

FTSE US Municipal Tax-Exempt Investment- Grade Bond Index

v1.5



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Section 1

Introduction

1. Introduction

1.1 FTSE US Municipal Tax-Exempt Investment-Grade Bond Index

1.1.1 The FTSE US Municipal Tax-Exempt Investment-Grade Bond Index measures the performance of the investment-grade tax-exempt municipal bond market. The index includes US Dollar-denominated bonds issued by a US state, municipality, territory or county. General Obligation bonds, Revenue bonds and Double-Barrel bonds that meet the inclusion criteria described in Figure 1 are included to the index.

1.1.2 Sub-indices are available based on credit quality, state, municipal sector classification, and maturity.

1.1.3 The FTSE US Municipal Tax-Exempt Investment-Grade Bond Index does not take account of ESG factors in its design.

1.2 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. and FTSE Fixed Income Europe Limited), FTSE Fixed Income LLC, The Yield Book Inc. and Beyond Ratings.

1.2.1 FTSE Russell hereby notifies users of the index that it is possible that factors, including external factors 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.

1.2.2 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 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

Section 2

Management responsibilities

2. Management responsibilities

2.1 FTSE Fixed Income LLC (FTSE)

2.1.1 FTSE is the benchmark administrator of the index series.¹

2.1.2 FTSE is responsible for the daily calculation, production and operation of the index series and will:

- maintain records of the index weightings of all constituents;
- make changes to the constituents and their weightings in accordance with the Ground Rules;
- carry out the periodic index reviews of the index series and apply the changes resulting from the reviews as required by the Ground Rules;
- disseminate the indices.

2.2 Amendments to these Ground Rules

2.2.1 These Ground Rules shall be subject to regular review (at least once a year) by FTSE Russell to ensure that they best reflect the aim 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.

2.2.2 As provided for in the Statement of Principles for FTSE Russell 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 Ground 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). FTSE Fixed Income LLC administers the Index Series in line with the third country transitional provisions contained within Article 51(5) of the European Benchmark Regulation and the third country transitional provisions as amended by Article 42(5) of 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 or by contacting fi.index@lseg.com. These policies are reviewed annually and any changes are approved by the FTSE Russell Product Governance Board.

3.1 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 Index Advisory Board for discussion before approval by the FTSE Russell Product Governance Board.

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

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

3.2 Queries and Complaints

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

[Benchmark Determination Complaints Handling Policy.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

3.4.1 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

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 Benchmarks², the European benchmark regulation³ and the UK benchmark regulation⁴. The FTSE Russell Governance Framework can be accessed using the following link:

[FTSE Russell Governance Framework.pdf](#)

[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](#)

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

Composition and design criteria

4. Composition and design criteria

Figure 1. FTSE US Municipal Tax-Exempt Investment-Grade Bond Index – design criteria and calculation assumptions

Coupon	Semi-annual fixed-rate bonds and zero coupon bonds
Currency	USD
Minimum Maturity	At least one year. The maturity for pre-refunded bonds is calculated to the pre-refunded date, rather than the stated final maturity date.
Minimum Issue Size	USD 10 million
Minimum Deal Size	USD 75 million at the time of issuance. Securities that do not qualify for the index at issuance because they fail to meet the deal size minimum will not enter the index if deal size subsequently increases to above the stated threshold.
Composition	<u>Securities included:</u> General Obligation, Revenue, and Double-Barrel bonds Pre-refunded, partial pre-refunded with newly issued CUSIPs, and escrow-to-maturity bonds Callable bonds, including make whole calls and callable bonds that have entered a thirty-day rolling call period <u>Securities excluded:</u> Crossover refunded bonds, bonds containing both pre-refunded and un-refunded portions with original issue CUSIPs, secondary insured bonds, monetary defaults, derivatives, letters of credit, guaranteed investment contracts, limited offerings, private placements, and convertibles
Minimum Credit Quality	BBB- by S&P or Baa3 by Moody's
Taxability	Federally tax-exempt; may be subject to an Alternative Minimum Tax (AMT)
Dated Date	Dated date must be less than two years from date of index entry. Bonds with a dated date prior to December 31, 2010 are not eligible for inclusion. In the event that a bond does not have a dated date, the issue date will be used.
Weighting	Market capitalisation
Rebalancing	Once a month on the last business day of the month (pricing as of the last business day of the month and settlement as of the last calendar day of the month). Called bonds exit the index at their call price at the next monthly rebalance after the call transaction takes place.
Reinvestment of Cash Flows	Intra-month cash flows from interest and principal payments are not reinvested as part of monthly index total return calculations. ⁵

⁵ Prior to 1 November 2022, reinvestment income was included in the total return calculation.

Pricing	Prices are sourced from Refinitiv and are taken as of 4:00 p.m. (New York time) on the bid side.
Calculation Frequency	Daily
Settlement Date	Monthly: Last calendar day Daily: Same day settlement except if the last business day of the month is not the last calendar day of the month; then, settlement is on the last calendar day of the month
Fixing Date	Each month, the upcoming month's index constituents are "fixed" on the profile fixing date. Each year's scheduled fixing dates are published on the website.
Base Date	December 31, 2012

4.1 Municipal classifications

4.1.1 Securities in the FTSE US Municipal Tax-Exempt Investment-Grade Bond Index are classified according to a two-tier scheme provided in Figure 2. At the broadest Municipal Class 1 Level, securities are classified as either General Obligation or Revenue. General Obligation bonds have their Municipal Class 2 assigned as "GO". Further granularity at the Municipal Class 2 Level is provided for Use of Proceeds for Revenue bonds only. The security-level codes for each classification is given in parenthesis.

Figure 2. FTSE US Municipal Tax-Exempt Investment-Grade Bond Index – Municipal Bond classifications

Municipal Class 1	Municipal Class 2	Description
General Obligation (GO)	General Obligation (GO)	Includes State and Local GO bonds, and Double-Barrel bonds
Revenue (REV)	Education (EDUC)	Primary/Secondary Education; University/Higher Education; Student Loans; Education Facility/Equipment/Library; Other Education
	Healthcare (HLTH)	Hospitals; Health System Loans; Nursing Homes; Lifecare/Retirement Centers; Other HealthCare
	Housing (HSNG)	Single Family Housing; Multi-Family Housing; Single/Multi-Family Housing; New Public Housing; Other Housing
	Industrial Development (INDV)	Industrial Development; Pollution Control; Solid Waste/Resource Recovery; Economic Development; Office Buildings/Limited Partnerships; Malls/Shopping Centers; Other Industrial Development
	Leasing (LEAS)	Leasing
	Public Services (PUBS)	Government/Public Buildings; Correctional Facilities/Jails; Fire Station/Equipment; Courts; Redevelopment/Land Clearance/Land Preservation; General Purpose/Public Improvement; Pension Funding/Retirement; Tobacco; Other Public Service
	Recreation (RECT)	Civic/Convention Centers; Stadium/Sports Complex; Recreation Facilities/Theatres/Parks/Zoos/Beaches
	Transportation (TRAN)	Airlines; Airports; Bridges/Tunnels; Mass/Rapid Transit; Parking Facilities; Seaports/Marine Terminals; Toll Roads/Streets/Highways; Other Transportation
	Utilities (UTIL)	Electric and Public Power; Flood Control/Storm Drainage; Gas; Sanitation; Telephone; Combined Utilities; Other Utilities
	Water and Sewer (WATR)	Water and Sewer
	Other (OTHS)	Agriculture/Irrigation; Veterans; Other

4.2 FTSE Russell maintains the following additional classifications and data attributes specific to municipal bonds tracked by its benchmarks:

- **Special Tax Bonds** – Securities that have dedicated revenue from a Special Tax; Fuel or Vehicle Tax; or Sales or Excise Tax.
- **Pre-refunded Bonds** – Securities where the proceeds of a refunding bond issuance are used to service the debt of the underlying securities. Securities are identified as escrow-to-maturity, advanced refunded, and partial advanced refunded bonds. Escrow-to-maturity securities are redeemed on the maturity date and pre-refunded securities are redeemed on an optional redemption date (i.e., the pre-refunded date).
- **State** –The US state or territory where the issuer of a municipal bond is domiciled. FTSE Russell publishes sub-indices by state for the top issuers in the index.

4.3 Index quality

4.3.1 An index quality is assigned to each index bond as of profile fixing. The index quality is first mapped to the Standard & Poor’s Financial Services LLC (“S&P”) rating. If a bond is not rated by S&P but it is rated by Moody’s Investors Service, Inc. (“Moody’s”), then it is assigned the S&P equivalent of the Moody’s rating to the index quality. If a bond is split-rated (an investment-grade rating by one rating agency and high-yield by the other), the S&P equivalent of the investment-grade rating is assigned to the index quality. Index quality remains unchanged for the entire performance month.

4.4 Return computation

4.4.1 Total returns are computed on the assumption that each security is purchased at the beginning of the period and sold at the end of the period. An issue’s total rate of return is the percentage change in its total value over the measurement period (see Figure 3). The components of total return are price change, principal payments, coupon payments and accrued interest. The total returns use each individual security’s beginning-of-period market value.

Figure 3. Total rate of return calculation methodology

Beginning-of-period value	-	(Beginning price + Beginning accrued) x Beginning par amount outstanding
End-of-period value	-	[(Ending price + Ending accrued) x (Beginning par amount outstanding – Principal payments)] + Coupon payments + Principal payments
Total rate of return (%)	-	[(End-of-period value/Beginning-of-period value) – 1] x 100

A note on precision: Returns are computed to at least six decimal places but reported to a maximum of four. In addition, owing to rounding inaccuracies inherent in computer floating-point arithmetic, the last digit in any reported value may sometimes be off by one from its true value.

4.5 Analytics

4.5.1 A comprehensive range of analytics, including duration, spread and yield metrics, are published for the FTSE US Municipal Tax-Exempt Investment-Grade Bond Index and sourced from the Yield Book. Where a curve is used in computation of analytics, the MMD AAA Curve is used. This curve is constructed based on a universe of AAA-rated state GO debt with a 5% coupon and a 10-year par call structure.

4.6 Chronological summary of events

Figure 5. FTSE Municipal Tax-Exempt Investment-Grade Bond Index Event Summary

Year	Highlight
2022	November: Intra-month cash flows from interest and principal payments are not reinvested as part of monthly index total return calculations.
2019	April: FTSE US Municipal Tax-Exempt Investment-Grade Bond Index is introduced.

Appendix A

Further information

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

[Glossary_of_terms_FTSE_Fixed_Income.pdf \(ftserussell.com\)](#)

For contact details please visit the FTSE Russell website or contact FTSE Russell client services at fi.index@lseg.com.

Website: www.lseg.com/en/ftse-russell/

For more information about our indices, please visit www.lseg.com/en/ftse-russell/.

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