

Assessing bond risks

Study shows break-even time has soared

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Quality bonds are the investment of choice today. In Canada, equity mutual funds are in net redemption almost every month while bond funds enjoy capital inflows. Investment-grade bonds have clobbered almost every major asset class over the past five years.

However, past short-term returns do not predict future long-term returns. Further, future expected returns should be proper compensation for the risks of any investment. Investment-grade bonds expose the investor to a plethora of risks — interest rate, reinvestment, inflation, downgrade, default and, for certain issues, liquidity.

History provides insight into the real (i.e., inflation-adjusted) return premium that investors demand from sovereign bonds. According to the Credit Suisse Global Investment Returns Yearbook, Canadian long-term government bonds have provided investors with an annual real return of 2.2% since 1900.

Globally, a 19-country world government bond index generated a real annual return of 1.7% over the same period. Over the long-run, investors seem to require about a 2% annual real return for incurring the risks inherent in long-term government bonds.

Currently, 10-year Government of Canadas are yielding about 1.8% while the long-term issue yields 2.3%. Assuming the Bank of Canada achieves its target annual inflation rate of 2%, these

yields, by historical standards, are inadequate — about two percentage points below what's needed to compensate investors for the risks.

Many financial advisors may not be aware that the interest rate risk associated with mid- to longterm bonds has climbed considerably over the past several decades. Using Bloomberg LP data, the research team at my firm, Tacita Capital Inc. of Toronto, was able to identify the yield to maturity (YTM) of benchmark 10-year Canadas since 1990 and its modified duration, a measure of its sensitivity to interest rate changes.

In January 1990, 10-year Canadas had a YTM of 9.9% and a duration of 6.4. At this duration, if interest rates rose by one percentage point, the price of the bond would decline by about 6.4%. A decade later, the YTM had declined to 6.5% while the duration had edged up to 7.0, slightly increasing interest rate risk. As of October 2012, the YTM had plummeted to 1.8% and the duration had climbed to 8.4.

Duration alone does not capture the full dimension of interest rate risk. The potential price decline has to be compared with the income yield and, assuming all other things being equal and the bond is held to maturity, the gradual pull to par. Through this comparison, the approximate time needed to break even on a bond investment can be calculated.

With the decline in yields, the break-even time (BET) has soared. In 1990, it would require approximately eight months to recover from a one percentage point increase in interest rates. By 2000, this BET had increased modestly to 13 months. However, with yields at levels not seen since the Second World War, the BET now has jumped to approximately 40 months.

Advisors need to evaluate the level of interest rate risk in their clients' portfolios. Although midto long-term bonds play an important role as a deflation hedge, it is easy to have excessive exposure. There is nothing more lulling than risk that has paid well recently. **IE**

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