Reducing risk and enhancing portfolio yield with corporate bonds

Examining the impact of the Canadian Institute of Actuaries Commuted Value Standard Change

The Canadian Institute of Actuaries ("CIA") has adopted a new standard for calculating the 'commuted value' of a pension plan, which will come in effect on December 1, 2020. The commuted-value standard is used to determine how much to pay a terminating plan member who chooses to take their pension payment as a lump sum. It is also a key part of calculating solvency ratios.

In this paper, TD Asset Management ("TDAM"/"We") will share our perspective on the impact of the CIA's new rules from an Asset Liability Management ("ALM") standpoint. Based on the analysis we have conducted, the change in standards will make it easier for pension plan sponsors to structure bond portfolios that more closely replicate solvency liability performance, in most spread environments.

The Former Commuted Value Standard

The former commuted value standard discounted liabilities at a fixed spread of 90 basis points (bps) over Government of Canada ("Federal") bond yields **(see Chart 1)**. Under the old standard, pension plan sponsors needed to assume spread risk in their bond portfolio to keep up with liabilities.

Chart 1

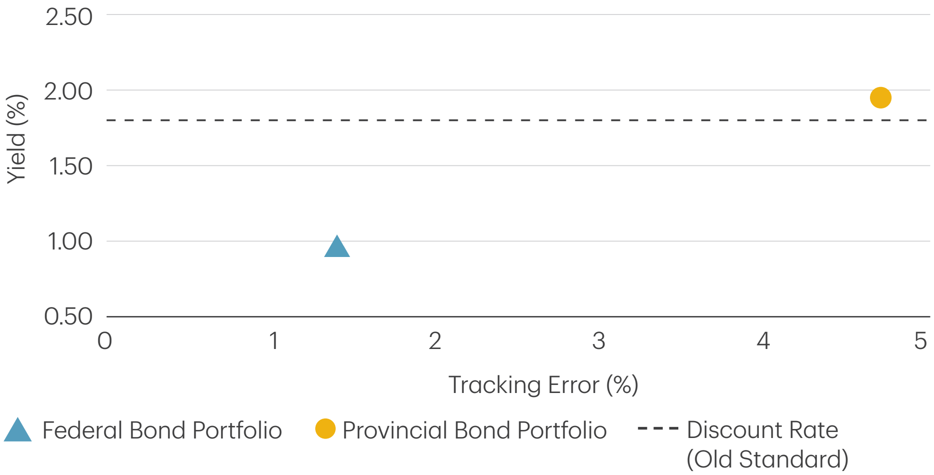

Chart for illustrative purposes only. Source: TDAM, June 2020.

- Under the former standard, solvency liabilities are valued based on Federal Canada bond yields + fixed spread of 90bps.
- To earn a rate of return in line with liabilities (and thus maintain funded status), pension plans need to assume exposure to credit spread movements.
- A typical liability hedging portfolio has a large allocation to Provincial bonds, with funded status exposed to credit spreads widening.

The New Commuted Value Standard

The new commuted value standard requires the discount spreads to be determined from observable spreads on provincial and corporate bonds, using a weighted average of two-thirds provincial bonds and one-thirds corporate bonds, subject to a cap of 150 bps. Relative to a federal bond portfolio, a provincial bond portfolio will earn a higher yield and have lower tracking to the liabilities. Furthermore, an allocation to corporate bonds can further increase the portfolio yield and reduce tracking to the liabilities. The new standards now make it easier for pension plan sponsors to manage funded status risk. The following chart **(Chart 2)** illustrates the impact of the change on the tracking error of different portfolios relative to liabilities.

Chart 2

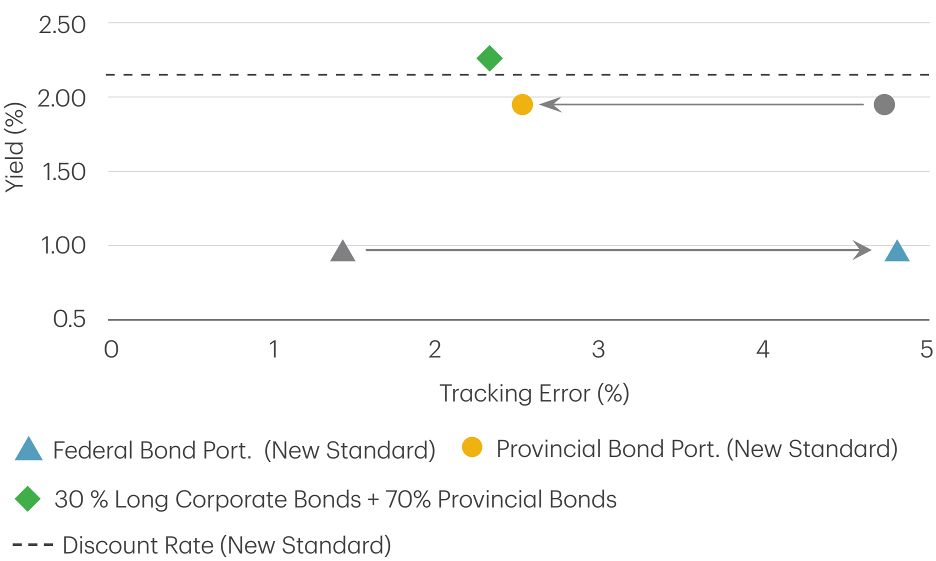

Chart for illustrative purposes only. Source: TDAM, June 2020.

- Under the new standard, solvency liabilities are valued based on Federal bond yields + spread based on weighted average of provincial bonds (2/3) and corporate bonds (1/3) spreads.
- Within the liability hedging portfolio, the risk minimizing allocation to corporate bonds may not be 1/3 and will depend on the profile of the bonds themselves (e.g., duration, credit quality).
- At the total plan level, it's also important to recognize the degree to which other assets are correlated with liabilities under the new standards (e.g., offer partial credit hedging benefit).

Conclusion

Based on the analysis conducted by TD Asset Management, from a liability hedging perspective, an allocation to corporate bonds can both improve portfolio yield and reduce lability tracking error, under the new standards. We also believe that these changes will work in conjunction with other actuarial valuation basis; namely the going concern and accounting basis. Finally, we recommend pension plan sponsors continually review their current asset mix to identify and capitalize on the new advantages arising from the new commuted value standard. ■

For more information, contact your **Relationship Manager** or **Associate, Relationship Management** at 1-888-834-6339

Notes: Yields as of June 2020. Liabilities have duration of 20 years and are discounted based on CIA lump sum methodology excluding lag and rounding effects. Bond portfolios invested to match liability profile. Annualized tracking error based on monthly observations from April 2010 to March 2020 (10 years).

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