RBC BlueBay
Asset Management

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Rate cycle maturing

Plan now for portfolio rebalancing as short-term interest rates peak

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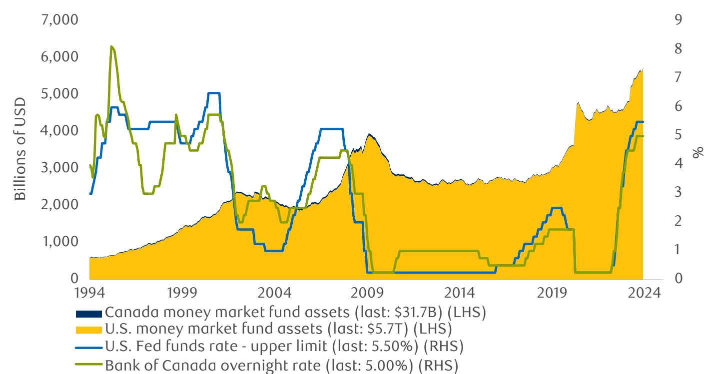
A mountain of cash and money market investments has grown on the back of the pandemic and spiking short-term interest rates in its wake (Exhibit 1). For the first time in decades, short-term paper has offered competitive rates of return, and done so within an increasingly unstable environment as central banks' war on inflation put the economy and markets at risk. The problem is that short-term investments are exactly that. Returns are quoted only for the life of the paper and investors eventually need to roll into whatever is available at their reinvestment date. At some point, central banks will have achieved their goals and rates will fall, driving returns for those invested in the short term lower while igniting returns for riskier, longer-dated and variable return assets. Assets like bonds and stocks.

Rates on short-term paper are currently fixed a bit above yields on longer-dated bonds, and in some scenarios that spread could remain in place or even expand if inflation reverses course to the upside. In our view, though, an even larger threat exists in waiting too long to lock in yields at today's levels. Those that have built cash and short-term investments above the "normal" levels embedded in their investment plans should consider a path to restoring balance in their portfolios as central banks look to have rounded out their policy tightening in the past few months or are set to do so in the early months of 2024. Fortunately bonds, for many the replacement asset for short-term investments, now offer better income, valuations and benefits to portfolio dynamics than they have in 15 years.

Exhibit 1: U.S. and Canada money market fund assets



Note: as of November 15, 2023. Source: ICI, Bank of Canada, Bloomberg, RBC GAM

Piling on policy tightening

Responding, perhaps a bit late, to unacceptably high inflation, the U.S. Federal Reserve ("the Fed") began hiking the benchmark fed funds rate with a 25 basis points (bps) move from 0% on March 17, 2022. Ten subsequent and unusually aggressive hikes into July 2023 boosted the fed funds rate to 5.25-5.50%, where it sits today. And rate hikes were not the only tool used to attack inflation. The annual growth rate of the M2 money supply, which had soared to 27% during the pandemic, was wrestled into negative territory by December 2022 (Exhibit 2). Similarly, quantitative easing, the practice of central banks buying their own government's bonds as a means of forcing longer term bond yields down in times of crisis, was suspended in the first half of 2022 and then began to move in reverse in June of last year (Exhibit 3). Only fiscal policy in the U.S. remains fixed at a highly expansionary setting, although with the national debt rising to 123% of GDP, well above the 90% that tends to inhibit economic growth, and the deficit for 2023 now forecast at 5.7% of GDP, the drumbeat for discipline cannot be ignored.

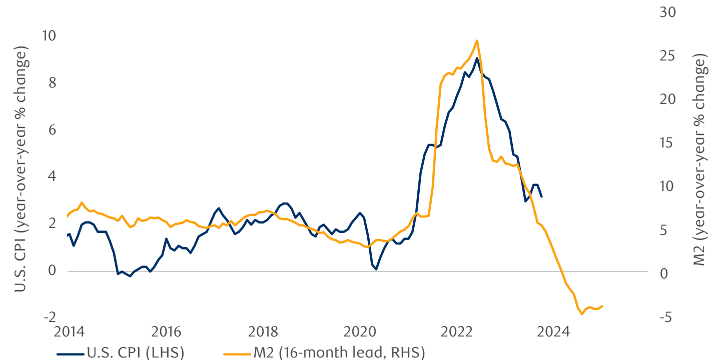
> "Plenty of interesting hypotheses have emerged suggesting that changes in the economy may have diminished the efficacy of policy tools..."

The U.S. is not alone in its multi-fronted war on inflation. Almost all of the world's major central banks including Canada, the UK, the eurozone and China tightened policy during the past two years, most quite significantly (Exhibit 4).

Forecasts of recession began appearing almost immediately following the Fed's initial rate hike in the spring of 2022, but the economy is still growing late in 2023. The consensus, which at one time indicated 88% of forecasters expected sub-1% GDP growth for the U.S. in 2023 (a level that would almost certainly require the economy to contract for at least part of the year), now shows that many have pushed forecasts for recession into 2024 and others have given up entirely on any meaningful slowdown. Instead, plenty of interesting hypotheses have emerged suggesting that changes in the economy may have diminished the efficacy of policy tools or that exactly the right blend of policy initiatives has been applied to allow inflation to settle without forcing the economy into contraction – a soft landing.

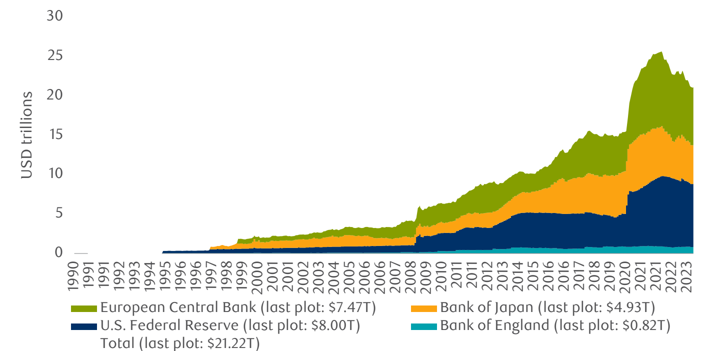
Exhibit 2: U.S. inflation and money supply

Year-over-year changes in CPI and M2 money supply



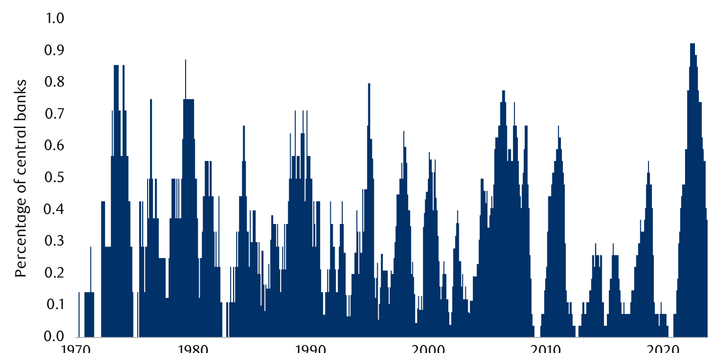
Note: as of October 31, 2023. Source: Bloomberg, RBC GAM

Exhibit 3: Central bank balance sheet assets



Note: as of October 2023. Source: Bloomberg, RBC GAM

Exhibit 4: Incidence of central banks tightening



Note: tightening episodes are defined as periods when the seven-month centred moving average of the policy rate is increasing. 27 countries included. As of September 2023. Source: BIS, RBC GAM

A little patience, please

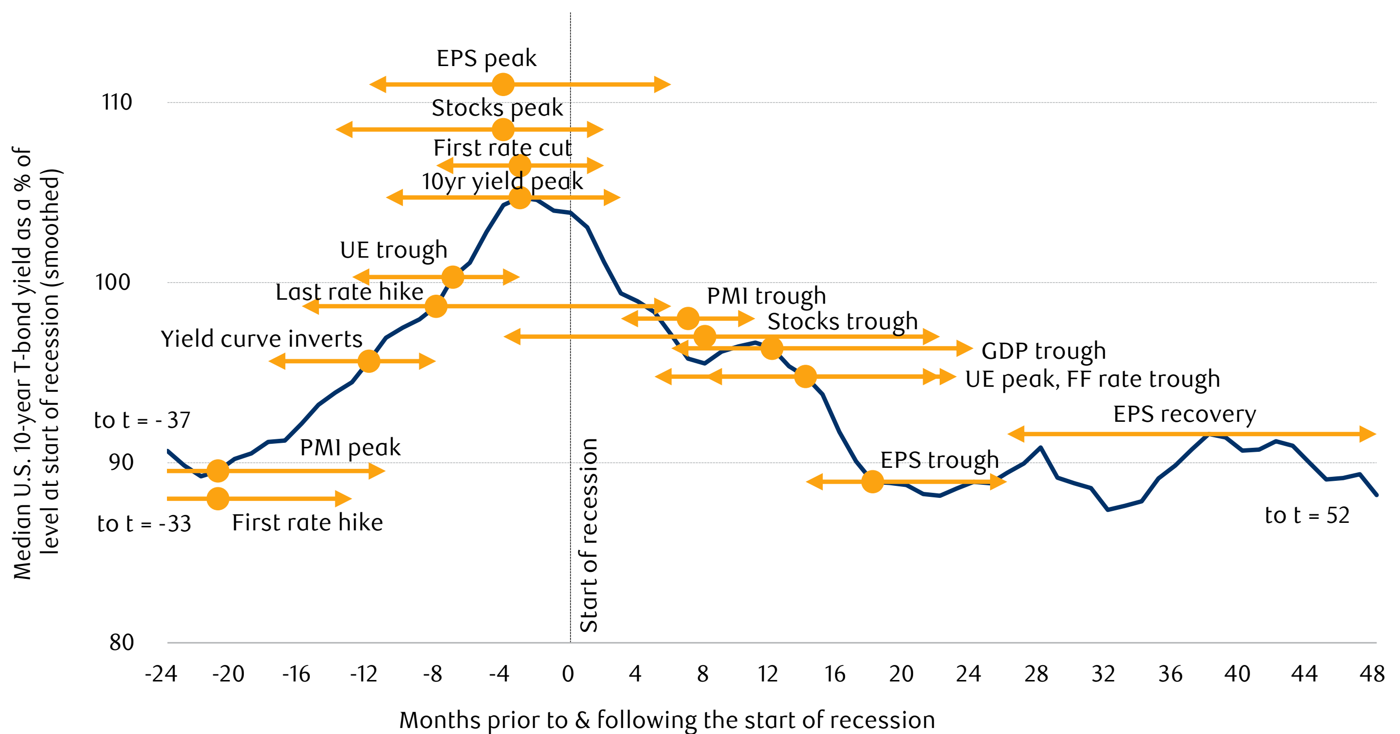
There are, of course, many possible outcomes for the economy. Every cycle comes with a twist, but there is valuable information that can be gleaned from past experience. In 10 of 18 cycles of policy tightening since the 1950s, the economy eventually entered a period of recession. Because of the degree of tightening since 2022, we have focussed on these.

Exhibit 5 presents a roadmap for the U.S. economy and the 10-year T-bond yield through the 10 recessions dating back to 1957. T=0 on the horizontal axis represents the start of recession and, for each metric (Purchasing Managers' Index (PMI), unemployment (UE), inflation, corporate earnings (EPS), short-term interest rates (FF), bond yields, stock prices), we have marked the median position and range for all 10 cycles.

Some may be surprised by the median lag of 21 months between the initial hike in short rates and the onset of recession. The current cycle began with the first rate hike in

Exhibit 5: U.S. 10-year yield and recessions

Median of 10 recessions since 1957



Note: markers represent median timing and ranges depicted by the arrows are one standard deviation from the mean. Source: Bloomberg, RBC GAM

March 2022, so the median lag would place the start of a U.S. recession at December 2023 (with a one-standard deviation range of +/- 10 months). While many have changed their minds on the probability of contraction despite such an aggressive tightening of policy, *the window is only now opening for recession, not closing*. Rate hikes work with long lags and growing intensity. The full force of the past 20 months of tightening is now feeding through.

There certainly are signs that higher interest rates, shrinking money-supply growth and the end of quantitative easing are having an impact. Most importantly, U.S. inflation (Exhibit 6), the reason for policy tightening, has sunk close to 3% from a peak of 9.1% in June 2022 and inflation expectations (Exhibit 7), plotted in this case as the breakeven inflation rate buried in inflation-linked bonds, remain well-anchored near 2% for the U.S., Canada and the eurozone. Key leading indicators of U.S. economic activity have drifted lower, although to levels generally indicating modest growth but not yet recession. Among these are the Purchasing Managers Index (PMI) (Exhibit 8), employment, and various measures of housing and automobile market health.

Also interesting is the tone of growth outside of the U.S. Canada, the U.K. and several eurozone economies including Germany, have already fallen into technical recession (defined as two consecutive quarters of negative year-over-year change in GDP) or are close to doing so. Consumer and mortgage debt loads for these economies have shorter durations than in the U.S., so the transmission of rising interest rates into economic activity is faster. This may provide a lens on what's ahead for the U.S.

> "The roadmap indicates that we should watch for inflection points in the economy, interest rates and stocks within the current quarter or the first quarter of 2024."

U.S. consumers reduced leverage following the global financial crisis and also enjoy relatively long-term mortgages locked in at the low rates of earlier in the decade. Nevertheless, the longer that rates stay at today's elevated levels, the more damage they will do. Although mortgage rates have soared alongside fed funds and bond yields, the

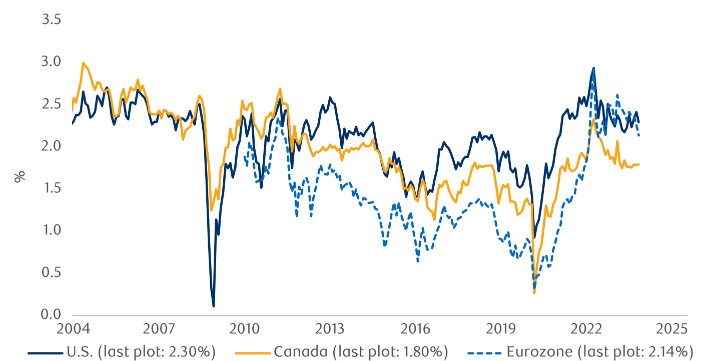
Exhibit 6: U.S. consumer price inflation

CPI Y/Y % change

Note: CPI data as of October 31, 2023. Source: Bloomberg, RBC GAM

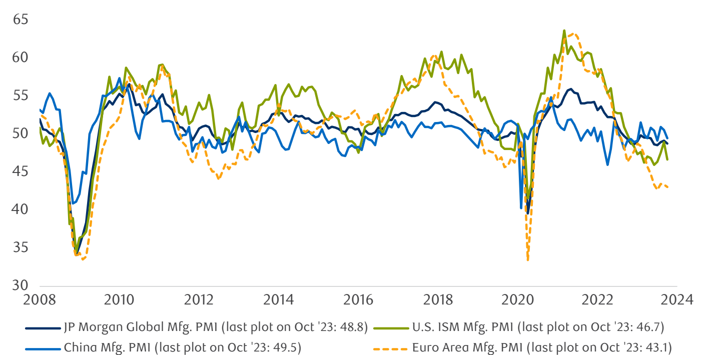
Exhibit 7: Implied long-term inflation premium

Breakeven inflation rate: nominal vs 10-year real return bond



Note: as of November 2023. Eurozone represents GDP-weighted breakeven inflation of Germany, France and Italy. Source: Bloomberg, RBC CM, RBC GAM

Exhibit 8: Global purchasing managers' indices



Source: Macrobond, RBC GAM

pain is not yet felt in America as common home-loan terms are fixed-rate for 30 years, not the traditional 5-year terms of countries like the U.K. and Canada. Right now, the effective average rate on existing mortgage debt in the U.S. is 3.74% (Exhibit 9). If that were all to be refinanced today, the rate would more than double to 7.79% for what makes up almost two thirds of household debt. Similarly, the Fed and others have pointed to a full calendar of high yield debt refinancings that begin near the end of next year and extend through 2029 (Exhibit 10). Plenty of this debt was put in place near record lows for interest rates, so current levels could challenge many formerly-sound business plans.

Past peak tightening?

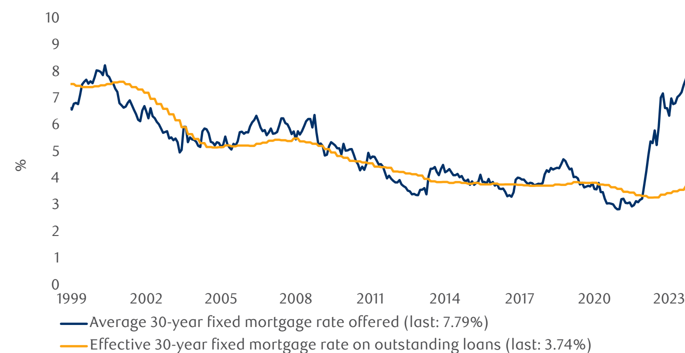
Much focus has been drawn to whether the collapse in inflation from 9.1% in mid-2022 to just above 3% in late 2023 and the anchoring of expectations near 2% have sealed the peak for short-term interest rates at current levels or just above (Exhibit 11). To us, that feels like a reasonable conclusion. More and more, comments from central bankers, however guarded these are, and the action in capital markets leans that way.

Restoring inflation to an optimal level has always been the goal for policy tightening. Recession may come for the U.S. and a broad list of countries, but the peak for short- and long-term interest rates seems much more dependent on the degree to which central banks are convinced that inflation is now locked on a path toward 2%. Recession remains our base case scenario and that includes the U.S. by the first half of 2024. However, *we do not consider recession a pre-condition to a peak and subsequent decline in short- and long-term interest rates.*

So, back to the roadmap (Exhibit 5). Notice that the end of rate hikes occurs a median of eight months prior to the onset of recession. Four months later, and four months before recession begins, rates are cut. At the same time, bond yields peak at levels roughly equal to fed funds. For the current cycle, the fed funds rate was last raised in July (4 months ago) and the U.S. 10-year T-bond yield touched 5.02% on October 23, 2023, not far from the 5.25%-5.50% setting for the fed funds rate. Since then, additional signs of the Fed's success on inflation have allowed the 10-year yield to sink to just below 4.5%.

More menacingly, the peak in bond yields also tends to come close to the same time that corporate earnings and stock prices begin to soften.

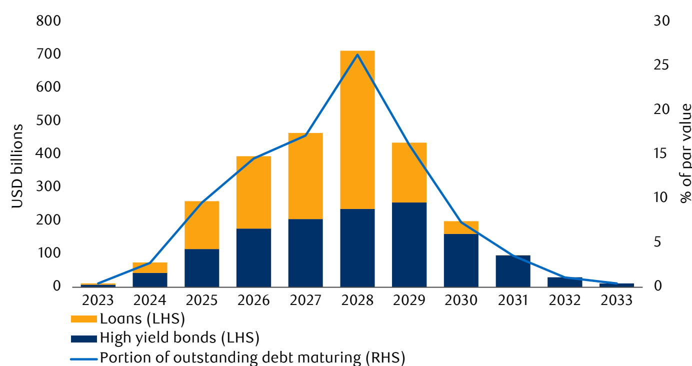
Exhibit 9: U.S. 30-year fixed mortgage rates



Note: as of November 21, 2023. Source: Bankrate.com, RBC GAM

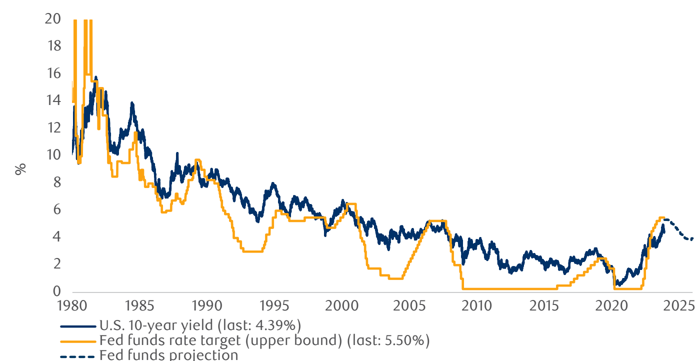
Exhibit 10: U.S. high-yield bonds and leveraged loans

Upcoming maturities



Note: as of August 31, 2023. Source: BofA Global Research, ICE Data Indices LLC, RBC GAM

Exhibit 11: U.S. 10-year yield and federal funds rate



Note: as of November 21, 2023. Source: Bloomberg, RBC GAM

The roadmap indicates that we should watch for inflection points in the economy, interest rates and stocks within the current quarter or the first quarter of 2024. That too fits well within our own views. With the economy still growing and inflation above target, the Fed is unlikely to cut rates in the near term, but if the final hike is not yet behind, it's very close by.

Critical rebasing of valuations now behind

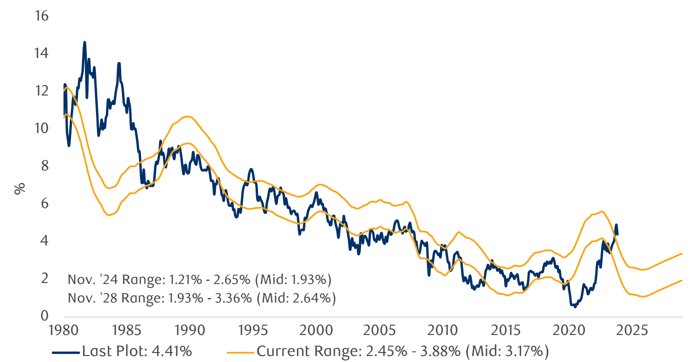
Since the exit from the global financial crisis (GFC), tactical positioning for our balanced solutions has skewed to underweight fixed income. Throughout the period, full valuations dominated our thinking. Our equilibrium models (see Exhibit 12 for US T-bonds) highlighted the persistent grind to lower yields, pushing bond prices into sharply overvalued territory. We viewed this to be unsustainable for bond yields in the U.S. and around the world. Indeed, our global composite for sovereign bonds sank to its lowest level (most overvalued) of the past 45 years in January 2022 (Exhibit 13). But the pressure of inflation, the resulting spike in rates, and a general tightening of policy have reversed all of that, forcing U.S. bonds to an undervalued position as yields rose above the equilibrium channel. Similarly, our global composite moved above neutral, signaling attractive pricing for the first time since the global financial crisis save for a very brief spike in 2013.

Digging deeper into the equilibrium model provides a good sense of the sustainability of current valuations. Equilibrium lies at the centre of the band. It's simply the sum of a real (after-inflation) interest rate plus an inflation premium. In financial theory, the real interest rate (or the "true" interest rate) is the payment one receives for deferring current consumption into the future plus a risk premium against the chance of not being paid back at maturity. Exhibit 14 shows that the real interest rate plunged to a low of -3.7% during the pandemic and only moved back above zero in October 2023, compared with its historic average of 1.8%.

Exhibit 14 reminds us that, like so many things in capital markets, "average" doesn't help much in establishing expected levels or even direction going forward. But it never made much sense to us that investors would forever accept a negative after-inflation return on their savings as long as the economy was heading away from crisis. Based on work initially published by the Bank of England in 2015 and essentially validated by the Fed with its own research, we have held to a belief that the central tendency for the real rate of interest would hover between 0 and 1% - below the historic average of 2% but consistent with the maturing of emerging economies, changes in global demographics and a

Exhibit 12: U.S. 10-year T-bond yield

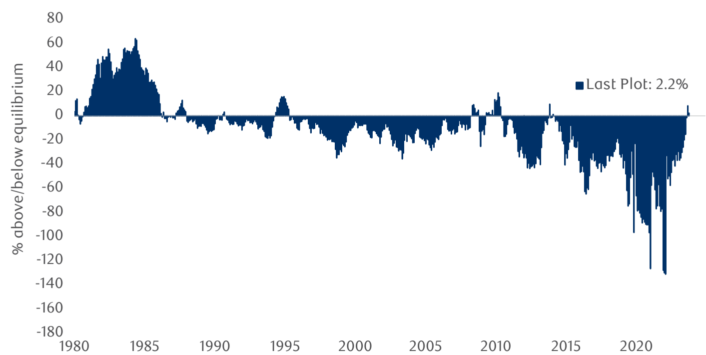
Equilibrium range



Note: as of November 17, 2023. Source: RBC GAM

Exhibit 13: Global bond market composite

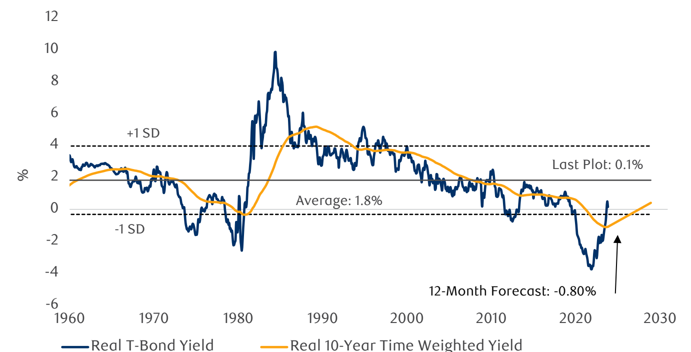
10-year government bond yields relative to equilibrium



Note: as of November 17, 2023. Source: RBC GAM

Exhibit 14: United States

Real 10-year T-bond yield



Note: Real yield is the 10-year Treasury yield minus CPI inflation. As of November 17, 2023. Source: RBC GAM

variety of other lesser factors. The real rate has now returned to that range and our modelled expectation (the orange line on Exhibit 14) is also moving in that direction. In our mind, *the biggest risk to the sustainability of nominal interest rates that existed for much of the post-financial-crisis era and which became acute during the pandemic – sharply negative real rates of interest – has been corrected.*

Similarly, the inflation premium – the equilibrium model's other component – is approaching what we believe is a sustainable level at close to 2%. Our model for the inflation premium reflects a rational expectations approach to forecasting: what one expects for the future is largely a forecast shaped by past experience with diminishing weights as time extends backward. Exhibit 15 shows that the rational expectations approach has provided a useful estimate of the inflation premium even through the sharp rise and fall of consumer and producer prices from 2020 to 2023. The inflation premium buried in the model is forecast at 2.7% one year from now (reflecting our own inflation forecast of 2.2% at that time), falling to 2.3% in five years.

The sum of our modelled inflation premium and real interest rate identifies the equilibrium level for bond yields. Right now, equilibrium rests at 3.19% and it moves to 2.64% in five years (Exhibit 12). While the near-term estimates are distorted by the recent period of deeply negative real rates and soaring inflation, we do believe that *3.0%-3.5% is achievable for T-bond yields over the coming half decade, meaning yields could fall from their recent highs through the cycle ahead even without recession, as long as inflation continues along its current path toward 2%.*

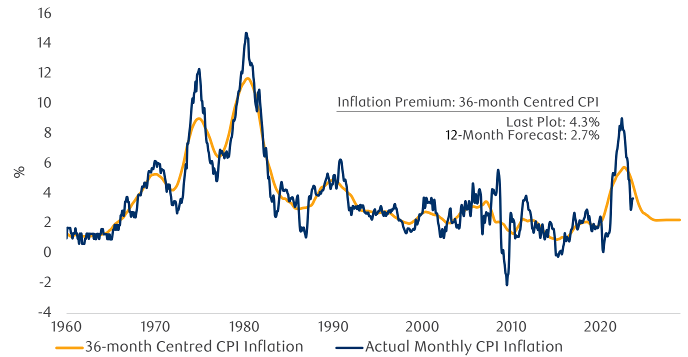
Timing a peak in yields

There are, of course, many risks to our view. First among these is that central banks could remain unconvinced of their success in taming inflation and push rates higher, or simply hold them at their current elevated levels deep into 2024. In such a scenario, and especially the rates-higher outcome, there will be a better time to reduce cash, buy bonds and extend term.

In addition to a review of past cycles and current valuation metrics, a variety of technical timing indicators offer some comfort that if the time for action isn't now, it's probably not far off. First among these is our long-term price momentum model which correctly read the upturn in yields in late 2020 and began signaling the nearness of a peak in mid-2023 (Exhibit 16). Similarly, the year/year rate of change of T-bond yields highlights the unprecedented degree to which bond prices were pounded during the past year (Exhibit 17).

Exhibit 15: United States

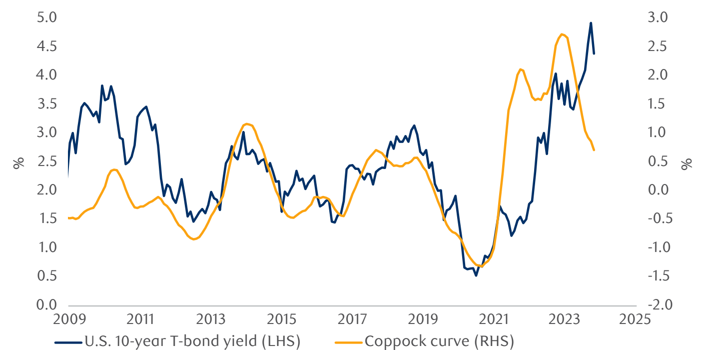
CPI inflation and the Inflation Premium



Note: as of November 17, 2023. Source: RBC GAM

Exhibit 16: U.S. 10-year T-bond yield

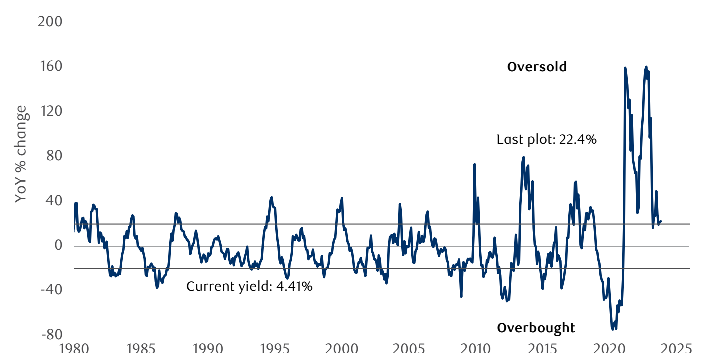
Long-term price (yield) momentum



Note: Coppock curve based on monthly data. As of November 17, 2023.
Source: Bloomberg, RBC GAM

Exhibit 17: U.S. 10-year T-bond yields

Rate of change



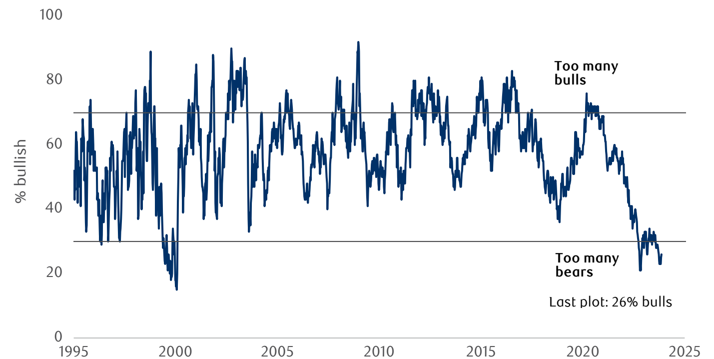
Note: as of November 16, 2023. Source: Bloomberg, RBC GAM

Our experience is that once yields have moved more than 20% above prior-year levels and then fall back through the +20% marker on the diagram, a sustainable rally in bonds has begun. Finally, new bull markets seldom begin with a backdrop of optimism. Exhibit 18 shows that bulls on T-bonds have sunk to the lowest level in almost a quarter-century, indicating the kind of sentiment that is typically associated with washed-out markets primed for reversal.

Our investment processes tend to focus on scenario analysis and an assessment of the significance of outcomes different from our expected course. One simple such analysis appears in Exhibit 19. In it we have compared the range of total returns that would be generated if 10-year T-bond yields were to move 100 basis points above or below the current level of 4.4% over the year ahead. Our base case reflects continued progress toward 2% inflation, the end of policy tightening and a decline in bond yields to approximately the minus 100 basis points scenario, generating a total return of 12.8%. But there is also the very legitimate threat that not enough policy tightening has been applied or other factors emerge to halt inflation's recent decline, bringing on additional rounds of rate hikes and a move higher in yields of, say, 100 basis points. The resulting decline in bond prices would deliver a loss of 3.2%. These scenarios and related targets are of course only a very small sample of what's possible as we move toward year-end and into 2024, but they do confirm our view that the current risk/reward setup in the bond market is quite favourable after years of ultra-low bond yields and almost non-existent coupons.

We saved Exhibit 20 for last as it places the past 15 years of T-bond yields in the context of 150 years of interest rate history. The word "unprecedented" seems overused, but it is perhaps well suited to bond yields through the post-financial-crisis era, falling and remaining below the lowest levels of the past century and a half. Similarly, the move up from the ultimate trough at 0.51% triggered the worst-ever bear market in sovereign bonds, with 10-year Treasury bonds losing 10% of their value in only 8 months, and extending those losses to as much as 26% by October 2023. Now at the current level of around 4.5%, T-bond yields are no longer exceptional. For investors, that's a good thing. In addition to providing income in the form of regular coupon payments and the opportunity for capital gains as market yields move up and down, bonds have traditionally played a highly useful role in portfolio construction, limiting downside through coupon and often moving in the opposite direction to stocks, dampening portfolio volatility and narrowing the range of

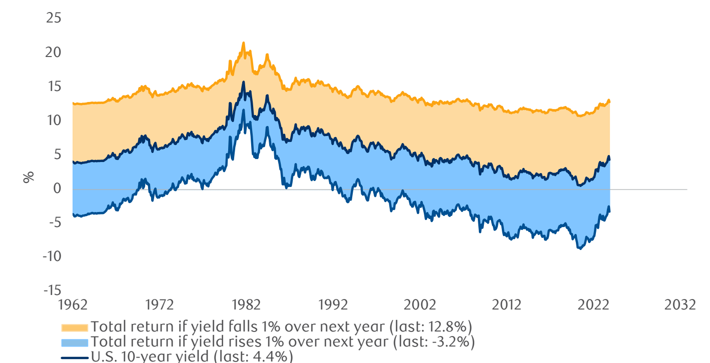
Exhibit 18: U.S. 10-year T-bond bullish consensus



Note: as of November 12, 2023. Source: Market Vane, RBC GAM

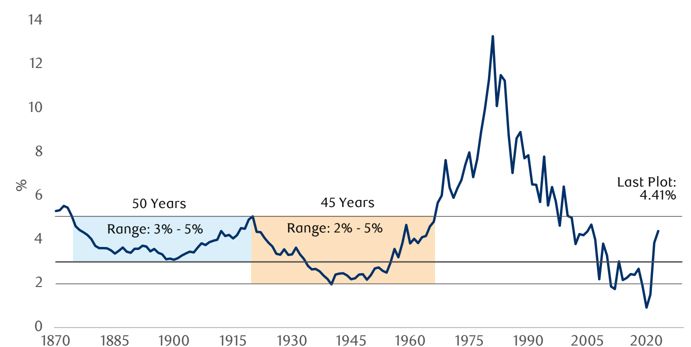
Exhibit 19: U.S. 10-year Treasury bond

Total returns given +/- 1% shift in yields over 1 year



Note: as of November 22, 2023. Chart reflects hypothetical computation of total returns in the event that yields were either to rise or fall 100 basis points over the subsequent 12 month period. Source: Bloomberg, RBC GAM

Exhibit 20: U.S. 10-year bond yield



Note: as of November 17, 2023. Source: RBC GAM

portfolio outcomes for investors. Those benefits disappeared in the last decade as yields ground steadily lower, coupons approached zero and the duration for the universe of fixed-income securities lengthened. With yields now well within their normal range of the past 150 years, bonds' utility in portfolio construction is again evident.

The minimum risk portfolio

Pension sponsors and their actuaries try to identify a "minimum risk portfolio" when committing funds. That portfolio is the blend of investment options that meets a plan's commitments with the minimum amount of risk, and it's unlikely that cash and money market instruments form much of their strategy. That's because, although short-term interest rates provide the highest degree of income certainty, they seldom offer returns in line with what's needed to meet long-term objectives, and when they do, those rates are frequently not available for long. As inflation continues its move back to optimal levels, the forces that halted its rise will eventually abate, short-term interest rates will normalize and bonds will provide returns equal to or greater than their coupons. *Those with larger than normal exposures to cash and short-term investments above should consider extending term and locking in current yield with at least some portion of the excess as we move past the peak in short rates.*

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