FTSE Custom UK Index-Linked Gilts Composite Index

(50% FTSE Actuaries UK Index-Linked Gilts up to 5 Years Index and 50% FTSE Actuaries UK Index-Linked Gilts 5-15 Years Index)

v1.6

FTSE RUSSELL

An LSEG Business

Contents

Section 1
Introduction

1.   Introduction

1.1   This document sets out the Ground Rules for the construction and management of the FTSE Custom UK Index-Linked Gilts Composite (50% FTSE Actuaries UK Index-Linked Gilts up to 5 Years Index and 50% FTSE Actuaries UK Index-Linked Gilts 5-15 Years Index) Index (the "Index"). Copies of the Ground Rules are available from www.lseg.com/en/ftse-russell/

1.2   The Index is a combination of two indices, the FTSE Actuaries UK Index-Linked Gilts up to 5 Years Index and the FTSE Actuaries UK Index-Linked Gilts 5-15 Years Index (each a "Component Index" and collectively the "Component Indices").

1.3   The FTSE Custom UK Index-Linked Gilts Composite Index Series does not take account of ESG factors in its index design.

1.3.1   The base currency of the FTSE Custom UK Index-Linked Gilts Composite Index Series is GBP.

1.3.2   The FTSE Actuaries UK Index-Linked Gilts up to 5 Years Index consists of UK index-linked gilts with remaining maturities of up to five years, and aims to track the market for short term index-linked gilts. The constituents of this Component Index are weighted by market capitalisation. This reflects the objective of the market/sector which this Component Index seeks to represent.

1.3.3   The FTSE Actuaries UK Index-Linked Gilts 5-15 Years Index consists of UK index-linked gilts with remaining maturities of between five and fifteen years, and aims to track the market for medium term index-linked gilts. The constituents of this Component Index are weighted by market capitalisation. This reflects the objective of the market/sector which this Component Index seeks to represent.

1.3.4   These Component Indices are part of the FTSE Actuaries UK Index-Linked Gilts Index Series and are calculated using a different methodology to that of the Index. A description of the methodology used to calculate the Component Indices can be found in the following document:

FTSE_Actuaries_UK_Gilts_Index_Series_Guide_to_Calc.pdf

The Index represents the market for UK index-linked gilts issued by the UK Government with remaining maturities of up to 15 years with an equal weighting to each of the Component Indices. At the start of each month, the Index is rebalanced so that it has an equal weighting to each of the Component Indices. The weighting within the Index to each Component Index will fluctuate throughout the month depending on the performance of their constituents, and therefore the equal weighting of the Component Indices in the Index may not be maintained throughout the relevant month.

1.4   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.

1.5   Statement of Principles for FTSE Bond 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 Bond 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 Policy Advisory Board for discussion before approval by FTSE Russell's Index Governance Board.

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

Statement_of_Principles_Bond_Indices.pdf

1.6   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 should be able to withstand, or otherwise address the possibility of changes to, or cessation of, the index series.

1.7   Index users who choose to follow this index series or to buy products that claim to follow this index series should assess the merits of the index series 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 (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 series or any constituent data.

Section 2
Management responsibilities

2. Management responsibilities

2.1 FTSE International Limited (FTSE)

2.1.1 FTSE is the benchmark administrator of the index.[1]

2.1.2 FTSE is responsible for the daily calculation, production and operation of the Index 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;

– disseminate the Index.

2.2 Amendments to these Ground Rules

2.2.1 These Ground Rules and those of the Component Indices shall be subject to regular review by FTSE Russell to ensure that they continue to best reflect the aims of the index. Any proposals for significant amendments to the Ground Rules for the Component Indices 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 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:

3.1 Queries and Complaints

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

FTSE_Russell_Benchmark_Determination_Complaints_Handling_Policy.pdf

3.2 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 info@ftserussell.com.

Fixed_Income_Recalculation_Policy_and_Guidelines.pdf

3.3 FTSE Russell 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:

FTSE_Russell_Policy_for_Benchmark_Methodology_Changes.pdf

3.4 FTSE Russell Governance Framework

3.4.1 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 ensure compliance with the IOSCO Principles for Financial Benchmarks[2] and the European benchmark regulation[3]. The FTSE Russell Governance Framework can be accessed using the following link:

FTSE_Russell_Governance_Framework.pdf

3.5 Real Time Status Definitions

3.5.1 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.

Section 4
Component indices

4.   Component indices

4.1.1   The Component Indices from which the Index is constructed are described as follows. (For information on the formulae and calculation of the Index, please refer to Section 6 below.)

4.2   **FTSE Actuaries UK Index-Linked Gilts up to 5 Years Index**

This Component Index is designed to track the UK index-linked gilt market for securities with a remaining maturity of up to five years.

The weighting of the individual securities is based upon their market capitalisation with rebalancing undertaken on a daily basis.

4.3   **FTSE Actuaries UK Index-Linked Gilts 5-15 Years Index**

This Component Index is designed to track the UK index-linked gilt market for securities with a remaining maturity of between five and fifteen years.

The weighting of the individual securities is based upon their market capitalisation, with rebalancing undertaken on a daily basis.

The Ground Rules for the Component Indices are available using the following link:

FTSE_Actuaries_UK_Gilts_Index_Series.pdf

Further details on the calculation algorithms can be found using the following link:

FTSE_Actuaries_UK_Gilts_Index_Series_Guide_to_Calc.pdf

The price of each Component Index will be calculated and published on the FTSE Russell website on each UK business day, with a lag of one business day. Important news on the Component Indices and a monthly factsheet containing information on the top 10 holdings of each Component Index is available from www.lseg.com/en/ftse-russell/.

Section 5
Rebalancing procedure

5. Rebalancing procedure

5.1.1   The Index is rebalanced at the start of each month (i.e. equivalently at the close of business on the last business day of the preceding month) so that it has an equal weighting of each of its Component Indices.

5.1.2   The weighting of the Index to each Component Index will fluctuate throughout the month depending on the performance of the Component Index constituents.

Section 6
Formulae and calculation method

6. Formulae and calculation method

6.1 Component Indices

Further details on the calculation algorithms can be found using the following link:

FTSE_Actuaries_UK_Gilts_Index_Series_Guide_to_Calc.pdf

6.2 Composite Indices

6.2.1 FTSE Actuaries UK Index-Linked Gilts up to 5 Years Index ("Component Index 1")

Price at time of establishment of the Index	$= A_e$
Price on the last day of previous month, or at time of establishment of the Index, if later	$= A_0$
Price on current day of current month	$= A_n$

6.2.2 FTSE Actuaries UK Index-Linked Gilts 5-15 Years Index ("Component Index 2")

Price at time of establishment of Index	$= B_e$
Price on the last day of previous month, or at the time of establishment of the Index, if later	$= B_0$
Price on current day of current month	$= B_n$

6.2.3 Index

Index at time of establishment	$= C_e$
Index on the last day of previous month, or time of establishment of the Index, if later	$= C_0$
Index current day	$= C_n$

Calculation of Index at the time of establishment:

Index at time of establishment = (Price of Component Index 1 x 0.5) + (Price of Component Index 2 x 0.5)

C_e $= (A_e \times 0.5)$ $+ (B_e \times 0.5)$

For example, where:

$A_e = 5000$

$B_e = 7000$

Then:

C_e $= (5000 \times 0.5)$ $+ (7000 \times 0.5)$

C_e $= 6000$

Calculation of Index at a time after the establishment of the Index:

Change in Component Index 1 = (A_n/A_0)

Change in Component Index 2 = (B_n/B_0)

And accordingly:

$C_n = (C_0 \times \text{Change in Component Index 1} \times 0.5) + (C_0 \times \text{Change in Component Index 2} \times 0.5)$

For example, where:

$A_0 = 1000$

$A_n = 1100$

$B_0 = 1000$

$B_n = 800$

$C_0 = 10000$

Then:

Change in Component Index 1	=	1100/1000	=	1.1
Change in Component Index 2	=	800/1000	=	0.8
C_n	=	(10000 x 1.1 x 0.5) + (10000 x 0.8 x 0.5)	=	9500

6.3   Appendix A of these Ground Rules sets out illustrative examples of the calculation methods of the Index.

Appendix A
Illustrative examples

Example: Calculation of the Index at the time of establishment

Date	Component Index A FTSE Actuaries UK Index-Linked Gilts up to 5 Years Index (last prices) ($A(e)$)	Component Index B FTSE Actuaries UK Index-Linked Gilts 5-15 Years Index (last prices) ($B(e)$)	Calculation of Index			
			Weighting given to Component Index A at start of period	Weighting given to Component Index B at start of period	Price on current day of current month ($C(e)$)	
Sunday, 31 January 2016	2373.90	3307.38	50%	50%	2840.64	

For the purposes of these examples, it is assumed that the Index is established at close on the 31st January 2016.

Using the formulae as set out in Section 6 to calculate the Index at the time of establishment:

$$C(e) = (A(e) \times 50\%) + (B(e) \times 50\%)$$

For Index calculation on 31 January 2016

A(e) 2373.90
B(e) 3307.38

$$C(e) = (2373.9 \times 50\%) + (3307.38 \times 50\%)$$

$$C(e) = 2840.64$$

where:
C(e)   Price of Index at time of establishment

A(e)   Price of Component Index A at time of establishment
B(e)   Price of Component Index B at time of establishment

Example: Calculation of the Index on the day after establishment of the Index

Date	Component Index A FTSE Actuaries UK Index-Linked Gilts up to 5 Years Index (last prices)	Component Index B FTSE Actuaries UK Index-Linked Gilts 5-15 Years Index (last prices)	Calculation of Index					
			Index on last day of previous month, or time of establishment of the Index, if later ($C(0)$)	Change in Component Index A ($A(n)$ / $A(0)$)	Change in Component Index B ($B(n)$ / $B(0)$)	Weighting given to Component Index A at start of period	Weighting given to Component Index B at start of period	Price on current day of current month ($C(n)$)
Sunday, 31 January 2016	2373.90	3307.38				50%	50%	2840.64
Monday, 1 February 2016	2370.48	3287.76	2840.64	0.99856	0.99407	50%	50%	2830.17

Using the formulae as set out in Section 6:

$$C(n) = (C(0) \times (A(n) / A(0)) \times 50\%) + (C(0) \times (B(n) / B(0)) \times 50\%)$$

For Index calculation on 01 February 2016

C(0)   2840.64

A(0)   2373.90
A(n)   2370.48

B(0)   3307.38
B(n)   3287.76

$$C\ (01\text{-Feb-}2016) = (2840.64 \times (2370.48 / 2373.9) \times 50\%) + (2840.64 \times (3287.76 / 3307.38) \times 50\%)$$

$$C\ (01\text{-Feb-}2016) = (2840.64 \times .99856) \times 50\%) + (2840.64 \times (.99407) \times 50\%)$$

$$C\ (01\text{-Feb-}2016) = 2830.17$$

where:
C(0)   Price of Index on last day of previous month

A(0)   Price of Component Index A on last day of previous month, or time of establishment of the Index, if later
A(n)   Price of Component Index A on current day of current month

B(0)   Price of Component Index B on last day of previous month, or time of establishment of the Index, if later
B(n)   Price of Component Index B on current day of current month

Example: Calculation of the Index on the first day of a calendar month

| Date | Component Index A
FTSE Actuaries UK Index-Linked Gilts up to 5 Years Index (last prices) | Component Index B
FTSE Actuaries UK Index-Linked Gilts 5-15 Years Index (last prices) | Calculation of Index | | | | | |
			Index on last day of previous month, or time of establishment of the Index, if later $(C(0))$	Change in Component Index A $(A(n) / A(0))$	Change in Component Index B $(B(n) / B(0))$	Weighting given to Component Index A at start of period	Weighting given to Component Index B at start of period	Price on current day of current month $(C(n))$
Monday, 29 February 2016	2373.78	3326.85	2836.16	0.99995	1.00589	50%	50%	2850.32
Tuesday, 1 March 2016	2372.62	3315.33	2850.32	0.99951	0.99654	50%	50%	2844.68

Using the formulae as set out in Section 6:

$$C(n) = (C(0) \times (A(n) / A(0)) \times 50\%) + (C(0) \times (B(n) / B(0)) \times 50\%)$$

For Index Calculation on 01 March 2016

C(0)	2850.32
A(0)	2373.78
A(n)	2372.62
B(0)	3326.85
B(n)	3315.33

$$C\ (01\text{-Mar-}2016) = (2850.32 \times (2372.62 / 2373.78) \times 50\%) + (2850.32 \times (3315.33 / 3326.85) \times 50\%)$$

$$C\ (01\text{-Mar-}2016) = (2850.32 \times (.99951) \times 50\%) + (2850.32 \times (.99654) \times 50\%)$$

$$C\ (01\text{-Mar-}2016) = 2844.68$$

where:

C(0)	Price of Index on last day of previous month
A(0)	Price of Component Index A on last day of previous month, or time of establishment of the Index, if later
A(n)	Price of Component Index A on current day of current month
B(0)	Price of Component Index B on last day of previous month, or time of establishment of the Index, if later
B(n)	Price of Component Index B on current day of current month

Example: Calculation of the Index on the second day of a calendar month

| Date | Component Index A
FTSE Actuaries UK Index-Linked Gilts up to 5 Years Index (last prices) | Component Index B
FTSE Actuaries UK Index-Linked Gilts 5-15 Years Index (last prices) | Calculation of Index | | | | | |
			Index on last day of previous month, or time of establishment of the Index, if later $(C(0))$	Change in Component Index A $(A(n) / A(0))$	Change in Component Index B $(B(n) / B(0))$	Weighting given to Component Index A at start of period	Weighting given to Component Index B at start of period	Price on current day of current month $(C(n))$
Monday, 29 February 2016	2373.78	3326.85	2836.16	0.99995	1.00589	50%	50%	2850.32
Tuesday, 1 March 2016	2372.62	3315.33	2850.32	0.99951	0.99654	50%	50%	2844.68
Wednesday, 2 March 2016	2372.11	3304.67	2850.32	0.99930	0.99333	50%	50%	2839.81

Using the formulae as set out in Section 6:

$$C(n) = (C(0) \times (A(n) / A(0)) \times 50\%) + (C(0) \times (B(n) / B(0)) \times 50\%)$$

For Index calculation on 02 March 2016

C(0)	2850.32
A(0)	2373.78
A(n)	2372.11
B(0)	3326.85
B(n)	3304.67

$$C\ (02\text{-Mar-}2016) = (2850.32 \times (2372.11 / 2373.78) \times 50\%) + (2850.32 \times (3304.67 / 3326.85) \times 50\%)$$

$$C\ (02\text{-Mar-}2016) = (2850.32 \times (.99930) \times 50\%) + (2850.32 \times (.99333) \times 50\%)$$

$$C\ (02\text{-Mar-}2016) = 2839.81$$

where:

C(0)	Price of Index on last day of previous month
A(0)	Price of Component Index A on last day of previous month, or time of establishment of the Index, if later
A(n)	Price of Component Index A on current day of current month
B(0)	Price of Component Index B on last day of previous month, or time of establishment of the Index, if later
B(n)	Price of Component Index B on current day of current month

Example: Calculation of the Index on the last day of a calendar month

	Component Index A	Component Index B	Calculation of Index					
Date	FTSE Actuaries UK Index-Linked Gilts up to 5 Years Index (last prices)	FTSE Actuaries UK Index-Linked Gilts 5-15 Years Index (last prices)	Index on last day of previous month, or time of establishment of the Index, if later $(C(0))$	Change in Component Index A $(A(n) / A(0))$	Change in Component Index B $(B(n) / B(0))$	Weighting given to Component Index A at start of period	Weighting given to Component Index B at start of period	Price on current day of current month $(C(n))$
Monday, 29 February 2016	2373.78	3326.85	2836.16	0.99995	1.00589	50%	50%	2850.32
Tuesday, 1 March 2016	2372.62	3315.33	2850.32	0.99951	0.99654	50%	50%	2844.68
Wednesday, 2 March 2016	2372.11	3304.67	2850.32	0.99930	0.99333	50%	50%	2839.81
....	....	....	....	....	....	....	....	....
Thursday, 31 March 2016	2377.11	3335.41	2850.32	1.00140	1.00257	50%	50%	2855.98

Using the formulae as set out in Section 6:

$$C(n) = (C(0) \times (A(n) / A(0)) \times 50\%) + (C(0) \times (B(n) / B(0)) \times 50\%)$$

For Index calculation on 31 March 2016

C(0)	2850.32
A(0)	2373.78
A(n)	2377.11
B(0)	3326.85
B(n)	3335.41

$$C (31\text{-}Mar\text{-}2016) = (2850.32 \times (2377.11 / 2373.78) \times 50\%) + (2850.32 \times (3335.41 / 3326.85) \times 50\%)$$

$$C (31\text{-}Mar\text{-}2016) = (2850.32 \times (1.00140) \times 50\%) + (2850.32 \times (1.00257) \times 50\%)$$

$$C (31\text{-}Mar\text{-}2016) = 2855.98$$

where:

C(0) Price of Index on last day of previous month

A(0) Price of Component Index A on last day of previous month, or time of establishment of the Index, if later
A(n) Price of Component Index A on current day of current month

B(0) Price of Component Index B on last day of previous month, or time of establishment of the Index, if later
B(n) Price of Component Index B on current day of current month

Example: Calculation of the Index on the first day of the following month

	Component Index A	Component Index B	Calculation of Index					
Date	FTSE Actuaries UK Index-Linked Gilts up to 5 Years Index	FTSE Actuaries UK Index-Linked Gilts 5-15 Years Index (last prices)	Index on last day of previous month, or time of establishment of the Index, if later $(C(0))$	Change in Component Index A $(A(n) / A(0))$	Change in Component Index B $(B(n) / B(0))$	Weighting given to Component Index A at start of period	Weighting given to Component Index B at start of period	Price on current day of current month $(C(n))$
Monday, 29 February 2016	2373.78	3326.85	2836.16	0.99995	1.00589	50%	50%	2850.32
Tuesday, 1 March 2016	2372.62	3315.33	2850.32	0.99951	0.99654	50%	50%	2844.68
Wednesday, 2 March 2016	2372.11	3304.67	2850.32	0.99930	0.99333	50%	50%	2839.81
....	....	....	....	....	....	....	....	....
Thursday, 31 March 2016	2377.11	3335.41	2850.32	1.00140	1.00257	50%	50%	2855.98
Friday, 1 April 2016	2377.34	3333.07	2855.98	1.00010	0.99930	50%	50%	2855.12

Using the formulae as set out in Section 6:

$$C(n) = (C(0) \times (A(n) / A(0)) \times 50\%) + (C(0) \times (B(n) / B(0)) \times 50\%)$$

For Index calculation on 01 April 2016

C(0)	2855.98
A(0)	2377.11
A(n)	2377.34
B(0)	3335.41
B(n)	3333.07

$$C (01\text{-}Apr\text{-}2016) = (2855.98 \times (2377.34 / 2377.11) \times 50\%) + (2855.98 \times (3333.07 / 3335.41) \times 50\%)$$

$$C (01\text{-}Apr\text{-}2016) = (2855.98 \times (1.00010) \times 50\%) + (2855.98 \times (0.99930) \times 50\%)$$

$$C (01\text{-}Apr\text{-}2016) = 2855.12$$

where:

C(0) Price of Index on last day of previous month

A(0) Price of Component Index A on last day of previous month, or time of establishment of the Index, if later
A(n) Price of Component Index A on current day of current month

B(0) Price of Component Index B on last day of previous month, or time of establishment of the Index, if later
B(n) Price of Component Index B on current day of current month

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 contact details please visit the FTSE Russell website or contact FTSE Russell client services at info@ftserussell.com.

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

FTSE RUSSELL
An LSEG Business