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Government Bonds: Today's "Free Parking" Space

by Avery Shenfeld, Ian Pollick and Sarah Ying

One has to sympathize with the plight of Canadian portfolio managers these days, particularly those running pension or life insurance assets seeking relatively safe, long run returns. Because one asset class, federal government bonds, has essentially disappeared as a way to make money. Instead, high-grade sovereign bonds these days have essentially become the "Free Parking" spot on a Monopoly game board, a place where nothing really happens.

Canada is not alone in that investor challenge. If purchased today, most developed-country government bonds are today's version of cash, likely to offer nothing much in return in the coming decade, and like cash, valued mainly for safety and liquidity. As a result, there are major implications for the traditional rules of thumb used to allocate portfolios across asset classes.

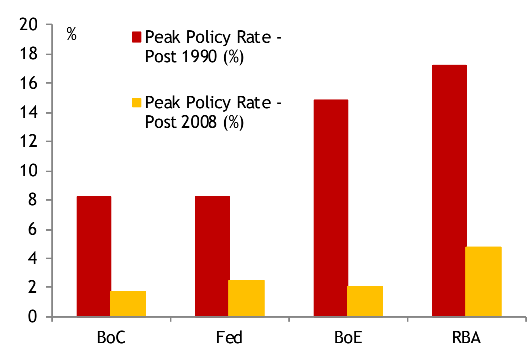
A Reasonable Ten-Year Simulation

Over the next decade, a basket of Government of Canada bonds purchased today will have coupon payments and maturities to reinvest, and a price change on a 30-year bond that won't mature. So, to project how an investor would do in the 2020s, we'll have to be brave enough to offer a ten-year scenario for the path of the full yield curve ahead.

It seems reasonable to assume that inflation will stay moderate and average near 2%, but much will depend on the path that the overnight rate takes to keep it that way. The last cycle confirmed what models were already suggesting: neutral policy rates ain't what they used to be. Despite reaching full employment in the last cycle, and the need to keep a lid on price pressures, the central bank never had to take rates anywhere near past peaks (Chart 1).

Canadian long yields also are linked to the global bond market. Internationally, the level for neutral rates has also descended, and looks likely to remain low. Neutral rates have to be set a level that balance savings with investment at full employment, and there are numerous explanations in the literature for why that now takes place at a lower rate. Savings are elevated by ageing populations and by unequal income distributions that put a lot of funds in the hands of those who have the ability to save.

Chart 1
Policy Rates Now Peak at Much Lower Levels



Source: Haver Analytics, CIBC Economics

Capital spending at a given rate of interest has been suppressed by the shift in GDP towards low-capital intensive services, and the fall in tech prices that makes nominal capital spending less expensive. The slowing in trend GDP due to dampened total factor productivity and diminished working age population growth implies less need for capital spending to expand capacity.

Well before COVID-19 hit, the Fed was pulling back from a 2½% fed funds rate. That wasn't just because of the uncertainties of trade wars, but because mid-2% rates were already slowing interest-sensitive domestic demand for autos and housing, suggesting that we were already above the neutral rate at the time.

Officially, the Bank of Canada still puts its central estimate of the neutral rate at 2.75%, or a real rate of 0.75%, but annual reviews have been inching it lower. Holsten-Laubach-Williams arrive at a figure about 70 bps above that, but their model seems highly flawed, as it also estimates that Canada had a zero output gap in Q2 of this year, and a large positive output gap pre-recession, even as inflation stayed calm.

The experience of the last cycle, in which the Bank was never able to hike beyond 1.75%, suggests that Canada's neutral rate might even be a bit lower than that of the US, and perhaps close to 2%. Mediocre oil prices were part of that story, but it also captured the drag associated with imposing a squeeze on indebted households whose mortgages renew every 1-5 years. The impact of elevated private sector debt on neutral rates was a point emphasized by Richard Clarida, well before he was elevated to be Fed Vice-Chair.

While there are also households who are savers and earn more income as interest rates rise, as a recent paper by Mian, Straub and Sufi argues, rising rates entail a transfer from lower income households to higher income households with a higher propensity to save the additional income rather than spend it. In their model, the rising indebtedness of the household sector lowers the neutral rate, and this gets worse with repeated use of ultra-low rates in recessions that induce additional household debt. So the path to neutral has to be shallower to avoid the shock of a wave of defaults, and the level of for neutral is now also lower.

For Canada, that story hasn't gone away. Moreover, taking Canadian overnight rates north of those stateside tends to bid up the loonie, adding a drag on exports.

So our simulation has Canadian overnight rates slowly rising over 2023-26 to 1.75% and then plateauing at the previous cycle's peak. That's not to say that we couldn't possibly spend some time above 2%, but that might be counterbalanced by some time below 1.75% in the latter half of the decade should there be pressure on growth from elsewhere.

We have the curve steepening in the next few years as markets anticipate rate hikes further out, and central banks pull back from QE, and then flattening once rate hikes are well underway. We applied typical elasticities for how much of the increase in overnight rates gets translated into rates further out the curve.

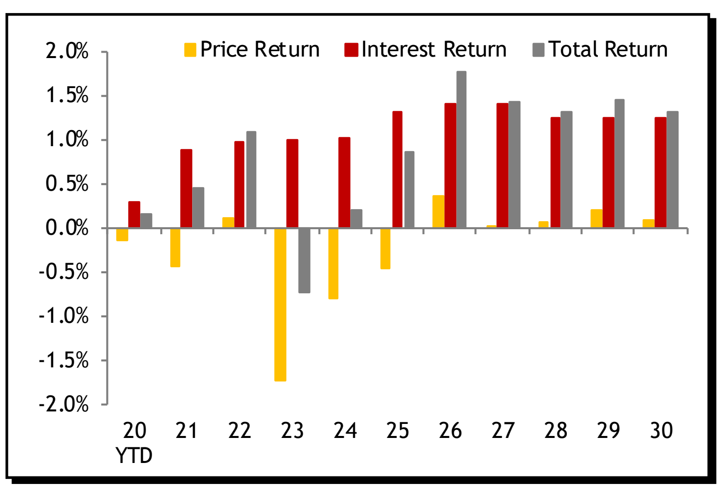
A Skimpy Decade for Returns

To estimate returns, we look at the simple case of starting with a market-weighted portfolio of Government of Canada bonds (2s, 5s, 10s, and 30s). Coupons are assumed to be reinvested at the overnight rates; maturing bonds are reinvested at the same tenor as the original issue. We concede that the duration of the portfolio isn't constant over the horizon as a result, but we're really only trying to approximate the reality that a bond investor faces today.

The results for this portfolio aren't pretty, either on a year-by-year basis (Chart 2) or in totality over the decade. The good news is that as yields rise, the reinvestment of maturing bonds will entail picking up a somewhat better running yield over the decade. But that's offset by price-impacts on the pull-to-par on bonds as they approach

Chart 2

Lean Returns Ahead on Government of Canada Bond Portfolio



Source: Bloomberg, CIBC FICC Strategy

maturity, and particularly as markets start to anticipate BoC tightening and feel the impact of waning QE, by the impact of higher rates on bond prices. That actually leaves the bond market showing negative returns in our simulation for 2023.

Over the whole period, the compound annual rate of turn is a mere 0.6%. If, as we expect, inflation averages close to 2% over that horizon, that's a negative real return for a full decade.

That's in sharp contrast with what happened in recent decades, in which the drag from reinvesting maturities as lower and lower yields was offset by capital gains on long bonds. Zeroing in on 10-year Government of Canada's alone, the meagre return offered by today's 10-year bond pales relative to what was available at the start of prior decades (Chart 3).

Portfolio Implications

Given that outlook, there are obvious implications for portfolio managers, particularly those tasked with generating long run returns to meet pension or life insurance liabilities. A lower risk-free yield has pushed such investors into adding risk, either by giving more weight to corporate bonds with higher running yields, adding long-lived hard assets like real estate, or additional weight to equities.

But that has bid up prices and multiples on these assets, and presumably lowered expected rates of return in the process. The hard truth is that defined benefit pension plans, or even individuals saving for their own retirement in the RRSPs, could need to have greater contributions to generate a given flow of income ahead without taking on undue risk.

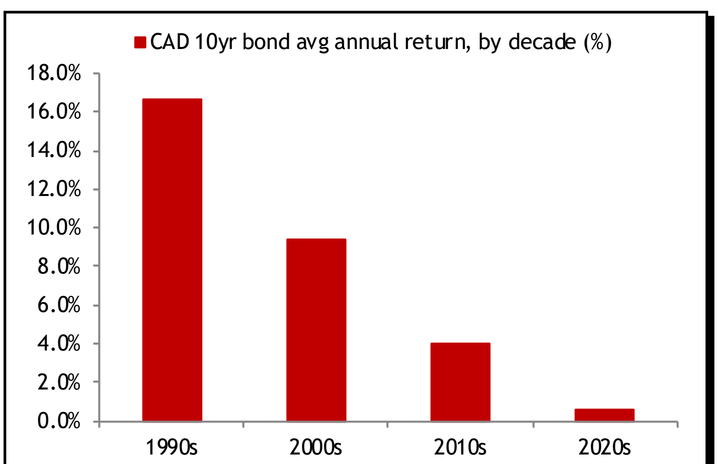
Bonds are like cash in another sense: they are still defensive in that they don't have much room to generate losses, but they no longer offer an opportunity for offsetting price gains as they did in the past. Barring a move into negative rates — which in North America seems unlikely given that both the Fed and the Bank of Canada have publicly given that option short shrift — bonds can't at this point provide the same counterweight to stocks in terms of their diversification benefit. If equities were to reverse their recent run up, there simply isn't a whole lot of room for bond prices to rally as an offset, except perhaps at the very long end of the curve.

From a portfolio construction perspective, the implication is that traditional allocations towards sovereign bonds are likely to be lower over the decade ahead. In fact, there is growing evidence that the stylized 60/40 stock-bond portfolio no longer provides the same diversification benefits as in prior decades given the starting level of bond yields. That is a trend that should only become more entrenched in the coming decade, as the potential for positive bond returns is reduced.

And by extension, the amount of risk required to eke out what was once considered a 'steady state return' has increased. That means the efficient frontier — which is the set of optimal portfolios that maximizes the highest expected return by minimizing the level of risk across a multi-asset portfolio (stocks, bonds, commodities etc.) — has flattened of late, and should continue to do so going forward (Chart 4).

Chart 3

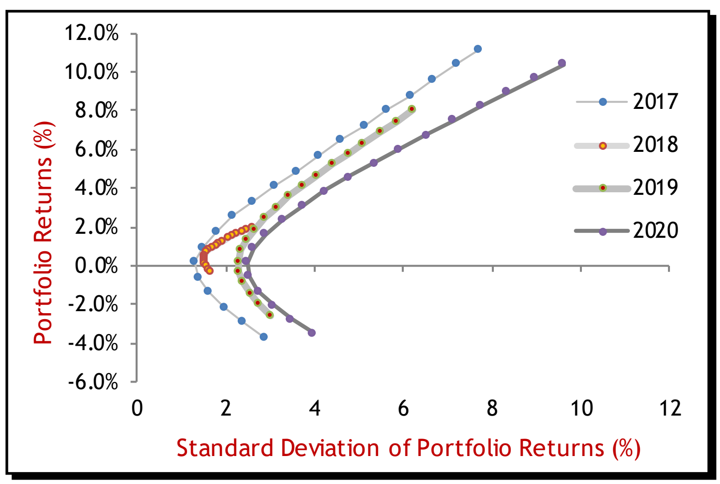
10-year Bonds Provided Much Larger Returns in Past Decades



Source: Haver Analytics, CIBC Economics

Chart 4

Efficient Frontier Cross-Asset Portfolios Entail More Risk for Same Return



Source: Bloomberg, CIBC Capital Markets

For portfolio managers, the flattening of the efficient frontier means that more leverage is required to generate one unit of return, which also promotes the acquisition of inherently riskier assets like high-yield bonds.

In sum, the job of managing a portfolio for longer term returns while avoiding undue risk has just gotten a lot tougher. Not that it was ever easy, but the comfort of having a reasonable weighting in safe long-term government bonds isn't as comforting as it once was. Other hedging strategies might be needed to keep some bounds on risk while adding weight to other assets classes to gain the needed returns.