

FTSE Canada NVCC Bond Index

v3.0



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Contents

Section 1 Introduction	3
Section 2 Management responsibilities	5
Section 3 FTSE Russell index policies	6
Section 4 Eligibility criteria	8
Section 5 Price sources	10
Section 6 Periodic change to the portfolios	11
Appendix A Index calculations	12
Appendix B Further information	13

Section 1

Introduction

1. Introduction

1.1 FTSE Canada NVCC Bond Index

1.1.1 The FTSE Canada NVCC Bond Index is a benchmark of the performance of Non Viable Contingent Capital (NVCC), as that term is set out by the Office of the Superintendent of Financial Institutions Canada ("OSFI") Guideline, bonds issued in Canadian Dollars.

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

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

1.4 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 Russell 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.

1.5 These Ground Rules

1.5.1 This document sets out the Ground Rules for the construction and management of the FTSE Canada NVCC Bond Index.

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 **Capital index** (also known as the Price Index or the Clean Price Index)

1.7.1 The capital index tracks the notional weighted average change in the prices of the index constituents and is calculated every business day.

1.8 **Total return index** (also known as the Performance Index)

1.8.1 A total return index is calculated for the index. A total return index takes into account the price changes and interest accrual, CPI accrual, and payments of each index constituent.

1.8.2 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).

1.9 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 index¹.

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

- maintain records of all the constituents, and
- 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 NVCC Bond Index.

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 through 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. 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 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.

¹ 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 through the links below:

3.1 Queries and Complaints

FTSE Russell's complaints procedure can be accessed through 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 Group for discussion before approval by the FTSE Russell Index Governance Board.

The Statement of Principles for Fixed Income Indices can be accessed through 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 through 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 through 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 through 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 Benchmarks², the European benchmark regulation³ and the UK benchmark regulation⁴. The FTSE Russell Governance Framework can be accessed through the following link:

[FTSE Russell Governance Framework.pdf](#)

² IOSCO Principles for Financial Benchmarks Final Report, FR07/13 July 2013.

³ 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.

⁴ The Benchmarks (Amendment and Transitional Provision) (EU Exit) Regulations 2019.

Section 4

Eligibility criteria

4. Eligibility criteria

4.1 Eligible bonds

4.1.1 In order to be eligible for the FTSE Canada NVCC Bond Index Series, bonds must meet the following criteria:

Currency of denomination:	Canadian Dollars (CAD)
Country of issue:	Canada
Country of issuing entity:	Canada
Issue type:	NVCC
Remaining effective term to maturity:	Greater than one year
Minimum rating:	The index rating, as defined in Section 3.3, must be BBB or higher
Number of institutional investors:	At least 10 institutional buyers at issue ⁵ .

4.1.2 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 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 Weighting

The FTSE Canada NVCC Bond Index is capitalisation-weighted. That is, each bond contributes to the return on the index in proportion to its nominal market value.

4.4 Index ratings⁶

4.4.1 Bonds must have an index rating of at least investment grade, in order to be eligible for the Index.

- The index rating for each bond is based on the publicly available ratings from Dominion Bond Rating Service, Standard and Poor's, Moody's Investors Service and Fitch. In cases where the agencies do not agree on the credit rating, the index rating will be classified according to the following rules: If two agencies rate a security, and the ratings are not equal, use the lower of the two ratings;
- 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.

⁵ Effective 15 April 2019.

⁶ Effective 15 April 2019.

These rules mean that a bond rated by two or more agencies must have at least two investment grade credit ratings in order 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 an index rating of BB for the purposes of the index, and would not be eligible for inclusion in the index.

The index ratings are classified into broad credit rating categories of AAA/AA, A, and BBB. The index rating 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. Additionally, 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.

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

4.5 Coupon type

4.5.1 Bonds must have fixed rate coupons, payable semi-annually.

4.5.2 Coupon bonds may have odd first and/or last coupon/principal payments:

- Short last shall mean a bond with scheduled semi-annual payments, where only the last coupon/principal payment date is less than 6 months in term from the previous scheduled semi-annual payment date;
- Long last shall mean a bond with scheduled semi-annual payments, where only the last coupon/principal payment date is greater than 6 months but less than 12 months in term from the previous scheduled semi-annual payment date;
- Prior to 15 February 2011, issues with short and/or long last coupon/principal payments were not eligible for index inclusion;
- Bonds with odd first coupon payments remain eligible under the definition of semi-annual.

Section 5

Price sources

5. Price sources

- 5.1 Constituents prices are provided by CanDeal Data and Analytics (“CanDeal DNA”) in accordance with its Composite pricing methodology⁷.
- 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.

⁷ The change from the use of the FTSE Canada Multi Dealer Pricing Methodology to use the Can Deal DNA composite pricing methodology was announced on 22 January 2022 and effective from 17 May 2022.

Section 6

Periodic change to the portfolios

6. Periodic change to the portfolios

6.1 Rebalancing the indices

6.1.1 The FTSE Canada NVCC Bond Index is rebalanced on a daily basis.

6.2 Addition of constituents

6.2.1 A new issue enters the index on/after the day it is issued or auctioned (when all eligibility criteria are verified). The bond is included in the calculation of index risk statistics such as duration on the day of issue, though it does not affect the return on the index until the following business day. The new security does not begin to accrue interest until the new issue settlement date. The cut-off time for inclusion on the day of issue is 3:00pm EST.

6.3 Removal of constituents

6.3.1 A bond is removed from the index on the day its remaining effective term to maturity declines to one calendar year, whether that year has 365 or 366 days.

6.3.2 When a bond is downgraded below BBB, it is removed from the index 30 days after the initial downgrade.

6.3.3 In the case that the NVCC conversion provision is triggered, the conversion date would be treated as the effective maturity and the bond removed in accordance with Section 5.3.1.

6.4 Alterations to constituents

6.4.1 The following events are implemented on their effective date:

- Unscheduled redemptions or repurchases, including puts or calls;
- Coupons which step up or down, for example rating driven bonds;
- Bonds which fungo into an existing bond.

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
$y_{i,t}$	yield to maturity of a constituent bond i as of valuation day t
$MacDur_{i,t}$	Macaulay duration of a constituent bond i as of valuation day t
$ModDur_{i,t}$	modified duration of a constituent bond i as of valuation day t
$Dval01_{i,t}$	dollar duration of a constituent bond i as of valuation day t
$Convexity_{i,t}$	convexity of a constituent bond i as of valuation day t
$C_{i,t}$	value of any coupon payment received from the bond i for the assumed settlement date at time t . If none the value = 0

Clean price index (Capital Index)

The clean price (PI) or Capital Index is given by

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

$$PI_{i,t}=PI_{i,t-1} \times \frac{\sum [P_{i,t} \times N_{i,t-1}]}{\sum [P_{i,t-1} \times N_{i,t-1}]}$$

Total return index

The total return index (TRI) is given by

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

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

Appendix B

Further information

A glossary of terms used in FTSE Russell's Ground Rule documents can be found through the following link:

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

For further information on the FTSE Canada NVCC Bond Index Ground Rules please visit www.lseg.com/en/ftse-russell/ or e-mail fi.index@lseg.com. Contact details can also be found on this website.

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