

FTSE Canada Maturity Corporate Bond Index Series

v4.5



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Section 1

Introduction

1. Introduction

1.1 FTSE Canada Maturity Corporate Bond Index Series

1.1.1 The index series consists of separate indices for each target year, for example the FTSE Canada 2020 Maturity Corporate Bond Index. Each index consists of qualifying corporate bonds with the same final maturity as the target year. In order to qualify for a particular index, the bonds must meet the index eligibility criteria (Section 4) and be selected using the selection procedure (Section 6).

1.2 The FTSE Canada Maturity Corporate Bond Index Series does not take account of ESG factors in its index design.

1.3 IOSCO

1.3.1 FTSE International Limited (FTSE) considers that the FTSE Canada Maturity Corporate Bond Index meets the IOSCO Principles for Financial Benchmarks as published in July 2013.

Full details can be accessed at www.iosco.org.

Details of FTSE Russell's Statement of Compliance with respect to the IOSCO Principles can be accessed using the following link:

[IOSCO Statement of Compliance](#).

1.4 FTSE hereby notifies users of the index series that it is possible that factors, including external factors beyond the control of FTSE, may necessitate changes to, or the cessation of, the index series and therefore, any financial contracts or other financial instruments that reference the index series or investment funds which use the index series to measure their performance should be able to withstand, or otherwise address the possibility of changes to, or cessation of, the index series.

1.5 Index users who choose to follow this index or to buy products that claim to follow this index should assess the merits of the index's rules-based methodology and take independent investment advice before investing their own or client funds. No liability whether as a result of negligence or otherwise is accepted by FTSE nor its subsidiary undertakings (or any person concerned with the preparation or publication of these Ground Rules) for any losses, damages, claims and expenses suffered by any person as a result of:

- any reliance on these Ground Rules, and/or
- any inaccuracies in these Ground Rules, and/or
- any non-application or misapplication of the policies or procedures described in these Ground Rules, and/or
- any inaccuracies in the compilation of the Index or any constituent data.

1.6 These Ground Rules

1.6.1 This document sets out the Ground Rules for the construction and management of the FTSE Canada Maturity Corporate Bond Index Series.

1.7 FTSE Russell

FTSE Russell is a trading name of FTSE International Limited, Frank Russell Company, FTSE Global Debt Capital Markets Limited (and its subsidiaries FTSE Global Debt Capital Markets Inc., FTSE Fixed Income Europe Limited), FTSE Fixed Income LLC, The Yield Book Inc and Beyond Ratings.

1.8 Index Series Objectives

- 1.8.1 Each FTSE Canada Maturity Corporate Bond Index is designed to represent the performance of a held-to-maturity portfolio consisting of, primarily, Canadian dollar denominated investment grade corporate bonds with effective maturities in the applicable Maturity Year. The effective maturity of an eligible corporate bond is determined by its actual maturity or the anticipated maturity of the security as determined in accordance with a rules-based methodology developed by FTSE Global Debt Capital Markets.

1.9 Index Ratings¹

- 1.9.1 Bonds in the index are classified into broad credit rating categories of AAA/AA, A, and BBB, based on publicly available information from Dominion Bond Rating Service, Standard and Poor's, Moody's Investors Service and Fitch. The index does not distinguish between minor ratings notches, such as plus or minus signs or their equivalent within a broad letter category. Thus, the ratings A+, A-, and A are viewed as equivalent for the purposes of the index. As well, the index does not take into account a rating agency's outlook for a credit rating, or whether a particular rating may be under review by an agency.

In cases where the agencies do not agree on the credit rating, the bond will be classified according to the following rules:

- If two agencies rate a security, use the lower of the two ratings;
- If three agencies rate a security, use the middle of the three ratings;
- If four agencies rate a security, use the middle of the three lowest ratings

These rules mean that a bond rated by two or more agencies must have at least two investment grade credit ratings to be eligible for the Universe Bond Index. For example, a new issue rated BBB- by S&P and BB+ by DBRS would be assigned a rating of BB for the purposes of the index, and would not be eligible for inclusion in the index.

- 1.9.2 An issuer rating may be applied for bonds classified as Government or Financial if security-level ratings are not available.

1.10 Capital Index (also known as the Price Index or the Clean Price Index)

- 1.10.1 The capital index tracks the average change in the prices of the index constituents, weighted by their notional amount outstanding and is calculated every business day.

1.11 Total Return Index (also known as the Performance Index)

- 1.11.1 A total return index is calculated for all the indices. A total return index takes into account the price changes and interest accrual and payments of each index constituent.
- 1.11.2 In addition to the Capital Index and Total Return Index, the following index analytics are also calculated:
- Average Coupon
 - Average Yield to Maturity
 - Average Time to Maturity
 - Value of 01
 - Average Macaulay Duration
 - Average Modified Duration

¹ Effective 15 April 2019.

- Average Convexity
- The sum of the nominal value of all bonds in each index
- The number of bonds in each Index, and
- The weight of the index in relation to its relevant aggregated index (when applicable).

1.12 The base currency of the benchmark is Canadian Dollars (CAD).

Section 2

Management responsibilities

2. Management responsibilities

2.1 FTSE International Limited (FTSE)

2.1.1 FTSE is the benchmark administrator of the index series.²

2.1.2 FTSE is responsible for the daily calculation, production and operation of the FTSE Canada Universe Bond Index Series and will:

- maintain records of all the constituents;
- be responsible for the addition and deletion of bonds and changes of nominal amounts, in accordance with the Ground Rules.

2.1.3 These Ground Rules set out the methodology and provide information about the publication of the FTSE Canada Universe Bond Index Series.

2.2 FTSE Canada Fixed Income Advisory Committee

2.2.1 The FTSE Canada Fixed Income Advisory Committee is established by FTSE Russell.

2.2.2 The purpose of the Committee is to provide a forum for FTSE Russell to interact with index users and other stakeholders with a view to enhancing the underlying methodologies of FTSE Russell indices.

2.2.3 The Terms of Reference of the FTSE Canada Fixed Income Advisory Committee are set out on the FTSE Russell website and can be accessed using the following link:

[FTSE Canada Fixed Income Advisory Committee.pdf](#)

2.3 Amendments to these Ground Rules

2.3.1 These Ground Rules shall be subject to regular review (at least once a year) by FTSE Russell to ensure that they continue to best reflect the aims of the index series. Any proposals for significant amendments to these Ground Rules will be subject to consultation with FTSE Russell advisory committees and other stakeholders if appropriate. The feedback from these consultations will be considered by the FTSE Russell Index Governance Board before approval is granted.

2.3.2 As provided for in the Statement of Principles for FTSE Fixed Income Indices, where FTSE Russell determines that the Ground Rules are silent or do not specifically and unambiguously apply to the subject matter of any decision, any decision shall be based as far as practical on the Statement of Principles. After making any such determination, FTSE Russell shall advise the market of its decision at the earliest opportunity. Any such treatment will not be considered as an exception or change to the Ground Rules, or to set a precedent for future action, but FTSE Russell will consider whether the Rules should subsequently be updated to provide greater clarity.

² The term administrator is used in this document in the same sense as it is defined in [Regulation \(EU\) 2016/1011 of the European Parliament and of the Council of 8 June 2016 on indices used as benchmarks in financial instruments and financial contracts or to measure the performance of investment funds](#) (the European Benchmark Regulation) and [The Benchmarks \(Amendment and Transitional Provision\) \(EU Exit\) Regulations 2019](#) (the UK Benchmark Regulation).

Section 3

FTSE Russell index policies

3. FTSE Russell index policies

These Ground Rules should be read in conjunction with the following policy documents which can be accessed using the links below:

3.1 Queries and Complaints

FTSE Russell's complaints procedure can be accessed using the following link:

[Benchmark Determination Complaints Handling Policy.pdf](#)

3.2 Statement of Principles for FTSE Fixed Income Indices (the Statement of Principles)

Indices need to keep abreast of changing markets and the Ground Rules cannot anticipate every eventuality. Where the Ground Rules do not fully cover a specific event or development, FTSE Russell will determine the appropriate treatment by reference to the Statement of Principles for FTSE Fixed Income Indices which summarises the ethos underlying FTSE Russell's approach to index construction. The Statement of Principles is reviewed annually and any changes proposed by FTSE Russell are presented to the FTSE Russell Policy Advisory Board for discussion before approval by the FTSE Russell Index Governance Board.

The Statement of Principles for Fixed Income Indices can be accessed using the following link:

[Statement of Principles Fixed Income Indices.pdf](#)

3.3 Recalculation Policy and Guidelines

The Recalculation Policy and Guidelines for Fixed Income Indices document is available from the FTSE Russell website using the link below or by contacting fi.index@lseq.com.

[Fixed Income Recalculation Policy and Guidelines.pdf](#)

3.4 Index Policy in the Event Clients are Unable to Trade a Market or a Security

Details of FTSE Russell's treatment can be accessed using the following link:

[Index Policy in the Event Clients are Unable to Trade a Market or a Security.pdf](#)

3.5 Policy for Benchmark Methodology Changes

3.5.1 Details of FTSE Russell's policy for making benchmark methodology changes can be accessed using the following link:

[Policy for Benchmark Methodology Changes.pdf](#)

3.6 FTSE Russell Governance Framework

- 3.6.1 To oversee its indices, FTSE Russell employs a governance framework that encompasses product, service and technology governance. The framework incorporates the London Stock Exchange Group's three lines of defence risk management framework and is designed to meet the requirements of the IOSCO Principles for Financial Benchmarks³, the European benchmark regulation⁴ and the UK benchmark regulation⁵. The FTSE Russell Governance Framework can be accessed using the following link:

[FTSE Russell Governance Framework.pdf](#)

3.7 Real Time Status Definitions

- 3.7.1 Please refer to the following guide for details of real time status definitions for indices that are calculated in real time.

[Real Time Status Definitions.pdf](#)

³ IOSCO Principles for Financial Benchmarks Final Report, FR07/13 July 2013.

⁴ Regulation (EU) 2016/1011 of the European Parliament and of the Council of 8 June 2016 on indices used as benchmarks in financial instruments and financial contracts or to measure the performance of investment funds.

⁵ The Benchmarks (Amendment and Transitional Provision) (EU Exit) Regulations 2019.

Section 4

Eligibility criteria

4. Eligibility criteria

4.1 Eligibility bonds

4.1.1 Qualifying securities are selected from the constituents of the FTSE Canada Universe Bond Index, with the following criteria:

- Issued by corporations incorporated under Canadian federal, provincial or territorial laws;
- Minimum issue size/amount outstanding of \$250 MM;
- Credit rating (index credit rating) of BBB or higher;
- Have an effective maturity in the Maturity Year.

4.1.2 Bonds must meet the following liquidity thresholds for periodic change to indices considered in Section 6:

- For bonds not issued in the three month period prior to the selection date, 30 individual trades of \$500k or higher in the three month period prior to the selection date AND be issued no more than one year prior to the selection cut-off date, as defined in Section 6;
- For bonds issued in the three month period prior to the selection date, no minimum number of trades;

4.1.3 Bonds must meet the following liquidity thresholds for New Maturity Index Creation considered in Section 7:

- For bonds not issued in the three month period prior to the selection date, 30 individual trades of \$500k or higher in the three month period prior to the selection date OR 50 individual trades of \$500k or higher in the twelve month period prior to the selection date;
- For bonds issued in the three month period prior to the selection date, no minimum number of trades;

4.1.4 In order to be eligible for the indices bonds must have a price assigned from a price source as specified in Section 5 of these Ground Rules.

4.2 Exclusions

4.2.1 The following types of securities are excluded from each FTSE Canada Maturity Corporate Bond Index:

- Securities with floating rates of interest;
- Zero-coupon bonds and zero-coupon step-up bonds;
- Amortizing or convertible;
- Non-Viability contingent capital;
- Asset Backed Securities (ABS);
- Bonds issued by Trusts, including REITs;
- Public Private Partnership Bonds (PPP);

- Securities that are callable prior to their effective maturity date, excluding ‘Canada callable’ yield threshold provisions;
- Bank and Insurance Tier 1 capital bonds; and
- Inflation and other index-linked bonds.

4.2.2 Regulatory capital that counts towards Additional Tier 1 (AT1) debt for deposit taking institutions, Tier 1 capital for life insurers, and Category B capital for property and casualty, and mortgage insurers is excluded.

4.3 Additional restrictions

The weight of each issuer on the initial construction and subsequent rebalances, will not have a single issuer with a Market Value of greater than 10% of the respective index. Also the Market Value weight of all the BBB issues should not exceed 25%

In order to maintain the minimum number of bonds at 10 for each index, Provincial bonds will be selected if there are an insufficient number of eligible corporate bonds available for a particular maturity bucket. Additionally, Provincial bonds may be added to ensure that the issuer (10%) and BBB rating caps (25%) can be achieved. This might be the case for example, if only BBB rated bonds are available for selection. Only Provincial bonds which meet the eligibility criteria above will be considered for inclusion, and will be removed on subsequent rebalancing dates if a sufficient number of eligible corporate bonds become available.

Section 5

Price sources

5. Price sources

5.1.1 Constituents prices are provided by CanDeal Data and Analytics (“CanDeal DNA”) in accordance with its Composite pricing methodology.⁶

5.1.2 Prices in the FTSE Canada Bond Index Series represent a mid-side price as of 4:00pm (Toronto time), unless otherwise stated in published index methodologies.

5.2 Verification and price challenges

5.2.1 Statistical techniques are used to identify pricing anomalies based on day-over-day changes and comparisons across peer groups by maturity, asset type, etc.

5.2.2 Any price challenges from index users and possible outliers from the verification process are reviewed with our third-party pricing provider.

5.2.3 In the event that an issue is not able to be resolved in a timely manner, FTSE Russell may exercise expert judgement and roll prices from the previous day. Any exercise of expert judgement is recorded.

⁶ The change from the use of the FTSE Canada Multi Dealer Pricing Methodology to use the CanDeal DNA composite pricing methodology was announced on 22 January 2022 and effective from 17 May 2022.

Section 6

Periodic change to the indices

6. Periodic change to the indices

6.1 Semi Annual Index Review

6.1.1 Each FTSE Canada Maturity Corporate Bond Index is rebalanced based on a semi-annual basis on the last business day of May and November, other than in the Maturity Year. The cut-off date for the data used in the selection is the first business day following the 15th of the rebalancing month. Additions to or removals from the universe of eligible securities are reflected in each semi-annual rebalancing.

6.2 Addition of constituents

6.2.1 Once the list of eligible bonds with adequate liquidity, unless otherwise specified, has been determined, they are passed through a selection procedure which is carried out for each respective FTSE Canada Maturity Corporate Bond Index. The goal of the selection process is to not add bonds to the respective index that would materially lower the current yield-to effective maturity (as of the selection cut-off date), or would breach the issuer/rating limits set out in Rule 4.1.4.

6.2.2 The process by which eligible bonds are selected is as follows:

1. The index yield immediately prior to rebalancing is calculated as of the selection cut-off date ("pre-review yield")
2. The list of eligible bonds with the same maturity year as the target date of the respective index is ranked in descending order of yield (highest yield first)
3. Eligible bonds whose yield falls outside of two standard deviations of the average pre-review yield will not be selected.
4. The highest ranked bond is considered for entry and added to the respective index if:
 - Adding the bond would not cause the post-review yield to fall below the pre-review yield. If this step is reached, move onto step 6.
 - If there are no more than two bonds from the same issuing entity in the index.
5. Move on to the next ranked bond and repeat step 4, until no eligible bonds remain.
6. Constituents of each Maturity Corporate Bond Index are updated to reflect any reduction in the amount outstanding per bond as of selection date.
7. If the total weight of any issuer is equal to 10% or greater, the weight of the newly added bond(s) of that same issuer are reduced so that the total weight of the issuer is 9.6%. The reduced weight is re-distributed, pro-rata to the other bonds in the index which do not belong to the capped issuer.

8. Finally, the weight of the bonds rated BBB is calculated. If the weight is above 25%, the last selected BBB is removed from the selection, and this is repeated until the weight is below 25%.
9. Provincial Bonds, which meet the eligibility criteria will be selected if i) the target weight of BBB rated issuers cannot be reached in step 6, or ii) if the total number of selected bonds is below 10. The process by which provincial bonds are selected is the same as corporate bonds. These bonds will be removed in subsequent rebalancing, if they are no longer required for the purposes as stated in this step.

6.3 Removal of constituents

- 6.3.1 Index Securities downgraded to below BBB will be removed from each FTSE Canada Maturity Corporate Bond Index at the next semi-annual rebalancing following the downgrade. The Relative Weight of the Index Securities that are removed will increase the Relative Weight of the remaining eligible securities on a proportional basis, subject to the issuer and credit quality concentration limits. Any Provincial bonds will be removed as suitable Corporate substitutes become available as described previously.
- 6.3.2 Index Securities which are called are handled in the following manner:
 - For securities in the Maturity Year Index, the redemption proceeds of bonds that are called (in full for a full call or in proportion for a partial call) are re-invested in Government of Canada Treasury bills 2 business days prior to the bond's call at the market price. The selected T-Bill is the bill that matures in or around November of the target year of the respective FTSE Canada Maturity Corporate Bond Index;
 - For securities in all other Target Maturity Indices, the redemption proceeds of bonds that are called (in full for a full call or in proportion for a partial call) are re-invested in the index 2 business days prior to the bond's call at the market price.

6.4 Redemptions

- 6.4.1 The redemption proceeds of bonds that mature are re-invested in Government of Canada Treasury bills 2 business days prior to the bond's maturity. The selected T-Bill is the bill that matures in or around November of the target year of the respective FTSE Canada Maturity Corporate Bond Index.

It is expected that each FTSE Canada Maturity Corporate Bond Index will consist largely, if not completely, of a portfolio of cash and cash equivalents (T-bills) when it terminates.

Section 7

Creation of new maturity corporate bond index

7. Creation of new maturity corporate bond index

7.1 Selection of constituents

- 7.1.1 Once the list of eligible bonds with adequate liquidity, unless otherwise specified, has been determined in accordance with Section 4, they are passed through a selection procedure.
- 7.1.2 The process by which eligible bonds are selected is as follows:
1. The yield on the list of eligible bonds is calculated as of selection date ("pre-review yield")
 2. The list of eligible bonds with the same maturity year as the target date of the respective index is ranked in descending order of yield (highest yield first)
 3. Eligible bonds whose yield falls outside of two standard deviations of the average pre-review yield will not be selected.
 4. The highest ranked bond is considered for entry and added to the respective index if:
 - If there are no more than two bonds from the same issuing entity in the index.
 5. If the total weight of any issuer is equal to 10% or greater, the weight of the newly added bond(s) of that same issuer are reduced so that the total weight of the issuer is 9.6%. The reduced weight is re-distributed, pro-rata to the other bonds in the index which do not belong to the capped issuer.
 6. Finally, the weight of the bonds rated BBB is calculated to a weight cap of 25%,
 7. Provincial Bonds, which meet the eligibility criteria will be selected if the target weight of BBB rated issuers cannot be reached in step 6. The process by which provincial bonds are selected is the same as corporate bonds. These bonds will be removed in subsequent rebalancing, if they are no longer required for the purposes as stated in this step.
- 7.1.3 When a new Maturity Corporate Bond Index is created, it will not observe the first semi annual review, and will retain the selections for a period of at least six (6) months, and will rebalance on a regular schedule thereafter.

Appendix A

Index calculations

The following notation is used in the following calculations:

| | |
|--------------|---|
| $P_{i,t}$ | clean price of a constituent bond i on valuation day t |
| $A_{i,t}$ | accrued interest of a constituent bond i as of valuation day t |
| $N_{i,t}$ | nominal value of a constituent bond i on valuation day t |
| $Coupon_i$ | coupon rate of a constituent bond i |
| $C_{i,t}$ | value of any coupon payment received from the bond i for the assumed settlement date at time t . If none the value = 0 |
| $Cash_{t-1}$ | This is the cash amount in the index on the previous valuation date. |
| pr_t | the price of T-bill on valuation day $t-1$ |
| $R_{i,t}$ | the redemption proceeds from constituent bond i as of valuation day t |

Clean Price Index (Capital Index)

The clean price (PI) or capital index is given by

$$PI_{i,0} = 100$$

$$PI_{i,t} = PI_{i,t-1} \times \frac{\sum_i P_{i,t} \times N_{i,t-1}}{\sum_i P_{i,t-1} \times N_{i,t-1}}$$

Total Return Index

The total return index (TRI) is given by

$$TRI_{i,0} = 100$$

$$TRI_{i,t} = TRI_{i,t-1} \times \frac{\sum_i (P_{i,t} + A_{i,t} + C_{i,t}) \times N_{i,t-1}}{\sum_i (P_{i,t-1} + A_{i,t-1}) \times N_{i,t-1}}$$

where $Cash_t$ is given by:

$$Cash_t = Cash_{t-1} \left[\frac{pr_t}{pr_{t-1}} \right] + \sum_i R_{i,t}$$

Appendix B

Further information

A Glossary of Terms used in FTSE Russell's Ground Rule documents can be found using the following link:

[Fixed Income Glossary of Terms.pdf](#)

For further information on the FTSE Canada Maturity Corporate Bond Index Series please visit www.lseg.com/en/ftse-russell/ or email fi.index@lseg.com. Contact details can also be found on this website.

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