



FTSE Market Based Allocation Index Series

v1.1



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Section 1

Introduction

1.0 Introduction

- 1.1 This document describes the rules used to calculate the FTSE Market Based Allocation Index Series.
- 1.2 The FTSE Market Based Allocation Index Series is designed as performance benchmarks for multi-asset funds.

The index series includes the below five Benchmarks which are designed for US market participants and calculated on an end of day basis in USD:

FTSE US Market Based Allocation Conservative Index
FTSE US Market Based Allocation Moderately Conservative Index
FTSE US Market Based Allocation Moderate Index
FTSE US Market Based Allocation Moderately Aggressive Index
FTSE US Market Based Allocation Aggressive Index

1.3 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.

- 1.4 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 indexes and therefore, any financial contracts or other financial instruments that reference the indexes 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 indexes.
- 1.5 Index users who choose to follow these indexes or to buy products that claim to follow these indexes 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 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 indexes or any constituent data.



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 series.¹

2.1.2 FTSE is responsible for the daily calculation, production and operation of the FTSE Market Based Allocation 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;
- publish changes to the constituent weightings resulting from their ongoing maintenance and the periodic reviews;
- disseminate the indexes.

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 Governance Board before approval is granted.

2.2.2 As provided for in the Statement of Principles for FTSE Russell Equity Indexes, where FTSE Russell or the FTSE Russell Regional Advisory Committees determine 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).



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 Statement of Principles for FTSE Russell Equity Indexes (the Statement of Principles)

Indexes need to keep abreast of changing markets and the Ground Rules cannot anticipate every eventuality. Where the Rules do not fully cover a specific event or development, FTSE Russell will determine the appropriate treatment by reference to the Statement of Principles 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 FTSE Russell's Governance Board.

Please use the following link for a copy of FTSE Russell's Statement of Principles.

[Statement of Principles.pdf](#)

3.2 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](#)

3.3 Queries and Complaints

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

[Benchmark Determination Complaints Handling Policy.pdf](#)

3.4 Index Policy for Trading Halts and Market Closures

- 3.4.1 Guidance for the treatment of index changes in the event of trading halts or market closures can be found using the following link:

[Index Policy for Trading Halts and Market Closures.pdf](#)

3.5 Index Policy in the Event Clients are Unable to Trade a Market

3.5.1 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.pdf](#)

3.6 Policy for Benchmark Methodology Changes

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

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

3.7 Equity Recalculation Policy and Guidelines

3.7.1 The FTSE Global Equity Index Series are recalculated whenever errors or distortions occur that are deemed to be significant. Users of the FTSE Global Equity Index Series are notified through appropriate media.

For further information refer to the FTSE Russell Recalculation Policy and Guidelines document which is available from the FTSE Russell website using the link below or by contacting info@ftserussell.com.

[Recalculation Policy and Guidelines Equity Indexes.pdf](#)

3.8 Fixed Income 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](#)



Section 4

Benchmark and Component Indexes

4.0 Benchmark and Component Indexes

4.1 Benchmarks

The index series consists of five Benchmarks, designed for US market participants:

- A. The FTSE US Market Based Allocation Conservative Index; designed to represent the performance of a mixed asset benchmark with a low level of historical volatility, as defined in Rule 5.4.1.
- B. The FTSE US Market Based Allocation Moderately Conservative Index; designed to represent the performance of a mixed asset benchmark with lower than average levels of historical volatility, as defined in Rule 5.4.2.
- C. The FTSE US Market Based Allocation Moderate Index; designed to represent the performance of a mixed asset benchmark with average levels of historical volatility, as defined in Rule 5.4.3.
- D. The FTSE US Market Based Allocation Moderately Aggressive Index; designed to represent the performance of a mixed asset benchmark with higher than average historical levels of volatility, as defined in Rule 5.4.4.
- E. The FTSE US Market Based Allocation Aggressive Index; designed to represent the performance of a mixed asset benchmark with high historical levels of volatility, as defined in Rule 5.4.5.

4.2 Asset Types and Component Indexes

Each of the 5 US Benchmarks consists of the following asset class mix employing Component indexes.

Asset Types	Component Index
US Equities	Russell 3000® Index
Developed ex US Equities	FTSE Developed All Cap ex US Index
Emerging Market Equities	FTSE Emerging All Cap Index
US Government/Agency Bonds	FTSE USBIG® Treasury/Agency Index
US Collateralized Bonds	FTSE USBIG® Collateralized Index
US Corporate Bonds	FTSE USBIG® Corporate Index
Global ex US Bonds	FTSE Non-USD World Government Bond Index
Cash	Fed Funds Rate
Other Investments	Fed Funds Rate (For calculating Benchmarks, 2% will be added to the rate .)



Section 5

Review of Index Allocations

5.0 Review of Index Allocations

- 5.1 The Component indexes of each Benchmark index are subject to their own rules. Copies of the methodology documents are available from www.ftserussell.com or www.yieldbook.com/m/indices.
- 5.2 The asset allocation levels for the FTSE Market Based Allocation Index Series will be reviewed semi annually in March and September, based on Morningstar data as at the close of business on the last business day of the previous quarter.

Changes in asset allocation levels will be implemented after the close on the third Friday (i.e. effective the following Monday) of March and September.

In June and December, each of the Asset Allocation Indexes will be reweighted to the asset allocation levels set in the immediate prior review. The reweighting will be implemented after the close on the third Friday (i.e. effective the following Monday) of June and December.

- 5.3 The asset allocation weights of each of the US Benchmarks will be derived from the asset allocation levels of funds in the Morningstar Direct fund database. The eligible funds must meet the following criteria:
- A. Open Ended and Closed End Funds domiciled in the US that are denominated in USD;
 - B. Allocation Funds as per Morningstar Direct definitions;
 - C. A portfolio report date that is within 3 months of the data cut-off date for the purpose of asset allocation review;
 - D. Funds with incomplete information regarding asset allocation levels for relevant Asset Types will be excluded;
 - E. Funds with an allocation levels to a relevant Asset Type greater than 120% or below -20% will be excluded.

All funds categorised by Morningstar as Allocation Funds, that meet the criteria in Rule 5.3 will be ranked according to historical 3-year weekly (Wednesday to Wednesday) return volatility as of the data cut-off date from highest to lowest and the median fund volatility determined. A minimum of 52 weekly return observations are required to calculate volatility**.

- 5.4 To derive the asset allocation weights of the US Benchmarks, all Morningstar Allocation Funds that meet the criteria in Rule 5.3 will be ranked according to their historical 3-year weekly return volatility

from highest to lowest into 5 quintiles. The asset allocation levels for the FTSE Market Based Allocation Index Series are derived from eligible Allocation Funds, as follows:

- 5.4.1 FTSE US Market Based Allocation Conservative Index allocation levels will be calculated as the average (mean) allocation levels of funds within the lowest volatility quintile.
- 5.4.2 FTSE US Market Based Allocation Moderately Conservative Index allocation levels will be calculated as the average (mean) allocation levels of funds within the second lowest volatility quintile.
- 5.4.3 FTSE US Market Based Allocation Moderate Index allocation levels will be calculated as the average (mean) allocation levels of funds within the third highest volatility quintile.
- 5.4.4 FTSE US Market Based Allocation Moderately Aggressive Index allocation levels will be calculated as the average (mean) allocation levels of funds within the second highest volatility quintile.
- 5.4.5 FTSE US Market Based Allocation Aggressive Index allocation levels will be calculated as the average (mean) allocation levels of funds within the highest volatility quintile.

** For reviews prior to February 2019, the historical 3-year weekly volatility had a Friday to Friday setting, and a minimum of 156 weekly return observations were required for the volatility calculation.

Section 6

Calculation Algorithm

6.0 Calculation Algorithm

6.1 Calculation Frequency

6.1.1 The FTSE Market Based Allocation Index Series will be calculated on an end of day basis and displayed to eight decimal points.

6.2 Index Calculation

6.2.1 The FTSE Market Based Allocation Index Series are calculated using the algorithm described below:

$$I_t = \left(1 + \sum_{i=1}^n (P_{i,t} \times W_{i,t-e}) \right) \times I_{t-e}$$

Where:

I_t = The Benchmark Index value at time t

$P_{i,t}$ = The total return performance of the Component Index at time t since the last semi-annual review

$W_{i,t-e}$ = The weight of the Component Index in the Benchmark Index at the last semi-annual review at time $t-e$



Appendix A: Further Information

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

[Glossary.pdf](#)

For further information on the FTSE Market Based Allocation Index Series Ground Rules visit www.ftserussell.com or e-mail info@ftserussell.com. Contact details can also be found on this website.

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