

# Russell 2000 Futures 40% ATV Indices

v1.2



**FTSE  
RUSSELL**

An LSEG Business

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## Section 1

# Introduction

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## 1. Introduction

- 1.1 This document sets out the Ground Rules for the construction and management of the Russell 2000 Futures 40% ATV Indices.
- 1.2 These indices represent the performance of an unfunded dynamic exposure to an underlying index and seeks to manage expected volatility close to a specific targeted level.
- 1.3 These indices deleverages (leverages) i.e. decreases (increases) the allocation to the underlying index in order to target a pre-specified level of volatility.
- 1.4 Some version of these indices apply a fixed daily fee or “decrement” to the daily index return.
- 1.5 The base currency of the index series is USD.
- 1.6 For more information on the underlying index, this document should be read in conjunction with the Ground Rules for the underlying index which are available at <https://www.lseg.com/en/ftse-russell/>.
- 1.7 The index series does not take account of ESG factors in its index design.
- 1.8 **FTSE Russell**
  - 1.8.1 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, FTSE (Beijing) Consulting Limited, Refinitiv Benchmark Services (UK) Limited, Refinitiv Limited and Beyond Ratings.
  - 1.8.2 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.
  - 1.8.3 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 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.

- 1.9 For all dates on or after 2nd January 2025, the indices are published at the end of each day on which the underlying index is published excluding days that fall on 1 January, 4 July and 25 December and the immediately preceding weekdays that fall before these dates, such a day being an Index Calculation Day. For all dates before 2nd January 2025, the indices are published at the end of each day on which the underlying index is published.

## Section 2

# Management responsibilities

## 2. Management responsibilities

### 2.1 FTSE International Limited (FTSE)

2.1.1 FTSE is the benchmark administrator of the index series<sup>1</sup>.

2.1.2 FTSE will maintain records and disseminate the index.

2.1.3 MerQube is the calculation agent of the indices as defined by the IOSCO Principles and is responsible for its daily calculation.

### 2.2 Status of these Ground Rules

2.2.1 These Ground Rules set out the methodology and provide information about the publication of the Russell 2000 Futures 40% ATV Indices.

### 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 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.

2.3.2 As provided for in the statement of principles for FTSE Russell Equity 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.

<sup>1</sup> 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).

## Section 3

# FTSE Russell Index policies

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## 3. FTSE Russell Index policies

These Ground Rules should be read in conjunction with the following policy documents which can be accessed through the links below:

### 3.1 Statement of Principles for FTSE Russell Equity 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 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 Index Governance Board.

The statement of principles can be accessed through the following link:

[Statement of Principles.pdf](#)

### 3.2 Queries and Appeals

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

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

### 3.3 Index Policy for Trading Halts and Market Closures

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

[Index Policy for Trading Halts and Market Closures.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 through the following link:

[Index Policy in the Event Clients are Unable to Trade a Market or a Security.pdf](#)

### **3.5 Recalculation Policy and Guidelines**

- 3.5.1 Where an inaccuracy is identified, FTSE Russell will follow the steps set out in the FTSE Russell Index recalculation guidelines when determining whether an index or index series should be recalculated and/or associated data products reissued. Users of the Russell 2000 Futures 40% ATV Indices will be notified through appropriate media.

For further information, please refer to the FTSE Russell recalculation policy and guidelines document which is available from the FTSE Russell website through the link below or by contacting [info@ftserussell.com](mailto:info@ftserussell.com).

[Recalculation Policy and Guidelines Equity Indices.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 through the following link:

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

### **3.7 FTSE Russell Governance Framework**

- 3.7.1 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 Benchmarks<sup>2</sup>, the European benchmark regulation<sup>3</sup> and the UK benchmark regulation<sup>4</sup>. The FTSE Russell Governance framework can be accessed through the following link:

[FTSE Russell Governance Framework.pdf](#)

### **3.8 Real Time Status Definitions**

- 3.8.1 Please refer to the following guide for details of real time status definitions for indices which are calculated in real time.

[Real Time Status Definitions.pdf](#)

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<sup>2</sup> IOSCO Principles for Financial Benchmarks Final Report, FR07/13 July 2013.

<sup>3</sup> 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.

<sup>4</sup> The Benchmarks (Amendment and Transitional Provision) (EU Exit) Regulations 2019.

## Section 4

# Target risk exposure calculation

## 4. Target risk exposure calculation

### 4.1 Target risk exposure

4.1.1 On any Index Calculation Day, the target level of risk exposure of the underlying index is calculated as:

On the Index Base Date:

$$E_0 = [191.549139923457\%]$$

And thereafter:

$$E_t = \min \left[ L_M, E_{t-1} + \text{Sign} \left( \frac{VT}{\sigma_{t-1}} - E_{t-1} \right) \times \min \left( \text{Cap}, \text{Abs} \left( \frac{VT}{\sigma_{t-1}} - E_{t-1} \right) \right) \right]$$

where,

- $E_t$  is the target level of risk exposure on Index Calculation Day t;
- $L_M$  is Maximum Leverage as defined in Appendix A;
- $VT$  is the Volatility Target as defined in Appendix A;
- $\sigma_t$  is the realized volatility of the underlying index on Index Calculation Day t and calculated as per section 4.2;
- Cap is the cap on leverage change as defined in Appendix A;
- $\text{Sign}(\alpha) = \begin{cases} 1 & \text{if } \alpha > 0 \\ -1 & \text{if } \alpha < 0 \\ 0 & \text{if } \alpha = 0 \end{cases}$
- $\text{Abs}(\alpha) = \begin{cases} \alpha & \text{if } \alpha \geq 0 \\ -\alpha & \text{if } \alpha < 0 \end{cases}$

### 4.2 Realized volatility

4.2.1 On any Index Calculation Day, the realized volatility of the underlying index is calculated as:

$$\sigma_t = \left( \frac{\text{Var}_{S,t} + \text{Var}_{L,t}}{2} \times 252 \right)^{0.5}$$



where,

- $\sigma_t$  is the realized volatility of the underlying index on Index Calculation Day t;
- $Var_{S,t}$  is the short-term variance estimate of the underlying index on Index Calculation Day t;
- $Var_{L,t}$  is the long-term variance estimate of the underlying index on Index Calculation Day t;

4.2.2 On any Index Calculation Day, the short-term and long-term variance estimate of the underlying index are calculated as:

On the Index Base Date:

$$Var_{S,0} = [0.010067459457\%]$$

$$Var_{L,0} = [0.025029745194\%]$$

And thereafter:

$$Var_{S,t} = Var_{S,t-1} \times \lambda_S + (1 - \lambda_S) \times \left( \frac{S_t}{S_{t-1}} - 1 \right)^2$$

$$Var_{L,t} = Var_{L,t-1} \times \lambda_L + (1 - \lambda_L) \times \left( \frac{S_t}{S_{t-1}} - 1 \right)^2$$

where,

- $S_t$  is the underlying index value on Index Calculation Day t;
- $\lambda_L$  is the long period decay<sup>5</sup> factor as defined in Appendix A;
- $\lambda_S$  is the short period decay factor as defined in Appendix A;
- Index Base Date is the date defined in Appendix A;

<sup>5</sup> Standard exponential weighted moving average using half life of 3 days for short period volatility and 22 days for long period volatility

## Section 5

# Calculation of index

## 5. Calculation of index

5.1.1 On any Index Calculation Day, the indices are calculated as follows:

On Index Base Date,  $I_0 = 1000$

And thereafter:

$$I_t = I_{t-1} \times \left( 1 - \frac{Act(t-1, t) \times D}{365} \right) + I_{m,t-1} \times \left[ E_{t-1} \times \frac{S_t - S_{t-1}}{S_{t-1}} - Abs[E_{t-1} - E_{t-2}] \times TC \right]$$

where:

- $I_t$  is the value of the index on Index Calculation Day t;
- $I_{t-1}$  is the value of the index on Index Calculation Day t-1;
- $I_{m,t}$  is the last month end value of the index as of Index Calculation Day t;
- $E_{t-1}$  is the target level of risk exposure on Index Calculation Day t-1;
- $S_t$  is the underlying index value on on Index Calculation Day t;
- $D$  is the level of Decrement as defined in Appendix A;
- $Act(t-1, t)$  is the number of calendar days between Index Calculation Day t-1 (excluded) and Index Calculation Day t (included);
- $TC$  is the transaction cost as defined in Appendix A;

## Section 6

# Periodic rebalancing

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## 6. Periodic rebalancing

### 6.1 Periodic rebalancing

6.1.1 The target level risk exposure for the indices is re-estimated daily.

## Appendix A

# Index Parameters and details

Parameter	Definition	Russell 2000 Futures 40% ATV Index	Russell 2000 Futures 40% ATV 5% Decrement Index
Underlying Index	Underlying Index	Russell 2000 Futures Excess Return Index	Russell 2000 Futures Excess Return Index
VT	Volatility Target	40%	40%
$L_M$	Max Leverage	300%	300%
Cap	Cap on Leverage Change	50%	50%
$\lambda_S$	Short Period Decay Factor	0.8	0.8
$\lambda_L$	Long Period Decay Factor	0.97	0.97
TC	Transaction Cost	0.1%	0.1%
D	Percentage Decrement	-	5%
Index Base Date	Index first value date	13/02/2012	13/02/2012
Index Ticker	Bloomberg Ticker	RUTF40V	RUTF40VD
Index RIC	Refinitiv RIC	.RU2F40V	.RU2F40VD

## Appendix B

# Further information

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A glossary of terms used in FTSE Russell's Ground Rule documents can be found through the following link:

[Glossary.pdf](#)

Further information on the Russell 2000 Futures 40% ATV Indices is available from FTSE Russell.

For contact details, please visit the FTSE Russell website or contact FTSE Russell client services at [info@ftserussell.com](mailto:info@ftserussell.com).

**Website:** [www.lseg.com/en/ftse-russell/](http://www.lseg.com/en/ftse-russell/)

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