Construction and Methodology

Russell Global Index Series

v3.5

Russell indexes benefits

Transparent. Russell indexes are constructed using an open, published, rules-based, methodology that's designed to be easy to understand for any financial professional. And FTSE Russell follows those rules, making our indexes transparent and predictable.

Representative of the market. Russell indexes are modular in design and constructed to be objective and comprehensive with full coverage of the underlying market segment without gaps or overlaps. There is no sampling. So our indexes are a complete picture of the whole market and the opportunity set available to investors.

Leading methodology. Russell indexes have a consistent history of being one of the first to adapt as the market evolves. Our indexes have been fully float-adjusted since their inception. Russell launched the first style indexes in 1987 and incorporated smart, small scale adjustments including the multi-factor style methodology in 1994 allowing for over fifteen years of comprehensive style and factor history. And these adjustments pioneered by Russell are now considered industry-standard. Recently we've designed indexes to accurately capture new alternative weighting methods including equal weighting and fundamental weighting.

Accurate and practical. To ensure that market segments are accurately represented, the indexes are rigorously maintained. Daily corporate actions, monthly share adjustments, quarterly IPO inclusions and annual total reconstitution ensure that the indexes accurately represent the true global opportunity set.

FTSE Russell's index methodologies are continually reviewed by product managers. Topics under consideration may result from direct inquiry, request for clarification, market observation or research; considerations are analyzed against four guiding principles of index methodology (Objective representation, replicable, transparent, passively manageable at a reasonable cost). Evaluation procedures include historical analysis of potential impacts of methodology changes and how turnover, fundamental characteristics and measurement of segment, factor, style or asset class is affected.

Updated sections

This document has been updated since the previously published version, in the following sections:

- Section 1: Added the Statement of Principles
- Section 2: Added the Management Responsibilities
- Section 3: Added Exchange and Segment requirements
- Section 6: Update to Free Float definitions (link provided to guidelines)
  Added Foreign Headroom guidelines
- Section 8: Update to Shares and Free Float maintenance guidelines

Contents

Section 1

Introduction

FTSE Russell provides float-adjusted, market capitalization–weighted indexes for a precise picture of the market. Today, $5.7 trillion in assets are benchmarked to the Russell indexes and more institutional funds track them than all other U.S. equity indexes combined.[1] In 2007, Russell applied its practical, industry-leading U.S. Index methodology to the world's equity markets and launched its family of global indexes. Covering 78 markets worldwide, we provide comprehensive benchmarks covering 98% of investable global equity, making them more representative of the market.

Available indexes

The Russell Global Index is modular and can be divided into thousands of components by capitalization size, region, sector, industry, etc. See Appendix A for a list.

Statement of Principles

Indexes need to keep abreast of changing markets and the Russell Index Methodologies cannot anticipate every eventuality. Where the Methodology does not fully cover a specific event or development, FTSE Russell will determine the appropriate treatment by reference to the Statement of Principles which summarizes 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.

FTSE Russell's Statement of Principles can be accessed using the following link: Statement_of_Principles.pdf

[1] U.S. Equity indexes: Institutional Benchmark Survey, December 2014.

FTSE Russell

FTSE Russell is a trading name of FTSE International Limited (FTSE), Frank Russell Company (Russell), FTSE TMX Global Debt Capital Markets Inc. and FTSE TMX Global Debt Capital Markets Limited (together, “FTSE TMX”) and MTSNext Limited. FTSE, Russell and FTSE TMX are each benchmark administrators of indexes. References to FTSE Russell should be interpreted as a reference to the relevant benchmark administrator for the relevant index.

FTSE Russell hereby notifies users of the index series that it is possible that circumstances, including external events beyond the control of FTSE Russell, may necessitate changes to, or the cessation of, the index series and therefore, any financial contracts or other financial instruments that reference the index series should be able to withstand, or otherwise address the possibility of changes to, or cessation of, the index.

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 Construction and Methodology, and/or
- any errors or inaccuracies in these Construction and Methodology, and/or
- any non-application or misapplication of the policies or procedures described in these Construction and Methodology, and/or
- any errors or inaccuracies in the compilation of the index or any constituent data.

Section 2

Management Responsibilities

Management Responsibilities

Frank Russell Company

Frank Russell Company is the benchmark administrator.

FTSE Russell 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;
- disseminate the indexes.

FTSE Russell External Advisory Committees

To assist in the oversight of the indexes FTSE Russell has established the following external advisory committees:

- FTSE Russell Asia Pacific Regional Equity Advisory Committee
- FTSE Russell Europe, Middle East & Africa Regional Equity Advisory Committee
- FTSE Russell Americas Regional Equity Advisory Committee
- FTSE Nationality Advisory Committee
- FTSE Russell Country Classification Advisory Committee
- FTSE Russell Industry Classification Advisory Committee

The Terms of Reference of the FTSE Russell external advisory committees are set out on the FTSE Russell website and can be accessed using the following link:
Terms of Reference

FTSE Russell Policy Advisory Board

The FTSE Russell Policy Advisory Board, whose membership is representative of users of FTSE Russell Indexes, is established by FTSE Russell as an independent committee. The FTSE Russell Policy Advisory Board provides strategic advice to FTSE Russell on the construction and maintenance of agreed indexes (as stipulated in their terms of reference) and to oversee the practitioner committees established by FTSE Russell to assist in the management of the indexes.

The Terms of Reference of the FTSE Russell Policy Advisory Board are set out on the FTSE Russell website and can be accessed using the following link:

FTSE_Russell_Index_Policy_Advisory_Board.pdf

Amendments to These Ground Rules

These Ground Rules shall be subject to regular review (at least once a year) by FTSE Russell to ensure that they continue to meet the current and future requirements of investors and other index users. 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.

As provided for in the Statement of Principles, 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.

Section 3

Defining the total stock universe

Many indexes purport to capture a certain percentage of an equity market, and it is often difficult to evaluate and compare index families on the basis of their claimed coverage percentage. A key step in creating market indexes is defining the total stock universe on which they are based. Russell has always promoted transparency in index construction. Accordingly, the methodology used to generate our 98% capture of the global equity universe is described below.

The Russell Global Index is fundamentally constructed from a company-level perspective. Every publicly traded company around the world that meets minimum size and investability standards is included in the stock universe. FTSE Russell uses seven steps to refine the exchange-traded securities universe and capture the total institutional universe of securities on which the Russell Global index is based.

Steps in constructing the investable equities universe and the Russell Global index

1. Evaluate security types and distinguish equity securities from all other securities
2. Assign companies to countries
3. Evaluate securities by country to remove ineligible types
4. Evaluate minimum capitalization size requirements
5. Evaluate country eligibility based on economic and practical investment environments
6. Evaluate minimum stock liquidity by using the average daily dollar trading volume (ADDTV), and active trading ratio (ATR)
7. Capture 98% of the institutionally investable universe

Total universe securities types

FTSE Russell's first step in determining index membership is to capture and evaluate all exchange-traded securities in the global marketplace and build the total stock universe. Equity and equity-like securities are included in the Russell global equity universe, with some country-specific nuances. Equity-like securities are those that represent ownership of a company without an obligation for the company to repay invested capital in the form of coupon payments or lump-sum payments throughout the life of the investment. Stapled units and other paired share structures are considered eligible for index inclusion, unless an underlying component of the stock is an ineligible security type (e.g. convertible debt).

A full list of eligible share classes by country is provided in Appendix C. The following securities types are not eligible for inclusion in the Russell Global Index series and are therefore excluded from the total stock universe.

Excluded securities

- Blank check companies
- Bulletin board and pink sheet stocks (with some global exceptions)
- Closed-end investment companies
- Depositary receipts (some exceptions apply when primary issue fails liquidity threshold)
- Exchange Traded Funds (ETFs) and mutual funds
- Installment receipts
- Limited-liability companies (with some country exceptions, such as Netherlands)
- Limited partnerships
- Trust receipts and royalty trusts
- Warrants and rights

Depositary receipt exceptions

Depositary receipts may be viewed as eligible for index inclusion in those countries where foreign ownership of local shares is restricted, where restrictions related to the currency account make local investment prohibitive, or where access by non local investors is commonly via an ADR. These countries include but are not limited to: Argentina, Egypt, Philippines, Thailand, and Russia due to their restrictions on foreign ownership in local shares or currency account restrictions. See Appendix C for details of countries where ADRs are viewed as eligible share classes.

Depositary receipts may be used if the following criteria apply:

- The only vehicle available for trade is in the form of an ADR (no alternative security trading); or
- The eligible equity security fails the liquidity test, however an ADR form exists for the company and it does pass liquidity; or
- Fewer than three eligible companies are available in a particular country and qualifying ADR vehicles exist. In this instance, eligible ADRs will be added to country opportunity to complete the critical mass requirement for individual country inclusion.

As with any member, each of the above vehicles must pass all other eligibility requirements including liquidity minimum.

These situations are applied regardless of country (excluding the U.S.).

Universe minimum size requirement

FTSE Russell further refines the investable universe by eliminating extremely small equity securities that are inaccessible by institutional investors. The minimum total market capitalization requirement for inclusion in the stock universe is USD1,000,000. Note this USD1 million threshold applies to the universe of stocks, from which then 98% makes up the index. Historically, the market capitalization of the smallest security in the Russell Global Index has been approximately USD160 million. Total market capitalization is determined by multiplying outstanding shares by market price as of the rank day in May.

Universe country eligibility

Some countries with sizable stocks do not provide a stable environment for institutional investing and thus are ineligible for inclusion in the Russell global indexes universe. Specifically, those designated as frontier countries are ineligible for the Russell Global Developed or Emerging Index components. FTSE Russell does, however, cover frontier countries in the Russell Frontier® Index (see Section 10). FTSE Russell assesses the adequacy of investability conditions in a country by using a group of country risk and trading risk/challenge factors and references, described below.

Country risk

The following criteria are used to determine country eligibility for the Russell Global Index.

Criteria	Measure	Eligible	Ineligible
Relative income	World Bank Income Category	“Lower Middle Income” or higher	“Low Income”
Country risk	Economist Intelligence Unit Score	Score less than 55	Score greater than or equal to 55

Sources: World Bank and Economist Intelligence Unit

A 12 month average score of 55 or higher for an existing Russell Global index (RGI) member will be accompanied by full research evaluation but should not be viewed as confirmation of removal. Specific country and investment considerations must be factored and appropriate communication details must be shared.

Trading risks/challenges

The following factors are considered to determine country eligibility for the Russell Global index.

Criteria	Eligible	Ineligible
Regulatory Infrastructure	Relatively mature	Incomplete
Trading and Custody accounts	Segregated	No Segregation
Foreign Ownership Limits	Limits on specific market segments	Broader restrictions
Trade Confidentiality	Yes	No
Settlement Periods	t+3 or less	Greater than t+3
Market Liquidity	75th percentile or better	Beneath 25th percentile
Pre-Deposit of shares required	No	Yes

Sources: Exchanges, market regulators, custodian data and third party sources like Bloomberg and FactSet

A complete list of investable countries with corresponding eligible share types can be found in the appendixes. FTSE Russell will monitor these countries and publicly pre-announce changes to their eligibility.

Treatment of securities affected by OFAC and EU restrictions

In 2014, pursuant to U.S. Executive Order 13662, the Office of Foreign Assets Control (OFAC) began maintaining a "Sectoral Sanctions" list whereby certain investment activities in selected Russian companies and sectors are prohibited. If a Russell Global Index member company is impacted by these restrictions such that investors cannot transact in the company's publicly traded shares, the company may be removed from the applicable indexes subject to an announcement by FTSE Russell. Under "Directive 1" of the OFAC sectoral sanctions, U.S. investors may not deal in the "new equity" of certain named companies. In the event a RGI member company is named under Directive 1, its shares will be capped across the applicable indexes.

The Council of the European Union (EU), pursuant to its Common Foreign Security Policy, has passed a series of similar resolutions that restrict financial dealings in selected Russian companies and sectors. In an instance where the OFAC and EU restrictions differ, FTSE Russell will adhere to the published prohibition with the strictest restrictions. For example, if dealing in a "new equity" of Company A is prohibited by the EU but not by OFAC, the shares of Company A will still be capped in order to adhere to the more strict prohibition—in this case, the prohibition mandated by the EU.

Ineligible exchange segments

Securities which 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 during a quarterly screening which will occur in March, June, September, and December. 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
China	Shanghai Stock Exchange Shenzhen Stock Exchange	Special Treatment (ST)
Malaysia	Bursa Malaysia	PN17
Poland	Warsaw Stock Exchange	Alert List
Singapore	Singapore Exchange	Watch-list
South Korea	Korea Exchange	Administrative Issues
Taiwan	Taiwan Stock Exchange	Altered Trading Method (ATM)
Thailand	Stock Exchange of Thailand	Companies facing possible delisting according to No. 9(6) of SET’s Regulations on Delisting of Securities
Turkey	Borsa Istanbul	Watchlist

Exchange and Segment requirements

In construction of its equity indexes, FTSE Russell reviews each exchange considering closing mechanism, regulatory requirements for each exchange segment, settlement, trading rules and recognition of the exchange by the governing regulatory body. All exchanges deemed eligible will be disclosed within the ground rules and/or appendix clearly indicating eligible markets in the announcement period prior to the index rebalance.

It is important to note that even though an exchange may be deemed eligible, each index family may apply some criteria of minimum securities or critical mass to be included within the family. This is done to recognize the practical challenges of trading a market and establishing custody where minimal eligible securities exist for trade.

No domestic exchange (NDE) and benefit driven incorporation (BDI) countries

NDE and BDI countries, as described below, are not eligible at a country level, however, securities within those countries are eligible, and if applicable, are assigned to the appropriate country.

NDE countries: FTSE Russell recognizes that some investable companies may be incorporated in countries that do not have domestic stock exchanges or exchanges that FTSE Russell recognizes as valid. FTSE Russell assigns these companies to the countries in which their primary equity issues are traded. NDE equities are subject to all of FTSE Russell's index eligibility criteria. A complete list of NDE countries can be found in Appendix G.

BDI countries: Incorporating in certain countries offers companies operational, tax, and political benefits. FTSE Russell identifies these as BDI countries. Companies choosing to incorporate in BDI countries are typically equity securities from other regions such as the U.S. and China that have elected to seek the tax and jurisdiction advantages available outside of their domiciles. BDI equities are subject to all of FTSE Russell's index eligibility criteria. A complete list of BDI countries can be found in the Appendix G.

Universe liquidity screen

Prior to capturing 98% of the market, FTSE Russell refines the universe of stocks to ensure investability. To be eligible for membership in the Russell Global Index (ex-U.S.), stocks must meet minimum size and liquidity requirements. FTSE Russell removes securities with inadequate liquidity by evaluating the average daily dollar trading volume (ADDTV) and the active trading ratio (ATR). ADDTV smooths abnormal trading volumes over short time periods and measures the actual transactions taking place in the market. ATR evaluation provides further refinement, due to the possibility that a few transactions across the year could distort the ADDTV for individual stocks. This two-step liquidity screen provides an accurate representation of the market and its liquidity.

The formulas for calculating ADDTV and ATR are:

$$\text{ADDTV}= \frac{\text{Annual accumulated trading volume in USD}}{\text{Number of available trading days (open for trading)}}$$

$$\text{ATR}= \frac{\text{Number of active trading days (minimum 1 share traded)}}{\text{Number of available trading days (open for trading)}}$$

All securities in investable countries with eligible share types are ranked by ADDTV. At reconstitution, securities with an above-median ADDTV and greater than 90% ATR are eligible for inclusion in the index. This threshold generally corresponds to the bottom 5% cumulative total market capitalization of the initial security universe, in descending order of ADDTV. U.S. securities are not subject to this liquidity screen. See Appendix I for historical median ADDTV.

Capturing 98% of the eligible universe

Following completion of the minimal universe refinements listed above, FTSE Russell assigns stocks to individual countries according to a process described in Section 4, "Assigning securities to countries." The Russell Global Index is composed of the Russell 3000® Index, which captures 98% of the U.S. equity universe, and the largest 98% of the rest of the global equity universe.

Additionally, a number of investable countries are eligible for the Russell Global Index but are not included in the index because either the securities in those markets are too small or too illiquid to be included in the index, or the countries do not reach critical mass (see “Countries without critical mass” in Section 5: “Russell Global Index membership”).

FTSE Russell evaluates more than 150 countries at reconstitution each year for potential index eligibility. Index maintenance applies only to countries covered by the Russell Global Index as of the most recent reconstitution.

Section 4

Assigning securities to countries

Country assignment within indexes is important because many investment strategies involve underweighting or overweighting particular countries, or passively investing within the countries. Indexes provide the market weighting for the strategic weighting decision and serve as the performance benchmark for evaluating the results. In most cases, country assignment is straightforward. However, some differences and complexities in the global equity environment warrant specific attention and rules. FTSE Russell's fundamental country-assignment rule is described below.

Home country indicators (HCIs)

If a company incorporates in, has a stated headquarters location in, and also trades in the same country, (ADRs and ADSs are not eligible), the company is assigned to its country of incorporation. If any of the three criteria do not match, FTSE Russell then defines three home country indicators (HCIs):

- Country of incorporation
- Country of headquarters
- Country of the most liquid exchange as defined by 2-year average daily dollar trading volume (ADDTV)

FTSE Russell cross-compares the primary location of the company's assets with the HCIs. If the primary location of assets matches ANY of the HCIs, then the company is assigned to its primary asset location.

If there is not enough information to determine a company's primary country of assets (as illustrated in Appendix H), FTSE Russell uses the primary location of the company's revenue for the same cross-comparison and assigns the company to its home country in a similar fashion. FTSE Russell uses an average of two years of assets or revenue data for analysis to reduce potential turnover.

If home country cannot be derived using assets or revenue, FTSE Russell assigns the company to the country in which its headquarters are located unless the country is a benefit driven incorporation (BDI) country. If this is the case, the company is assigned to the country of its most liquid stock exchange.

FTSE Russell recognizes that the manager of a country classification-specific portfolio (developed only or emerging only) is typically limited to trading on exchanges, and dealing in currencies, that satisfy the fund's minimum country and currency risk requirements. Therefore, in order for a non-local listing to be eligible it must trade on an exchange in a country having an equivalent or more advanced country classification. In the event the primary exchange is located in a less developed market, country classification will be assigned to the country of primary exchange. Minimum liquidity requirements apply for any security, regardless of exchange, that is under review for inclusion in the Russell Global Index.

Steps to country classification:

Step 1	Is the company incorporated, traded, and headquartered in one unique country?	**YES –** Classified in the unique country	**NO** – Move to Step 2
Step 2	Are the company's reported assets primarily located in one of the HCIs?	**YES** – Classified in the country of primary assets	**NO –** Move to Step 3
Step 3	Are the company's reported revenues primarily located in one of the HCIs?	**YES** – Classified in the country of primary revenue	**NO –** Move to Step 4
Step 4	Is the company's headquarters located in a non-BDI country?	**YES** – Classified in the country of headquarters	**NO –** Assign to primary exchange country

In addition, if one of the HCIs of a company is a BDI country, the company will be re-evaluated and assigned to its primary assets/revenue location. In the absence of assets/revenue information, the company will be assigned to its headquarter location, unless the country is a BDI. In that case, the company will be assigned to its most liquid stock exchange.

China/Hong Kong home country indicators: If a company is assigned to China or to the Hong Kong Special Administrative Region (S.A.R.) based on its HCIs, it is further analyzed to determine to which country it should be assigned. For the purpose of index creation, FTSE Russell recognizes China and the Hong Kong S.A.R as two distinct investment universes. All "Red Chip" and "P Chip" companies (as defined by FTSE Russell) trading on the Hong Kong Stock Exchange will be classified to China. For example, China Mobile Ltd., a state-owned red-chip company and the largest mobile phone provider in China, is a member of the Russell China Index, despite the fact that it is incorporated and traded in Hong Kong.

To be recognized as a "Red Chip" by FTSE Russell, a non member must satisfy the following criteria at the time of index entry:

The company is incorporated outside the PRC; and

• The company is listed on the Hong Kong Stock Exchange; and

• Over 55 per cent of the revenue or assets of the company are derived from the PRC; and

• The company is controlled by Chinese state entities, i.e. the government, provinces or municipalities, through strategic holdings which, in aggregate, total more than 35 per cent.

An existing "Red Chip" index member which fails one or more of the following criteria will cease to be classified as a "Red Chip" at reconstitution if:

• The company is no longer incorporated outside the PRC; or

• The company is no longer listed on the Hong Kong Stock Exchange; or

• The percentages of revenue and assets derived from the PRC have both fallen below 45 per cent; or

• The aggregate holding of Chinese state entities, i.e. the government, provinces or municipalities, has fallen below 25 per cent.

To be recognized as a "P Chip" by FTSE Russell, a non member must satisfy the following criteria at the time of index entry:

• The company is incorporated outside the PRC; and

• The company is listed on the Hong Kong Stock Exchange; and

• Over 55 per cent of the revenue or assets of the company are derived from the PRC; and

• The company is controlled by mainland individuals. If the shareholder background cannot be determined with publicly available information, FTSE Russell will assess the P Chip status of a company with the help of other criteria including:

1. Whether the establishment and origin of the company are in Mainland China; and

2. Whether the company's headquarters is in Mainland China.

An existing "P Chip" index member which fails one or more of the following criteria will cease to be classified as a "P Chip" at the time of the next reconstitution:

• The company is no longer incorporated outside the PRC; or

• The company is no longer listed on the Hong Kong Stock Exchange; or

• The percentages of revenue and assets derived from the PRC have both fallen below 45 per cent; or

• The company is no longer controlled by mainland individuals.

Lastly, in cases where the data could support an assignment as either a Red Chip or a P Chip, the company will be classified as a Red Chip.

Hong Kong/Macao

For purposes of index creation, companies assigned to Macao are re-assigned to Hong Kong.

Tax rates

Taxes are applied to dividend payments and vary according to a company's tax domicile. The tax rate applied is the rate applied to nonresident institutions that do not benefit from taxation treaties. The underlying tax rate information and the FTSE Russell Withholding tax guide are available at http://www.ftse.com/products/indices/withholding-tax-service.

Section 5

Russell Global Index membership

When the total universe has been screened as described in Section 3, and after securities have been allocated to their home countries as described in Section 4, FTSE Russell determines index membership. FTSE Russell includes the top 98% of U.S. market capitalization, the Russell 3000, and the top 98% of the rest of the world's market capitalization. This index design preserves global equity market integrity and effectively relieves the overrepresentation of the U.S. from the global perspective. Additionally, this design assures consistency between the Russell Global Index and its U.S. sub-indexes as components.

The broad building blocks capturing 98% or more of the investable market enable thousands of modular sub-indexes, including country, region, sector, market capitalization and stability segments. Each division of the parent index provides a set of sub-indexes with no gaps and no overlaps. Additionally, each sub-index, as a stand-alone index, provides comprehensive representation of a particular subgroup of the global investment opportunity set.

Global equity index design

Global large cap and small cap indexes construction

Research summary

The need for cap-size indexes is based on a well-documented phenomenon known as the "cap-size effect." Stated simply, it means that large stocks tend to behave like other large stocks, and small stocks tend to behave like other small stocks. Russell observed this effect in the U.S. more than 20 years ago, and the effect has been seen to prevail in global markets as well. Much research has been focused on determining an appropriate dividing point between large and small stocks, but Russell's research has demonstrated that there is no hard line between large and small. Instead, the division between large and small stocks should be established as a range, or "band." around which representative large cap and small cap indexes can be created.

In addition, Russell research has demonstrated that the cap-size effect exists across regional boundaries; that is, companies of similar size tend to behave similarly regardless of their geographic locations. While this relationship is not equally strong across all regions (varying particularly in emerging markets), it does appear to be increasingly apparent as markets continue to globalize.

As a result of its research into the global cap-size effect, Russell implemented a global-relative methodology with banding when constructing its Global Large Cap, Global Midcap and Global Small Cap indexes, beginning with the June 2007 reconstitution. This approach differs fundamentally from the current industry practice of determining cap size on a country-by-country basis, where companies with very different market capitalizations may be classified in the same cap-size index, or, alternatively, where companies with similar market capitalizations may be classified in different cap-size indexes simply because they are located in different countries or regions. Cap-size indexes constructed by use of country-relative distinctions (whether banded or not) can generate substantial overlap when combined into broader indexes, reducing their ability to accurately represent what they originally intended to measure.

Construction rules

At reconstitution, all companies in the Russell Global Index (ex-U.S.) are ranked by their total market capitalization in descending order, and the cumulative total market capitalization percentile for each company is calculated.

To determine the Russell Global Large Cap and Russell Global Small Cap indexes, all companies that rank below the 90th percentile of the capitalization band are classified as small cap, and all companies that rank above the 85th percentile are classified as large cap. Current members of the index that rank between the 85th and 90th percentiles retain their existing classification. For example, if a member of the existing Russell Global Small Cap Index falls within the 85th-90th percentile band at reconstitution, it remains classified as small cap. New companies being added to the Russell Global Index are classified relative to the midpoint of the range. In other words, new companies ranking above 87.5 are classified as large cap, and new companies ranking below 87.5 are classified as small cap.

To determine the Russell Global ex-US Microcap Index, which is a subcomponent of the Russell Global Small Cap Index, all companies that rank between the 96th and 98th percentile are classified as Global ex-US Microcap. To determine the Russell Global Midcap and Global Mega Cap indexes, which are subcomponents of the Russell Global Large Cap Index, all companies that rank below the 60th percentile of the capitalization band are classified as midcap, and all companies that rank above the 55th percentile are classified as mega cap. Current index members that rank within the 55th and 60th percentiles retain their existing classification. For example, if a member of the existing Global Midcap Index falls within the 55th-60th percentile band at reconstitution, it remains classified as midcap. New companies being added to the Global Index are classified relative to the midpoint of the range. In other words, new companies ranking above 57.5 are classified as mega cap, and new companies ranking below 57.5 are classified as midcap.

Using a global-relative 5% band has been shown to create indexes that are robust representations of large and small stock behavior and that provide consistently better tracking results when tested against the results of global and non-U.S. cap-tier mandated managers. Use of the banding approach also has the associated benefit of dramatically reducing turnover at reconstitution. Russell’s research shows that a 5% band provides an optimal balance between representing asset-class return behavior and reducing turnover, which ultimately benefits investors who are using the indexes as passive vehicles or active portfolio benchmarks.

Index name	Upper range (percentiles)	Lower range (percentiles)
Russell Global Mega Cap	NA	55%–60%
Russell Global Midcap	55%–60%	85%–90%
Russell Global Small Cap	85%–90%	NA

Percentiles are based on descending total market capitalization. Large Cap = Mega Cap + Midcap.

Corporate actions impacting reconstitution ranking

For merger and spin-off transactions that are effective between the rank day in May and the Friday prior to annual reconstitution in June, the market capitalizations of the impacted securities are recalculated and membership is reevaluated as of the effective date of the corporate action. For corporate events that occur during the final week of reconstitution (during which reconstitution is finalized on Friday after U.S. market close), market capitalizations and memberships will not be reevaluated. Non index members that have been considered ineligible as of rank day will not be reevaluated in the event of a subsequent corporate action that occurs between rank day and the reconstitution effective date.

Countries without critical mass

FTSE Russell's global-relative approach focuses less on country coverage and more on the true global opportunity set. A country coverage focus can result in the inclusion of countries with few securities available to trade. From a manager's perspective, this is not an ideal situation, due to the relative costs of setting up a trading account with those countries compared to the number of tradable securities.

In an effort to reduce those trading implications while remaining global relative, FTSE Russell uses the most liquid exchange OUTSIDE of a security's home country if a security's home country has fewer than three securities. However, the most liquid exchange must be in a country eligible for the Russell Global Index that contains three or more securities. If the most liquid exchange outside of the home country is in a country that does not meet these criteria, then FTSE Russell looks to the next most liquid exchange. If the security does not trade on an exchange in an eligible country, or only trades locally and does not trade on any other exchange outside of its home country, the security is ineligible for index inclusion.

While this rule allows the Russell Global Index to use a listing on an exchange outside of the security's home country, the security is still assigned to its home country within the indexes. Additionally, while depositary receipts are generally ineligible for inclusion within the Russell Global Index, FTSE Russell includes depositary receipts for securities that fall under this rule.

Global SMID construction

FTSE Russell believes that small-mid (SMID) cap is an asset class separate from the large, mid, and small capitalization market segments. While other index providers define SMID as simply an aggregation of midcap and small cap, FTSE Russell defines SMID as comprising the bottom of the midcap and the top of the small cap markets.

To construct the Russell Global SMID Index, all companies in the current Russell Global Index are ranked by market-capitalization in descending order, and the cumulative total market capitalization percentile for each company is calculated. Companies that rank between the 75th and 95th percentiles are classified as SMID. At reconstitution each year, 5% bands are implemented at both the bottom and the top of the SMID index, which means that an existing SMID member remains in the SMID index if it ranks between the 72.5 and 97.5 percentiles. For a security new to the Russell Global Index, the 75th percentile and 95th percentile breakpoints are used to determine SMID membership.

Historical construction rules

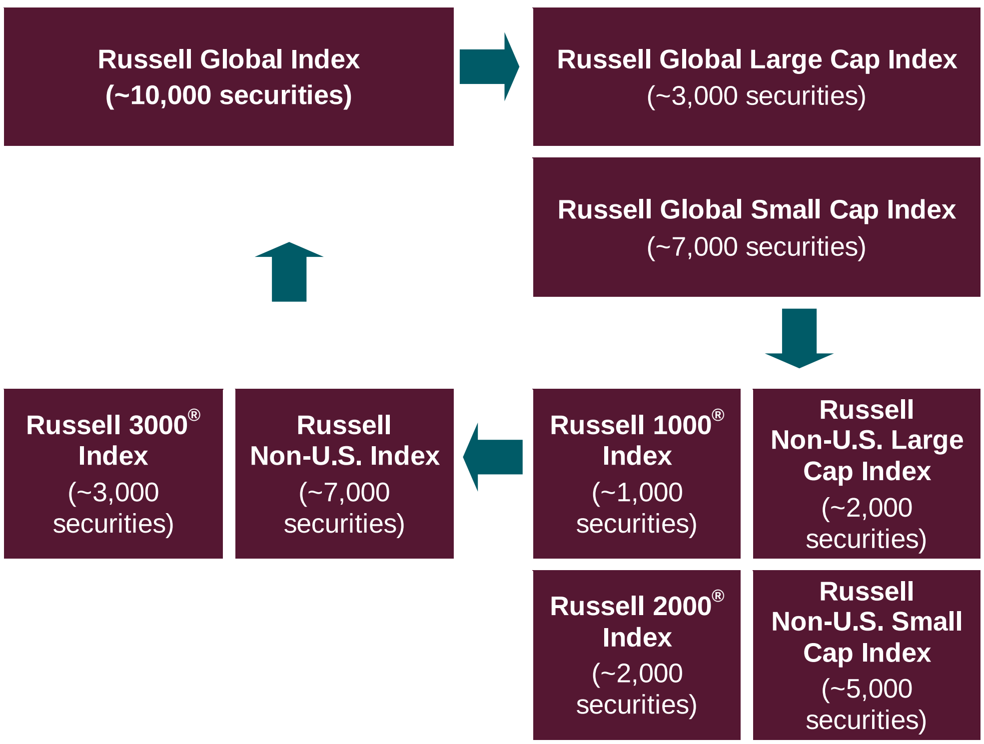
Historically, the following methodology was used to build the Russell Global cap-tier indexes.

The large/small breakpoint was made by using the corresponding breakpoints for the years 1996 to 2006 in the Russell U.S. Index series. These breakpoints generally correspond to the 90th percentile, on the basis of cumulative float-adjusted market capitalization of the global universe ranked in descending order by total market capitalization, including the U.S. Japan was calculated using the Russell/Nomura Total Market Index and their corresponding breakpoints. Russell/Nomura Total Market was used as the Japan portion from 1996-2008.

The mega cap/midcap breakpoint was made by using the corresponding breakpoints for the years 1996 to 2006 in the Russell U.S. Index series. These breakpoints generally correspond to the 60th percentile, on the basis of cumulative float-adjusted market capitalization of the global universe, including the U.S., ranked in descending order by total market capitalization.

No banding was used in the historical construction.

The following illustration shows the Russell Global Index construction and its high-level decomposition into U.S. and non-U.S. regions and large cap and small cap tiers.



Regional and country indexes

The Russell Global Index series includes stand-alone regional and country indexes. A complete list of regions and countries is available in Appendix A.

Developed, emerging, and frontier markets

In consideration of the investing environments of existing developed, emerging, and frontier markets, the modular structure of the Russell Global Index provides developed and emerging markets regional index options. Given the purpose of the Russell Global Index—to offer investors the best and most accurate proxy of the investable global equity asset class—FTSE Russell uses a combination of macroeconomic and market-based criteria to distinguish developed from emerging and frontier markets. FTSE Russell uses a transparent set of indicators for recognizing countries that have reached the most advanced developed market status, or that, conversely, may be higher risk and generally less accessible to investors.

Economic criteria

FTSE Russell uses economic criteria as the first step in categorizing countries into developed, emerging, and frontier market indexes, because doing so provides a measurement of the relative stability and development of the macro-economy. Countries must meet the minimum economic criteria for developed markets in order to be considered for inclusion in the Russell Developed Markets Index or any of its sub-indexes. In order for a country to be considered a developed market, it must meet and sustain a top quartile composite score based on the below set of economic criteria. In order for an existing emerging market country to move to developed market status it should have a developed-relative economic score for at least three consecutive years. After two consecutive years of a change in signal, FTSE Russell will conduct an additional market review taking into consideration investor sentiment on the specific market under evaluation to determine economic stability of the country and the merits of a change in development status.

Criteria	Measure	Developed	Emerging/Frontier
Relative income	World Bank Income Category	“High Income”	Less than “High Income”
Development status	International Monetary Fund	Advanced	Advancing
Country risk	Economist Intelligence Unit Score	Score less than or equal to 40	Score greater than 40

Sources: World Bank and Economist Intelligence Unit, and IMF.

Note: In 2009, the EIU changed their scoring system from letter rankings (A-D), to numbers. Historical classifications were not changed to reflect this change. The scores were applied going forward only.

Market (operational) criteria

The second portion of FTSE Russell’s market review process is to evaluate its investing environment. Economic criteria alone are insufficient for categorizing a country as a developed, emerging, or frontier market because they do not necessarily reflect the conditions of the trading environment. Market criteria provide an objective filter by use of the practical investment considerations set forth in the below table. All market factors are assigned values which are used to form a market criteria composite score. For a country to be considered a developed market, in addition to satisfying the economic criteria above, it also must sustain a top quartile composite score based on the market criteria listed below: In the event of a signal change, or a change to a specific element of the market criteria that may impact the signal, FTSE Russell will also conduct an additional market review taking into consideration the feedback from market participants regarding the investing environment of the country and the merits of a change in development status.

Criteria	Developed	Emerging/Frontier
FX restrictions	No	Yes
Repatriation restrictions	No	Yes
Stock transfer restrictions within fund complex	Allowed, not requiring sell or repurchase in market	Not allowed
Relative liquidity	Above median	Below median
Foreign Ownership Limits	Few or none	Moderate or restrictive
Allowable accounts structure	Omnibus	Segregated

Sources: Exchanges, market regulators, FTSE Russell, custodian data, and third party sources like Bloomberg and FactSet.

Moving between developed and emerging markets

Prior to each reconstitution, FTSE Russell conducts its market reviews by evaluating the economic and market criteria for each country in the Russell Global Index. Only countries with at least a three-year sustained change in economic criteria may then be eligible to move between developed, emerging, or frontier market classifications in the third year if indicators remain constant.[2] FTSE Russell also looks for a sustained change in the market-based criteria but the accessibility of a market can change with greater speed (than the economic criteria) based on regulatory and/or technology infrastructure upgrades. FTSE Russell will announce any final change to developed, emerging or frontier status in the first quarter of each year – typically March 1st.

A complete listing of Russell developed and emerging market countries is available in Appendix B.

FTSE Russell defines frontier markets separately through the Russell Frontier Index methodology. See Section 10 for more information.

[2] Please refer the financial crisis rule found on pages 30-31 which details the circumstances by which a country can be reclassified or removed from the Russell Global Index and Russell Frontier Index outside of Russell's standard market review process.

Section 6

Float-adjusted weighting

Russell pioneered float-adjusted index weightings with its U.S. indexes launched in 1984, and then extended its industry-leading methodology globally, where float may be even more important. After index membership has been determined by total market capitalization, each security's shares are adjusted to include only those available for public investment—shares called "free float." The purpose of float adjustment is to exclude from index weights the capitalization that is not available for purchase and that is not part of the global investing opportunity set. Float-adjusted market capitalization is calculated by multiplying the primary closing price by the number of investable shares. A detailed description of Russell's free-float-calculation algorithm is available in Appendix E, along with security-level examples.

Step 1: Remove unavailable shares

Generally, shares that are owned by strategic investors or that are restricted from trading are considered unavailable. These shares are subtracted from total shares outstanding to derive available shares, or free float, and are used to weight each security in the Russell Global Index.

Full details of the free float adjustments applied to the Russell Global Indexes can be found within the following guidelines:

Free_Float_Restrictions_new.pdf

Step 2: Apply foreign ownership and headroom adjustments

Foreign equity ownership limits are common, especially in emerging markets. These ownership limits are imposed either by local governments or by regulatory bureaus for political and economic reasons. Foreign investment is often restricted in business sectors considered by a country to be sensitive, such as automobiles or telecommunications. However, some of these heavily regulated sectors present substantial investment opportunities. FTSE Russell adjusts securities with foreign ownership limits (FOLs) and removes them from index weights as described below.

Firstly, 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 will be calculated as 20.41% i.e. (49% - 39%)/ 49%.

(i) For a non-constituent that is subject to foreign ownership limit, a minimum headroom of 20% must be available in order to be included in the index.

(ii) Where the headroom of an existing constituent falls below 10%, its investability weight will be reduced an absolute value of 5% at the next quarterly review.

For example, if Company A’s current investability weight is 49% (i.e. equal to the FOL), a 5% absolute reduction will result in an adjusted investability weight of 44.0% (49%-5%).

If Company B’s current investability weight is 30% (i.e. Free Float more restrictive than FOL), a 5% absolute reduction will result in an adjusted investability weight of 25% (30%-5%).

(iii) The investability weight will continue to be reduced at subsequent quarterly reviews in increments of 5% until the headroom level increases to 10% or above. As a result of these quarterly 5% downward adjustments, should the investability weight of the security fall to 5% under this process, the security will no longer be eligible to remain in the index.

(iv) The investability weight of an existing constituent which has been subject to headroom adjustments will have its most recent 5% adjustment reversed at a quarterly review subject to a minimum 20% headroom remaining post reversal (as illustrated in step 2 below).

For example, Company A has an FOL of 49%, foreign holdings of 32% and a current investability weight of 29%.

Step 1: The foreign headroom test is calculated as 35% (i.e. (49%-32%)/49%), highlighting a potential reversal.

Step 2: The post reversal foreign headroom test is calculated as 24% (i.e. (49%-37%)/49%). For the purpose of the test the 5% adjustment is deemed to have the effect of increasing the foreign holding to 37%.

In the above example, Company A qualifies for a headroom reversal. The investability weighting will be increased from 29% to 34% (i.e. 29% + 5%).

(v) In the event a security with a headroom adjustment increases its foreign ownership limit (FOL), the increase in the FOL will implemented in two, 50% tranches, subject to the headroom remaining at 20% or above.

For example, Company A had two headroom adjustments down from a FOL of 24% to a current investability weight of 14.00%

Company A – Initial FOL of 24%	
(Q1) First Headroom Adjustment	19.00% (5% reduction from 24%)
(Q2) Second Headroom Adjustment	14.00% (5% reduction from 19%)

The Company announces an increase to its FOL from 24% to 35%. The increase in the FOL will be implemented in the following steps:

Company A announces an FOL increase to 35% (11% increase)	
(Q1) Subject to 20% headroom availability, FOR is increased by 50% of the 11% increase	14.00% + 5.50% = 19.50%
(Q2) Subject to 20% headroom availability, FOR is increased by remaining 50% of the 11% increase	19.50% + 5.50% = 25.00%
(Q3) Subject to 20% headroom availability, reverse second headroom adjustment of 5.0%	25.00% + 5.00% = 30.00%
(Q4) Subject to 20% headroom availability, reverse first head room adjustment of 5.0%	30.00% + 5.00% = 35.00%

- First quarterly review following the announcement of an increase in FOL to 35%; 50% of the FOL increase (in this case 5.50%) will be implemented (subject to headroom remaining at 20% or above).
- Second quarterly review; the remaining 50% of the FOL increase will be implemented (subject to headroom remaining at 20% or above).
- Subsequent quarterly reviews; if the headroom availability remains at 20% or above, the previous two headroom adjustments of 5% each will be reversed on a quarterly basis.

(vi) In the event a security with a headroom adjustment decreases its foreign ownership limit (FOL), the decrease in the FOL will be implemented in full at the next quarterly review.

For example, Company A had a headroom adjustment down from a FOL of 24% to a current investability weight of 19.0%. The Company announces a decrease in the FOL to 21% (a decrease of 3% from the previous FOL of 24%).

FTSE Russell will decrease the existing adjusted investability weight by the 3% reduction in FOL at the next quarterly review, resulting in Company A having a new investability weighting of 16.0% (19% - 3%).

(vii) An existing constituent with a headroom adjustment, that passes the index eligibility screens (for example – liquidity, minimum size, investability weight) will not be eligible for index promotion from Small Cap to All-World (Large/Mid) until all headroom adjustments have been reversed. An index demotion from All-World (Large/Mid) to Small Cap will proceed for an existing constituent with a headroom adjustment.

(viii) Where foreign ownership restrictions are not universally applied to all foreign investors, but only impact a particular set of foreign investors, a 5% headroom adjustment will be applied where there is evidence of these restrictions being enforced. This headroom restriction will be reassessed on a quarterly basis and will not be lifted until either foreign ownership restrictions are removed or all foreign investors are treated equally.

(ix) For an existing index constituent, where foreign investors are prohibited from purchasing additional shares (for example, where Indian companies are placed on the Reserve Bank of India (RBI) Ban List), a 5% headroom adjustment will be applied at the next quarterly review and reassessed on a quarterly basis. Upon removal of restrictions prohibiting the purchase of shares, a headroom test will be conducted at the next quarterly review and headroom adjustments removed if the index constituent passes the headroom test.

(x) Where a non constituent passes the relevant headroom test, but individual foreign investors or institutions are only permitted to hold a maximum of 1% of the free float adjusted shares in issue, the security will not be eligible for index membership.

(xi) Headroom tests will be conducted in conjunction with the June reconstitution, and the March, September and December quarterly reviews.

(xii) Unless there is an increase in the foreign ownership limit, a headroom adjustment will not be reversed for a period of 6 months (i.e. if a headroom adjustment has been implemented at the June review then the earliest it can be reversed is at the following March review).

(xiii) If a constituent has been removed from the index as a result of its investability weight falling below 5% following a headroom adjustment, it will only be reconsidered for inclusion after a period of 12 months from its deletion. For the purposes of index eligibility it will be considered as a new issue.

(xiv) Securities are assigned their official foreign ownership limit, however if permission is required from a local regulator to purchase additional shares beyond a certain permission threshold, then the more restrictive permission level is assigned as the foreign ownership limit for example, a security may have a foreign ownership limit of 24%, however any purchase beyond 22% requires prior permission from the local regulatory authority. In this example the security would be assigned a foreign ownership limit of 22%.

Restricted and unrestricted share classes: In countries such as Thailand, companies issue restricted stocks (foreign shares) as well as unrestricted stocks (local shares). Unrestricted stocks can be owned by both domestic and foreign investors, while restricted stocks can be owned only by domestic investors. For index construction, FTSE Russell recognizes only unrestricted stocks as available shares. All restricted stocks are removed from index weights. **Foreign ownership limits by industry or sector:** In many countries, foreign ownership limits are imposed within particular industries. Though local foreign investment laws vary, energy, banking and real estate are among the most heavily regulated sectors across countries. For index construction, FTSE Russell calculates foreign ownership limits according to the local industry classification, which may differ from Russell Global Index industry sector classifications.

Segregated market via share classes: In China, the stock market is segregated via share classes for domestic and foreign investors. There are four share classes, of which only three can be owned by foreign investors, who have limited or no voting rights. For index construction, FTSE Russell recognizes investable shares as B shares, H shares and N shares. All A shares are subtracted from free-float calculation. The foreign ownership limit adjustment is applied after the unavailable shares adjustment described in Step 1 above. The detailed calculations for float weighting can be found in Appendix E.

Step 3: Reflect special depositary receipts

In countries such as Russia and Israel, sensitive sectors, such as telecommunications, oil, energy, media and real estate, are heavily government-regulated. As a result, the majority of shares in these sectors are restricted to domestic investors. However, to raise capital for local companies while still retaining domestic control, the countries allow a large portion of the restricted shares to be deposited in custodian banks and traded overseas in the form of ADRs and GDRs. Depositary receipts are the only realistic way for global investors to invest in the underlying companies. FTSE Russell recognizes the shares represented by ADRs/GDRs from some countries as investable and adds these underlying shares back to index weights after the foreign ownership limit adjustment has been applied.

Minimum available shares/float requirement: Companies with only a small portion of their shares available in the marketplace are not eligible for the Russell Global Index series. When unavailable shares are determined to be 94.5% or greater, this will be rounded to 95%. Companies with 5% or less will be removed from eligibility.

High shareholding concentration: Where a company is the subject of a high shareholding concentration warning notice by a regulatory authority to the effect that the company is in the hands of a limited number of shareholders, the following rules apply:

a) Companies that are the subject of a warning notice that has been issued within the two years prior to the free float cut-off date ahead of a forthcoming index review, and which has not subsequently been rescinded, are ineligible for index inclusion at that review. Existing index constituents that become subject to such a notice before the free float cut-off date will be deleted at the forthcoming review.

b) Companies that are the subject of a warning notice, which has not subsequently been rescinded, that was issued more than two years before the free float cut-off date ahead of a forthcoming index review, will only be considered for index eligibility at that review if FTSE Russell determine that the company has published sufficient information to demonstrate that the concerns that led to the issue of the warning notice no longer apply

c) Where a company has been the subject of a warning notice, but that notice has either subsequently been rescinded or FTSE Russell has determined that the conditions described in sub-clause (b) above have been met, the company will be treated as a new issue for the purposes of determining index eligibility.

Section 7

Determining Russell Stability Indexes®

The Russell Stability Indexes® are designed to be comprehensive representations of the investable global defensive and dynamic equity markets. The Russell Defensive Indexes® measure the performance of companies that have relatively stable business conditions which are less sensitive to economic cycles, credit cycles and market volatility based on their stability indicators. The Russell Dynamic Indexes® measure the performance of companies that have relatively less stable business conditions and are more sensitive to those market cycles.

FTSE Russell uses a “non-linear probability” method to assign stocks to the defensive and dynamic Russell Stability Indexes. The term “probability” is used to indicate the degree of certainty that a stock is defensive or dynamic, based on its relative stability characteristics. This method allows stocks to be represented as having both defensive and dynamic characteristics, while preserving the additive nature of the indexes.

Russell Defensive and Dynamic indexes

Defensive and Dynamic indexes are created by splitting a base Russell Index in half based on the combination of five stability indicators. For each base index (for U.S. companies the Russell 1000® and Russell 2000® indexes, and for global ex-U.S. companies the Russell Global ex-U.S. Large Cap and Russell Global ex-U.S. Small Cap indexes), there are five variables used to determine the probability of being defensive or dynamic: debt/equity, return on assets (ROA), earnings variability and total return volatility (52-week and 60-month frequencies).

The process for assigning defensive and dynamic weights is applied separately to the large cap and small cap stocks. Research indicates that on average, characteristics of small stocks differ from those of large stocks. Treating the large cap and small stocks separately prevents the possible distortion to relative stability that may occur if the global index is used as the base index.

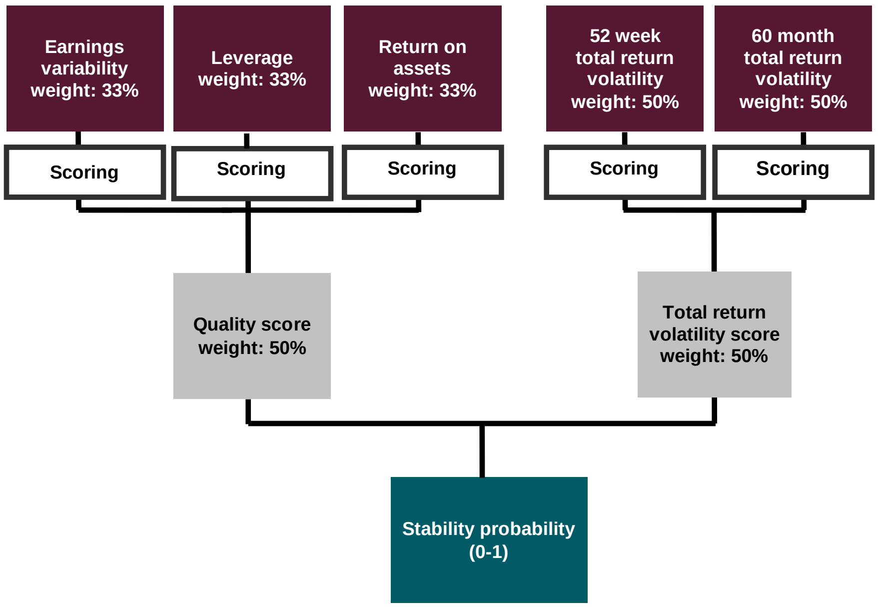
Among other risks, a company has risks related to balance sheet leverage, economic cycles and industry/product cycles, and to weaknesses in its business model. Debt/equity ratio is used as a proxy for risks related to balance sheet leverage. Earnings variability is used as a proxy for risks related to economic cycles and industry/product cycles. ROA is used as a proxy for risks related to the strength of a company's business model. The final component used as an indicator of a company's risk is the volatility of its stock's returns. Total return volatility reflects those aspects of a company's stability or risk not captured by the other three variables.

For each base index, stocks are ranked by each of the five variables. These rankings are converted to standardized units and combined to produce a composite defensive score (CDS). Stocks are then ranked by CDS, and the non-linear probability algorithm is applied to the CDS distribution to assign defensive and dynamic weights to each stock. In general, a stock with a lower CDS is considered dynamic, a stock with a higher CDS is considered defensive, and a stock with a CDS in the middle range is considered to have both defensive and dynamic characteristics and is weighted proportionately in the defensive and dynamic indexes.

FTSE Russell has assigned the label "Quality" to the score resulting from an equal weight of the three accounting-based indicators (earnings variability, debt/equity ratios, and ROA). Together, these three variables comprise 50% of the stability probability. The "Volatility" score makes up the other half of the stability probability, and is based on an equal weight of the stock's past year's weekly total return volatility and the past five years' monthly total return volatility. The volatility and quality variables are gathered annually, as at the end of May.

Stocks are always fully represented by the combination of their defensive and dynamic weights, e.g. a stock that is given a 20% weight in a Russell Global Defensive Index will have an 80% weight in the same corresponding Russell Global Dynamic Index. A company may be included in both the defensive and dynamic indexes based on its stability probability, and the number of shares for each index will be divided based on its stability probability. The total shares will be the same as in the base index.

Stability index assignment for non-pricing vehicle share classes will be based on that of the pricing vehicle and assigned consistently across all additional share classes.



Quality score (comprises 50% of the overall stability probability)

Three stability indicators comprise the quality score: debt/equity, pre-tax ROA, and earnings variability. Each indicator comprises one third of the quality score. Annual attribute data is used for global ex-U.S. companies to create the global-relative defensive and dynamic indexes. Quarterly attribute data is used to create the U.S. defensive and dynamic indexes.

Debt/equity: The debt/equity ratio for global ex-U.S. companies is based on most recent annual reports. The debt/equity ratio for U.S. companies is based on the most recent quarterly SEC filings. Negative numbers for a company will not be used to calculate debt/equity. Rather, negative debt/equity is excluded in the analysis and the indicator for this company will be set to zero/dynamic.

Pre-tax ROA: The pre-tax ROA for global ex-U.S. companies is based on the annual year-end pre-tax income divided by the average of the latest year end and the previous year-end assets (latest year-end assets + previous year-end assets) / 2). The pre-tax ROA for U.S. companies is based on the last 12 months' pre-tax income divided by the average of the assets for the previous year, or (current assets + same quarter one year prior) / 2).

Earnings variability: The earnings variability for global ex-U.S. companies is computed by dividing the standard deviation of the company's earnings-per-share (EPS) by the company's median earnings for the previous five years. This scaling normalizes the information to make each company directly comparable to other companies regardless of the relative level of EPS. If there are less than five annual EPS observations, earnings variability is considered NULL and standard deviation will not be calculated (see "Missing values" below).

Note: U.S. companies require 20 quarters of data for calculation of earnings variability, which is based on the standard error of the linear EPS trend regression. If there are less than 20 EPS observations (or standard error is equal to zero), earnings variability is considered NULL and standard error will not be calculated (see “Missing values” below). The rationale for using the standard error is that if there is a trend in the EPS over time, then the trend itself should not contribute to EPS variability. The standard error is then divided by the median EPS (of the 20 observations).

Negative (or zero) EPS numbers are included in the standard deviation or standard error calculation, however, a negative or zero median EPS value will not be used to calculate earnings variability. Rather, when the median EPS is negative or zero, earnings variability is excluded from the analysis and set to zero/dynamic. Assigning this value is equivalent to characterizing the company as having very high earnings variability.

Volatility score (comprises 50% of the overall stability probability)

Total return volatility (standard deviation) is measured over two horizons, over the previous year and over the previous five years. Each indicator represents one half of the volatility score.

52-week price volatility (1-year): The one-year volatility is the standard deviation based on the 52 weekly returns that end on the last Friday on or before May 31. A stock must have 52 weeks’ of data points in order to populate, otherwise, the indicator will be set to NULL (see “Missing values” below).

60-month price volatility (5-year): Trailing five-year volatility is the standard deviation based on monthly returns. Thus, for a score based on May 31, 2016 data, the five-year volatility is based on the 60 monthly returns for the period that starts on May 31, 2011 and ends on May 31, 2016. A stock must have 60 months of data points in order to populate, otherwise, the indicator will be set to NULL (see “Missing values” below).

Description of non-linear probability algorithm

Stock A is a security with 20% of its available shares assigned to the defensive index and the remaining 80% assigned to the dynamic index. The defensive and dynamic probabilities will always sum to 100%. Hence, the sum of a stock’s market capitalization in the defensive and dynamic indexes will always equal its market capitalization in the base index, e.g. Russell Global Large Cap Index.

The quartile breaks are calculated such that approximately 25% of the available market capitalization lies in each quartile. Stocks at the median are divided 50% in each index. Stocks below the first quartile are 100% in the defensive index. Stocks above the third quartile are 100% in the value dynamic index. Stocks falling between the first- and third-quartile breaks are in both indexes to varying degrees; depending on how far they are above or below the median and on how close they are to the first or third quartile breaks.

5% rule

Roughly 70% of the available market capitalization is classified as all-defensive or all-dynamic. The remaining 30% of stocks have some portion of their market value in either the defensive or the dynamic index, depending on their relative distance from the median value score. The observer may note that since the percentage of capitalization between the first quartile and the third quartile is 50%, we would expect that 50% of the capitalization would be found in both indexes. What happened to the 20% (i.e., 50% to 30%)? The source for the disappearance of the 20% is FTSE Russell's decision to institute a small-position cutoff rule. If a stock's weight is more than 95% in one index, we increase its weight to 100% in that index. This rule eliminates many small types of weighting and makes passive management easier.

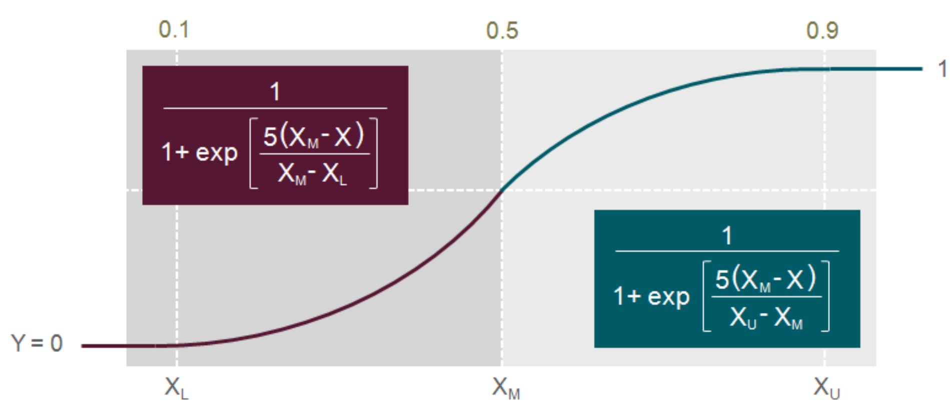
Market capitalization of defensive/dynamic indexes

The market capitalization of the defensive and dynamic indexes may not each equal 50% of their base index. At first glance, this seems counterintuitive, since the methodology uses capitalization-weighted medians and quartiles, which in turn implies that 50% of the capitalization is above and 50% is below the median. However, asymmetry in the capitalization distributions within the second and third quartiles results in a skewed distribution of CDS. When CDS is normally distributed, 50% will be in each index.

Missing values

If a stability variable is not available or set to NULL, the company receives a stability score of 0.25 for that indicator. Since zero is the worst possible score and 1 is the best, this conservative assumption mandates that missing data will result in a lower than average stability probability.

Russell non-linear probability algorithm



XL – Lower Breakpoint XM – Median XU – Upper Breakpoint

Section 8

Index maintenance

The Russell Global Index and its sub-indexes are proactively maintained, and they maintained to reflect daily changes in the global equities market. The Russell Global indexes are calculated Monday through Friday including all holidays. In the event of a scheduled market closure during a FTSE Russell scheduled index event (i.e. quarter-end share change, IPO addition or reconstitution), FTSE Russell will institute the index changes on the prior open trading day. For example, when markets that are closed on Friday and a FTSE Russell event is scheduled for Friday, FTSE Russell will make the scheduled index changes for that market on Thursday.

Daily changes

The Russell Global Index and its sub-indexes are regularly maintained to reflect the impact of corporate actions on the underlying index constituents. These adjustments include:

- Daily additions of sizable spin-offs
- Daily adjustment of stock splits
- Daily dividends and stock market delistings
- Daily reflection of mergers and acquisitions
- Daily reflection of primary and secondary offerings

More detailed information on how company corporate actions are applied is provided in the appendixes

Changes to shares outstanding and free float

To maintain representativeness and maximize the available investment opportunity for index managers, the Russell Global Indexes will be reviewed quarterly for updates to shares outstanding and to free floats used within the index calculation. The changes will be implemented quarterly, on the third Friday of the month (after the close). The June reconstitution will continue to be implemented on the last Friday of June (unless the last Friday occurs on the 29th or 30th, when reconstitution will occur on the Friday prior).

Shares outstanding and free floats will be updated in March, June*, September, and December, and will be updated to reflect the following:

- Changes greater than 1% for cumulative shares in issue changes
- Changes greater than 3% for cumulative free float changes**

**Where a company's actual free float moves to above 99%, it will not be subject to the 3 percentage points threshold and will be rounded up to 100%.

A constituent with a free float of 15% or below will not be subject to the 3 percentage points threshold and will instead be updated if the change is greater than 1%.

The March, September, and December updates will be triggered by vendor changes and confirmed appropriately.

*Every June the shares and free float updates will be implemented regardless of size (i.e. the buffers detailed above will not be applied). The June updates will be implemented using data sourced primarily from company filings for all constituents, where appropriate.

Outside of the quarterly update cycle, shares and free float will be updated with at least two days' notice if occasioned by primary or secondary offerings IF:

- There is a USD 1bn investable market cap change related to a primary/secondary offering;

OR

- There is a resultant 5% change in index shares related to a primary or secondary offerings AND a USD 250m investable market cap change.

These changes will be implemented after the close on the day that the subscription period closes, assuming two days notice can be provided; if two days' notice cannot be provided prior to the end of the subscription period, the change will still proceed with two days' notice and will be implemented at the earliest opportunity.

If discovery of the event occurs more than two days after the close of the subscription period, the changes will be deferred until the quarterly review cycle.

Quarterly initial public offerings (IPOs)

FTSE Russell adds IPOs each quarter in order to quickly reflect new additions to the global investing opportunity set. Because FTSE Russell's approach to index construction is company-based and captures 98% of the investment opportunity set, IPOs are the only stocks that need to be added between reconstitution periods. Companies filing an initial public offering registration statement (or local equivalent), regardless of previous trading activity are reviewed for eligibility.

In order to be added during a quarter outside of reconstitution, IPOs must meet all eligibility requirements for index construction. Additionally, an IPO must meet the following criteria on the final trading day of the month prior to quarter end: 1) it is traded and priced; 2) it ranks larger in total market capitalization than the market-adjusted smallest company in the Russell Global Index as of the latest June reconstitution; and 3) it has met the most recent liquidity threshold for at least 10 business days. All IPOs entering the index outside of annual reconstitution are assigned as 100% dynamic within the Russell Stability Indexes. IPOs entering the index during annual reconstitution are reviewed for Russell Stability Index assignment, and probabilities are calculated using the methodology described in Section 7.

The schedule for IPO reviews outside reconstitution is established below:

Quarterly additions	Third quarter additions	Fourth quarter additions	First quarter additions
Initial Offering Period*†	IPOs that initially price/trade between May 16 and August 15	IPOs that initially price/trade between August 16 and November 15	IPOs that initially price/trade between November 16 and February 15
Rank Date	Last business day in August	Last business day in November	Last business day in February
Announce Date	September 15	Monday prior to add date	March 15
Effective Date**	Last business day in September	Third Friday in December	Last business day in March

* If the 15th of the month is a holiday or weekend, the date shown in the table is automatically adjusted to the previous business day.
**After the close.
**Once IPO additions have been announced, an IPO may be added to the index prior to the previously announced schedule, if a corporate action has deemed this to be appropriate and notice can be provided (e.g. an index member automatically receives shares via a stock distribution into a projected IPO add).† Ending date of the initial offering period is different from the rank date, due to the minimal 10-day liquidity requirement.

Annual reconstitution

Annual reconstitution is the process through which the Russell Global Index series rebalanced and securities are moved among size-based and emerging/developed markets categories. Reconstitution is a vital part of benchmark maintenance, particularly within the sub-indexes that reflect large cap and small cap stocks. Companies may become bigger or smaller or may periodically undergo changes in their characteristics, and foreign investment opportunities may change over time. For a benchmark to accurately represent a particular market segment and the available shares of each company, rules for objective and regular maintenance are necessary.

On the rank day in May each year (timetable is announced each spring), all globally eligible securities are ranked by total market capitalization. All companies whose stocks are listed on eligible stock exchanges in eligible countries are considered for inclusion in the Russell Global Index. The largest 98% of securities in the U.S. and in the rest of the world become the Russell

Global Index. All sub-indexes are determined from that set of securities. See Sections 2 through 5 for more detail.

Reconstitution occurs on the last Friday in June. However, at times this date is too proximal to exchange closures and abbreviated exchange trading schedules when market liquidity is exceptionally low. In order to ensure proper liquidity in the markets, when the last Friday in June falls on the 29th or 30th, reconstitution will occur on the preceding Friday. A full calendar for reconstitution is made available each spring.

Section 9

Corporate action driven changes

Timing and treatment of corporate actions

FTSE Russell applies corporate actions to the Russell Global Index on a daily basis, both to reflect the evolution of securities and to assure that the index remains highly representative of the global equity market. A company's index membership and its weight in the index can be impacted by these corporate actions. FTSE Russell uses a variety of reliable public sources to determine when an action is final, including a company's press releases and regulatory filings; local exchange notifications; and official updates from other data providers that FTSE Russell deems trustworthy. Prior to the completion of a corporate action, FTSE Russell estimates the effective date on the basis of the same above sources. As new information becomes available, FTSE Russell may revise the anticipated effective date and the terms of the corporate action, before ultimately confirming its status, before the FTSE Russell effective date.

Depending upon the time an action is determined to be final, FTSE Russell either (1) applies the action before the open on the ex-date or (2) applies the action providing appropriate notice[3], referred to as a "delayed action" (see specific action types for details on timing and procedure). The timing of when corporate actions are applied is critical for accurate market representation, and it impacts tracking for passive managers. FTSE Russell believes this methodology strikes the best balance between the two. The impact of the action and the effective date will be communicated to clients on a regular schedule, via the daily cumulative change files and the global calendar.

For the purposes of index calculation, FTSE Russell generally applies the most recently available market prices to the index for corporate action adjustments. FTSE Russell will only use exchange provided estimates and price adjustments

[3] When referred, two full days' notice can be regarded as: Notification coming from Russell through the daily cumulative change files no later than the last change file three business days before the Russell effective date. For example; if an action was to be applied by Russell on a Monday, Russell would give notification of the change no later than the last daily cumulative change file on the previous Wednesday.

in the absence of market prices and if the exchange provided estimate is deemed to be appropriate.

If FTSE Russell has confirmed the completion of a corporate action, scheduled to become effective subsequent to a rebalance; the event may be implemented in conjunction with the rebalance to limit turnover, providing appropriate notice can be given. Example: Company ABC is scheduled to be added or continue as an existing member at rebalance. A tender offer is confirmed to be completed two days following the rebalance effective date. FTSE Russell will provide appropriate notice of this index change per our normal procedures and will remove company ABC at the rebalance effective date.

"No replacement" rule

Securities that leave the index for any reason (e.g., mergers, acquisitions or other similar corporate activity) are not replaced. Thus, the number of securities in the indexes over the year will fluctuate according to corporate activity.

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

Corporate_Actions_and_Events_Guide.pdf

Extraordinary events

FTSE Russell defines the following as extraordinary events due to their rarity and their potential to significantly impact the capital markets. FTSE Russell publicly announces specific changes to the indexes if any such events occur.

Country unification or dissolution: If two countries decide to unite as one, such as the unification of the former German Democratic Republic and the Federal Republic of Germany, FTSE Russell will combine securities previously belonging to these two country indexes into one new country index. The new currency quotation, if any, will be implemented for index calculation.

Conversely, if one country splits into two or more new countries, the Russell Global Index will continue to hold all securities from the previous country indexes. FTSE Russell will evaluate the newly formed countries for their stability and determine future index changes accordingly.

Change of foreign ownership limit: Given the increasing globalization trend in equities, it is possible that local governments may remove or lower their foreign ownership caps for certain sensitive industry sectors. If the change in a foreign ownership limit is substantial (usually more than 10%), FTSE Russell will adjust the foreign ownership percentage in the index at the end of the calendar quarter, along with any new IPO reviews.

Closure of exchanges: If a stock exchange is temporarily closed on a regular business day due to a special event or an emergency, the prices for all stocks that are traded only on that particular exchange will be frozen at the last available closing price until the exchange reopens.

If the closure of a stock exchange is expected to be long term, due to civil war or other rare political reasons, because of the expected difficulty of asset repatriation, FTSE Russell will work with clients invested in the affected securities to determine and publish an adequate index strategy to reflect the market condition. New currency quotations, if any, will be implemented for index calculation.

You can view the Index Policy for Security Suspensions and Market Closures by clicking on the following link:

http://www.ftse.com/Index_Policy_for_Trading_Halts_and_Market_Closures.pdf

Significant currency devaluation: If the currency of a country devalues significantly over a short period of time, it could create serious liquidity problems for investors who buy or sell stocks on the local market. It could also cause complications with government currency controls and abnormal bid-ask spreads, or even potentially trigger a financial crisis. Given this situation, ADR trading prices, if available, will be used to derive the underlying FX exchange rate and will be applied for index calculations.

Financial crisis: FTSE Russell attempts to exclude countries with considerable financial risk from the Russell Global Index by using the country risk scores published by The Economist, but crises can erupt at any time. During a financial crisis, investors generally lose confidence in local securities and may attempt to sell off securities from the local market. Due to the expected difficulty of asset repatriation in such conditions, FTSE Russell will work with clients invested in the affected securities to determine and publish an adequate index strategy to reflect the market condition. However, FTSE Russell reserves the right to remove the whole country from the Russell Global Index and will also consider using ADRs or other non-primary issues as proxies during the crisis on a case-by-case basis.

Section 10

Russell Frontier® Index

Determining frontier countries

The first step in the construction of Russell Frontier Index is to identify which countries qualify for frontier membership. Frontier markets are countries with investable equity markets that are considered highly risky, and difficult and expensive to trade in. Countries with smaller, less liquid markets are also considered frontier markets. However, as the global economy grows in complexity, investors are seeking more sophisticated tools for diversifying portfolios. Investing in frontier markets offers investors earning potential with low correlation to other markets in exchange for higher risk.

FTSE Russell defines frontier countries as those that do not meet the established criteria for membership in Russell's Emerging Markets Indexes. Countries that are not considered emerging markets are eligible for frontier index membership as long as accessible market data are available. In an effort to control turnover, countries must meet the higher or lower requirements for two consecutive years before moving between frontier and emerging markets.

A country will be considered a frontier market if it is classified as such after Russell has reviewed economic criteria (country risk) and market criteria (trading risk) as described below.

Country risk

FTSE Russell takes economic criteria into consideration when categorizing countries into either emerging markets or frontier markets. This provides a measurement of the macro-economy and its level of development. It also provides a measurement of political, sovereign and currency risk. The economic criteria taken into consideration include relative income as measured by the World Bank and country risk score as measured by the Economist Intelligence Unit.

Trading risks / challenges

To designate a country as developed, emerging, or frontier, FTSE Russell also reviews market criteria (trading risks). For the distinction between emerging and frontier, the information is more obscure than the distinction between developed and emerging. The below trading risks are reviewed to determine frontier market status:

Criteria	Frontier
Regulatory Infrastructure	Incomplete
Trading and Custody accounts	No Segregation
Foreign Ownership Limits	Broader restrictions
Trade Confidentiality	No
Settlement Periods	Longer than t+3
Market Liquidity	Lower than Emerging
Pre-Deposit of shares required	Yes

Sources: Custodian data and FactSet.

In addition, countries listed on the U.S. Department of Treasury (or OFAC) sanctions lists where investment activities are blocked are ineligible. The following countries are included on the prohibited list: Cuba, Iran, North Korea and Syria.

A country which has been determined eligible to transition from Frontier to Emerging will need to sustain its eligibility for a three year period before graduating to Emerging– as described in the “Moving between developed and emerging markets” of the Russell Global Index methodology.

Frontier securities types

FTSE Russell’s second step in determining Russell Frontier Index membership is to capture and evaluate all exchange-traded securities in the frontier marketplace and build the eligible stock universe. Equity and equity-like securities are included in the frontier universe. Equity-like securities are those that represent ownership of a company without an obligation for the company to repay invested capital in the form of coupon payments or lump-sum payments throughout the life of the investment. See Section 3, “Defining the total stock universe” for a list of included and excluded securities types.

Universe minimum size requirement

Consistent with the Russell Global Index, any security under $1M market capitalization is not included in the eligible universe.

Universe liquidity screen

The third step in determining the membership of the Russell Frontier Index is to further refine the universe of frontier stocks to ensure investability. To be eligible for membership in the Russell Frontier Index, stocks must meet minimum liquidity requirements. The average daily dollar trading volume (ADDTV) liquidity threshold is determined by reducing the ADDTV liquidity threshold established for the Russell Global Index by half. The active traded ratio (ATR) threshold for the Russell Frontier Index is 50%. See Section 3, “Defining the total stock universe,” for the formulas for calculating ADDTV and ATR.

Capturing 98% of the eligible frontier universe

Following completion of the country, security and liquidity screens, all eligible securities within the frontier countries are ranked in descending order by total market capitalization. 98% of the cumulative market capitalization becomes the Russell Frontier Index. Unlike the Russell Global Index, there is no rule for critical mass in the Russell Frontier Index. Regardless of the number of securities within a country, the country will be eligible. In frontier markets, it is not unusual for investors to enter a market to gain access to one stock.

Ineligible exchanges

For some frontier countries, it is difficult or impossible to receive daily pricing from the exchanges for the calculation of the index. In these circumstances, if a company assigned to this type of country trades on another exchange with available daily pricing, the company remains eligible and performance is calculated using data from the accessible exchange. If no other exchange is available, the security becomes ineligible. The following countries’ local exchanges are ineligible due to the lack of availability of pricing data: Papua New Guinea, Senegal, Togo, Gabon, Cambodia and Kyrgyzstan.

Ineligible exchange segments

Securities which 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 during a quarterly screening which will occur in March, June, September, and December. 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	Designated Security, Controlled Security and Under special monitoring

Float adjustments

Just as with all Russell indexes, securities within the Russell Frontier Index are adjusted for float. See Section 6, "Float-adjusted weighting," for details. In addition, in the Russell Frontier Index, a float-adjusted market capitalization greater than 10% of the smallest security in the index is required. For example, if the smallest security in the index, by total market cap, is $60M, then each security must have at least $6M in available float.

Country weights

Frontier countries vary dramatically in size. This could cause some countries to be heavily weighted in the Russell Frontier Index. Frontier managers, however, are unlikely to take a large bet in a single country due to country risks in these markets. Therefore, to align more closely with manager behavior, FTSE Russell caps each country's weight at a maximum weight of 15% of the Russell Frontier Index at each reconstitution.

Frontier large cap and small cap index construction

At reconstitution, all companies in the Russell Frontier Index are ranked by their total market capitalization in descending order, and the cumulative total market capitalization percentile for each company is calculated.

To determine the Russell Frontier Large Cap and Russell Frontier Small Cap indexes, all companies that rank below the 90th percentile are classified as small cap, and all companies that rank above the 85th percentile are classified as large cap. Current Russell Frontier Index members that rank between the 85th and 90th percentiles within retain their existing classification. For example, if a member of the existing Russell Frontier Small Cap Index is within the 85th-90th percentile band at reconstitution, it remains classified as small cap. New companies being added to the Russell Frontier Index, however, are classified relative to the midpoint of the range. In other words, new companies ranking above 87.5% are classified as large cap, and new companies ranking below 87.5% are classified as small cap.

Index name	Upper range (percentiles)	Lower range (percentiles)
Russell Frontier Large Cap	NA	85%–90%
Russell Frontier Small Cap	85%–90%	NA

Percentiles are based on descending total market capitalization.

Countries / exchanges

Country assignment for Frontier is consistent with the way companies are assigned to countries in the Russell Global Index. Therefore, it is possible that stocks can be assigned to one country but trade elsewhere.

Section 11

Russell-IdealRatings Islamic Global Index

Securities included in the Russell-IdealRatings Islamic Global Index are screened from the Russell Global Index universe, which is divisible by region, country, market (developed and emerging), capitalization size, sector, and industry to provide fully modular benchmarks representing the diversified opportunity set within each segment. The Russell-IdealRatings Islamic Global Index contains around 3,600 securities and across 44 countries.

Additionally, a Global + GCC index is available which includes all of the countries and constituents of the global (developed + emerging) version while also providing coverage of securities assigned to one of the four GCC (Gulf Cooperation Council) countries included in the Russell Frontier Index: Bahrain, Oman, Qatar and Kuwait.

Purpose of the Russell-IdealRatings Islamic Index

- To offer investors an accurate and complete Shariah-compliant global equity market performance benchmark
- To serve as a Shariah-compliant equity market proxy for asset allocation analysis and decisions
- To provide a Shariah-compliant replicable vehicle for passive investment portfolios
- To provide comprehensive Shariah-compliant retirement plan or investment portfolio benchmarks with fully modular segments, resulting in no gaps or overlaps in equity allocation/analysis
- To provide performance and characteristics of the Shariah-compliant total equity market, as well as individual segments, to be used in academic research and financial media reporting

Available indexes

The Russell-IdealRatings Global Islamic Index is modular, divisible into components by capitalization size, country, region, sector, and industry. Some of the broadest segments of the Russell-IdealRatings Islamic Index include:

Available indexes	
Russell-IdealRatings Islamic Global	Russell-IdealRatings Islamic ex-U.S.
Russell-IdealRatings Islamic Developed Markets	Russell-IdealRatings Islamic Developed Markets ex-U.S.
Russell-IdealRatings Islamic Emerging Markets	Russell-IdealRatings Islamic Europe
Russell-IdealRatings Islamic Asia Pacific	Russell-IdealRatings Islamic Asia Pacific ex-Japan
Russell-IdealRatings Islamic Global + GCC	

Selection of Shariah compliant securities for index membership

The Russell-IdealRatings Islamic Index is based on the Russell Global Index. Specific financials-based and sector filters are applied to the Russell Global Index to create the Russell-IdealRatings Islamic Index.

Financial-based screens

1. The Russell-IdealRatings Islamic Index does not include a company as an index member where the sum of cash, deposits and receivables divided by the immediately preceding 12-month average total market capitalization, exceeds 70%
2. The Russell-IdealRatings Islamic Index does not include a company as an index member where interest-bearing debt divided by the immediately preceding 12-month average total market capitalization exceeds 33%
3. The Russell-IdealRatings Islamic Index does not include a company as an index member where the sum of cash, deposits and interest bearing securities divided by the immediately preceding 12-month average total market capitalization exceeds 33%

For companies which do not have a long enough price history (e.g., recent IPOs), the average total market capitalization is calculated over the number of days/months the company has been trading, or for which a daily closing price for the company has been available.

Sector-based, prohibited income screens

The Russell-IdealRatings Islamic Index does not include a company as an index member where the sum of interest earned and revenue from prohibited activities divided by total income (defined as total revenue or sales), exceeds 5%. A list of prohibited activities is provided below.

1. Financial institutions such as traditional banks and insurance companies that deal with interest or financial instruments that violate Shariah rules
2. Production and distribution of alcohol
3. Production and distribution of tobacco
4. Production and distribution of pork and its derivatives
5. Management of casinos and gambling halls and production of games such as slot machines
6. Houses of prostitution or vice
7. Adult entertainment such as pornographic films and services
8. Production and distribution of magazines, advertising, music, satellite channels, and cinemas that violate Shariah rules, including violent or mature games
9. Trading of gold and silver as cash on deferred basis
10. Manufacturing of weapons
11. Stem cell, human embryo, and genetic cloning (research firms, therapy clinics, etc.)

Additional screens

As part of the Shariah compliant screening process, preferred shares are excluded from membership due to their tendency toward predetermined rates of return, cumulative guaranteed dividends, and/or the rights to prioritized capital repayment.

Maintenance

The Russell-IdealRatings Islamic Index is maintained as follows:

- The Russell-IdealRatings Islamic Index is based on the Russell Global Index. All maintenance and operational processes that support the Russell Global Index are extended to the Russell-IdealRatings Islamic Index where applicable
- The Russell Global Index is screened quarterly for Shariah compliance. These screened securities become the Russell-IdealRatings Islamic Index as of the first business day of each new quarter with the exception of the second quarter screen, which occurs during the annual reconstitution process in June, and the fourth quarter screen, which occurs according to the same schedule as the parent index IPO additions in December.
- Corporate action items (including acquisitions and mergers, share changes, stock splits, stock dividends, and stock price adjustments due to restructurings or spin-offs) that may impact the Shariah compatibility of the index constituents are reflected in the index membership daily. If an index member is no longer permissible because of a Shariah compliance screen, it is removed from the index within two business days after notification has been provided to index clients. Client notifications are initiated as soon as it is discovered that a security is no longer compliant
- IPO candidates for Russell Global Index membership are screened quarterly for compliance before they are eligible for inclusion in the

Russell-IdealRatings Islamic Index. If relevant financial data is not available for the IPO, it is not included in the Russell-IdealRatings Islamic Index

- The financial ratios calculated in the filtering process are based on the most recent available data, within the preceding two (2) calendar quarters, from an independent, recognized financial data vendor. Exceptions to this requirement are presented to the Russell-IdealRatings Islamic Board for consideration and approval (e.g., if an emerging market stock only publishes annual financial statement

Compliance monitoring

A list of permissible and non-permissible index members, their underlying sector classifications and financial ratios, plus additions to and deletions from the index are provided to the Russell-IdealRatings Islamic Board on a quarterly basis.

If it is discovered that a non-compliant security has been included as an index member in error, the security is removed from the index within two business days after notification has been given to index clients. Client notifications are initiated as soon as the non-compliant index member is discovered. Additionally, the Shariah Board will be notified of the error, and they will be alerted if any dividend income was recorded for purification during the period in which the non-compliant security was in the index.

Purification

The total return for the Russell-IdealRatings Islamic Index reflects dividend purification in accordance with Shariah law. Any realized income from interest-bearing or non-Islamic revenue for an index member is purified daily.

Eligibility and calculation of the purification amount

Income from the following sources is eligible for purification:

- Any realized income from interest-bearing or non-Islamic revenue for the respective index members
- Any income from other sources for index members, with the specific review and approval of the Shariah Board

Purification process

The purification process is as follows:

1. Determine the amount of impure income for an index member by dividing the amount of impure income of the security by the total number of float adjusted shares to obtain the stock share of the impure income
2. Multiply the proceeds by the number of float adjusted shares of the index member for the purpose of calculating total impure income
3. Repeat calculation for each index member
4. Sum the amount of the impure income for all index members

5. Daily calculate net and total index values and returns are purify daily using the purification ratio

The financial data used in the purification process, including a company's net revenue, net interest income, and revenue from prohibited activities, are primarily based on the most recent available data, within the preceding two (2) calendar quarters, from an independent, recognized financial data vendor. If the financial data are unavailable, non-financial data sources including analyst research reports are utilized. Estimated proportions, based on industry or market norms, are used where financial data are not readily available.

Section 12

Russell Equal Weight Indexes

Russell research has shown that the process of equally weighting each sector within an underlying index, and then equally weighting each of the constituents within each sector, provides greater diversification benefits than only equally weighting the constituents of an underlying index.

Available indexes

The following indexes are available for the Russell Equal Weight Indexes:

Russell 1000® Equal Weight Index
Russell 2000® Equal Weight Index
Russell Midcap® Equal Weight Index
Russell Top 200® Equal Weight Index

Russell 1000® Equal Weight Consumer Discretionary Index
Russell 1000® Equal Weight Consumer Staples Index
Russell 1000® Equal Weight Energy Index
Russell 1000® Equal Weight Financial Services Index
Russell 1000® Equal Weight Health Care Index
Russell 1000® Equal Weight Materials & Processing Index
Russell 1000® Equal Weight Producer Durables Index
Russell 1000® Equal Weight Technology Index
Russell 1000® Equal Weight Utilities Index

Each quarter, each sector[4] in the underlying index is allocated an equal weight (i.e., 1/N, where N is the number of sectors in the Market Cap Index). Next, each constituent within each sector is assigned an equal weight within that sector (i.e., 1/N, where N is the number of constituents within the sector.)

[4] The sector scheme used in the construction of the Russell Equal Weight Indexes is the Russell Global Sectors (RGS) classification system, which has nine sectors: Consumer Discretionary, Consumer Staples, Energy, Financial Services, Health Care, Materials & Processing, Producer Durables, Technology and Utilities

A capacity screen is then applied to the securities in the Russell Equal Weight Indexes. Capacity is defined as the total amount that can theoretically be invested in a company. For a security that has 100% of its shares freely available, the maximum capacity is defined as the total market capitalization of that security. To be eligible for membership, the share position of a potential constituent cannot exceed 5% of the float-adjusted shares of a company when a notional value of $5 billion is assumed to be invested in the portfolio. (An example is provided in the appendix.)[5]

If the parent index includes multiple share classes for a given company, only the primary share class will be included in the index (i.e. each company will have only one share class represented in the Russell Equal Weight Indexes).

Quarterly index re-weighting and annual reconstitution

The Russell Equal Weight Indexes are re-weighted at the close of the last business day in March and September. June's re-weighting is completed at the same time as the annual reconstitution of the parent indexes and December's re-weighting is completed at the close of the third Friday of the month to coincide with the IPO additions to the parent indexes.

Corporate action–driven changes

The Russell Equal Weight Indexes are proactively maintained and reflect daily changes in the global equity markets. Full details of changes to constituent companies due to corporate actions and events can be accessed in the Corporate Actions and Events Guide for Non Market Capitalisation Weighted Indexes using the following link:

Corporate_Actions_and_Events_Guide_Non_Market_Cap_Weighted_Indices.pdf

Security classification changes: If a security's sector classification changes following a corporate action event, (e.g., spin-off or reverse merger), it will be assigned to the appropriate sector subsequent to the implementation of the corporate action with appropriate notice. Consequently, the security will match its classification within the parent Russell Global Index. This also applies to regular, non-corporate action related sector re-classifications.

How the capacity screen is applied

To understand the effects of the capacity screen, take a hypothetical nine-sector index with 30 constituent securities. The sector weight for each constituent is defined as 1/N, where N is the number of sectors in the index – in other words, constituent weight is the sector weight divided by the number of constituents in the sector. In the example provided, the constituent weight of Company B is equal to 11.1% divided by 2.

A notional value of $5 billion is assumed to be invested in the portfolio.

[5] After securities' weights are reset, they may change as often as daily as stock prices fluctuate.

The price of each security is then taken at the quarterly re-weighting date and its notional share position is calculated by dividing the portfolio value by the price of the security.

If the ratio of the notional share amount to the float adjusted shares of the security is greater than 5%, the security is removed from the equal weight index.

In the example provided, the highlighted companies (Company D, Company E, Company U, Company AD) are removed from the hypothetical equal weight index.

Company	Sector	Weight for each sector	# of constituents in sector	Constituent weight	Portfolio value*	Price	Shares held in portfolio	Float adjusted shares	% of float adjusted shares
Company A	Consumer Discretionary	11.1%	2	5.56%	277,777,778	23	12,077,295	120,772,946,860	0.0%
Company B	Consumer Discretionary	11.1%	2	5.56%	277,777,778	15	18,518,519	1,851,851,852	1.0%
Company C	Consumer Staples	11.1%	4	2.78%	138,888,889	48	2,893,519	72,337,963	4.0%
Company D	Consumer Staples	11.1%	4	2.78%	138,888,889	55	2,525,253	36,075,036	7.0%
Company E	Consumer Staples	11.1%	4	2.78%	138,888,889	19	7,309,942	73,099,415	10.0%
Company F	Consumer Staples	11.1%	4	2.78%	138,888,889	33	4,208,754	1,402,918,070	0.3%
Company G	Energy	11.1%	3	3.70%	185,185,185	67	2,763,958	460,659,665	0.6%
Company H	Energy	11.1%	3	3.70%	185,185,185	42	4,409,171	1,469,723,692	0.3%
Company I	Energy	11.1%	3	3.70%	185,185,185	89	2,080,732	456,300,969	0.5%
Company J	Financial Services	11.1%	5	2.22%	111,111,111	12	9,259,259	1,381,978,994	0.7%
Company K	Financial Services	11.1%	5	2.22%	111,111,111	27	4,115,226	4,623,849,817	0.1%
Company L	Financial Services	11.1%	5	2.22%	111,111,111	1230	90,334	1,290,489,095	0.0%
Company M	Financial Services	11.1%	5	2.22%	111,111,111	8	13,888,889	462,962,963	3.0%
Company N	Financial Services	11.1%	5	2.22%	111,111,111	215	516,796	527,342,720	0.1%
Company O	Health Care	11.1%	4	2.78%	138,888,889	43	3,229,974	4,969,191,016	0.1%
Company P	Health Care	11.1%	4	2.78%	138,888,889	27	5,144,033	907,236,847	0.6%
Company Q	Health Care	11.1%	4	2.78%	138,888,889	14	9,920,635	496,031,746	2.0%
Company R	Health Care	11.1%	4	2.78%	138,888,889	73	1,902,588	350,384,442	0.5%
Company S	Producer Durables	11.1%	2	5.56%	277,777,778	26	10,683,761	267,094,017	4.0%
Company T	Producer Durables	11.1%	2	5.56%	277,777,778	45	6,172,840	68,587,105,624	0.0%
Company U	Technology	11.1%	6	1.85%	92,592,593	120	771,605	13,536,929	5.7%
Company V	Technology	11.1%	6	1.85%	92,592,593	45	2,057,613	2,611,184,224	0.1%
Company W	Technology	11.1%	6	1.85%	92,592,593	342	270,739	791,633,260	0.0%
Company X	Technology	11.1%	6	1.85%	92,592,593	38	2,436,647	5,378,912,083	0.0%
Company Y	Technology	11.1%	6	1.85%	92,592,593	67	1,381,979	6,008,604,321	0.0%
Company Z	Technology	11.1%	6	1.85%	92,592,593	15	6,172,840	791,389,680	0.8%
Company AA	Utilities	11.1%	2	5.56%	277,777,778	29	9,578,544	2,128,565,347	0.5%
Company AB	Utilities	11.1%	2	5.56%	277,777,778	8	34,722,222	6,123,848,716	0.6%
Company AC	Materials & Processing	11.1%	2	5.56%	277,777,778	4	69,444,444	30,062,530,063	0.2%

Company	Sector	Weight for each sector	# of constituents in sector	Constituent weight	Portfolio value*	Price	Shares held in portfolio	Float adjusted shares	% of float adjusted shares
Company AD	Materials & Processing	11.1%	2	5.56%	277,777,778	58	4,789,272	53,214,134	9.0%

* This hypothetical example is for illustration only and is not intended to reflect an actual value.

Section 13

Russell Australia High Dividend Index

Definition

The Russell Australia High Dividend Index (“RAHDI”) is an equity index comprised of blue chip Australian companies that have historically paid above average dividends, including Franking Credits. The Index includes large cap companies and is built using an objective, transparent and market-driven construction.

Eligible securities

Russell Australia High Dividend Index starts with the members of the Russell Australia Large Cap Index, including infrastructure stocks and excluding foreign ownership limits. The index is then reduced down to those securities which meet the requirements to be considered high dividend paying companies.

Starting with the review universe, each security is given a Composite Yield Score. The Stock Weight of each security is then calculated by adding capitalization weight to the Composite Yield score multiplied by 2.5% as per the formula below.

Stock Weight = Capitalization Weight + (Composite Yield Core x 2.5%)

Therefore securities with positive Composite Yield Scores will see an increase in their Stock Weight compared to their Capitalization Weight and vice versa for those with negative Composite Yield Scores.

The Composite Yield Score is the combined score from the underlying factors:

Dividend criteria

The methodology not only targets high dividends, but is also built to include better quality dividends. To capture the quality of the underlying dividends the methodology focuses on penalizing those companies that have paid sporadic dividends and also those companies whose dividends have been falling or are likely to fall in the future based on certain factors such as Forecast Dividend and Forecast Dividend Growth. Multiple factors at varying weights are used to capture the relative importance of high forecasted dividends, consistency of dividends and trajectory of dividend growth (both future and historical). The factors used in the model are not equally weighted; rather weighted by their relative importance with the greatest emphasis on future dividend potential and equal emphasis on historical yields, dividend growth (including trailing and forecasted growth) and EPS variability.

Franking credits

For Australian investors, dividends are often worth more than the cash payments received. This is because a company can also distribute franking credits for any company tax it has paid. Dividends carry franking credits that entitle shareholders to a tax offset or a reduction in the amount of tax to be paid. Dividends received by investors can range from 100% franked to completely unfranked.

The effect dividend imputation has on individual shareholders depends mainly on two things – the individual shareholder's taxable income, and how much tax the company paid before it distributed a dividend. In some cases, a shareholder can actually pay less tax after receiving dividend income than would have been payable without it.

Grossed up dividend calculation

For example, a company declares a 10 cent fully franked dividend (taxed at 30%).

10c /70 x 30 = franking credit per share

= 4.28 cents per share

If the current share price was $2.50 the returns would be as follows:

Dividend yield = 10 cents/$2.50 = 4%

Grossed up = (10 cents + 4.28 cents)/$2.50 = 5.71%

Franking credits at different tax rates

Tax rates	10%	30%	40%	46.5%
Dividend	$700	$700	$700	$700
Grossed Up Dividend	$1,000	$1,000	$1,000	$1,000
Gross Tax Payable	$100	$300	$400	$465
Franking Credit Rebate	$300	$300	$300	$300
Net Tax Payable	Refund $200	$0	$100	$165

The 45-day rule

The 45-day rule aims to eliminate franking credit trading where franking benefits are received by someone other than the true economic owner of the underlying shares. The rule requires resident taxpayers to hold shares for at least 45 days to be eligible to receive franking benefits from dividends paid on shares. Furthermore, even if the shares are held for at least 45 days, the franking credit is denied if the resident taxpayer has eliminated 70% or more of the ownership risk through other financial transactions during that period. Hence, the rule also specifies a 30% minimum level of ownership risk.

Index treatment of franking credits

All dividends considered in the model have been grossed up and assume that the shares have been held for the full 45 days.

Composite yield score

The Russell Australia High Dividend Index targets not only companies that pay high dividends but also companies that pay high "quality" dividends as measured by the Composite Yield Score. The Composite Yield Score model weighs the following five factors:

1. 3-year Average Forecast Dividend,
2. 5-year Average Trailing Dividend,
3. 3-year Forecast Dividend Growth,
4. 3-year trailing dividend growth, and
5. 5-year standard deviation of annual Earnings per Share.

These factors were selected as proxies for selecting stocks with high forecasted dividends, consistent dividends and a positive dividend growth trajectory.

The Composite Yield Score Model is focused primarily on penalizing those companies that pay sporadic dividends and also those companies whose dividends have been falling or are likely to fall in the future. By identifying better "quality" and higher growing dividends, the Composite Yield Score Model is designed to avoid one-time dividend payments and also looks to reduce future turnover.

The factors used in the model are not equally weighted; rather the factors are weighted by their relative importance in achieving the desired outcome.

The methodology for calculating these factors are outlined below.

3 year average forecast dividend

This is computed as the average of consensus analysts' median predicted dividends for the current fiscal year 1, 2 and 3 divided by the most recent price. Three year forecasted dividends are utilized to avoid companies that are unlikely pay out dividends consistently in the future, which will help to reduce future turnover.

It is calculated as follows:

$$\frac{\frac{1}{3}(Div_{FY1}+Div_{FY2}+Div_{FY3}}{P_t}$$

Where:

Div_{FY} = Forecasted dividend per share (grossed up) in Fiscal Year.

P_t = Current Price

5 year average trailing dividend

This is computed as the average dividend yield over the previous five fiscal years. Trailing dividends are utilized to provide an indication of a company's ability to pay dividends in the future.

Five year trailing dividend yields are utilized to avoid companies that are unlikely pay out dividends consistently in the future, which will help to reduce future turnover.

It is calculated as follows:

$$\frac{\text{Dividends Per Share-Five Year Average}}{\text{Market Price-Five Year Average Close}}$$

3 year forecast dividend growth

This is computed as the growth in grossed up dividends per share from fiscal year one to fiscal year three. The inclusion of this factor helps to identify the trajectory of the three year average forecasted dividend yield.

It is calculated as follows:

$$\frac{(Div_{FY3} - Div_{FY1})}{Div_{FY1}}$$

Where:

DivFY = Forecasted dividend per share (grossed up) in Fiscal Year.

3 year trailing dividend growth

This is computed as the growth in grossed up dividends per share over the past 3 years. The inclusion of this factor helps to identify the trailing trajectory of the average dividend yield.

It is calculated as follows:

$$\frac{(Div_{FY0} - Div_{FY-2})}{Div_{FY-2}}$$

Where:

Div_{FY} = Dividend per share (grossed up) in Fiscal Year.

5 year standard deviation of annual EPS

This is computed as the standard deviation of annual EPS (fiscal year) over the trailing 5 years. This measure is included to help avoid value traps and identify companies with less cyclical earnings patterns.

Factor scoring

In measuring a company's exposure to a particular factor we have used standardized scores. Standardized scores, or normalization, allow each company's factors to be converted to a common scale which can be easily interpreted and comparable.

Using the Forecasted Dividend Yield as an example, we calculate the difference between observed company's Forecasted Dividend Yield and the universe's weighted average Forecasted Dividend Yield and then divide the difference by the universe's Forecasted Dividend Yield standard deviation.

Forecasted dividend yield standardized score

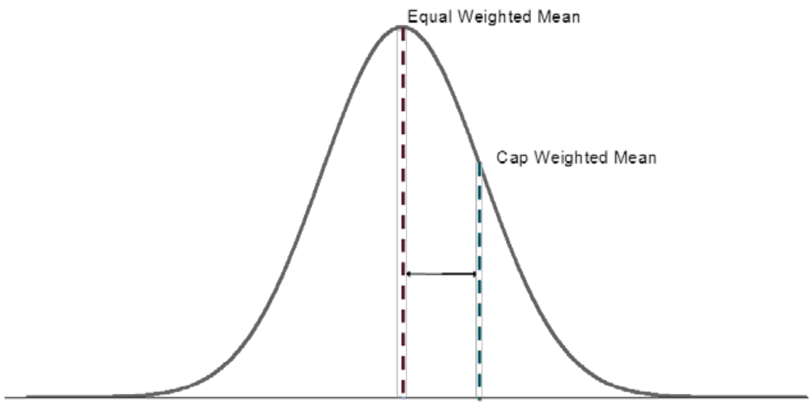
$$Z_{FcstDivYield_i} = \frac{FcstDivYield_i - \mu}{\sigma_{FcstDiYield}}$$

The use of standardized scores provides a simple measure of how many "standard deviations" an observation is away from the expected value; in this case the expected value is the capitalization weighted mean yield of the universe. For the Forecasted Dividend Yield, using a universe capitalization weighted mean of 5.5%, with a universe standard deviation of 2.8%, a company with a forecasted dividend yield 2.7% would produce a standardized score of -1. In other words, this company's dividend yield is one standard deviation below the universe average or alternatively is in the bottom quintile (16th percentile) of the universe.

Calculating the universe mean and standard deviation

The Z-scores are calculated using a capitalization weighted universe mean and an equally weighted universe standard deviation.

The capitalization weighted mean is used because it is the objective that we are trying to beat (i.e. greater dividend yield than the market). We try to illustrate this in the bell chart below where we have plotted the equal weighted mean (blue line) and assumed a capitalization weighted mean (orange line). The deviation we are concerned with, and want to capture, is the deviation away from the capitalization weighted mean.



The equal weighting on the standard deviations is used to better capture the underlying range of the variables and to reduce the dominance of large capitalization stocks determining the range size (see Adams, Lin and Ross 2002).[6]

Capitalization Weighted Mean

$$\mu_{factor} = \sum w_i Factor_i$$

Equal Weighted Standard Deviation

$$\sigma_{Factor} = \sqrt{\frac{\left(Factor_i - \mu_{Factor}\right)^2}{n}}$$

Extreme values

At certain points we can have situations where an extreme value on a factor can arise (we define extreme value as +/- 2 standard deviations). When these values arise it suggests that there is an issue with the data or that potentially (most likely) the market is discounting the stock due to some other factor that is not captured in the model. For the index where we identify a stock has a particular factor score greater than +/- 2 standard deviations we set the Composite Yield Score to zero. The effect of setting the Composite Yield Score to zero is that the stocks weight in the final index will be determined by its market capitalization only.

Once a Composite Factor Yield Score is calculated for all stocks in the starting universe, these scores are then standardized using Z-Scores which provide a common scale which can be easily interpreted and used for comparison purposes among different stocks.

[6] Securities with larger weights will impact the market value-weighted mean and deviate only moderately from that mean. A market value-weighted standard deviation would give large weights to large capitalization stocks and produce very small standard deviations and very large Z-scores. Using an equal weighted standard deviation in the Z-score calculation reduces the impact of large cap stocks on the standardization process and results in greater normality of the Z-scores.

Determining index membership

The top 50 companies by stock weight (as defined under Eligible Securities) are selected for the Russell Australia High Dividend Index and the resulting portfolio weights are then scaled to sum to one. This methodology allows the focus to remain on the largest capitalization companies with the highest Composite Yield Scores.

Semi-annual reconstitution

The index is reconstituted semi-annually using data as of the last business day in February and August. The rebalanced index is implemented on the first business day in April and October. These rebalance periods have been chosen to also coincide with the Australian company reporting season so that the reconstitution incorporates the latest analyst estimates.

Index maintenance / Corporate action-driven changes

The Russell Australia High Dividend Index is proactively maintained and reflects daily changes in the Australian equity market. Full details of changes to constituent companies due to corporate actions and events can be accessed in the Corporate Actions and Events Guide for Non Market Capitalisation Weighted Indexes using the following link:

Corporate_Actions_and_Events_Guide_Non_Market_Cap_Weighted_Indices.pdf

Section 14

Russell Australia High Value Index

Definition

The Russell Australia High Value Index ("RAHVI") is an equity index that is constructed using several variables that seek to provide investors with a diversified large cap exposure to the value premium in the Australian market. The Index includes large cap companies and is built using an objective, transparent and market-driven construction methodology.

Eligible securities

Russell Australia High Value Index starts with the members of the Russell Australia Large Cap Index (excluding foreign ownership limits), which includes all Australian domiciled companies with a market capitalization greater than the 85th percentile. All constituents must be traded on the Australian Securities Exchange (ASX). Those that do not trade on the ASX are removed from the universe.

Style criteria

FTSE Russell uses a "non-linear probability" algorithm to assign stocks to the U.S. growth and value style indexes. The term "probability" is used to indicate the degree of certainty that a stock is value or growth, based on certain variables. This algorithm allows stocks to be represented as having both growth and value characteristics, while preserving the additive nature of the indexes. For the Russell Australia High Value Index, Russell selected underlying variables that are slightly different than those used for Russell's U.S. style indexes. Russell Australia High Value Index uses earnings-to-price and I/B/E/S medium-term earnings growth (3 years).

The members of the Russell Australia Large Cap Index are ranked by their earnings-to-price and their I/B/E/S medium-term earning growth (3 years). These rankings are converted to standardized units and combined to produce a composite value score (CVS). Stocks are then ranked by their CVSs, and a probability algorithm is applied to the CVS distribution to assign value and growth weights to each stock. The index is then reduced down to those securities which meet the requirements to be considered value companies.

In general, a stock with a higher CVS is considered value while a stock with a lower CVS is considered growth, and a stock with a CVS in the middle range is considered to have both value and growth characteristics, and is weighted proportionately in the value and growth index. Stocks are always fully represented by the combination of their value and growth weights; e.g., a stock that is given a 20% weight in a Russell value index will have an 80% weight in the same Russell growth index. The Russell Australia High Value Index only includes a given stock's value weight.

For more information on how FTSE Russell determines style, please see the Russell US Construction and Methodology document.

Semi-annual reconstitution

The index is reconstituted semi-annually using data as of the last business day in February and August. The rebalanced index is implemented on the first business day in April and October. These rebalance periods have been chosen to also coincide with the Australian company reporting season so that the reconstitution incorporates the latest analyst estimates.

Index maintenance / Corporate action-driven changes

The Russell Australia High Value Index is proactively maintained and reflects daily changes in the Australian equity market. Full details of changes to constituent companies due to corporate actions and events can be accessed in the Corporate Actions and Events Guide for Non Market Capitalization Weighted Indexes using the following link:

Corporate_Actions_and_Events_Guide_Non_Market_Cap_Weighted_Indices.pdf

Appendix A

Russell Global Indexes

Core indexes

Available currencies

Performance data for the Russell Global Index are available in the following currencies. Exchange rates used in the End of Day calculations are WM/Reuters Closing Spot Rates™, collected at 16:00 London time (further information on The WM/Reuters Closing Spot Rates service is available from The WM Company).

- AUD
- CAD
- CHF
- EUR
- GBP
- JPY
- LOC (local)*
- USD

* Local currency available at the security and country level.

GLOBAL
Global
Global Large Cap
Global Midcap
Global SMID
Global Small Cap
Global Eurozone
Global Eurozone Large Cap
Global Eurozone Midcap
Global Eurozone Small Cap
Global Mega Cap
Global ex-Australia
Global ex-Australia Large Cap

Global ex-Australia Midcap
Global ex-Australia Small Cap
Global ex-Canada
Global ex-Canada Large Cap
Global ex-Canada Midcap
Global ex-Canada Small Cap
Global ex-Japan
Global ex-Japan Large Cap
Global ex-Japan Midcap
Global ex-Japan Small Cap
Global ex-North America
Global ex-North America Large Cap
Global ex-North America Midcap
Global ex-North America Small Cap
Global ex-UK
Global ex-UK Large Cap
Global ex-UK Midcap
Global ex-UK Small Cap
Global ex-US
Global ex-US Large Cap
Global ex-US Midcap
Global ex-US SMID
Global ex-US Small Cap
Global ex-US ex-Japan
Global ex-US ex-Japan Large Cap
Global ex-US ex-Japan Midcap
Global ex-US ex-Japan Small Cap

REGIONAL
Asia
Asia Large Cap
Asia Midcap
Asia Small Cap
Asia ex-Japan
Asia ex-Japan Large Cap
Asia ex-Japan Midcap
Asia ex-Japan Small Cap
Asia Pacific
Asia Pacific Large Cap
Asia Pacific Midcap
Asia Pacific SMID
Asia Pacific Small Cap
Asia Pacific ex-Japan
Asia Pacific ex-Japan Large Cap

Asia Pacific ex-Japan Midcap
Asia Pacific ex-Japan Small Cap
BRIC
BRIC SMID
Developed
Developed Large Cap
Developed Midcap
Developed Small Cap
Developed Europe
Developed Europe Large Cap
Developed Europe Midcap
Developed Europe SMID
Developed Europe Small Cap
Developed Pacific Basin
Developed Pacific Basin Large Cap
Developed Pacific Basin Midcap
Developed Pacific Basin SMID
Developed Pacific Basin Small Cap
Developed ex-Canada
Developed ex-Canada Large Cap
Developed ex-Canada Midcap
Developed ex-Canada Small Cap
Developed ex-Japan
Developed ex-Japan Large Cap
Developed ex-Japan Midcap
Developed ex-Japan Small Cap
Developed ex-North America
Developed ex-North America Large Cap
Developed ex-North America Midcap
Developed ex-North America SMID
Developed ex-North America Small Cap
Developed ex-US
Developed ex-US Large Cap
Developed ex-US Midcap
Developed ex-US SMID
Developed ex-US Small Cap
Developed ex-UK
Developed ex-UK Large Cap
Developed ex-UK Midcap
Developed ex-UK Small Cap
Developed Eurozone
Developed Eurozone Large Cap
Developed Eurozone Midcap
Developed Eurozone SMID

Developed Eurozone Small Cap
Developed Europe ex-UK
Developed Europe ex-UK Large Cap
Developed Europe ex-UK Midcap
Developed Europe ex-UK Small Cap
Developed Pacific Basin ex-Japan
Developed Pacific Basin ex-Japan Large Cap
Developed Pacific Basin ex-Japan Midcap
Developed Pacific Basin ex-Japan Small Cap
Emerging Asia
Emerging Asia Large Cap
Emerging Asia Midcap
Emerging Asia Small Cap
Emerging EMEA
Emerging EMEA Large Cap
Emerging EMEA Midcap
Emerging EMEA Small Cap
Emerging Europe
Emerging Europe Large Cap
Emerging Europe Midcap
Emerging Europe SMID
Emerging Europe Small Cap
Emerging Markets
Emerging Markets Large Cap
Emerging Markets Midcap
Emerging Markets Small Cap
Europe
Europe Large Cap
Europe Midcap
Europe Small Cap
Europe ex-UK
Europe ex-UK Large Cap
Europe ex-UK Midcap
Europe ex-UK Small Cap
Greater China
Greater China Large Cap
Greater China Midcap
Greater China Small Cap
Latin America
Latin America Large Cap
Latin America Midcap
Latin America Small Cap
North America
North America Large Cap

North America Midcap
North America Small Cap

COUNTRY
Australia
Australia Large Cap
Australia Midcap
Australia Small Cap
Austria
Austria Large Cap
Austria Midcap
Austria Small Cap
Belgium
Belgium Large Cap
Belgium Midcap
Belgium Small Cap
Brazil
Brazil Large Cap
Brazil Midcap
Brazil Small Cap
Canada
Canada Large Cap
Canada Midcap
Canada Small Cap
Chile
Chile Large Cap
Chile Midcap
Chile Small Cap
China
China Large Cap
China Midcap
China Small Cap
Colombia
Colombia Large Cap
Colombia Midcap
Colombia Small Cap
Czech Republic
Czech Republic Large Cap
Czech Republic Midcap
Czech Republic Small Cap
Denmark
Denmark Large Cap
Denmark Midcap
Denmark Small Cap

Egypt
Egypt Large Cap
Egypt Midcap
Egypt Small Cap
Finland
Finland Large Cap
Finland Midcap
Finland Small Cap
France
France Large Cap
France Midcap
France Small Cap
Germany
Germany Large Cap
Germany Midcap
Germany Small Cap
Greece
Greece Large Cap
Greece Midcap
Greece Small Cap
Hong Kong
Hong Kong Large Cap
Hong Kong Midcap
Hong Kong Small Cap
Hungary
Hungary Large Cap
Hungary Midcap
Hungary Small Cap
India
India Large Cap
India Midcap
India Small Cap
Indonesia
Indonesia Large Cap
Indonesia Midcap
Indonesia Small Cap
Ireland
Ireland Large Cap
Ireland Midcap
Ireland Small Cap
Israel
Israel Large Cap
Israel Midcap
Israel Small Cap

Italy
Italy Large Cap
Italy Midcap
Italy Small Cap
Japan
Japan Large Cap
Japan Midcap
Japan Small Cap
Korea
Korea Large Cap
Korea Midcap
Korea Small Cap
Luxembourg
Luxembourg Large Cap
Luxembourg Midcap
Luxembourg Small Cap
Malaysia
Malaysia Large Cap
Malaysia Midcap
Malaysia Small Cap
Mexico
Mexico Large Cap
Mexico Midcap
Mexico Small Cap
Morocco
Morocco Large Cap
Morocco Midcap
Morocco Small Cap
Netherlands
Netherlands Large Cap
Netherlands Midcap
Netherlands Small Cap
New Zealand
New Zealand Large Cap
New Zealand Midcap
New Zealand Small Cap
Norway
Norway Large Cap
Norway Midcap
Norway Small Cap
Peru
Peru Large Cap
Peru Midcap
Peru Small Cap

Philippines
Philippines Large Cap
Philippines Midcap
Philippines Small Cap
Poland
Poland Large Cap
Poland Midcap
Poland Small Cap
Portugal
Portugal Large Cap
Portugal Midcap
Portugal Small Cap
Russia
Russia Large Cap
Russia Midcap
Russia Small Cap
Singapore
Singapore Large Cap
Singapore Midcap
Singapore Small Cap
South Africa
South Africa Large Cap
South Africa Midcap
South Africa Small Cap
Spain
Spain Large Cap
Spain Midcap
Spain Small Cap
Sweden
Sweden Large Cap
Sweden Midcap
Sweden Small Cap
Switzerland
Switzerland Large Cap
Switzerland Midcap
Switzerland Small Cap
Taiwan
Taiwan Large Cap
Taiwan Midcap
Taiwan Small Cap
Thailand
Thailand Large Cap
Thailand Midcap
Thailand Small Cap

Turkey
Turkey Large Cap
Turkey Midcap
Turkey Small Cap
United Arab Emirates
United Arab Emirates Large Cap
United Arab Emirates Midcap
United Arab Emirates Small Cap
United Kingdom
United Kingdom Large Cap
United Kingdom Midcap
United Kingdom Small Cap
United States
United States Large Cap
United States Midcap
United States Small Cap

Appendix B

Country list

Country	Country_ISO	Market
Argentina	AR	Frontier
Australia	AU	Developed
Austria	AT	Developed
Bahrain	BH	Frontier
Bangladesh	BD	Frontier
Belgium	BE	Developed
Bosnia and Herzegovina	BA	Frontier (not currently populated)
Botswana	BW	Frontier
Brazil	BR	Emerging
Bulgaria	BG	Frontier (not currently populated)
Canada	CA	Developed
Chile	CL	Emerging
China	CN	Emerging
Colombia	CO	Emerging
Côte d’Ivoire	CI	Frontier (2015 Change)
Croatia	HR	Frontier
Cyprus	CY	Frontier
Czech Republic	CZ	Emerging
Denmark	DK	Developed
Egypt	EG	Frontier (2014 change)
Estonia	EE	Frontier
Finland	FI	Developed
France	FR	Developed
Gabon	GA	Frontier
Georgia	GE	Frontier (not currently populated)
Germany	DE	Developed
Ghana	GH	Frontier
Greece	GR	Emerging (2013 change)

Country	Country_ISO	Market
Hong Kong	HK	Developed
Hungary	HU	Emerging
India	IN	Emerging
Indonesia	ID	Emerging
Ireland	IE	Developed
Israel	IL	Developed
Italy	IT	Developed
Jamaica	JM	Frontier
Japan	JP	Developed
Jordan	JO	Frontier
Kazakhstan	KZ	Frontier
Kenya	KE	Frontier
Kuwait	KW	Frontier
Kyrgyzstan	KG	Frontier (not currently populated)
Latvia	LV	Emerging (2014 change and not currently populated)
Lebanon	LB	Frontier (not currently populated)
Lithuania	LT	Frontier
Luxembourg	LU	Developed
Macedonia	MK	Frontier (not currently populated)
Malaysia	MY	Emerging
Malta	MT	Frontier
Mauritius	MU	Frontier
Mexico	MX	Emerging
Montenegro	ME	Frontier (not currently populated)
Morocco	MA	Frontier (2015 change)
Namibia	NA	Frontier (not currently populated)
Netherlands	NL	Developed
New Zealand	NZ	Developed
Nigeria	NG	Frontier
Norway	NO	Developed
Oman	OM	Frontier
Pakistan	PK	Frontier
Papua New Guinea	PG	Frontier
Peru	PE	Emerging
Philippines	PH	Emerging
Poland	PL	Emerging
Portugal	PT	Developed
Qatar	QA	Frontier
Romania	RO	Frontier
Russia	RU	Emerging
Senegal	SN	Frontier (2015 Change)
Serbia	RS	Frontier
Singapore	SG	Developed

Country	Country_ISO	Market
Slovakia	SK	Frontier (not currently populated)
Slovenia	SI	Frontier
South Africa	ZA	Emerging
South Korea	KR	Emerging
Spain	ES	Developed
Sri Lanka	LK	Frontier
Sweden	SE	Developed
Switzerland	CH	Developed
Taiwan	TW	Emerging
Tanzania	TZ	Frontier
Thailand	TH	Emerging
Togo	TG	Frontier (not currently populated)
Trinidad and Tobago	TT	Frontier
Tunisia	TN	Frontier
Turkey	TR	Emerging
Ukraine	UA	Frontier
United Arab Emirates	AE	Emerging
United Kingdom	GB	Developed
United States	US	Developed
Vietnam	VN	Frontier
Zambia	ZM	Frontier (not currently populated)

Appendix C

Eligible share classes by country

Country	Eligible share classes	Remarks
Argentina	Common shares Depository receipts	Non-domestically listed shares only.
Australia	Common shares Preferred shares Stapled Trust Unit	Preferred shares are usually non-voting.
Austria	Common shares Preferred shares Participation certificates	
Bahrain	Common shares	
Bangladesh	Common shares	
Belgium	Common shares	
Bosnia and Herzegovina	Common shares	
Botswana	Common shares	
Brazil	Common shares Preferred shares Unit	Preferred shares are usually non-voting and traded heavily at the stock exchange.
Bulgaria	Common shares	Preferred shares are illiquid.
Canada	Common shares Units of Income Trusts	Units of Income Trusts are REIT-like securities.
Chile	Common shares Preferred shares	Preferred shares have restricted voting rights.
China	B shares H shares N shares	B, H, N shares are the only share classes available to foreign investors. H shares are traded in Hong Kong. N shares are traded in the U.S.
Colombia	Common shares Preferred shares	Preferred shares are usually non-voting.
Côte d'Ivoire	Common shares	

Country	Eligible share classes	Remarks
Croatia	Common shares Preferred shares	Preference shares do no have voting rights.
Cyprus	Common shares	
Czech Republic	Common shares	
Denmark	A shares B shares	B shares have lower voting rights.
Egypt	 Depository receipts	
Estonia	Common shares	Non-domestically listed shares only.
Finland	A shares B shares K shares	A shares and B shares have lower voting rights than K shares.
France	Common shares Preferred shares Investment certificates Voting certificates	Preferred shares, investment certificates and voting certificates are non-voting.
Gabon	Common shares	Non-domestically listed shares only.
Georgia	Common shares	
Germany	Common shares Preferred shares	Preferred shares are usually non-voting.
Ghana	Common shares	
Greece	Common shares Preferred shares	Preferred shares are usually non-voting.
Hong Kong	A shares B shares Stapled Trust	B shares have lower voting rights.
Hungary	Common shares	
India	Common shares	
Indonesia	Common shares	
Ireland	Common shares Unit	
Israel	Common shares Preferred shares	
Italy	Common shares Preferred shares Savings shares	Preferred shares and savings shares are non-voting.
Jamaica	Common shares	Preferred shares are ineligible (component of liability).
Japan	Common shares Preference	
Jordan	Common shares	
Kazakhstan	Common shares	Preferred shares are ineligible (component of liability).
Kenya	Common shares Unit	REIT – Unit Trust is eligible security type.
Kuwait	Common shares	
Kyrgyzstan	Common shares	Non-domestically listed shares only.

Country	Eligible share classes	Remarks
Latvia	Common shares	
Lebanon	Common shares	Preferred shares are ineligible (component of liability).
Lithuania	Common shares	
Luxembourg	Common shares	
Macedonia	Common shares	Preferred shares are illiquid.
Malaysia	Common shares	Common shares are classified as local/foreign shares.
Malta	Common shares	
Mauritius	Common shares	Preferred shares are ineligible (component of liability).
Mexico	Common shares Participation certificate Unit	Participation certificates are usually non-voting.
Montenegro	Common shares	
Morocco	Common shares	
Namibia	Common shares Unit	REIT – Unit Trust is eligible security type.
Netherlands	Common shares Preferred shares	
New Zealand	Common shares Preferred shares Unit	Preferred shares are usually non-voting.
Nigeria	Common shares Unit	REIT – Unit Trust is eligible security type.
Norway	A shares B shares Equity Certificates	B shares are non-voting.
Oman	Common shares	Preferred shares are illiquid.
Pakistan	Common shares	
Papua New Guinea	Common shares	Non-domestically listed shares only.
Peru	Common shares Preferred shares Investment shares	
Philippines	Common shares	Common shares are classified as A (local) and B (foreign) shares
Poland	Common shares	
Portugal	Common shares	
Qatar	Common shares	
Romania	Common shares	
Russia	Common shares Preferred shares	Preferred shares are usually non-voting and are guaranteed dividends no less than common shares.
Senegal	Common shares	
Serbia	Common shares	Preferred shares are illiquid.

Country	Eligible share classes	Remarks
Singapore	Common shares Unit Unit Business Trust	Subject to Foreign Board Action.
Slovakia	Common shares	
Slovenia	Common shares	
South Africa	Common shares Preferred shares	Preferred shares are usually non-voting.
South Korea	Common shares Preferred shares	Preferred shares are usually non-voting.
Spain	Common shares Preferred shares	Preferred shares are usually non-voting.
Sri Lanka	Common shares	Preferred shares are illiquid.
Sweden	A shares B shares C shares Preference	B shares and C shares have lower voting rights. C shares are not entitled for dividends.
Switzerland	Registered shares Bearer shares Participation certificates Dividend-right certificates	Bearer shares have lower voting rights. Participation certificates and dividend-right certificates are non-voting.
Taiwan	Common shares Preferred shares	Preferred shares have limited or no voting rights.
Tanzania	Common shares	
Thailand	Common shares Preferred shares Unit	Common shares are classified as local/foreign shares and are subject to Foreign Board Action. Preferred shares are usually non-voting.
Togo	Common shares	
Trinidad and Tobago	Common shares	Preferred shares are ineligible (component of liability).
Tunisia	Common shares	
Turkey	Common shares	
Ukraine	Common shares	
United Arab Emirates	Common shares	
United Kingdom	Common shares Unit Preference	
United States	Common shares	
Vietnam	Common shares	
Zambia	Common shares	

* All share types are subject to certain liquidity-screening processes for index inclusion.

* Preferred securities are those where there is no fixed cumulative dividend.

Appendix D

Eligible stock exchange and bourse codes

Country	Eligible stock exchange	MIC code
Australia	Australia Stock Exchange	XASX
Austria	Vienna Stock Exchange	XWBO
	XETRA	XETR
Bahrain	Bahrain Stock Exchange	XBAH
Bangladesh	Dhaka Stock Exchange	XDHA
Belgium	NYSE Euronext	XBRU
Bosnia and Herzegovina	Sarajevo Stock Exchange	XSSE
Botswana	Gaborone Stock Exchange	XBOT
Brazil	Sao Paulo Stock Exchange	BVMF
Bulgaria	Bulgaria Stock Exchange	XBUL
Canada	Toronto Stock Exchange	XTSE
	TSX Venture Exchange	XTSX
Chile	Santiago Stock Exchange	XSGO
China	Shanghai Stock Exchange	XSHG
	Shenzhen Stock Exchange	XSHE
Colombia	Bolsa de Bogotá Stock Exchange	XBOG
Côte d'Ivoire	BRVM Regional Stock Exchange	335
Croatia	Zagreb Stock Exchange	XZAG
Cyprus	Cyprus Stock Exchange	XCYS
Czech Republic	Prague Stock Exchange	ZPRA
Denmark	Copenhagen Stock Exchange	XCSE
Estonia	Tallinn Stock Exchange	XTAL
Finland	OMX Helsinki Stock Exchange	XHEL
France	NYSE Euronext	XPAR
Georgia	Georgia Stock Exchange	XGSE

Germany	Deutsche Borse	XFRA
	XETRA	XETR
Ghana	Ghana Stock Exchange	XGHA
Greece	Athens Stock Exchange	XATH
Hong Kong	Stock Exchange of Hong Kong	XHKG
Hungary	Budapest Stock Exchange	XBUD
India	Mumbai Stock Exchange	XBOM
	National Stock Exchange	XNSE
Indonesia	Indonesia Stock Exchange	XIDX
Ireland	Irish Stock Exchange	XDUB
Israel	Tel Aviv Stock Exchange	XTAE
Italy	Mercato Continuo Italiano	MTAA
Jamaica	Jamaica Stock Exchange	XJAM
Japan	Tokyo Stock Exchange	XTKS
	Fukuoka Stock Exchange	XFKA
	Nagoya Stock Exchange	XNGO
Jordan	Amman Financial Market	XAMM
Kazakhstan	Kazakhstan Stock Exchange	XKAZ
Kenya	Nairobi Stock Exchange	XNAI
Kuwait	Kuwait Stock Exchange	XKUW
Latvia	Nasdaq Riga	XRIS
Lebanon	Beirut Stock Exchange	XBEY
Lithuania	Vilnius Stock Exchange	XLIT
Luxembourg	Luxembourg Stock Exchange	XLUX
Macedonia	Macedonian Stock Exchange	XMAE
Malaysia	Bursa Malaysia Stock Exchange	XKLS
Malta	Malta Stock Exchange	XMAL
Mauritius	Mauritius Stock Exchange	XMAU
Mexico	Bolsa Mexicana de Valores	XMEX
Montenegro	Montenegro Stock Exchange	XMNX
Morocco	Casablanca Stock Exchange	XCAS
Namibia	Namibian Stock Exchange	XNAM
Netherlands	NYSE Euronext	XAMS
New Zealand	New Zealand Stock Exchange	XNZE
Nigeria	Nigerian Stock Exchange	XNSA
Norway	Oslo Stock Exchange	XOSL
	Oslo Stock Exchange, Axess Alternative Equities Market	XOAS
Oman	Muscat Securities Market	XMUS
Pakistan	Karachi Stock Exchange	XKAR
Peru	Lima Stock Exchange	XLIM
Philippines	Manila Stock Exchange	XPHS
Poland	Warsaw Stock Exchange	XWAR
Portugal	NYSE Euronext	XLIS
Qatar	Doha Securities Market	DSMD

Romania	Bucharest Stock Exchange	XBSE
Russia	Russia Trading System	RTSX
	Moscow Inter-Currency Exchange	MISX
Senegal	BRVM Regional Stock Exchange	XBRV
Serbia	Belgrade Stock Exchange	XBEL
Singapore	Singapore Stock Exchange	XSES
Slovakia	Bratislava Stock Exchange	XBRA
Slovenia	Ljubljana Stock Exchange	XLJU
South Africa	Johannesburg Stock Exchange	XJSE
South Korea	South Korea Stock Exchange, KOSDAQ	XKOS
	South Korea Stock Exchange (KRX)	XKRX
Spain	Mercado Continuo Espana	XMCE
	SIBE, Mercado Continuo	XMCE
Sri Lanka	Colombo Stock Exchange	XCOL
Sweden	OM Stockholm Stock Exchange	XSTO
Switzerland	Swiss Stock Exchange	XSWX
	SWX Europe Ltd. (VIRT-X)	XSWX
Taiwan	Taiwan Stock Exchange	XTAI
	GreTai Securities Market	ROCO
Tanzania	Dar es Salaam Stock Exchange	XDAR
Thailand	Stock Exchange of Thailand	XBKK
Togo	BRVM Regional Stock Exchange	XBRV
Trinidad and Tobago	Trinidad & Tobago Stock Exchange	XTRN
Tunisia	Tunis Stock Exchange	XTUN
Turkey	Istanbul Stock Exchange	XIST
Ukraine	PFTS Stock Exchange	PFTS
United Arab Emirates	Dubai International. Financial Exchange (DIFX	DIFX
	Dubai Financial Market	XDFM
	Abu Dhabi Securities Exchange	XADS
United Kingdom	London Stock Exchange – SETS	XLON
	London Stock Exchange – SETSqx	XLON
	London Stock Exchange – IOB	XLON
United States	New York Stock Exchange (NYSE)	XNYS
	NYSE ARCA	ARCX
	NASDAQ – All Markets	XNAS
	NASDAQ Capital Market	XNCM
	NASDAQ/NGS (Global Select Market)	XNGS
	NASDAQ/NMS (Global Market)	XNMS
	American Stock Exchange	XASE
	NYSE MKT (formerly NYSE Alternext US and NYSE Amex)	XASE
	Investors Exchange	IEXG
	BATS Z-Exchange	BATS
Vietnam	Ho Chi Minh Stock Exchange	XSTC
Zambia	Lusaka Stock Exchange	XLUS

Note:

- There are no eligible stock exchanges in Argentina, Egypt, Gabon, Kyrgyzstan or Papua New Guinea. Securities with assigned index nationality in these countries trade in other locations.

Appendix E

Calculation of free float

Investable shares are assumed to be shares that are publicly traded and open to foreign investment. We derive investable shares by use of the following formulas:

Formula 1
Free Float-Adjusted Market Capitalization (FFAMC) = Closing Price of Shares x Number of Investable Shares

Formula 2
Number of Investable Shares = Number of Total Shares Outstanding – Number of Non-investable Shares

Formula 3
Free Float Ratio (FFR) = (Number of Investable Shares / Number of Total Shares Outstanding) x 100%

Formula 4
Number of Non-investable Shares = Number of Unavailable Shares + Number of Additional Shares Restricted by FOL

Combining Formulas 1 through 4, the foreign ownership limit adjustment is applied on top of the unavailable shares adjustment described above.

Formula 5
Free Float-Adjusted Market Capitalization = FFII x Share Closing Price x (Number of Total Shares Outstanding – Number of Unavailable Shares – Number of Additional Shares Restricted by FOL)

Where the Free Float Inclusion Indicator (FFII) is an indicator function based on the following condition: Free Float Percentage > 5%.

Example of free float calculation with depositary receipts

In this section, an example of free float calculation is provided, where restricted stocks are used to sponsor depositary receipts.

For free float calculation, FTSE Russell uses the market price of depositary receipts. Thus, Formula 5 can be further modified as the following:

Formula 6

Free Float-Adjusted Market Capitalization = FFII x Share Price x (Number of Total Shares Outstanding – Number of Unavailable Shares – Number of Additional Shares Restricted by FOL) + Depositary Receipts Market Price x Number of Investable Depositary Receipt Contracts

Where the Free Float Inclusion Indicator (FFII) is an indicator function based on the following condition: Free Float Percentage > 5%. If the condition is true, then the FFII will have a value of 1; otherwise, FFII will have a value of 0.

XYZ Company example

XYZ Company in Country ABC is a typical candidate for index consideration. Its common stocks are traded on the local market and are divided into categories of restricted and unrestricted. Restricted stocks can be purchased only by domestic investors, while unrestricted stocks do not have this constraint. Additionally, some of the restricted stocks are used as collateral to sponsor American Depositary Receipts, which are traded on the NYSE. The free-float calculation is carried out, given the following company information:

Share information of XYZ Company

Country	Total shares outstanding	Unavailable shares	Additional shares restricted by FOL	ADRs backed by restricted shares (5 shares per contract)
ABC	100,000,000	5,000,000	50,000,000	300,000

Pricing information of XYZ Company

Country	Share closing price (USD)	ADR market price (USD)
ABC	$30.00	$155.00

Step 1:

Total Market Capitalization = $30.00 x 100,000,000 = $3,000,000,000 > Russell Global large cap/small cap cut-off

Thus, Free Float Inclusion Indicator (FFII) = 1 as long as the Free Float Ratio is greater than 5%

Step 2:

Formula (6) is simplified as the following:

Free Float-Adjusted Market Capitalization of XYZ Company

= Share Closing Price x (Number of Total Shares Outstanding – Number of Unavailable Shares – Number of Additional Shares Restricted by FOL) + Depositary Receipts Market Price x Number of Investable Depositary Receipt Contracts = $30.00 x (100,000,000 – 5,000,000 – 50,000,000) + $155.00 x 300,000

= $1,350,000,000 + $46,500,000

= $1,396,500,000

Step 3:

Free Float Ratio (FFR) = 1,396,500,000 / 3,000,000,000 x 100% = 46.55%

Appendix F

Assigning primary exchange to a security

The selection of the primary exchange is used to determine the closing price and underlying currency of a stock. The primary factor of selecting a primary exchange for a stock is the company's country assignment following rules described in Section 4.

With limited exceptions, FTSE Russell strongly prefers to consider a company's domestic exchange to be its primary exchange. For nearly 100% of the securities in the index, the local exchange is also the most liquid (and passes the FTSE Russell defined liquidity measure), so most securities are assigned to their local exchanges. In very few cases, a company is also listed on a non-domestic exchange and is significantly more liquid on that exchange. In these rare cases, the primary exchange assignment is reviewed.

If the domestic listing for a company does not pass the liquidity screen, FTSE Russell then considers dual listings on foreign exchanges. FTSE Russell takes the most liquid foreign listing (provided it passes the FTSE Russell defined liquidity measure), and the stock exchange on which that issue trades becomes its primary exchange. If none of the stock listings pass the FTSE Russell defined liquidity measure, depositary receipts (DR) of the stock are considered eligible for liquidity testing. In this case, if the company's stock in DR form passes the Russell defined liquidity measure, FTSE Russell recognizes the DR as being the primary issue of the stock, and thus recognizes the stock exchange wherein the DR trades as being the primary exchange.

Appendix G

BDIs, NDEs and U.S. territories

No domestic exchange (NDEs) countries
Falkland Islands
Liechtenstein
Monaco
Suriname

Benefit driven incorporations (BDIs) countries
Anguilla
Antigua and Barbuda
Aruba
Bahamas
Barbados
Belize
Bermuda
Bonaire
British Virgin Islands
Cayman Islands
Channel Islands
Cook Islands
Curacao
Faroe Islands
Gibraltar
Guernsey
Isle of Man
Jersey
Liberia
Marshall Islands
Panama
Saba
Sint Eustatius
Sint Maarten
Turks and Caicos Islands

U.S. territories

A U.S. HCI is assigned for any company incorporated or headquartered in a U.S. territory. This includes countries such as: Puerto Rico, Guam, and the U.S. Virgin islands

Appendix H

Country assignment methodology details

Home country indicators (HCIs)

Country of incorporation
Country of headquarters
Country of most liquid exchange as defined by the 2 year average daily dollar trading volume (ADDTV)

Headquarters: FTSE Russell defines headquarters as the address of principal executive offices. For those companies reporting in the U.S., FTSE Russell uses the SEC filings to determine the location of headquarters. For those companies outside of the U.S. reporting requirements, multiple vendor sources and independent FTSE Russell research are used. In the case where multiple headquarters are listed on the SEC filings and a HCI needs to be determined, FTSE Russell assigns the HCI for headquarters to the location with the highest average daily trading volume. If the HCI for headquarters cannot be determined (IE, no trading in any headquarters location) the two remaining HCIs are used.

Assets/revenue data sources and requirements defined: Assets and revenue data are retrieved from the company's annual report: 10-Ks (20-F), or other reliable company information, as of the rank day in May. Any filings after that date are not used. FTSE Russell will use an average of two years of assets or revenue data to reduce potential turnover. However, if only one year of data is available (either company starts or stops reporting by location), one year will be used.

Assets and Revenue Reporting

Assets and/or revenue found in the text or table of the geographical segment section of the filing is given preference over other information in the filing. Assets and/or revenue must be reported as numbers or percentages which allow us to confirm substantial tolerance is met or stating ALL assets/revenue come from a specific country will be used to designate primary country of risk. However, "Substantially all" or "majority of" assets and/or revenue will be considered as acceptable confirmatory statements.

FTSE Russell gives preference to long-lived/long-term assets over total assets if both are listed. However, either type will be used prior to reviewing revenue.

If intangible assets are reported separately as part of a total assets table, FTSE Russell removes intangibles from consideration. In other words, preference is given to tangible assets.

Total and net revenue are both considered. If both exist in table form, total takes precedent.

Country versus Regional Reporting

- Country-level reporting takes precedent if both country and regional are reported.
- If a company changes their detailed level of reporting (country to regional or regional to country), FTSE Russell first utilizes the more detailed level of reporting, but also reviews the less detailed reporting to ensure accuracy and monitor current trends.
- The majority of assets/revenue is determined by the absolute difference between those percentages. For example, a 20% difference WOULD be achieved if assets were 44% in one country and 20% in another. A 20% difference WOULD NOT be recognized if one country was reported as 30% and another country was reported as 20% higher at 36%.

Company reports by	Requirements to be determined "majority" *
Country	Total assets/revenue for HCI country is 20 percentage points greater than that of the next largest reported country
Region	Total assets/revenue for region containing only one HCI country is greater than 20 percentage points of any other reported region.
Combination of single country and region(s)	Total assets/revenue for HCI country is greater than 20 percentage points of any reported region.
Combination of single country or single region and rest of the world	Total assets/revenue for HCI country is at least 40% of the world's total assets/revenues.
No data, or Insufficient data available	Defaults to headquarters, or most liquid exchange if BDI country

* Majority of assets/revenue is determined by the absolute difference between those percentages. For example, 20% difference would be achieved if assets were 44% in one country and 20% in another. 20% difference would NOT be recognized if country one was 30% and country two was 20% higher at 36%.

Appendix I

Average daily dollar trading volume median

(US$)

Recon year	Global	Frontier
2015	$170,000	$85,000
2014	125,000	62,500
2013	90,000	45,000
2012	75,000	37,500
2011	105,000	52,500
2010	80,000	40,000
2009	40,000	20,000
2008	140,000	70,000
2007	150,000	75,000
2006	155,000	77,500
2005	85,000	42,500
2004	85,000	42,500
2003	30,000	15,000
2002	45,000	22,500
2001	65,000	32,500

Appendix J

Predictive index data

Any security level detail contained within the report that has not yet reached its effective date for processing across the index represents the most recent and best available information. Events that have not yet reached their effective date are subject to change as regulatory agencies; parties involved in the action and market terms may be updated prior to final effective date and should be considered predictive data (“Predictive Index Data”). The information should be considered preliminary until the effective date has been reached. FTSE Russell reserves the right to update or change details of the action or update to effective date.

The Predictive Index Data is being provided for informational purposes only and may be used solely for evaluation purposes. FTSE Russell and its third party licensors do not warrant or make any representations regarding the use, or the results of use, of the Predictive Index Data, or any data included therein or any security (or combination thereof) comprising the Predictive Index Data. Recipient, and not FTSE Russell or its third party licensors, assumes the entire risk as to such use, results of use and the performance of the Predictive Index Data and any such data or securities and will be fully responsible for any uses, and consequences thereof, of the Predictive Index Data by you or anyone obtaining access thereto from or through you.

FTSE RUSSELL’S DISTRIBUTION OF THE PREDICTIVE INDEX DATA IN NO WAY SUGGESTS OR IMPLIES AN OPINION BY FTSE RUSSELL OR ITS THIRD PARTY LICENSORS AS TO THE ATTRACTIVENESS OF INVESTMENT IN ANY OR ALL OF THE SECURITIES TO WHICH THE PREDICTIVE INDEX DATA RELATES.

Appendix K

File revisions

FTSE Russell endeavors to maintain the highest standard of return accuracy and to maintain accurate security level positions and returns which are replicable for passive investment managers, and replicate the passive experience of a stockholder/derivative owner. The full index recalculation policy can be viewed by clicking on the following link:

http://www.ftse.com/products/downloads/FTSE_Russell_Index_Recalculation_Policy_and_Guidelines.pdf

Appendix L

Performance algorithms

Calculation of a synthetic position or a "delayed action"

Stock / Stock plus Cash Actions between members. The closing price of the acquired company will be adjusted to capture the performance of the newly formed entity, according to the merger terms.

Adjusted closing price calculation:

= (Acquiring company closing price per share * stock terms) + cash offer per share

Stock only example: On trading day, Company A, a member of the Russell Global Index (RGI) Midcap, acquires Company B, a member of the RGI Small Cap, at the acquisition terms of 1:5 shares. Based on the time of final notification from the exchange, FTSE Russell classifies this as a "delayed action." Therefore, for an entire trading day, Company B remains a member of the RGI Small Cap, although the action has been finalized and technically Company B no longer trades. At the close of that day, Company B's price is adjusted to mimic the terms of the deal and capture the performance of Company A. After the close, Company B is removed from the RGI Small Cap, and Company A's shares are increased in the correct proportion according to the merger terms.

Date	Company A (mid cap)	Company B (small cap) - 1,200 shares
Closing Price (effective date)	$10.00	$2.00
Closing Price (effective date+1)	$12.00	No longer trading
Adjusted Closing Price (effective date+1)	NA	$2.40

Stock + cash example: In the same example as above, assume that the merger terms were stock plus cash, 1:5 plus $2 per share.

Date	Company A (mid cap)	Company B (small cap) - 1,200 shares
Closing Price (effective date)	$10.00	$2.00
Closing Price (effective date+1)	$12.00	No longer trading
Adjusted Closing Price (effective date+1)	NA	$4.40

Cash only actions or actions involving non-members. If a company is acquired for cash, the acquired company will remain in the index for an additional trading day at a stale price and will be removed at the cash price after the close of the following day.

Cash example: Company Z, a member of the RGI Small Cap Index, is acquired for $5.02 per share in cash. Based on the timing of final notification from the exchange, FTSE Russell considers this a “delayed action” and delays deletion for one trading day. Company Z remains in the index the following day at a stale price, and removed at the cash price, mimicking the cash received by investors. After the close, Company Z is removed from the index.

Date	Company Z (small cap)
Closing Price (effective date)	$5.00
Closing Price (effective date+1)	No longer trading
Cash Price (effective date+1)	$5.02

Market-adjusted breakpoints

Market-adjusted breakpoints are determined by applying the performance of the Russell Global Index to date to the latest reconstitution breakpoints.

> **Example:** Russell Global Index Performance to date = 2.05%
> Latest reconstitution breakpoint between Mid Cap and Small Cap = $2.34 billion
> Market-adjusted breakpoint = $2.34B * 1.0205 = $2.38797 billion

For more information about our indexes, please visit ftserussell.com.

© 2017 London Stock Exchange Group companies.

London Stock Exchange Group companies includes FTSE International Limited (“FTSE”), Frank Russell Company (“Russell”), MTS Next Limited (“MTS”), and FTSE TMX Global Debt Capital Markets Inc (“FTSE TMX”). All rights reserved.

“FTSE®”, “Russell®”, “MTS®”, “FTSE TMX®” and “FTSE Russell” and other service marks and trademarks related to the FTSE or Russell indexes are trademarks of the London Stock Exchange Group companies and are used by FTSE, MTS, FTSE TMX and Russell under licence.

All information is provided for information purposes only. Every effort is made to ensure that all information given in this publication is accurate, but no responsibility or liability can be accepted by the London Stock Exchange Group companies nor its licensors for any errors or for any loss from use of this publication.

Neither the London Stock Exchange Group companies nor any of their licensors make any claim, prediction, warranty or representation whatsoever, expressly or impliedly, either as to the results to be obtained from the use of the Russell Indexes or the fitness or suitability of the Indexes for any particular purpose to which they might be put.

The London Stock Exchange Group companies do not provide investment advice and nothing in this document should be taken as constituting financial or investment advice. The London Stock Exchange Group companies make no representation regarding the advisability of investing in any asset. A decision to invest in any such asset should not be made in reliance on any information herein. Indexes cannot be invested in directly. Inclusion of an asset in an index is not a recommendation to buy, sell or hold that asset. The general information contained in this publication should not be acted upon without obtaining specific legal, tax, and investment advice from a licensed professional.

No part of this information may be reproduced, stored in a retrieval system or transmitted in any form or by any means, electronic, mechanical, photocopying, recording or otherwise, without prior written permission of the London Stock Exchange Group companies. Distribution of the London Stock Exchange Group companies’ index values and the use of their indexes to create financial products require a licence with FTSE, FTSE TMX, MTS and/or Russell and/or its licensors.

The Industry Classification Benchmark (“ICB”) is owned by FTSE. FTSE does not accept any liability to any person for any loss or damage arising out of any error or omission in the ICB.

Past performance is no guarantee of future results. Charts and graphs are provided for illustrative purposes only. Index returns shown may not represent the results of the actual trading of investable assets. Certain returns shown may reflect back-tested performance. All performance presented prior to the index inception date is back-tested performance. Back-tested performance is not actual performance, but is hypothetical. The back-test calculations are based on the same methodology that was in effect when the index was officially launched. However, back-tested data may reflect the application of the index methodology with the benefit of hindsight, and the historic calculations of an index may change from month to month based on revisions to the underlying economic data used in the calculation of the index.

IdealRatings is a trademark of IdealRatings Company. FTSE Russell is the source and owner of all copyrights related to the Russell Indexes, including the Russell-IdealRatings Islamic Index series.

About FTSE Russell

FTSE Russell is a leading global provider of benchmarking, analytics and data solutions for investors, giving them a precise view of the market relevant to their investment process. A comprehensive range of reliable and accurate indexes provides investors worldwide with the tools they require to measure and benchmark markets across asset classes, styles or strategies.

FTSE Russell index expertise and products are used extensively by institutional and retail investors globally. For over 30 years, leading asset owners, asset managers, ETF providers and investment banks have chosen FTSE Russell indexes to benchmark their investment performance and create ETFs, structured products and index-based derivatives.

FTSE Russell is focused on applying the highest industry standards in index design and governance, employing transparent rules-based methodology informed by independent committees of leading market participants. FTSE Russell fully embraces the IOSCO Principles and its Statement of Compliance has received independent assurance. Index innovation is driven by client needs and customer partnerships, allowing FTSE Russell to continually enhance the breadth, depth and reach of its offering.

FTSE Russell is wholly owned by London Stock Exchange Group.

For more information, visit www.ftserussell.com.

To learn more, visit www.ftserussell.com; email info@ftserussell.com;
or call your regional Client Service Team office:

EMEA
+44 (0) 20 7866 1810

North America
+1 877 503 6437

Asia-Pacific
Hong Kong +852 2164 3333
Tokyo +81 3 3581 2764
Sydney +61 (0) 2 8823 3521