Ground Rules

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FTSE Frontier Index Series

v6.1



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Section 1 Introduction

1. Introduction

1.1 The FTSE Frontier Index Series

1.1.1 The FTSE Frontier Index Series covers securities in countries classified as frontier markets as defined by FTSE's Country Classification System and includes global, regional and country indices with the following size classifications:

FTSE Frontier Large Cap)	
FTSE Frontier Mid Cap)	
FTSE Frontier Small Cap)	End-of-day calculation
FTSE Frontier Large/Mid Cap)	
FTSE Frontier (All Cap))	
FTSE Frontier 50)	Real-time calculation, based on real-time prices
FTSE Vietnam 30)	

- 1.1.2 The following variants are, or if requested may be, calculated for certain indices within the index series:
 - Capital and total return indices.
 - Net total return indices based on specified withholding tax rates.
 - Indices calculated in currencies other than the base currency (USD).
 - Currency hedged indices.
 - Capped indices; for full details see the FTSE Russell Capping Methodology Guide.
 - Constituent size bands large, mid and small capitalisation indices.
 - Global, regional and single country indices.
 - Sector indices.

Additional customised variants can be calculated on request including indices with industry, country and sector exclusions. Selected indices are calculated and disseminated on a real-time basis.

- 1.1.3 For the current list of countries eligible for inclusion in the FTSE Frontier Index Series, refer to Appendix A.
- 1.1.4 The FTSE Frontier Index Series does not take account of ESG factors in its index design.
- 1.1.5 The base currency of the benchmark is US Dollars. Index values may also be published in other currencies.
- 1.1.6 Price and Total Return Indices are published at the end of each working day. The Total Return Index includes income based on dividends paid by constituents, reinvested on the ex-dividend date.

- 1.1.7 Net-of-tax Total Return Indices are also calculated based on the maximum withholding tax rates applicable to dividends received by institutional investors who are not resident in the same country as the remitting company and who do not benefit from double taxation treaties.
- 1.1.8 The underlying tax rate information is available from FTSE Russell.

1.2 FTSE Frontier 50 Index

- 1.2.1 This index comprises the largest 50 companies by full market capitalisation that are constituents of the FTSE Frontier Index.
- 1.2.2 The FTSE Frontier 50 Index is calculated in US Dollars in real time every 15 seconds. Real-time prices are required for a market to be eligible for the FTSE Frontier 50 Index.

1.3 FTSE Vietnam 30 Index

- 1.3.1 The FTSE Vietnam 30 Index comprises the largest 30 Vietnam companies by full market capitalisation that are constituents of the FTSE Frontier Vietnam Index and trade on Ho Chi Minh Stock Exchange.
- 1.3.2 The FTSE Vietnam 30 Index is calculated in Vietnam Dong in real time every 15 seconds. Real-time prices are required for a security to be eligible for the FTSE Vietnam 30 Index.
- 1.3.3 The base currency of the FTSE Vietnam 30 Index is Vietnam Dong. Index values may also be published in other currencies.

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, FTSE (Beijing) Consulting Limited, Refinitiv Benchmark Services (UK) Limited, Refinitiv Limited and Beyond Ratings.

1.5 Index objective and intended use

- 1.5.1 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.
- 1.5.2 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'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.

Section 2 Management responsibilities

2. 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 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; and
 - disseminate the indices.

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 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 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 <u>Regulation (EU) 2016/1011 of the European Parliament and of the Council of 8 June 2016</u> 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 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 that influence the performance of the indices.

FTSE Global Equity Index Series Guide to Calc.pdf

3.2 Corporate Actions and Events Guide

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

Corporate_Actions_and_Events_Guide.pdf

3.3 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 using the following link:

Statement of Principles.pdf

3.4 Queries, Complaints and Appeals

A constituent or prospective constituent company (or professional adviser acting on behalf of the company), a national organisation or a group of no fewer than 10 users of the indices from different organisations acting in their professional capacity may appeal against decisions taken by FTSE Russell.

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

Benchmark_Determination_Complaints_Handling_Policy.pdf

FTSE Russell's appeal process can be accessed using the following link:

Appeals_Against_Decisions.pdf

3.5 Index Policy for Trading Halts and Market Closures

3.5.1 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

3.6 Index Policy in the Event Clients are Unable to Trade a Market or a Security

3.6.1 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

3.7 Recalculation Policy and Guidelines

3.7.1 The FTSE Frontier Index Series is recalculated whenever errors or distortions occur that are deemed to be significant. Users of the FTSE Frontier 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 <u>info@ftserussell.com</u>.

Recalculation_Policy_and_Guidelines_Equity_Indices.pdf

3.8 Policy for Benchmark Methodology Changes

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

Policy_for_Benchmark_Methodology_Changes.pdf

3.9 FTSE Russell Governance Framework

3.9.1 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 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

3.10 Real Time Status Definitions

3.10.1 For indices that are calculated in real time, please refer to the following guide for details of real time status definitions:

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.

⁴ The Benchmarks (Amendment and Transitional Provision) (EU Exit) Regulations 2019.

Section 4 Country inclusion criteria

4. Country inclusion criteria

4.1 Classification categories

4.1.1 FTSE classifies countries included in its global indices into one of four categories: developed, advanced emerging, secondary emerging or frontier. FTSE maintains a set of criteria to assess market status and minimum standards for each category for equity markets to achieve in order to be eligible for that category. The minimum standards increase from frontier to secondary emerging, from secondary emerging to advanced emerging and from advanced emerging to developed. A country will be classified under the category with the highest standards which it meets. FTSE conducts an annual review of all countries included in its global indices and those being considered for inclusion. See Appendix A for markets classified as frontier by FTSE Russell.

A current list of countries included in each category can be found in the following link: <u>Country_Classification.</u>

4.1.2 In order for a country to be classified as developed, advanced emerging, secondary emerging or frontier, it must meet the required criteria for those categories as set out in the FTSE Quality of Markets matrix. Further details available in the following document: FTSE Equity Country Classification Process.

4.2 Criteria for index inclusion

4.2.1 Once a country has met the criteria for classification as frontier, it will become eligible for inclusion in the FTSE Frontier Index Series, subject to the availability of real-time prices. Unlike the FTSE Global Equity Index Series, there is no requirement for a minimum number of companies to pass the FTSE frontier eligibility screens to create a country index. An existing country index will remain in the FTSE Frontier Index Series, while any eligible constituents representing the country remain within the index. On the deletion of the last constituent, the country will continue to be eligible as a frontier market, but the country index will be immediately removed from the FTSE Frontier Index Series.

4.3 Country review process

4.3.1 FTSE conducts an annual review of all countries included in its global indices and those being considered for possible inclusion. Countries already in the indices will be assessed against the minimum standards for each category and prior to any reclassification or removal from the index will be placed on a watch list. Countries not in the index will be assessed against the minimum standards for each category and, if appropriate, will be added to the watch list for possible future inclusion to one of the categories. In conducting the annual review, FTSE will consult the FTSE Country Classification Advisory Committee. In March and September of each year, FTSE will publish a watch list of countries being monitored for possible promotion or demotion.

This process is detailed in the following document:

FTSE_Equity_Country_Classification_Paper.pdf

4.3.2 FTSE releases the results of its annual review in September of each year. FTSE will normally give at least six months' notice before changing the classification of any country.

- 4.3.3 Countries may be added to the indices at any time after a prior announcement.
- 4.3.4 New regional indices may be added at any time after a prior announcement.
- 4.3.5 Companies in the newly added countries will be reviewed in line with the annual review and any changes implemented after a prior announcement.

Section 5 Inclusion criteria

5. Inclusion criteria

5.1 Company inclusion criteria

- 5.1.1 The following are regarded as ineligible for inclusion:
 - Companies whose business is that of holding equity and other investments (e.g. investment trusts), which are assumed by the Industry Classification Benchmark as subsector equity investment instruments and non-equity investment instruments.
 - Limited liability partnerships (LLP), limited partnerships (LP), master limited partnerships (MLP), limited liability companies (LLC) and business development companies (BDC).

Where a stapled unit comprises an eligible security and a non-eligible security (such as non-equity or an investment trust structure), the unit will not be eligible for inclusion.

5.2 Security inclusion criteria

5.2.1 FTSE Russell periodically review the classes of securities to be included in each country.

Appendix E shows the current list of eligible classes for eligible countries.

5.2.2 Convertible preference shares and loan stocks are excluded – until converted.

5.3 FTSE Vietnam 30 Index

5.3.1 The Vietnam constituents of the FTSE Frontier Index that are traded in Ho Chi Minh Stock Exchange are eligible for inclusion in the FTSE Vietnam 30 Index.

Section 6 Screens applied to eligible securities

6. Eligible security screens

Eligible securities are required to pass the following screens before being added to the FTSE Frontier Index Series.

6.1 Investability weightings screen

Constituents of the FTSE Frontier Index Series are adjusted for free float and foreign ownership limits.

A. Initial weighting

Free float is calculated using available published information rounded to 12 decimal places. Securities with a free float of 5% or below are excluded from the index.

For FTSE Frontier 50 only: a security that has a free float greater than 5% but less than or equal to 15% will be eligible for the index, providing the security's full market capitalisation (before the application of any investability weighting) is greater than USD 1.25 billion.

Details on free float restrictions can be accessed using the following link:

Free_Float_Restrictions.pdf

B. Foreign ownership restrictions

FTSE Russell's index methodology takes account of the restrictions placed on the equity holdings of foreign investors in a company where these have been imposed by a government, regulatory authority or the company's constitution.

Further details of the foreign ownership restrictions can be accessed using the following link:

Foreign Ownership Restrictions and Minimum Foreign Headroom Requirement.pdf

C. Minimum foreign headroom requirement

FTSE Russell defines foreign headroom as the percentage of shares available to foreign investors as a proportion of the company's foreign ownership limit (FOL), i.e. (FOL - foreign holdings)/FOL.

For example, if a company has a foreign ownership limit of 49%, of which 39% is held by foreign investors, the foreign headroom is calculated as 20.41%, i.e. (49% - 39%)/49%.

Further details of the minimum foreign headroom requirement can be accessed using the following link:

Foreign Ownership Restrictions and MInimum_Foreign_Headroom_Requirement.pdf

6.2 Liquidity screen

6.2.1 Calculating liquidity:

Each security will be tested for liquidity annually in September by calculation of its velocity trading per month.

Liquidity will be calculated from the first business day in July of the previous year to the last business day in June of the current year.

Security volume data will be taken on trading days from Sunday to Friday (where applicable) when markets are open.

When calculating the velocity trading for a particular month, a minimum of five trading days in that month must exist, otherwise the month will be excluded from the test.

Each month the ratio of the security's daily trading volume divided by its free float adjusted shares are summed.

Any period of suspension will not be included in the test.

For newly eligible securities where the testing period is less than 12 months, the liquidity test will be applied on a pro-rata basis.

Please note:

- When testing liquidity, the free float weight as at the last date in the testing period will be used for the calculation for the whole of that period.
- Shares in issue used for the calculation is that as of the date of volume traded.
- 6.2.2 Liquidity thresholds:
 - A. An existing constituent of the FTSE Frontier Index Series which, based on its velocity trading per month does not trade at least 0.4% of their shares in issue (after the application of any investability weightings*) for at least eight of the 12 months prior to the review in September will be removed from the index series.
 - B. A non-constituent of the FTSE Frontier Index Series which, based on its velocity trading per month, does not trade at least 0.5% of their shares in issue (after the application of any investability weightings*) for at least 10 of the 12 months prior to the review in September will continue to be excluded from the index series.
 - C. New issues which do not have a 12-month trading record must have a minimum three-month trading record when reviewed. They must turnover at least 0.5% of their shares in issue (after the application of any free float weightings*) based on their velocity trade per month since listing.
 - D. The minimum three-month trading record rule will not apply to new issues added under the fast entry rule (see rule 8.1.3).

Newly eligible securities will be treated as new issues and liquidity will be tested from the date of eligibility. Trading records prior to this date will not be taken into account.

E. In the event that a company fails the liquidity test based on its underlying shares and the company has an equivalent depositary receipt (DR), then the DR may be considered for inclusion in the index if it passes the liquidity test in its own right and is traded on an exchange within a similar regional time zone as the underlying shares.

Where a company has both DR and underlying shares listed, both lines will be tested separately for liquidity. The underlying shares will be included as long as they pass the liquidity test in their own right. The DR will only be eligible for inclusion if the underlying shares fail the liquidity test and the DR passes in its own right.

Where the DR has been included, it will remain in the index until such time as it either fails the liquidity test or the underlying shares pass the liquidity test for two future consecutive reviews.

- F. A security that is excluded because it fails the liquidity requirement will be excluded from the FTSE Frontier Index Series for the period until the next annual review in September.
- G. In exceptional market conditions, if trading volumes are very low, FTSE Russell may reduce the percentage threshold in order to avoid a large number of constituents being removed from the FTSE Frontier Index Series. This discretion may not be applied to individual securities.

^{*} When testing liquidity, the free float weight as at the last date in the testing period will be used for the calculation for the whole of that period.

6.3 Surveillance stocks screen

6.3.1 Securities that are subject to surveillance by the stock exchanges and have been assigned to any of the following segments will not be eligible for index inclusion. Where an existing constituent is assigned to an ineligible segment, it will normally be deleted from the index at the next quarterly review and it will only be reconsidered for index inclusion after a period of 12 months from its deletion, subject to it no longer being under surveillance. For the purposes of the index eligibility, it will be treated as a new issue.

Country	Exchange	Segment
Estonia	Nasdaq Tallinn	Watch notation
Latvia	Nasdaq Riga	Observation status
Lithuania	Nasdaq Vilnius	Observation status
Jordan	Amman Stock Exchange	Third market
Vietnam	Ho Chi Minh Stock Exchange	Subject to warning, under control, under special control

For constituent securities, surveillance is tested based on data as of the quarterly shares in issue and free float cut-off date in March, June, September and December.

For non-constituent securities, surveillance is tested based on data as of the review cut-off date in September.

Securities that are assigned to the above segments after the review announcement date but before the index review effective date are assessed on a case-by-case basis, which may generally result in schedule index review additions, investability weight and shares in issue changes no longer being implemented at the forthcoming review.

For a list of securities deleted for failing specific eligibility screens please use the following link:

ftse-russell-Index-constituents-deleted-for-failing-specific-eligibility-screens.pdf

Section 7 Periodic review of constituents

7. Periodic review of constituents

7.1 Global review universe

7.1.1 Countries are grouped into a global universe for the purpose of the review.

7.2 Index reviews

- 7.2.1 Countries are reviewed annually in September based on data as at the close of business on the last business day of June (where the last business day of the month falls on a Saturday or Sunday for any individual countries, data will be taken as at close of the last business day before Saturday). Any constituent changes resulting from the periodic review will be implemented after the close of business on the third Friday (i.e. effective the following Monday) of September.
- 7.2.2 The review process is designed to reflect market movements since the previous review and to minimise turnover.

7.3 Review process

7.3.1 Define the 100% global universe by selecting all eligible companies (as per appendices A and B) assigned the nationality of countries that are included in the frontier indices.

All securities included in FTSE global indices are assigned a nationality in accordance with the rules as set out in the Nationality Statement. Details can be accessed using the following link:

Determining Nationality.pdf

- 7.3.2 Value companies by full market capitalisation (shares in issue * price), group multiple lines and rank companies (not securities) by full market capitalisation (companies that are capped will be ranked based on their full capped market capitalisation see rule 7.3.4).
 - A company's full market capitalisation will consist of any equity shares that are listed and in issue at the index review cut-off date in accordance with FTSE Russell's shares in issue rules as set out in the Corporate Actions and Events Guide, which can be accessed using the following link:

Corporate_Actions_and_Events_Guide.pdf

- Shares that have been listed but do not form part of a company's current issued share capital, such as treasury shares and shares pending issuance to an employee scheme, will be excluded from the full market capitalisation calculation.
- 7.3.3 Calculate the total market capitalisation of the universe by aggregating the full capitalisation of all eligible companies in the universe.
- 7.3.4 Any company which has a full market capitalisation greater than 10% based on the total capitalisation of the global universe will be capped at 10%. If no company requires capping, the 100% global universe will be defined as per rule 7.3.1, otherwise the 100% global universe will be recalculated by aggregating the capped total market capitalisation of all eligible companies.

- 7.3.5 Throughout the review process, all of a company's eligible securities will remain grouped and companies as a whole, rather than individual securities are assigned to large, mid or small cap (see rule 7.6).
- 7.3.6 Define the index universe ranked by full market capitalisation in descending order, calculate the cumulative market capitalisations of all stocks in the universe and their relevant weights. The top 98% of the global universe will be selected and forms the index universe.

7.4 Screens applied to eligible securities

Eligible securities are subject to the screens detailed in Section 6.

7.5 Multiple lines

Where there are multiple lines of equity capital in a company, all are included and priced separately, provided that they pass index eligibility screens in their own right.

All partly paid classes of equity are priced on a fully paid basis if the calls are fixed and are payable at known future dates. Those where future calls are uncertain in either respect are priced on a partly paid basis.

7.6 Reviewing constituents for the FTSE Frontier Index Series

7.6.1 To reduce turnover, existing and potential constituents are subject to a series of buffer zones to determine the cut-off points between large, mid and small cap – the buffers are detailed in the table below. In addition to the percentage cut-offs, new constituents are required to pass basis points entry and exit levels allocated to each index segment (FTSE Frontier Large Mid Cap Index and FTSE Frontier Small Cap Index). These basis points entry and exit levels are detailed below.

	Turnover bands (based on the index universe)	
	Eligible for inclusion Eligible for exclusion	
Large cap	68%*	72%*
Mid cap	86%*	92%*
Small cap	98%*	101%*

Note: 101% of the index universe is approximately 99% of the global universe.

7.6.2 Inclusion and exclusion percentage levels by investable market capitalisation in the FTSE Frontier Index Series to determine additions and deletions and other changes in the index are shown below. These percentages are based on the FTSE Frontier Small Cap Index. Individual securities will be tested against these levels:

For inclusion – new stocks 1.00%

For exclusion – current stocks 0.20%

In exceptional circumstances where FTSE Russell believes that strict adherence to the inclusion and exclusion levels listed in the above table and in rule 7.7 would produce either excessive turnover at an index review, or an index that inaccurately represented different size segments, FTSE Russell reserves the right to vary the percentage levels.

7.6.3 Companies currently not in the FTSE Frontier Index Series

- Companies at or above 68% of the index universe by full market capitalisation with a weight greater than 0.04% of the Frontier Large Mid Index by full market capitalisation, and with a weight greater than the inclusion percentage levels stated in rule 7.6.2 by investable market capitalisation, will be included in the Large Cap Index.
- Companies ranked below 68%, but within the top 86% of the index universe by full market capitalisation with a weight greater than 0.04% of the current Frontier Large Mid Index by full market capitalisation, and with a weight greater than the inclusion percentage levels stated in rule 7.6.2 by investable market capitalisation, will be included in the Mid Cap Index.

Companies ranked below the top 86%, but within the top 98% of the index universe by full market capitalisation or have a weight less than 0.04% of the Frontier Large Mid Index by full market capitalisation, and with a weight greater than the inclusion percentage levels stated in rule 7.6.2 by investable market capitalisation, will be included in the Small Cap Index.

Existing FTSE Frontier Index Series Constituents

- Large cap constituents will remain in the Large Cap Index if they fall within the top 72% of the ranking described in rule 7.3. If they are ranked between 72% and 92% of the index universe, they will move to the mid cap. If they are ranked below 92% of the index universe but within the top 101% of the index universe, they will move to the small cap. If they are ranked below 101% of the index universe by full market capitalisation or have a weight less than the exclusion percentage levels stated in rule 7.6.2 by investable market capitalisation, they will be excluded from the index.
- Mid cap constituents will move to the large cap if they fall within the top 68% of the ranking described in rule 8.3. If they are ranked between 68% and 92% of the index universe, they will remain in the mid cap. If they are ranked below 92% of the index universe but within the top 101% of the index universe, they will move to the small cap. If they are ranked below 101% of the index universe by full market capitalisation or have a weight less than the exclusion percentage levels stated in rule 7.6.2 by investable market capitalisation, they will be excluded from the index.
- Small cap constituents will move to the large cap if they fall within the top 68% of the ranking described in Rule 8.3. If they are ranked between 68% and 86% of the index universe by full market capitalisation and have a weight greater than 0.04% of the current respective regional Frontier Large Mid Index by full market capitalisation, they will move to the mid cap. If they are ranked below 86% of the index universe or have a weight less than 0.04% of the current respective regional Frontier Large Mid Index by full market capitalisation, but within the top 101% of the index universe, they will remain in the small cap. If they are ranked below 101% of the index universe by full market capitalisation or have a weight less than the exclusion percentage levels stated in rule 7.6.2 by investable market capitalisation, they will be excluded from the index.

7.7 Reviewing constituents for the FTSE Frontier 50 and FTSE Vietnam 30 Indices

7.7.1 Index reviews

The FTSE Frontier 50 Index and the FTSE Vietnam 30 Index will be reviewed on a semi-annual basis in March and September based on data from the third Friday in February and August incorporating underlying index constituent changes of the FTSE Frontier Index Series at the review effective dates. The reviews will be implemented on the next working day following the third Friday of March and September.

Intra-review deletions will not be replaced in the FTSE Frontier 50 and FTSE Vietnam 30 Indices, and therefore may result in fewer than the fixed number of constituents within the respective index until the next index review.

7.7.2 Review process

- A. A company will be inserted at the periodic review if it rises above the position stated below, when ranked by full market capitalisation (i.e. before the application of any investability weighting):
 - FTSE Frontier 50 Index Risen to 40th or above
 - FTSE Vietnam 30 Index Risen to 20th or above

A company will be deleted at the periodic review if it falls below the position stated below, when ranked by full market capitalisation (i.e. before the application of any investability weighting):

FTSE Frontier 50 Index –	Fallen to 61st or below
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FTSE Vietnam 30 Index – Fallen to 41st or below

- B. At review, a constant number of constituents will be maintained for the FTSE Frontier 50 and FTSE Vietnam 30 Indices. Where a greater number of companies qualify to be inserted in an index than those qualifying to be deleted, the lowest-ranking constituents presently included in the index will be deleted to ensure that an equal number of companies are inserted and deleted at the periodic review. Likewise, where a greater number of companies qualify to be deleted than those qualifying to be inserted, the securities of the highest-ranking companies which are presently not included in the index will be inserted to match the number of companies being deleted at the periodic review.
- C. For every country in the FTSE Frontier 50 Index, there is a maximum weight of 20%. After the initial selection of the FTSE Frontier 50 Index constituents (see rule 7.7.2.A-B) each constituent is weighted by investable market capitalisation and index constituents are further adjusted using the following rules:
 - i. If any country has an index weight greater than 20%, the smallest constituent in that country by full market capitalisation will be removed and replaced by the largest non-constituent from a country with a weight that is not greater than 20%.
 - ii. This process will only be applied if a constituent removal does not result in the country index weight falling to less than 20%.
 - iii. The process shown in rule 7.7.2 is repeated until rule 7.7.2 is satisfied for all countries that have a weight greater than 20%.
- D. At review, the maximum weight of constituents of the FTSE Vietnam 30 Index are capped at 10% using prices adjusted for corporate actions as at the close of business on the second Friday in the review month. The capping is implemented after close of business on the third Friday in March and September based on the constituents shares in issue and free float on the next trading day following the third Friday of the review month.
- E. Where a FTSE Frontier 50 or FTSE Vietnam 30 constituent is deleted after the periodic review changes have been announced but before they have been implemented, the company will not be replaced.

Section 8 Additions outside of a review

8. Additions outside of a review

8.1 Definition of fast entry thresholds

- a. Large cap inclusion level full market capitalisation of the smallest company that falls wholly within the top 68% of the index universe by full market capitalisation of the respective region when ranked according to rule 7.3.
- b. Mid cap inclusion level full market capitalisation of the smallest company that falls wholly within the top 86% of the index universe by full market capitalisation of the respective region when ranked according to rule 7.3.
- 8.1.1 For a security to be considered for fast entry to the FTSE Frontier Index, it will have to meet both a full market capitalisation threshold at company level and an investable market capitalisation threshold at security level.
 - The full market capitalisation threshold is defined as 1.5 times the mid cap inclusion level (see 7.6.1).

For example, if the 86% mid cap inclusion level is 300m USD. The full market capitalisation fast entry threshold at company level will be $300m \times 1.5 = 450m$ USD.

- The investable market capitalisation threshold is defined as 0.5 times the mid cap inclusion level.

For example, if the 86% mid cap inclusion level is 300m USD. The investable market capitalisation fast entry threshold at security level will be 300m * 0.5 = 150m USD.

Where a security passes both the full market capitalisation and investable market capitalisation test, it will be assigned to the Large Cap Index subject to its full market capitalisation breaching the large cap inclusion level (see 7.6.1), otherwise it will be assigned to the Mid Cap Index.

Note: only shares offered at the time of the IPO will be included within the investable market capitalisation calculation for the purposes of evaluating fast entry eligibility and if eligible, the offering shares only will be included within the index calculation.

8.1.2 The Fast Entry level will be set at the time of the annual review in September using data as at the last trading day in June, and adjusted up to the last business day in July to reflect the performance of the FTSE Frontier Index Series as a whole, and will be published by FTSE Russell.

In June, December and March the Fast Entry levels will be adjusted up to the last business day in April, October, or January, respectively, to reflect the performance of the FTSE Frontier Index Series as a whole, and an updated figure will be published by FTSE Russell.

- 8.1.3 Where a company, whether an existing constituent or not, undertakes an initial public offering of a new equity security, that security will be eligible for fast entry inclusion to the FTSE Frontier Index Series if it meets the following conditions:
 - A. A new equity security (IPO), which satisfies the eligibility criteria and the screens other than the liquidity screen, is eligible for fast entry when its full market capitalisation and its investable market capitalisation using the closing price on the first day of trading is greater than the fast entry thresholds for the relevant region (see rule 8.1.1). The addition of a new security to the index will be implemented after the close of business on the fifth day of trading. In the event of the fifth day of trading occurring during the week of an index review, an eligible fast entrant will be added to the index concurrent with the review effective date.
 - B. A new equity security (IPO) which does not qualify as an immediate fast entrant to the index will be reconsidered for inclusion into the FTSE Frontier Index Series at the next annual review.
 - C. In the case of a demutualisation where upon listing the entire free float of a new eligible security is immediately transferred to private shareholders the addition of the security will be deferred for one month after trading has commenced, provided that adequate liquidity over the intervening period (as defined under rule 6.2) is demonstrated.
 - D. Newly eligible securities, for example a non-constituent moving to an eligible market, will be reviewed for inclusion at the next annual review.
 - E. Variable, best effort and direct listing IPOs* will not be considered for fast entry inclusion since FTSE Russell would be:
 - unable to confirm if the minimum free float requirement has been met; and
 - unable to assign an accurate free float for the purposes of the index calculation.
 - F. Variable, best effort and direct listing IPOs will be considered for index inclusion at the next review if, by the review cut-off date, a public disclosure* (which has been published post IPO) is available confirming the updated shareholder structure. Index inclusion remains subject to meeting all other eligibility criteria. If the post-IPO shareholder structure has not been disclosed by the review cut-off date, the evaluation of the company will be deferred to a subsequent review.

*A public disclosure is typically by way of a company filing, stock exchange notice or shareholding regulatory announcement.

8.1.4 The FTSE Frontier 50 and FTSE Vietnam 30 Indices will not have intra-review additions and new issues which satisfy rule 8.1.1 will be reviewed for index inclusion at the next semi-annual review.

Section 9 Corporate actions and events

9. Corporate actions and events

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

Corporate_Actions_and_Events_Guide.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. These include the following:

- capital repayments;
- rights issues/entitlement offers;
- stock conversion;
- splits (sub-division)/reverse splits (consolidation); and
- 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 Russell will provide notice advising of the timing of the change.

9.2 Shares in issue

Changes to the number of shares in issue for constituent securities are covered in the Corporate Actions and Events Guide.

9.3 Investability weightings

9.3.1 Changes to free float for constituent securities are covered in the Corporate Actions and Events Guide.

9.4 Spin-offs

If a constituent company is split and forms two or more companies by issuing new equity to existing shareholders, then the resulting companies may be eligible to continue as constituents in the same indices within the FTSE Frontier Index Series as their predecessor company.

If a constituent company in the FTSE Frontier 50 or FTSE Vietnam 30 is split so as to form two or more companies eligible* for index inclusion, then the resulting companies index memberships will be re-assessed in order to rebalance the indices back to 50 or 30 companies as appropriate. The full market capitalisations at close on the first trading day of the spun-off company will be used to determine index inclusion. The changes will then be applied at market close giving two business days' notice from the date of the ranking. Consequently, the FTSE Frontier 50 and the FTSE Vietnam 30 may have more than 50 or 30 companies respectively for three days (or more if the spun-off company does not trade on the effective date).

*Where a split results in the inclusion of ineligible non-equity, the security will remain in the index for two trading days and then be deleted at market price or if no market price is available, at zero value.

For illustration purposes: a FTSE Frontier 50 constituent splits into two eligible companies resulting in 51 companies in the index. The lowest-ranking FTSE Frontier 50 constituent at the close on the first trading day of the spun-off company will be removed giving two business days' notice. For further details please refer to the Corporate Actions and Events Guide.

9.5 Suspension of dealing

Suspension of dealing rules can be found within the Corporate Actions and Events Guide.

Where a suspended constituent of the FTSE Frontier 50 Index and the FTSE Vietnam 30 Index is removed, the vacancy will not be filled until the next semi-annual review.

9.6 Takeovers, mergers and demergers

The treatment of takeovers, mergers and demergers can be found within the Corporate Actions and Events Guide.

Where a constituent of the FTSE Frontier 50 Index and the FTSE Vietnam 30 Index is involved in a takeover, merger or demerger and is removed from the index, the vacancy will not be filled until the next semi-annual review.

Section 10 Treatment of dividends

10. Treatment of dividends

- 10.1 Declared dividends are used to calculate the Standard Total Return Indices in the FTSE Frontier Index Series. All dividends are applied as at the ex-div date.
- 10.2 A series of net-of-tax Total Return Indices are also calculated based on the maximum withholding tax rates applicable to dividends received by institutional investors who are not resident in the same country as the remitting company and who do not benefit from double taxation treaties.

Withholding tax rates used in the net-of-tax indices can be accessed using the following link:

Withholding Tax Service

Please also refer to the FTSE Russell Withholding Tax Guide which can be accessed using the following link:

FTSE_Russell_Withholding_Tax_Guide.pdf

Section 11 Industry Classification Benchmark (ICB)

11. Industry Classification Benchmark (ICB)

11.1 Industry classification structure⁵

- 11.1.1 The FTSE Frontier Index Series constituents are classified into industries, supersectors, sectors and subsectors, as defined by the ICB.
- 11.1.2 Details of the ICB are available from FTSE Russell and published on the FTSE Russell website (<u>www.ftserussell.com</u>) and can be accessed using the following link:

Industry Classification Benchmark

⁵ FTSE Indices migrated to the new ICB classification system in March 2021.

Section 12 Algorithm and calculation method

12. Algorithm and calculation method

12.1 Prices

12.1.1 The FTSE Frontier Index Series use 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

12.1.2 Refinitiv real-time exchange rates are used in the index calculations, which are disseminated in real time. Exchange rates used in the end-of-day calculations are WM/Refinitiv Closing Spot Rates[™], collected at 16:00 London time (further information on The WM/Refinitiv Closing Spot Rates service is available from The WM Company).

12.2 Algorithm

- 12.2.1 For details on the algorithm and calculation methods used for the FTSE Frontier Index Series, see the Guide to Calculation Methods.
- 12.2.2 The performance of an index in the FTSE Frontier Index Series on a given day is determined by calculating the percentage difference between:
 - the index's market capitalisation as at the close of that day; and
 - the market capitalisation at the start of that day.

Start of the day is defined as the previous day's close adjusted for capital changes, investability weight changes, additions and deletions.

12.2.3 Adjustments are applied whenever capital changes take place, so that the performance of the FTSE Frontier Index Series reflects the experience of investors (for further details see the Corporate Actions and Events Guide).

Appendix A Eligible countries

The following countries are eligible to be included to the FTSE Frontier Index Series.

Region	Country	Country code	Currency name	ISO currency code	ISO currency number
Americas	Peru	PER	Peruvian Sol	PEN	604
Asia-Pacific	Bangladesh	BGD	Bangladesh Taka	BDT	050
	Mongolia ⁶	MNG	Mongolian tögrög	MNT	496
	Sri Lanka	SLK	Sri Lankan Rupee	LKR	144
	Vietnam	VNM	Vietnam Dong	VND	704
EMEA Africa	Botswana	BWA	Botswana Thebe	BWT	072
	Côte d'Ivoire	CIV	West African Franc	XOF	952
	Ghana	GHA	Ghanaian New Cedi	GHS	936
	Kenya	KEN	Kenyan Shilling	KES	404
	Mauritius	MAU	Mauritius Rupee	MUR	480
	Morocco	MAR	Moroccan Dirham	MAD	504
	Tanzania	TZA	Tanzanian Shilling	TZS	834
	Tunisia	TUN	Tunisian Dinar	TND	788
EMEA Europe	Bulgaria	BGR	Bulgarian Lev	BGN	975
	Croatia	HRV	Croatian Kuna	EUR	191
	Cyprus	CYP	Euro	EUR	978
	Estonia	EST	Euro	EUR	978
	FYR Macedonia	MKD	Macedonian Denar	MKD	807
	Kazakhstan	KAZ	Kazakhstan Tenge	KZT	398
	Latvia	LVA	Euro	EUR	978
	Lithuania	LTU	Euro	EUR	978
	Malta	MLT	Euro	EUR	978
	Serbia	RSB	Serbian Dinar	RSD	941
	Slovak Republic	SVK	Euro	EUR	978
	Slovenia	SVN	Euro	EUR	978
EMEA Middle East	Bahrain	BHR	Bahraini Dinar	BHD	048
	Jordan	JOR	Jordanian Dinar	JOD	400
	Oman	OMN	Omani Rial	OMR	512
	Palestine	PSE	Jordanian Dinar or USD	JOD/USD	400/840

⁶ Classification is effective from the open on Monday 18 September 2023.

Appendix B Eligible exchanges and market segments

In evaluating the eligibility of exchanges, FTSE Russell will review such factors as recognition of the exchange by the relevant governing regulatory body, the settlement cycle (ideally there is no pre-funding requirement) and the availability of end-of-day prices via third-party data vendors.

	Exchanges	Eligible segments
Bahrain	Bahrain Bourse	Main market
Bangladesh	Dhaka Stock Exchange	Main market
Botswana	Botswana Stock Exchange	Main board
Bulgaria	Bulgarian Stock Exchange	Premium equities, standard equities
Côte d'Ivoire	Bourse Regionale Des Valeurs Mobilieres	Main market
Croatia	Zagreb Stock Exchange	Main market
Cyprus	Cyprus Stock Exchange	Main market
Estonia	Nasdaq Tallinn	Baltic main list, Baltic secondary list, first North Baltic
Ghana	Ghana Stock Exchange	Main market
Jordan	Amman Stock Exchange	Main market, secondary market
Kenya	Nairobi Stock Exchange	Main market
Kazakhstan	Kazakhstan Stock Exchange	Premium, standard
Kazakhstan	Astana International Exchange	Securities market
Latvia	Nasdaq Riga	Baltic main list, Baltic secondary list, first North Baltic
Lithuania	Nasdaq Vilnius	Baltic main list, Baltic secondary list, first North Baltic
Republic of North Macedonia	Macedonian Stock Exchange	Super listing, exchange listing, mandatory listing, free market
Malta	Malta Stock Exchange	Main market
Mauritius	Stock Exchange of Mauritius	Official market
Mongolia ⁷	Mongolian Stock Exchange	Classification I and II
Могоссо	Casablanca Stock Exchange	Main market
Oman	Muscat Stock Exchange SAOC (MSX)	Main market
Palestine	Palestine Securities Exchange	Main market
Peru	Bolsa de Valores de Lima	Official market
Serbia	Belgrade Stock Exchange	Prime, standard, open market
		Main listing, free market, parallel-listed market

⁷ Classification is effective from the open on Monday 18 September 2023

	Exchanges	Eligible segments	
Slovenia	Ljubljana Stock Exchange	Prime, standard, entry market	
Sri Lanka	Colombo Stock Exchange	Colombo Stock Exchange Main market	
Tanzania	Dar es Salaam Stock Exchange	Main market	
Tunisia	Bourse De Tunis	Bourse De Tunis Main market	
Vietnam	Hanoi Stock Exchange	Main market	
Vietnam	Ho Chi Minh Stock Exchange	Main market	

Appendix C Calculation schedule

1. Normal schedule

- 1.1 The FTSE Frontier Index Series are calculated once daily at approximately 21:30 to 22:00 London time, shortly after the close of North American securities markets. Selected indices within the series are calculated on a real-time basis, see below.
- 1.2 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.

2. Real-time indices

Refinitiv real-time cross exchange rates are used in all calculations during the calculation period, other than for the closing value for each index. The WM/Refinitiv Closing Spot Rates[™] are used in calculating the closing value for each of these indices. Corporate actions for these indices are based on the price and exchange rates as applied within the main FTSE Frontier Index Series.

Index	Calculation times*
FTSE Frontier 50 Index	00:30 to 21:10
FTSE Vietnam 30 Index	02:00 to 08:00

*Note: timings are UK hours. Indices that disseminate until 21:10 will have the closing value disseminated at 21:30.

Appendix D Country additions and deletions

Countries were added or deleted from the FTSE Frontier Index Series at the market close on the following dates:

FTSE Frontier Index Series – country inclusion	
2008 original 23 countries	
Bahrain	Mauritius
Bangladesh	Nigeria
Botswana	Oman
Bulgaria	Romania
Côte d'Ivoire	Serbia
Croatia	Slovak Republic
Cyprus	Slovenia
Estonia	Sri Lanka
Jordan	Tunisia
Kenya	Vietnam
Lithuania	
Republic of North Macedonia	
17 September 2010	
Argentina ⁸	
Malta	
16 March 2012	
Ghana	
19 June 2015	
Argentina ⁹	
Morocco ¹⁰	
16 September 2016 ¹¹	
Latvia	
Palestine ¹²	
Qatar ¹³	

Argentina reclassification from secondary emerging to frontier market status.

a Argentina reclassified from frontier to unclassified market status.

 ¹⁰ Morecco reclassified from secondary emerging to frontier market status.
 ¹¹ Note: to facilitate moves between the frontier and secondary emerging classifications, the annual review of the FTSE Frontier Index in June 2016 was postponed and conducted in September 2016 to coincide with the GEIS semi-annual review. From this date forward, the reviews of the FTSE Frontier Index will take place annually in September.

¹² Latvia and Palestine reclassified from unclassified to frontier market status.

¹³ Qatar reclassified from frontier to secondary emerging market status.

FTSE Frontier Index Series – country	ry inclusion
15 September 2017	
Argentina Kazakhstan ¹⁴	
20 September 2019	
Iceland ¹⁵	
21 September 2020	
Argentina ¹⁶	
Peru ¹⁷	
Romania ¹⁸	
Tanzania ¹⁹	
19 September 2022	
Iceland ²⁰	
18 September 2023	
Mongolia ²¹	
Nigeria ²²	

Adoption of the Euro

- January 2007 Slovenia
 January 2008 Malta and Cyprus
 January 2009 Slovak Republic
- 1 January 2011 Estonia
- 1 January 2014 Latvia
- 1 January 2015 Lithuania
- 1 January 2023 Croatia

¹⁴ Argentina and Kazakhstan reclassified from unclassified to frontier market status.

¹⁵ Iceland reclassified from unclassified to frontier market status in September 2019.

¹⁶ Argentina to be reclassified from frontier to unclassified market status from September 2020, subject to the removal of capital controls.

Peru reclassified from secondary emerging market to frontier status in September 2020.
 Romania reclassified from frontier market to secondary emerging market status in September 2020.

¹⁹ Tanzania reclassified from unclassified to frontier market status in September 20

²⁰ Iceland reclassified from frontier market to secondary emerging market status in September 2022.

²¹ Mongolia reclassified from unclassified to frontier market status in September 2023.

²² Nigeria reclassified from Frontier market to Unclassified status in September 2023.

Appendix E Eligible classes of securities

Frontier Africa

Country	Class
Botswana	Ordinary
Côte d'Ivoire	Ordinary
Ghana	Ordinary Preference
Kenya	Ordinary
Mauritius	Ordinary Preference
Могоссо	Ordinary
Tanzania	Ordinary
Tunisia	Ordinary

Frontier Americas

Country	Class
Peru	Ordinary

Frontier Asia-Pacific

Country	Class
Bangladesh	Ordinary
Mongolia	Ordinary
Sri Lanka	Ordinary
Vietnam	Ordinary
	*Stocks listed under designated security, controlled security and under special monitoring are ineligible.

Frontier Europe

Country	Class
Bulgaria	Ordinary
Croatia	Ordinary Preference
Cyprus	Ordinary

Country	Class
Estonia	Ordinary
	*Stocks listed under watch notation are ineligible.
Kazakhstan	Ordinary
	Preference
Latvia	Ordinary
	*Stocks listed under observation status are ineligible.
Lithuania	Ordinary
	*Stocks listed under observation status are ineligible.
Malta	Ordinary
Republic of North Macedonia	Ordinary
	Preference
Serbia	Ordinary
	Preference
Slovak Republic	Ordinary
Slovenia	Ordinary
	Preference

Frontier Middle East

Country	Class
Bahrain	Ordinary
Jordan	Ordinary *Stocks listed under third market are ineligible.
Oman	Ordinary Preference
Palestine	Ordinary

Appendix F Further information

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

Glossary.pdf

For further information on the FTSE Frontier Index Series, visit <u>www.ftserussell.com</u> or e-mail <u>info@ftserussell.com</u>. Contact details can also be found on this website.

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