
FTSE MTS Eurozone Government Bond Index (Ex-CNO ETRIX) Series

v2.0



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Section 1

Introduction

1.0 Introduction

1.1 The FTSE MTS Index Structure

1.1.1 FTSE MTS Indexes are a set of benchmarks for the European sovereign bond market. The indexes are calculated and distributed by FTSE Russell using pricing data from the MTS platform. All quotes made on the consolidated inter-dealer platform are live and tradable to member dealers. Additionally, market data from the order book is widely distributed via data vendors.

1.2 IOSCO

1.2.1 FTSE International Limited (FTSE) considers that the FTSE MTS Eurozone Government Bond Index Ex-CNO Etrix Series (the Index Series) meets the IOSCO Principles for Financial Benchmarks as published in July 2013.

1.3 FTSE Russell hereby notifies users of the index series 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 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.

1.4 Index users who choose to follow this index series 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 group companies (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 errors or 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 errors or inaccuracies in the compilation of the Index or any constituent data in the FTSE MTS Eurozone Government Bond Index (Ex-CNO Etrix) Series

1.5 These Ground Rules

1.5.1 This document sets out the Ground Rules for the construction and management of the FTSE MTS Eurozone Government Bond Index (Ex-CNO Etrix) Series.

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. and MTSNext Limited), Mergent, Inc., FTSE Fixed Income LLC and The Yield Book Inc.

1.7 Index Series Objectives

1.7.1 The FTSE MTS Eurozone Government Bond Index (Ex-CNO Etrix) Series is designed to be a measure of the Eurozone Government Bond market. They are transparent indexes, and are designed to be replicable with individual security holdings and prices disclosed electronically each day.

1.8 Publication of Index and Underlying Data

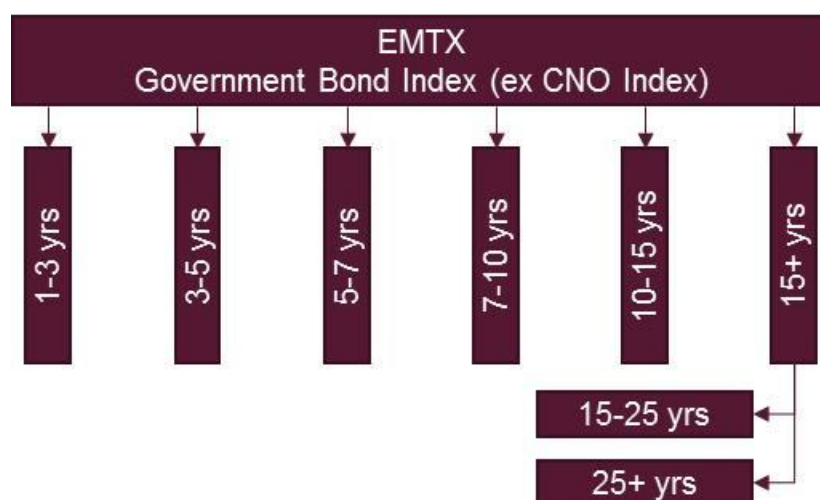
1.8.1 FTSE MTS Indexes are published in real time between 09:00 CET and 17:15 CET, with three snapshots at 11:00 CET, 16:00 CET and 17:15 CET. Bond prices used for the 11:00, 16:00 and 17:15 CET snapshots are published on the website. Real time bond prices directly from the MTS platform are available from data vendors. These bond prices are distributed with a higher frequency than the 30 second index updates. Underlying bond portfolio composition and weights are also published on the FTSE MTS Index website.

1.9 The base currency of the benchmark is EUR.

1.10 FTSE MTS Eurozone Government Bond Index (Ex-CNO Etrix) Series

1.10.1 The FTSE MTS Eurozone Government Bond Index (Ex-CNO Etrix) Series is designed to improve index replicability by limiting each Eurozone sovereign issuer to two bonds per maturity range, with the exception of the 15+ years range.

The structure of FTSE MTS Eurozone Government Bond Index Series is shown below:



There is a parallel series of indexes which includes investment grade issues only, as defined in Section 4.

1.11 Price and Total Return indexes

1.11.1 Price and Total Return indexes are calculated.

Total Return Index: Coupons paid out on any bond in an index portfolio are reinvested overnight in the index itself. No deduction is made to a coupon before it is reinvested in the index i.e. no withholding tax is applied.

1.12 Index Analytics

1.12.1 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
- Average Macaulay Duration
- Average Modified Duration
- Average Convexity

1.13 Index Calculation

The indexes are calculated on every day that is a TARGET Business day and a MTS market trading day. The index calculation will use the T+2 settlement convention for the valuation of index constituents and the calculation of index analytics.

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.

2.1.2 FTSE Russell is responsible for the daily calculation, production and operation of the FTSE MTS Eurozone Government Bond Index (Ex-CNO Etrix) 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.

2.2 FTSE EMEA Fixed Income Advisory Committee

2.2.1 The FTSE EMEA Fixed Income Advisory Committee has been established by FTSE Russell. The Committee may recommend changes to the Ground Rules for approval by the FTSE Russell Product Governance Board.

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

[FTSE EMEA 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 meet the current and future requirements of investors and other index users. Any proposals for significant amendments to these Ground Rules will be subject to consultation with the FTSE EMEA Fixed Income Advisory Committee and other stakeholders if appropriate. The feedback from these consultations will be considered by the FTSE Russell Product Governance Board before approval is granted.

2.3.2 As provided for in the Statement of Principles for FTSE Fixed Income Indexes, 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.

2.4 Market Disruption

- 2.4.1 If the value of one or more constituents is not published due to a suspension or a market disruption event, the index will be calculated taking the latest intra-day value, if available. If an intra-day value is unavailable the previous end of day value will be used.

2.5 Interruption of Live Pricing from MTS Platform

- 2.5.1 The FTSE MTS Indexes are calculated based on executable bids and offers sourced from the MTS inter-dealer platform. The MTS platform is not controlled by FTSE Russell and should the platform be unable to disseminate live prices for any reason, the FTSE MTS Indexes will not be updated during that period. Index users who choose to follow the FTSE MTS Indexes should be aware of this possibility and make suitable contingency arrangements.



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 Guide to the Calculation Methods for the FTSE Fixed Income Indexes

3.2.1 For a description of the methodology used to calculate the index and bond level analytics, please consult the Guide to Calculation Methods for FTSE Fixed Income indexes, which can be found using the following link:

[FTSE Fixed Income Index Guide to Calculation.pdf](#)

3.3 Statement of Principles for FTSE Fixed Income Indexes (the Statement of Principles)

Indexes 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 Indexes 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 Product Governance Board.

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

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

3.1 FTSE MTS Pricing Methodology Guide

3.1.1 For further information, please see the FTSE MTS Pricing Methodology Guide which is available using the following link:

[FTSE MTS Pricing Methodology Guide](#)

3.2 Recalculation Policy and Guidelines

The Recalculation Policy and Guidelines for Fixed Income Indexes document is available from the FTSE Russell website using the link below or by contacting info@ftserussell.com.

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

3.3 Policy for Benchmark Methodology Changes

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

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

Section 4

Eligibility Criteria

4.0 Eligibility Criteria

4.1 Selection Process

The constituent selection process for the FTSE MTS Eurozone Government Bond Index (Ex-CNO Etrix) Series comprises two steps:

1. Establish all Eligible Bonds for each sub-index, as per the eligibility criteria in Rule 4.2 and 4.3.
2. Select a limited number of Eligible Bonds for the index ('Selected Bonds'), depending on the maximum number of bonds per issuer. For most maturity sub-indexes, this maximum is two. If there are more than two bonds available for selection, the bond with the largest amount outstanding and residual maturity is selected. The detailed selection procedure is described in Appendix A.

4.2 Eligible Bonds

To be eligible for the FTSE MTS Eurozone Government Bond Index bonds must meet the following eligibility criteria:

- Nominal, fixed coupon bullet-maturity bonds denominated in euros and having no embedded options or convertibility,
- Quoted on the MTS Platform,
- Issued by the sovereign government of one of the following Eurozone countries: Austria, Belgium, Finland, France, Germany, Ireland, Italy, Netherlands, Portugal and Spain,
- A minimum outstanding amount of €2 billion.

4.3 Credit Ratings

For the investment grade sub-indexes, eligible bonds must have an issuer rating from at least two of the following rating agencies: Fitch, Moody's and S&P.



Section 5

Price Sources

5.0 Price Sources

5.1 FTSE MTS Indexes are priced using live quotes from the MTS inter-dealer platform. Each bond quoted on the MTS platform is supported by multiple dealers supplying continuous quotes. These quotes are widely distributed for information to the market via data vendors.

Index updates are calculated using best bid prices. New bonds entering the index for the first time use the best offer price, replicating the bid-offer spread experienced by a fund tracking the index. This applies to both the all-maturity and the individual maturity sub-indexes.

Selected indexes of each series are also available in mid-priced versions, where existing constituents are valued using mid prices. In order to replicate the bid-offer spread incurred when tracking the mid-priced index, new constituents enter the mid-priced index using their respective ask prices, and leave the index using their respective bid prices. The mid-price is calculated as the arithmetic average of the respective bid and offer price pair.

5.2 The prices used to update the indexes are taken from the MTS market in real time. Prior to being used in the index calculation, the prices are subject to a multi-step verification process which aims to remove stale or off-market prices. The verification procedure includes:

- Comparing the bid and offer spreads against country thresholds
- Comparing price movements in individual bonds against pre-defined thresholds

Any price that successfully completes the verification process is referred to as the Last Good Price (LGP) and is subsequently used in the index calculation. In the event that the verification process disqualifies all prices for a particular bond the LGP is used, until a new price is available.

5.3 For further information, please see the FTSE MTS Pricing Methodology Guide which is available using the following link:

[FTSE MTS Pricing Methodology Guide](#)



Section 6

Index Rebalancing

6.0 Index Rebalancing

6.1 Monthly Rebalancing

FTSE MTS Indexes are rebalanced every calendar month. New selections for the index portfolios and their weights are established using market data at 11:00 CET on the first day that is a TARGET business day and a MTS market trading day following the 15th day of the month prior to the effective date of the new selections (such business day being the “Selection Day”). The first settlement day of a newly issued bond must be on or before Selection Day in order for it to be eligible for the new monthly selections.

The monthly rebalance is effective at the open of the first business day of the month.

In the event that there are no Eligible Bonds available to be selected for a new monthly index portfolio, the current (populated) index portfolio is held constant until a new bond(s) becomes eligible.

6.2 Notional Amounts

The notional amount of each Selected bond i is determined using data from 11:00 CET on the first business day following the 15th day of the month immediately preceding the effective month₁. This time is denoted t_0 . Bond eligibility and selections are established by applying the relevant criteria for each index at the same time t_0 .

For historical reasons, some of the sub-indexes belonging to the FTSE MTS Eurozone Government Bond Index (Ex-CNO Etrix) Series includes only a subset of all Eligible Bonds as Selected Bonds (see Appendix A for details). Additionally, Selected Bonds for the all-maturity FTSE MTS Eurozone Government Bond Index (Ex-CNO Etrix) are simply those that are selected for the maturity sub-indexes (i.e. a combination of some and all Eligible Bonds in respect of each sub-index).

The notional amounts of the bonds in the FTSE MTS Eurozone Government Bond (Ex-CNO Etrix) sub-indexes in which only a subset of Eligible Bonds become Selected Bonds, are adjusted so that their weight in each sub-index is equal to the weight of the eligible bonds of that issuer, relative to all of the eligible bonds for each sub-index.

Note that if a bond is selected in more than one sub-index, then:

- The bond is selected for the all-maturity index only once
- The weight of the bond in the wider sub-index is used in calculating the weight in the all-maturity index (i.e. for a 17 year bond, the 15+ years sub-index is considered and the 15-25 years sub-index is not used).

Appendix A: FTS MTS Eurozone Government Bond Index (Ex-CNO Etrix) Series

Base dates and selection criteria:

Index	Maturity range	Base date (Index = 100)	Selection criteria
FTSE MTS Eurozone Government Bond Index (Ex-CNO Etrix)	> 1 year	31-Dec-98	All Selected Bonds in maturity sub-indexes below
FTSE MTS Eurozone Government Bond 1-3Y Index (Ex-CNO Etrix)	1 – 3 years	31-Dec-98	2 eligible bonds per issuer
FTSE MTS Eurozone Government Bond 3-5Y Index (Ex-CNO Etrix)	3 – 5 years	31-Dec-98	2 eligible bonds per issuer
FTSE MTS Eurozone Government Bond 5-7Y Index (Ex-CNO Etrix)	5 – 7 years	31-Dec-98	2 eligible bonds per issuer
FTSE MTS Eurozone Government Bond 7-10Y Index (Ex-CNO Etrix)	7 – 10 years	31-Dec-98	2 eligible bonds per issuer
FTSE MTS Eurozone Government Bond 10-15Y Index (Ex-CNO Etrix)	10 – 15 years	31-Dec-98	2 eligible bonds per issuer
FTSE MTS Eurozone Government Bond 15-25Y Index (Ex-CNO Etrix)	15 – 25 years	31-Dec-98	All eligible bonds
FTSE MTS Eurozone Government Bond 25Y+ Index (Ex-CNO Etrix)	25+ years	31-Dec-98	All eligible bonds
FTSE MTS Eurozone Government Bond Index (Ex-CNO Etrix)	15+ years	31-Dec-98	All eligible bonds

If a bond is included in more than one maturity sub-index (for example, in both the 15-25 years sub-index and the 15+ years sub-index), it is included only once in the all-maturity FTSE MTS Eurozone Government Bond Index (Ex-CNO Etrix). For maturity sub-indexes with a selection limit of two bonds per issuer, Selected Bonds from the previous monthly selections that continue to be Eligible, automatically become Selected Bonds for the new month.

For maturity sub-indexes with a selection limit of two bonds per issuer but having less than two Selected Bonds inherited from the previous month for any given issuer, any available Eligible bond with a suitable maturity and issuer is selected. If there is more than one suitable Eligible Bond, the bond that most closely meets the following criteria becomes the Selected Bond:

Outstanding Amount x Residual Maturity within the Maturity Range



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 MTS Eurozone Government Bond Index Ex-CNO Ground Rules please visit www.ftse.com/products/mts or e-mail info@ftserussell.com.

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