of r^* may begin to drift higher, taking real yields upwards as well.

Figure 5: Long TIPS & RRB Yields



Long-term implied inflation or break-evens (the difference between long-term nominal and real yields) have not deviated much since the beginning of the summer. There was a rise of break-evens when war broke out in Ukraine, but they eventually reversed over May-June. Implied inflation (not reliable as an indicator of inflation expectations given the technical nature of inflation indexed securities) is running just over 2% in the US and just below in Canada. While investors are not necessarily showing great confidence in central banks,

they appear reasonably satisfied that longer-term inflation will not change materially. However, we would not be surprised to see higher long-term inflation expectations leading to a rise in long-term nominal yields.

Corporate Bonds

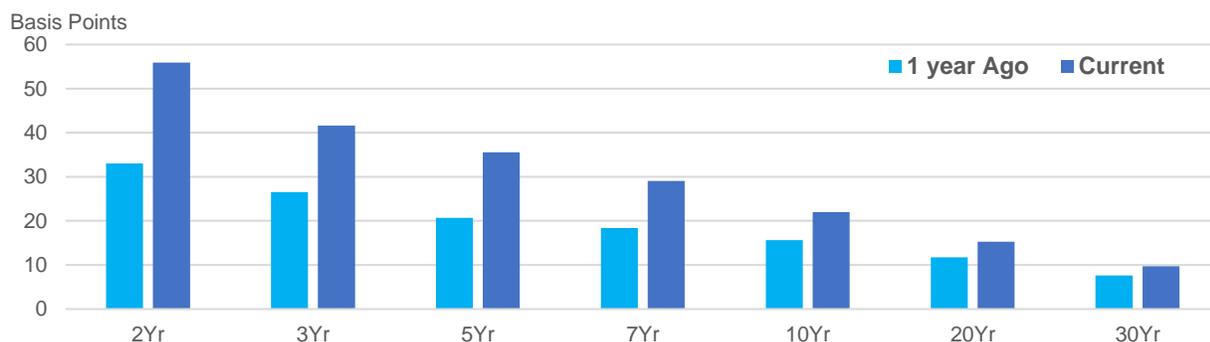
Corporate yield spreads spent much of 2022 widening as investors priced in persistent and broadening inflation, higher policy rates and an increasing likelihood of recession. Spreads peaked in October, as investors became more conscious of the improved risk-reward relationship for corporates, particularly in the short-end. However, yield spread narrowing has been limited, with spreads only recouping about 25% of the widening from the lows of 2021. Short-term corporates look particularly attractive, with average yields having risen from around 2% a year ago to 5% today (they were 1% in December 2020). Yields for long term bonds are only slightly above those for short-term, having risen to just over 5¼% today from 3¼% a year ago (they were just over 3% in December 2020). In addition, short-term corporate yield spreads are now averaging around 140 bps, compared to 200 bps for long-term. Relatively high overall yields for short-term corporate bonds, combined with short durations, make this sector a particularly attractive investment.

Why are investors content to receive almost the same yield compensation for long-term corporates as they are for short-term? First, we should qualify this question, by stating that this is true in the investment grade space, where overall spread widening has been much more limited. In the US (where there is far more high yield issuance) high yield spreads have widened by around 200 bps on average over the last year (after having peaked mid-year at over 300 bps). In contrast US high quality corporate spreads have only widened by about 40 bps over the same period, with a peak at about 70 bps. The yield differential between US long-term and short-term high yield averages around 150 bps.

So, more appropriately, why are investment grade investors content to take on more duration risk with regards to yields and yield spreads? It seems that investors in government bonds have decided that lower long-term yields are worth the risk because we are headed for a slow-down, probably recession. Hence the inversion of the yield curve. It would make sense that corporate investors would have the same view, but then wouldn't they be demanding more yield spread for the risk of a slow-down? We believe investors are generally of the view that investment grade issuers will be able to withstand a slowdown, given improved balance sheets and funding positions; and the belief that central banks will once again, quickly, bail-out risk assets. This doesn't necessarily consider a scenario where inflation remains high and handcuffs policy around higher rates for longer. In such a scenario, yield spreads could easily widen.

However, we are of the view that the economy will not slow so quickly. It could mean that yield curves will continue to steepen, but it would also mean that yield spreads should hang-in. In this scenario, investors will be rewarded for taking on the yield spread risk, but not necessarily the yield curve risk. That is, short corporate bonds look far more attractive where the spreads are competitive with longer-term issues, and there isn't excessive reliance on an imminent policy reversal to offset lower overall yields (see Figure 6).

Figure 6: Average Corporate Breakeven Yield Spread



Note: The corporate breakeven yield spread is an approximation for the amount of yield spread widening that would negate the yield pick-up for corporate bond versus a similar term Government of Canada bond over a one year period.

Source: Bloomberg Canada Aggregate Indices, Bloomberg & Cidel Asset Management; January, 2023