

Proposed IFRS (IAS) Discount Rates

Canada – as of June 30, 2022

Background

Appropriate discount rates should always be determined by considering the nature of the liabilities and other plan specific factors in consultation with the client and their auditor. Choosing an appropriate discount rate is ultimately the client's decision.

According to IAS 19 (and most other commonly used accounting standards), the relevant rate for discounting (post-) employment benefit obligations should be determined by reference to market yields at the end of the reporting period on high quality corporate bonds (HQCB) where the currency and term to maturity (duration) of the corporate bonds should be consistent with the estimated term to maturity (duration) of benefit obligations. Market practice typically considers HQCB as corporate bonds rated AA or better (where they exist).

The number of existing HQCB may be limited within certain countries, and/or may not cover the whole range of liability durations. This can lead to alternative approaches to extrapolate yield curves; in most of these cases governmental bonds are used as an alternative. Separate curves in different currencies and countries are available through our partner firms.



Proposed Discount Rates as of June 30, 2022

Term	Spot Rate - CAD
1	3.84%
2	4.24%
3	4.44%
4	4.57%
5	4.68%
6	4.77%
7	4.84%
8	4.90%
9	4.95%
10	4.99%
11	5.02%
12	5.05%
13	5.08%
14	5.09%
15	5.11%
16	5.12%
17	5.13%
18	5.13%
19	5.14%
20	5.14%
21	5.14%
22	5.13%
23	5.13%
24	5.12%
25	5.12%
26	5.11%
27	5.10%
28	5.09%
29	5.08%
30	5.07%

Source: Fiera Capital's CIA Method Accounting Discount Rate Curve

<https://www.fieracapital.com/en/institutional-markets/curve>

Methodology

As there is a limited market for HQCB in Canada, particularly with longer maturities, there are various approaches to developing the discount rate for accounting purposes. The methodology developed by the Canadian Institute of Actuaries (the "CIA") employs an approach which extrapolated the yields on high quality bonds with maturities over 10 years based on a spread adjustment to high quality provincial bonds and A-rated corporate bonds.

Bond issues in the Canadian market are first filtered to exclude those with non-standard cash flows, which have explicit call options and which have less than \$100,000,000 outstanding nominal value. This filtered subset is further divided into three subsets: a provincial bond subset, an A-rated corporate bond subset and an AA-rated corporate bond subset. The corporate and provincial bond subsets are filtered to only include issues that have at least one of a recognized rating agency (i.e., Standard & Poor's, Moody's Investors Service, Fitch Group, or Dun & Bradstreet) giving a credit rating of AA or better (A or better for the A-rated corporate bonds), and those that are not issued by quasi-governmental agencies.

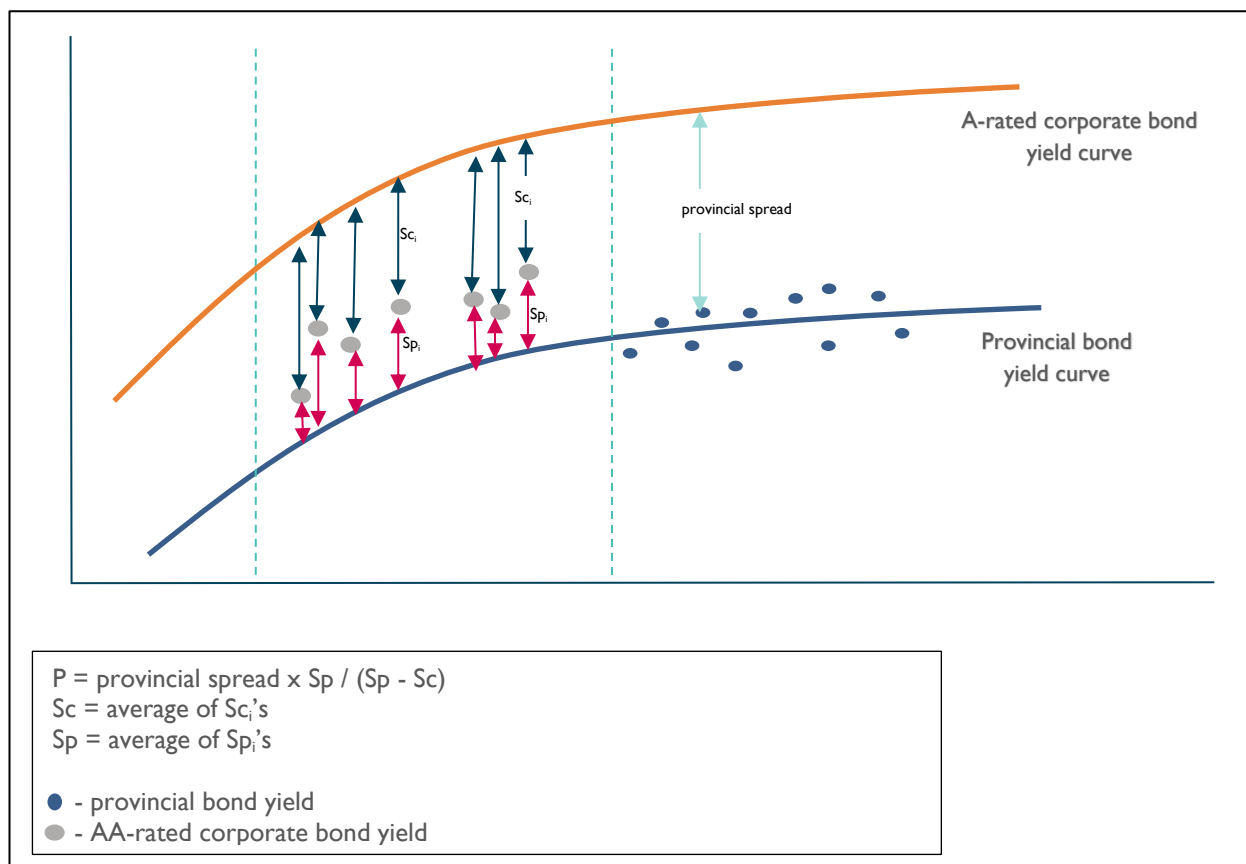
Under the CIA methodology, the yield curve is based on the actual yield to maturity for all bonds in the corporate subset, as well as a "synthetic" bond yield determined for provincial bonds with maturities greater than 10.5 years derived based on the provincial bond's yield to maturity plus a spread adjustment, P.

In order to determine P, the provincial yield curve and A-rated corporate yield curve are first created based on the provincial and A-rated corporate bond subsets described above. The spread adjustment, P, is then determined as the observed spread for a particular provincial bond issue, relative to the A-rated corporate bond yield curve, multiplied by a spread ratio factor, $S_p / (S_p - S_c)$ where:

- S_c is the average AA-rated corporate spread over the A-rated corporate bond yield curve for AA-rated corporate bonds in the AA-rated corporate bond subset with maturities between 3.5 and 10.5 years, and
- S_p is the average AA-rated corporate spread over the provincial bond yield curve for AA-rated corporate bonds in the AA-rated corporate bond subset with maturities between 3.5 and 10.5 years.

The chart below illustrates the determination of P as described above.

Figure 1: Illustration of determination of **P** under CIA model



An AA-rated corporate yield to maturity curve is thus extrapolated based on actual AA-rated corporate bond yields and “synthetic” bond yields determined using the factors described above for provincial bonds with maturities greater than 10.5 years. Finally, a spot curve is extracted.

Further Information and Contact



Geneviève Larouche
glarouche@eckler.ca
 +1 416 696 4006



Guillaume Turcotte
gturcotte@eckler.ca
 +1 514 879 8917