FTSE ORB Index Series

v2.3



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Introduction

1. Introduction

- 1.1 This document sets out the ground rules for the construction and management of the FTSE ORB Index Series. The ground rules are available from FTSE Russell on www.lseg.com/en/ftse-russell/.
- 1.2 The FTSE ORB Index Series consists of the following indices:
 - FTSE ORB Index
 - FTSE ORB Financials Index
 - FTSE ORB Non-Financials Index
 - FTSE ORB Under 5Y Until Maturity Index
 - FTSE ORB Over 5Y Until Maturity Index

1.3 Index series objectives

- 1.3.1 The FTSE ORB Index Series is a set of rules-based indices that measure the performance of corporate bonds trading on the London Stock Exchange's Order Book for Retail Bonds across different maturity bands and industry segments.
- 1.3.2 The indices to which each bond are assigned depend on the maturity term on the first business day of the month.
- 1.4 The FTSE ORB Index Series does not take account of ESG factors into its index design.

1.5 Index methodology

- 1.5.1 This document sets out the ground rules for the construction and maintenance of the FTSE ORB Index Series.
- 1.5.2 The purpose of the family of FTSE ORB Index Series is to measure the performance of corporate bonds trading on the London Stock Exchange's Order Book for Retail Bonds. This is achieved by creating an index of eligible bonds and calculating the index performance. At the end of each month, the constituents of the index are reviewed. Bonds may be removed or added to the index during the review. It is assumed that any rebalancing occurs at zero cost. The constituents of an index do not change during a month, except in exceptional circumstances (see sections 4 and 5).
- 1.6 **Capital index** (also known as the price index or the clean price index)
- 1.6.1 The capital index of all the listed indices is calculated every business day. Each capital index is an arithmetically weighted index based on the clean price and weighted by the nominal amount outstanding.
- 1.7 **Total return index** (also known as the performance index)

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1.8 Other data provided

- 1.8.1 In addition to the capital index and total return index, the following are also calculated:
 - Average coupon
 - Average gross redemption yield
 - Average time to maturity
 - 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
- 1.9 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 bond.
- 1.10 The base currency of the benchmark is GBP.

1.11 FTSE Russell

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- 1.12 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 that 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.
- 1.13 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;
 - any inaccuracies in these ground rules;
 - 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.

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Management responsibilities

Management responsibilities

2.1 FTSE International Limited (FTSE)

- 2.1.1 FTSE is the benchmark administrator of the index series¹.
- 2.1.2 FTSE is responsible for the daily calculation, production and operation of the FTSE ORB Index Series, and will:
 - maintain records of all the constituents;
 - carry out the periodic reviews of the index series and apply the changes resulting from the reviews as required by the ground rules;
 - be responsible for the addition and deletion of bonds and changes of nominal amounts in accordance with the ground rules.

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 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.
- 2.2.2 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.
- 2.2.3 If FTSE Russell considers that a change of principle should be made to any of the ground rules, the issue must be brought to the attention of the chairman of the FTSE Russell Index governance board for approval.

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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 Russell index policies

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 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

3.2 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

3.3 FTSE Russell Governance Framework

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

3.4 Real Time Status Definitions

3.4.1 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

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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.

Eligible securities

4. Eligible securities

4.1 Eligibility of bonds

- 4.1.1 Bonds trading on the LSE ORB platform will be considered for inclusion in the FTSE ORB Index Series.
- 4.1.2 Only bonds satisfying the following criteria will be eligible for inclusion in the FTSE ORB Index Series:
 - bonds must be GBP denominated;
 - bonds must be classified as corporate bonds; and
 - bonds must have a fixed coupon payment.
- 4.1.3 To be eligible for the FTSE ORB Financials Index, a bond must have an issuer ICB code in the 8,000 (new ICB code 30)⁵ series. The opposite must be true for a bond to be eligible for the FTSE ORB Non-Financials Index.
- 4.1.4 Bonds excluded from the FTSE ORB Index Series are:
 - hybrid/convertible bonds;
 - multi-step coupon bonds;
 - inflation-linked bonds;
 - contingent convertible bonds; and
 - perpetual bonds
- 4.1.5 Bonds with embedded options

Callable and puttable bonds are eligible. Callable and puttable bonds with no available data for next call/put date and next call/put price at the time of the calculation are treated as plain vanilla bonds. For callable and puttable bonds with available next call/put date and next call/put price, yield to the next call/put date (whichever is sooner if different) is calculated as the bond's redemption yield.

4.1.6 There is no limit on the minimum issuance of a bond.

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 $^{^{\}rm 5}~$ FTSE indices migrated to the new ICB classification system in March 2021.

Price sources

5. Price sources

5.1 The prices used for the calculation of the indices are LSE ORB closing prices. The arithmetic mean between the bid and ask quotes (mid-price) is used in the indices.

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Periodic change to the indices

Periodic change to the indices

6.1 Rebalancing the indices

6.1.1 The FTSE ORB Index Series is rebalanced monthly at the close of business on the last business day of each month. New issues are bought at the fixing price (16:30 UK time) on the last trading day of the rebalance month and integrated into the index.

6.2 Monthly rebalance

- 6.2.1 Index membership for the subsequent month is determined three business days before the last business day of the month and changes are effective at the close on the last business day of the month.
- Bonds to be removed from the index, e.g. because their residual life at the beginning of the new month is less than a year, are treated as sold at the fixing price 16:30 UK time on the last trading day of the previous month. The residual life of the bonds with embedded options is based on the next call/put date, where available else the actual maturity date.
- 6.2.3 Where a bond is moved at its fixing price from one maturity sub-index to a shorter maturity sub-index, this occurs after the close of the last business day of the month preceding the month in which the residual life of this bond is within the shorter maturity index.
- 6.2.4 Deletions from and additions to the index are announced to the market three business days before the last business day of the month.

6.3 Intra-review

- 6.3.1 Addition of large constituents: if a new issue is so large (i.e. its full par amount outstanding is greater than or equal to 1% of the total par amount outstanding of the existing index) that the effectiveness of the index as a market indicator would be significantly and adversely affected by its omission, the new issue will be included as a constituent of the index at the open on the first day of official trading.
- 6.3.2 **Removal of constituents:** if a bond defaults and the default announcement is made available from a reputable data vendor, then the deletion is announced immediately and the bond is retained in the index at the last traded price for two days. No interest accrues during this period. The bond is deleted at the close two business days after the announcement at a price of zero.
- 6.3.3 **Adjustments to constituents:** adjustments to nominal amounts outstanding in the index are announced at the close on the day, they are effective in the market. Changes to nominal amounts outstanding are effective in the index two business days after they are effective in the market.

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Appendix A

Calculation formulae

Appendix A: FTSE ORB Index Series calculation formulae

The following notation is used in the following calculations.

 $P_{i,t}$ clean price of bond i at time t

 $A_{i,t}$ accrued interest to the normal settlement date for bond i at time t

 $N_{i,t}$ nominal value of amount outstanding for bond i at time t

 $C_{i,t}$ coupon of bond i at time t

 $L_{i,t}$ remaining life of bond i at time t

 $Y_{i,t}$ redemption yield to maturity for bond i at time t

 $D_{i,t}$ MacAulay duration for bond i at time t

 $M_{i,t}$ modified duration for bond i at time t

 $X_{i.t}$ convexity for bond i at time t

 $G_{i,t}$ value of any coupon payment received from bond i for the assumed settlement date at time t or since time (t-1). If none the value = 0

Clean price index (capital index)

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

$$PI_{0} = 100$$

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

where the summations are over the bonds currently in the index.

Total return index

The total return index (TR) is calculated as follows:

$$TR_{0} = 100$$

$$TR_{t} = TR_{t-1} \times \frac{\sum_{i} (P_{i,t} + A_{i,t} + G_{i,t}) \times N_{i,t}}{\sum_{i} (P_{i,t-1} + A_{i,t-1}) \times N_{i,t}}$$

where the summations are over the bonds currently in the index.

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Average coupon

The average coupon (CO) for an index is given by:

$$CO_{t} = \frac{\sum_{i} C_{i,t} \times N_{i,t}}{\sum_{i} N_{i,t}}$$

where the summations are over the bonds currently in the index.

Average gross redemption yield

The average gross redemption yield (RY) is the average of the bond yields weighted by both their sizes and their modified durations.

$$RY_{t} = \frac{\sum_{i} Y_{i,t} \times M_{i,t} \times (P_{i,t} + A_{i,t}) \times N_{i,t}}{\sum_{i} M_{i,t} \times (P_{i,t} + A_{i,t}) \times N_{i,t}}$$

where the summations are over the bonds currently in the index.

The yields are usually compounded on an annual basis. However, for those markets where coupons are paid on a semi-annual basis, semi-annual yields are also shown.

The relationship between a semi-annual redemption yield Y_s and an annualised yield Y_a is given by:

$$\left(1 + \frac{Y_a}{100}\right) = \left(1 + \frac{Y_s}{200}\right)^2$$

Average time to maturity

The average life (*LF*) or time to maturity for an index is given by:

$$LF_{t} = \frac{\sum_{i} L_{i,t} \times N_{i,t}}{\sum_{i} N_{i,t}}$$

where the summations are over the bonds currently in the index.

Average MacAulay duration

The average MacAulay duration (DU) for an index is given by:

$$DU_{t} = \frac{\sum_{i} D_{i,t} \times (P_{i,t} + A_{i,t}) \times N_{i,t}}{\sum_{i} (P_{i,t} + A_{i,t}) \times N_{i,t}}$$

where the summations are over the bonds currently in the index.

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Average modified duration

The average modified duration (MD) for an index is given by:

$$MD_{t} = \frac{\sum_{i} M_{i,t} \times (P_{i,t} + A_{i,t}) \times N_{i,t}}{\sum_{i} (P_{i,t} + A_{i,t}) \times N_{i,t}}$$

where the summations are over the bonds currently in the index.

Average convexity

The average convexity (CX) of an index is given by:

$$CX_{t} = \frac{\sum_{i} X_{i,t} \times (P_{i,t} + A_{i,t}) \times N_{i,t}}{\sum_{i} (P_{i,t} + A_{i,t}) \times N_{i,t}}$$

where the summations are over the bonds currently in the index.

Nominal size of index

The sum (SZ) of the nominal values of all the bonds in an index is given by:

$$SZ_t = \sum_i N_{i,t}$$

where the summations are over the bonds currently in the index.

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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

Further information on the FTSE ORB Index Series is available from FTSE Russell.

For contact details, please visit the FTSE Russell website or e-mail FTSE Russell client services at info@ftserussell.com.

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

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