



FTSE Canada Maturity Government Bond Index Series

v1.0



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Section 1

Introduction

1.0 Introduction

1.1 FTSE Canada Maturity Government Bond Index Series

- 1.1.1 The index series consists of separate indices for each target year, for example the FTSE Canada 2024 Maturity Government Bond Index. Each index consists of qualifying Government bonds with the final maturity date in 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 Index Series Objectives

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

- 1.3 The FTSE Canada Maturity Government Bond Index Series does not take account of ESG factors in its index design.

- 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 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.

1.7 Index Ratings¹

- 1.7.1 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.

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

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

- 1.8.1 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.

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

- 1.9.1 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.

- 1.9.2 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
- 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).

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

¹ Effective 15 April 2019

Section 2

Management Responsibilities

2.0 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 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).

- 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.

Section 3

FTSE Russell Index Policies

3.0 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@lseg.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](#)

3.1 Policy for Benchmark Methodology Changes

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

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

3.2 FTSE Russell Governance Framework

- 3.2.1 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 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

4.0 Eligibility Criteria

4.1 Eligibility Bonds

4.1.1 The bond must be issued by one of the following entities:

- Government of Canada (including both non-agency, agency / crown corporations);
- Provincial and Territorial governments of Canada.

Exclude Supranational entities and Municipal governments of Canada.

4.1.2 Qualifying securities are selected from the constituents of the 0+ Year FTSE Canada Universe Bond Index at rebalance, as specified in Rule 6.1, with the following criteria:

- Minimum issue size of \$500 MM;
- Index rating of BBB or higher;
- Have an effective maturity date in the Maturity Year.

4.1.3 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 Government Bond Index:

- Corporate Bonds
- Securities with floating rates of interest;
- Zero-coupon bonds and zero-coupon step-up bonds;
- Amortizing or convertible;
- Public Private Partnership Bonds (PPP);
- Securities that are callable prior to their effective maturity date, excluding 'Canada callable' yield threshold provisions; and
- Inflation and other index-linked bonds.

Section 5

Price Sources

5.0 Price Sources

- 5.1 Constituent prices are provided by CanDeal Data and Analytics (“CanDeal DNA”) in accordance with its Composite pricing methodology.⁶
- 5.2 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.
- 5.3 **Verification and price challenges**
 - 5.3.1 Statistical techniques are used to identify pricing anomalies based on day-over-day changes and comparisons across peer groups by maturity, asset type, etc.
 - 5.3.2 Any price challenges from index users and possible outliers from the verification process are reviewed with our third-party pricing provider.
 - 5.3.3 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

6.0 Periodic Change to the Indices

6.1 Semi Annual Index Review

- 6.1.1 Each FTSE Canada Maturity Government 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 at each semi-annual rebalancing.
- 6.1.2 The Maturity Government Bond Indices will not observe a rebalance in its corresponding Maturity Year.
- 6.1.3 Any outstanding amount change (stripping / reissuance / tender offers) to the constituents will only be reflected at the next rebalance date.

6.2 Addition of Constituents

- 6.2.1 Once the list of eligible bonds has been determined, they will enter the corresponding FTSE Canada Maturity Government Bond Index, on the last business day of May and November.
- 6.2.2 New issuance and reissuance will only be reviewed on the semi-annual cut-off dates.

6.3 Removal of Constituents

- 6.3.1 Index securities downgraded to below BBB will be removed from each FTSE Canada Maturity Government 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.
- 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 two business days prior to the bond's call at the market price. The selected T-Bill is the bill that matures in or around October of the target year of the respective FTSE Canada Maturity Government 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 two business days prior to the bond's maturity date. The selected T-Bill is the bill that matures in or around October of the target year of the respective FTSE Canada Maturity Government Bond Index.

It is expected that each FTSE Canada Maturity Government 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 Government Bond Index

7.0 Creation of New Maturity Government Bond Index

7.1 Selection of Constituents

7.1.1 Once the list of eligible bonds has been determined in accordance with Section 4, a new Maturity Government Bond Index with a new Maturity Year can/ be created.

7.2 When a new Maturity Government 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 Government Bond Index Series please visit
www.ftserussell.com or email fi.index@lseg.com. Contact details can also be found on this website.

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