

FTSE Single Stock Decrement Index Series

v1.0



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Section 1

Introduction

1. Introduction

- 1.1 The objective of the FTSE Single Stock Decrement Index Series is to measure the performance of a single stock after taking into account dividend expectations and may include other costs such as transaction costs. The cost can be applied either as a number of fixed points to the underlying index value or as a fixed percentage to the underlying index returns.
- 1.1.1 The decrement levels used for each single stock index are supplied by third parties and there may be more than one index with different decrement levels for any single stock.
- 1.1.2 The base currency of the index can be found in the list of decrement and non-decrement indices shown in Section 5.
- 1.1.3 To support the calculation of each single stock decrement index, corresponding single stock Total Return Indices are also calculated. The list of single stock total return indices can be found in Section 5.
- 1.2 MerQube**
- 1.2.1 MerQube is the calculation agent for the index series.
- 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 FTSE Fixed Income Europe Limited), FTSE Fixed Income LLC, The Yield Book Inc and Beyond Ratings.
- 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 index series or indices and therefore any financial contracts or other financial instruments that reference the indices or investment funds which use the indices to measure their performance should be able to withstand, or otherwise address the possibility of changes to, or cessation of, the indices or the index series.
- 1.5 Index users who choose to follow this index series or these indices or to buy products that claim to follow this index series or these indices 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 the indices 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

FTSE will maintain records and disseminate the index.

2.1.2 MerQube is the calculation agent of the index as defined by the IOSCO principles and is responsible for its daily calculation.

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. 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.

¹ FTSE is the benchmark administrator of the Index Series as the term administrator is defined in the [IOSCO Principles for Financial Benchmarks](#) and [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

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 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 FTSE Russell's Index Governance Board.

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

[Statement_of_Principles.pdf](#)

3.2 FTSE Global Equity Index Guide to Calculation Methods

The aim of the guide is to describe how the indices are calculated, to facilitate users' replication of the indices in order to support their investment and trading activities and to assist users in understanding the factors which influence the performance of the indices.

[FTSE Global Equity Index Series Guide to Calc.pdf](#)

3.3 Corporate Actions and Events Guide for Market Cap Weighted Indices

3.3.1 Full details of changes to constituent companies due to corporate actions and events can be accessed in the Corporate Actions and Events Guide for Market Cap Weighted Indices using the following link:

[Corporate Actions and Events Guide.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 or a Security

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 or a Security.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 Real Time Status Definitions

3.7.1 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](#)

Section 4

Calculation methodology

4. Calculation methodology

Unless stated in these Ground Rules, the FTSE Single Stock Decrement Index Series will use the following calculation methodology.

4.1 Fixed points of index

$$IL(t) = IL(t - 1) \times \frac{UIL(t)}{UIL(t - 1)} - FP \times \frac{ACT(t - 1, t)}{d}$$

4.2 Fixed percentage of index return

$$IL(t) = IL(t - 1) \times \left(\frac{UIL(t)}{UIL(t - 1)} - FD \times \frac{ACT(t - 1, t)}{d} \right)$$

where,

IL(t)	=	Closing index value of the decrement index on calculation date (t)
IL(t - 1)	=	Closing index value of the decrement index on calculation date (t - 1)
UIL(t)	=	Closing index value of the underlying index on calculation date (t)
UIL(t - 1)	=	Closing index value of the underlying index on calculation date (t - 1)
FP	=	Fixed points
FD	=	Fixed percentage
ACT(t - 1, t)	=	The number of calendar days between Calculation Date (t - 1) (excluded) and Calculation Date (t) (included).
d	=	Day count convention (either 360 or 365).

For further information on how the underlying single stock indices are calculated please refer to the FTSE Global Equity Index Guide to Calculation Methods.

4.3 Target risk exposure

On any business day t, the target level of risk exposure of the underlying index is calculated as:

$$E(t) = \min(LM, \alpha T V_t)$$

where:

- LM is maximum leverage
- αT is the volatility target
- V_t is the realized volatility of the underlying index at day t across the last n days

where:

- R_i is the daily return of the underlying index at day i

$$V_t = (\sum(R_i - R_{average})^2)^{1/2}$$

4.4 Cash return

Return on cash is calculated as:

$$rC(t) = r(t-1) \times d(t, t-1) \text{DayCount}$$

where:

- $r(t-1)$ is the overnight interbank rate.
- $d(t, t-1)$ is the number of calendar days between $t-1$ and t
- DayCount is the number of days in a year used in the convention of the corresponding interest rate.

4.5 Calculation of index

Price return indices

Price return indices are calculated as follows:

$$PI(t) = PI(t-1) \times (1 + E(t) \times rU(t))$$

where:

- $PI(t)$ is the Price Return Index
- $E(t)$ is the target level of risk exposure
- $rU(t)$ is the underlying index return

4.6 Total return indices

Total return indices are calculated as follows:

$$TRI(t) = TRI(t-1) \times [E(t) \times rU(t) + (1 - E(t)) \times rC(t) + 1]$$

where:

- $TRI(t)$ is the Total Return Index
- $E(t)$ is the target level of risk exposure
- $rU(t)$ is the underlying index return
- $rC(t)$ is the return on cash on day t

4.7 Excess return indices

Excess return indices are calculated as follows:

$$EI(t) = EI(t-1) \times [1 + E(t) \times (rU(t) - rC(t))]$$

Where:

- $EI(t)$ is the Excess Return Index
- $E(t)$ is the target level of risk exposure
- $rU(t)$ is the underlying index return
- $rC(t)$ is the return on cash on day t

4.8 Decrement overlay

Decrement index values can be calculated using the following:

Fixed points of index $IL(t) = IL(t-1) \times UIL(t) \times [UIL(t-1) - FP] \times ACT(t-1, t) \times d$

Fixed percentage of index return

$$IL(t) = IL(t-1) \times (UIL(t) / UIL(t-1) - FD \times ACT(t-1, t) / d)$$

where,

IL(t)	=	Closing index value of the decrement index on calculation date (t)
IL(t-1)	=	Closing index value of the decrement index on calculation date (t-1)
UIL(t)	=	Closing index value of the underlying index on calculation date (t)
UIL(t-1)	=	Closing index value of the underlying index on calculation date (t-1)
FP	=	Fixed points
FD	=	Fixed percentage
ACT(t-1, t)	=	The number of calendar days between Calculation Date (t-1) (excluded) and Calculation Date (t) (included).
d	=	Day count convention (either 360 or 365)

4.9 Prices

4.9.1 The FTSE Single Stock Decrement Index Series uses actual closing mid-market or last trade prices, where available, for securities with local market quotations. Further details can be accessed using the following link:

[Closing Prices Used For Index Calculation.pdf](#)

4.9.2 WM/Refinitiv Closing Spot Rates™, collected at 16:00 London time (further information on the WM/Refinitiv Closing Spot Rates™ service is available from Refinitiv) are used in the index calculations.

4.10 Normal schedule

4.10.1 The FTSE Single Stock Decrement Index Series are calculated once daily at approximately 21:30 - 22:00 London time, shortly after the close of North American securities markets.

4.10.2 The Index Series are calculated every weekday, when one or more of the constituent markets are open, however on 1 January, the indices may not be disseminated. There is no separate calculation to accommodate the Saturday or Sunday opening of any market.

4.11 Treatment of dividends

4.11.1 Declared dividends are used to calculate the single stock Total Return Indices. All dividends are applied as at the ex-dividend date.

Section 5

List of indices

5. List of decrement indices

Index Name	Currency	Return Type	Decrement Type	Day Count Convention	Decrement Level	Base Date	Base Value
FTSE 100 Equal Weight Total Return Index	GBP	Total Return	Fixed Point	360	50 po		
FTSE 100 Equal Weight Total Return Index	GBP	Excess	Fixed Point	360	40		

5.1 Target risk exposure

Index Name	Volatility Calculation	Days used in Vol Calc	Maximum Leverage	Volatility Target	Long period decay factor	Short period decay factor	Overnight Rate	Day Count
FTSE 100 Equal Weight Total Return Index	Simple	60	125%	15%	n.a.	n.a.	SONIA	360
FTSE 100 Equal Weight Total Return Index	Simple	60	125%	15%	n.a.	n.a.	SONIA	360

Section 6

Corporate actions and events

6. Corporate actions and events

Full details of changes to constituent companies due to corporate actions and events can be accessed in the Corporate Actions and Events Guide for Market Capitalisation Weighted Indices using the following link:

[Corporate Actions and Events Guide for Market Cap Weighted Indices.pdf](#)

A Corporate 'Action' is an action on shareholders with a prescribed ex date. The share price will be subject to an adjustment on the ex date. The index will be adjusted in line with the ex date.

These include the following:

- Capital Repayments
- Rights Issues/Entitlement Offers
- Stock Conversion
- Splits (sub-division) / Reverse splits (consolidation)
- Scrip issues (Capitalisation or Bonus Issue)

A Corporate 'Event' is a reaction to company news (event) that may impact the index depending on the index rules. For example, a company announces a strategic shareholder is offering to sell their shares (secondary share offer) – this could result in a free float weighting change in the index. Where an index adjustment is required FTSE will provide notice advising of the timing of the change.

6.1 Suspension of dealing

Suspension of Dealing rules can be found within the Corporate Actions and Events Guide for Market Capitalisation Weighted Indices.

6.2 Takeovers, mergers and demergers

6.2.1 The treatment of takeovers, mergers and demergers can be found within the Corporate Actions and Events Guide for Market Capitalisation Weighted Indices.

6.3 Spin-offs

6.3.1 In the event of a spin-off where the company is split so as to form two or more companies, the spin-off companies will be treated as ineligible and removed from the index with two days' notice. As a result the single stock index may include more than one company for a minimum of three days. Refer to the Corporate Actions and Events Guide for Market Capitalisation Weighted Indices for further details.

6.4 Cessation of index calculations

- 6.4.1 In the event of the FTSE Single Stock Decrement Index becoming negative, the index value will be set to zero and its calculation/publication discontinued.
- 6.4.2 If an overnight change of the underlying index leads to an opening value for the calculated Single Stock Decrement Index of zero (or below), the Single Stock Decrement Index value will be set to zero and its calculation/publication discontinued.

Appendix A

Further information

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

[Glossary.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/

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