Russell
Investments

1301 Second Avenue   **tel**   206-505-7877   **www.russell.com**
Seattle, WA 98101   **fax**   206-505-3495
                            toll-free 800-426-7969

Mr. Alp Eroglu
International Organization of Securities Commissions (IOSCO)
Calle Oquendo 12
28006 Madrid
Spain

RE: IOSCO FINANCIAL BENCHMARKS CONSULTATION REPORT

Dear Mr. Eroglu:

Frank Russell Company (d/b/a "Russell Investments" or "Russell") fully supports IOSCO's principles and goals outlined in the Financial Benchmarks Consultation Report (the "Report"), although Russell respectfully suggests several alternative approaches in its response below that Russell believes will better achieve those goals, strengthen markets and protect investors without unduly burdening index providers. Russell is continuously raising the industry standard for index construction and methodology. The Report's goals accord with Russell's bedrock principles:

- Index providers' design standards must be objective and sound;
- Indices must provide a faithful and unbiased barometer of the market they represent;
- Index methodologies should be transparent and readily available free of charge;
- Index providers' operations should be governed by an appropriate governance structure; and
- Index providers' internal controls should promote efficient and sound index operations.

These are all principles deeply ingrained in Russell's heritage, practiced daily and they guide Russell as the premier provider of indices and multi-asset solutions.

Russell is a leader in constructing and maintaining securities indices and is the publisher of the Russell Indexes. Russell operates through subsidiaries worldwide and is a subsidiary of The Northwestern Mutual Life Insurance Company. The Russell Indexes are constructed to provide a comprehensive and unbiased barometer of the market segment they represent. All of the Russell Indexes are reconstituted periodically, but not less frequently than annually or more frequently than monthly, to ensure new and growing equities and fixed income securities are reflected in its indices. Over the past 25 years, Russell's innovative methodology has helped the Russell Indexes become the indices most used by U.S. institutional investors. Investment professionals manage over $3.9 trillion in portfolio assets using Russell Indexes.

Russell Indexes represent over 99% and 98% of the investable U.S. and global equity universes, respectively. Our modular index construction allows users to track current and historical market performance by specific market segment supporting a broad spectrum of sub-indices based on country, region, sector and capitalization size covering over 10,000 securities in 50 countries. Russell Indexes are

objective, comprehensive, and built according to transparent rules. Industries and sectors are represented by a wide variety of securities, rather than samples found in other indexes. Russell Indexes are rigorously maintained. Member securities are not selected by panels, surveys or committees.

Russell owns the Russell Indexes and develops each Russell Index based on its own proprietary model employing its intellectual property (patented property as well as trade secrets and other intellectual property) and industry expertise. Russell Indexes may be based on the intellectual property of certain third parties under contractual arrangements with Russell. In establishing each Russell Index, Russell has developed a set of clearly defined inclusion/exclusion criteria for determining when a security should be included or excluded from an Index. Certain Russell personnel use this proprietary, rules-based methodology to determine, amongst other things, the composition of each Russell Index, the policies and procedures to be followed by Russell personnel in calculating and maintaining each Russell Index, the method and frequency of reconstitution and the daily treatment of corporate actions. Russell is pleased to submit its response to the Report which follows below.

*　　*　　*

Before Russell provides its views on the Report we must review and revise the premise that Benchmarks are monolithic, subject to the same concerns related to manipulation and conflicts of interest and, therefore, as a monolithic whole are in need of regulatory oversight by Market Authorities without regard to the differences between them. Although the Report and other regulatory bodies thoughtfully question that premise, meaningful regulation requires that we recognize the differences in Benchmarks before making regulatory proposals.[1]

We must recognize a critical distinction between two different types of Benchmarks. This distinction is at the heart of the way in which these Benchmarks should be treated by Market Authorities, and the degree of prudential oversight that is required for them. The Report speaks in terms of, and is grounded in, one type of these Benchmarks – using that language to cover and describe both types of Benchmarks may well lead to confusion and to a sub-optimal regulatory structure. Crafting the correct regulatory structure requires that we consider three key elements:

- What type of information is being used to construct the benchmark?
- What is the source of that information?
- How is the information used to construct the benchmark?

Using these elements it is easy to determine that there are two quite different types of Benchmarks.

---

[1] Accord Markit Consultation on a Possible Framework for the Regulation of the Production and Use of Indices Serving As Benchmarks in Financial and Other Contracts at p.2 (hereinafter "Markit", Nov. 29, 2012); NASDAQ OMX Consultation on a Possible Framework for the Regulation of the Production and Use of Indices Serving As Benchmarks in Financial and Other Contracts at p.4 (hereinafter "NASDAQ", Nov. 2012).

Russell Investments

The first is what we call "Public Data Benchmarks" which are thoroughly reliable and not susceptible to manipulation or conflicts of interest absent actual fraud,[2] which, if present, would destroy the business of a Public Data Benchmark Provider. This is the type of Benchmark that Russell produces and which exhibit the characteristics of a credible benchmark as stated in the Report.[3] These Benchmarks should receive a light regulatory touch in the form of industry codes that perhaps may be approved by Market Authorities. The characteristics of these Benchmarks in terms of the three elements outlined above are as follows:

Type of information collected (referred to as "actual transaction data" in Russell's response to the Report	Information relating to - prices of actual trades performed on a regulated exchange - trades reported to an aggregated single consolidated tape (or similar mechanism) - trade or tradable quote data provided to a data consolidator and aggregator that is regarded by market participants as an authentic and dispassionate descriptor of broad market behaviour (such as Reuters for foreign exchange marketplaces, or the WM fixing rates for foreign exchange marketplaces) - descriptive metrics (earnings, profits, revenues and such information) of companies whose securities are being included in benchmarks where the data is sourced from publicly issued reports and accounts (and similar documents) filed as part of a regulatory filing process
Source of information	Information collected from: - exchanges or other similar entities acting in their roles of information consolidators and reporters whose data collection and dissemination activities are likely formally regulated - reputable data consolidators and aggregators (such as Reuters and Bloomberg) where such data is regarded as an authentic and dispassionate descriptor of broad market behaviour - corporate or other entities where that information is part of a regulatory disclosure process in a standardized or audited form with existing regulatory sanction applicable for intentional error or failure to disclose
Construction process	The creation of Benchmarks using transparent, robust, publicly available rules based methodologies produced by index operations governed by an effective control framework. Notably absent is survey, panel or estimated data collection methodologies.

---

[2] See also Response of Investment Company Institute and ICI Global to the European Commission Consultation on the Regulation of Indices at p.2 (hereinafter "ICI"; Nov. 29, 2012).
[3] Financial benchmarks Consultation Report, International Organization of Securities Commissions ("IOSCO") at p.10 (Jan. 2013).

The second type of benchmark can be called "Survey-Based Benchmarks." These are quite different specimens from Public Data Benchmarks. Survey-Based Benchmarks are quite susceptible to manipulation and conflicts of interest and require a comprehensive substantive regulatory framework supervised by Market Authorities.

Type of information collected	Information relating to: • indicative quotes or prices of trades, activity, holdings or interest in private markets • indications of opinions, views or approximations of the state of the market from market participants in markets • Model-based or assumption-based indications of prices, quotes, market levels or similar indicators
Source of information	Information collected: • from market participants, whether from their trading desks or other similar sources • by means of estimates, surveys, panels or other non-observable and non-confirmable means
Construction process	Survey, panel or estimate based methodologies. Methodologies involving unclear rules, discretionary decision making structures, incomplete data or other uncertainties that make the Benchmark susceptible to manipulation and conflicts of interest and, possibly, unable to be replicated by third parties.

Public Data Benchmarks carry few or none of the potential concerns expressed in the Report. The primary source of concern here are inadequate control frameworks or insider trading, or other inappropriate use of potentially price-sensitive information about index changes.[4] These concerns can best be addressed by the creation of an industry code, and by Administrators having strong and robust control frameworks. The design, construction, dissemination and maintenance of Public Data Benchmarks occurs in a highly competitive marketplace with few or no barriers to entry. Russell believes that the inherent checks and balances of a highly competitive marketplace combined with the transparency of input data, transparent/robust/publicly available methodologies and presence of suitable control frameworks strengthens markets and provides a huge protection to investors.

Conversely, Survey-Based Benchmarks is the area of primary concern for markets, investors and Market Authorities. Regardless of the presence of control frameworks Survey-Based Benchmarks are susceptible to manipulation and multi-faceted conflicts of interest. Survey-Based Benchmarks like LIBOR, unlike the Russell Indexes, are based on data supplied by those who are trying to strategically signal markets with that data and who have a vested interest in the result embodied in the Survey-Based Benchmark. In addition, Survey-Based Benchmarks' data sources must find a way to mitigate the conflicts of interest regarding their own usage of the Survey-Based Benchmark as we've seen in some recent Survey-Based Benchmark scandals. In addition Survey-Based Benchmarks grapple with other significant problems including lack of transparency, opaque methodologies and, sometimes, less robust

---

[4] These types of behaviors are already prohibited under various regulatory schemes in the jurisdictions represented by IOSCO.

governance mechanisms. This is the only type of Benchmark where the term "Submitter" is appropriate. The concerns about the role that Submitters play and the way that information is collected, handled, managed and used are highly concerning. Many of the concerns raised in the Report are valid, and most of the proposals suggested (as long as they are confined to Survey-Based Benchmarks) are appropriate and might well deal with those concerns.

Due to the fundamental differences between Public Data Benchmarks and Survey-Based Benchmarks Russell suggests that:

(i)   Survey-Based Benchmarks should be governed by a substantive regulatory framework similar to the framework set forth by the UK Financial Services Authority (the "FSA").[5]

(ii)   Public Data Benchmarks should not be subject to regulation by Market Authorities,[6] but should as an industry develop common standards and best practices to guide their operations due to the fact that Public Data Benchmarks exhibit the characteristics of a credible benchmark as stated in the Report and because they are simply not subject to manipulation short of actual fraud which is already illegal under applicable laws.[7]

1. **Do you agree with the scope of the report and intended audience? Are there other Benchmarks or stakeholders that have idiosyncrasies that should place them outside of the scope of the report? Please describe each Benchmark or stakeholder and the idiosyncrasies that you identify and the reasons in you view the Benchmarks or stakeholder should be placed outside of the scope of the report.**

    Russell generally agrees with the scope of the Report, but respectfully suggests that Benchmarks should be regulated similarly without regard to whether a public body acts as the Benchmark Administrator or Administrator. Russell believes that a failure to include public bodies within the scope of this Report deprives financial markets, investors and consumers of a useful secondary system of oversight and, at worst, potentially places significant portions of Survey-Based Benchmarks outside the effective regulatory oversight of Market Authorities.

2. **Do you agree that the design of a Benchmark should clearly reflect the key characteristics of the underlying interest it seeks to measure?**

    Yes, Russell thinks that as a threshold matter all Benchmarks must provide a faithful and unbiased barometer of the market they represent.

---

[5] The Regulation and Supervision of benchmarks: Consultation Paper 12/36, UK Financial Services Authority ("hereinafter the "FSA Paper", Dec. 2012). Accord Stoxx Ltd. Response to Public Consultation by the European commission on the Regulation of Indices at p.11 (hereinafter, "Stoxx", Nov. 29, 2012). See also Response of Index Industry Association to the European Commission Consultation on the Regulation of Indices at p.3 (hereinafter "IIA"; Nov. 29, 2012). See Markit at p.2.
[6] Accord Stoxx Ltd at p.11.
[7] Accord ICI at p.2. See also Markit at p.2.

Russell Investments

3. **What measures should Administrators take to ensure the integrity of information used in Benchmark-setting and that the data is bona fide? Please highlight any additional measures required where Benchmarks are survey based. Please also comment on each of the factors identified in the discussion on the vulnerability of data inputs such as voluntary submission, and discretion exercised by Administrators. Are these measures adequately reflected in the discussion of roles and responsibilities of the Administrator discussed in section E?**

Russell believes that use of actual transaction data (end of day and real time for benchmarks requiring real time calculation), transparent rules based methodologies and index production systems that minimize opportunities for manual intervention into the Benchmark Administration process best mitigate conflicts of interest in the Benchmark Administration process.[8] Russell sources this data direct from securities exchanges whose data collection and dissemination activities are regulated activities as well as other reputable data distributors. Please see Russell's response to the Report at pages 2-4, above for a fuller discussion of the superiority of Public Data Benchmarks over Survey-Based Benchmarks and why this Question 3 should apply to Survey-Based Benchmarks.

Russell prefers the use of actual transaction data as the input to an objective, accurate and reliable indices. However, Russell acknowledges that certain data critical to Benchmark Administration might not be readily available. In those cases (e.g., certain fixed income securities or structured securities), model data or other inputs, subject to the application of processes that support the veracity of those data or inputs, might be an acceptable proxy for certain data elements.[9]

Section 2(E) of the Report, Role and Responsibilities of Administrators, generally reflects Russell's position that Administrators should be governed by an appropriate governance structure and that internal controls should promote efficient and sound Benchmark Administration.[10] Benchmark Administrators for Public Data Benchmarks should develop their own control framework and quality assurance processes (i.e., the governance structure and internal controls) that efficiently and effectively monitors their operations and mitigate any processing exceptions or conflicts of interest.[11] Benchmark Administrators for Survey-Based Benchmarks must not only develop their own control framework and quality assurance processes that efficiently and effectively monitors their operations and mitigate any processing exceptions or conflicts of interest, but they must also comply with appropriately crafted substantive regulation by Market Authorities. However, as noted in response to Consultation Questions 11-16 Russell does not support the use of external audits as part of the control framework.

---

[8] See also, Responses of CFA Institute to the European Commission Consultation on the Regulation of Indices at pp.4-5 (hereinafter "CFA Institute"; Nov. 29, 2012); GFMA Consultation on a Possible Framework for the Regulation of the Production and Use of Indices Serving As Benchmarks in Financial and Other Contracts at pp.4-5 (hereinafter "GFMA", Nov. 29, 2012); International Swaps and Derivatives Association, inc. at p.6 (Nov. 29, 2012).
[9] See also Markit at pp.6-7.
[10] See also CFA at pp.5-6; GFMA at p.5.
[11] See also GFMA at pp.5-6.

4. What measures should Submitters implement to ensure the integrity of information provided to Administrators? Are these measures adequately reflected in the discussion of a code of conduct for Submitters discussed in section E? In particular, should Submitters submit all input data, and not a selection of such data so as to maximise the representation of the underlying market? Please comment on any practical issues that compliance with such an approach may give rise to.

Russell notes that the notion of Submitters and any related regulation of them are only applicable to Survey-Based Benchmarks. While Submitters must maintain robust controls over the submissions that they make,[12] Benchmark Administrators should also maintain the integrity of inputs to Benchmarks, but the processes and procedures utilized by Benchmark Administrators to maintain integrity will vary depending upon whether the Benchmark Administrator produces Public Data Benchmarks or Survey-Based Benchmarks. The processes and procedures employed to maintain the integrity of Survey-Based Benchmarks must be more rigorous to overcome the inherent shortcomings of those Benchmarks as discussed on pages 2-4 of Russell's response above.

No Benchmark Administrator or Submitter can be a guarantor of the inputs to Benchmarks. That said, Benchmark Administrators should consider the nature of Submitters and the facts and circumstances surrounding the submission process and perform reasonable diligence on the sources of that data to reasonably maintain the integrity of inputs to Benchmarks.

In the case of Public Data Benchmarks input data tends to be observable transaction data sourced from suppliers whose operations as they relate to the collection and transmission of data is itself a regulated activity (e.g., securities exchanges, market makers and other entities conducting and reporting actual securities transactions). Benchmark Administrators should be entitled to rely on the regulated nature of those activities to as the primary indicia of data integrity.

In cases where the Benchmark Administrator to a Public Data Benchmark receives data from sources whose collection and transmission of data is not a regulated activity, that Benchmark Administrator should perform reasonable diligence on such sources and employ reasonable quality assurance procedures to maintain an adequate level of integrity of inputs to Public Data Benchmarks.

In as much as Benchmark Administrators do not control or have the ability to dictate the internal policies of Submitters Russell does not support the criteria enumerated in the Report's Code of Conduct for Submitters. It is incumbent on Submitters to maintain their own procedural and technical safeguards when collecting and disseminating data. Russell understands that Market Authorities may have the ability to dictate the internal policies of Submitters and that some regulation of Submitters may be appropriate. However, Russell urges Market

---

[12] Accord GFMA at p.7.

![Russell Investments logo]

Authorities to strike a balance between burden, cost and benefit of regulation so that the submission process is not chilled to stagnation with the attendant evaporation of Benchmarks.

Benchmark Administrators to a Survey-Based Benchmark akin to LIBOR should be regulated similar to the framework set forth by the UK Financial Services Authority.[13]

5. What level of granularity with regard to the transparency of Methodologies would enable users to assess the credibility, representativeness, relevance and suitability of a Benchmark on an on-going basis and its limitations with respect to their intended use? Relevant factors could include; criteria and procedures used to develop the Methodology, type of data used, how data is collected, relative weighting of data used, how and when judgement is used, contingency measures (e.g., methods when transaction data is unavailable, etc.), publication of information supporting each Benchmark determination, etc. Please provide examples where you consider there are currently significant gaps in the provision of this information.

Transparency and Granularity of Methodologies

Index methodology transparency is one of Russell's bedrock principles. Accordingly, Russell believes that indices should be constructed as unbiased and comprehensive representatives of the entire market segment they are designed to represent.[14] Please see Russell's Global Indexes Construction and Methodology document attached hereto as Appendix A as a representative example of an appropriate level of granularity and transparency for Public Data Benchmarks.

The attached Russell Global Indexes Construction and Methodology document illustrates the key tenets of the principle of granularity and transparency for Public Data Benchmarks:

- All rules regarding the construction and maintenance of indices should be published and publicly available allowing the indices to be tracked and replicated, making them better benchmarks for retail investors and both active and passive managers.

- To ensure that market segments are accurately represented, indices should be completely reconsituted at least annually and maintained over time to account for changes in securities' size and style characteristics as well as new entries to the market – specifically, initial public offerings – on a

---

[13] See FSA Paper supra n.5.
[14] See also, CFA Institute at p.4; IIA at p.6; Markit at p.5; MSCI Response to the EU Consultation Document on the Regulation of Indices at p.8 (hereinafter, "MSCI", Nov. 2012).

quarterly basis.[15]

- Honoring agreements with others and applicable intellectual property laws such that any publicly disclosed information (including disclosure via password protected websites whose access cannot be controlled by a benchmark Administrator in its sole discretion) concerning indices:

  o do not impede Russell's intellectual property rights or the intellectual property rights of others; and

  o do not violate contractual agreements with third parties;

which helps ensure that Russell can provide unbiased and comprehensive indices on a continuous basis. Russell and other Benchmark Administrators cannot comply with these laws and contractual agreements unless disclosure of index constituent weightings is delayed so that they are at least retrospective as of the most recent annual index reconstitution. Additionally, contractual covenants may preclude Benchmark Administrators from publicly disclosing certain constituent level index data.

Suitability and Limitations on Use

Benchmark providers develop Benchmarks to measure markets (e.g., UK equities), statistics (e.g., inflation or housing prices) or for bespoke purposes. Benchmark providers also develop Benchmarks as the basis for certain investment products. The purpose for which a Benchmark is developed is somewhat irrelevant to its ultimate use. The key considerations for a Benchmark's particular usage are the Benchmark's integrity and its analytically or empirically evidenced relationship to the subject measured by the Benchmark.

If the Benchmark demonstrates an observed and analytically supported relationship to its proposed use, it is appropriate to use the Benchmark for that purpose regardless of the impetus for the Benchmark's initial development. There are numerous examples of this principle, but consider three: (i) Benchmarks developed for performance attribution of equity market segments are used for passive investment products, investment products for portfolio risk management and as the basis for active investment strategies; (ii) the statistics developed to measure the investment yield for the certain U.S. Treasury securities are analytically related to appropriate consumer and commercial mortgage rates; or (iii) vast government economic statistics drive complex business models that efficiently allocate corporate capital such that business know (with varying degrees of precision) what products/services to produce, how much to produce and where to produce them.

---

[15] Accord BlackRock Response to Consultation on a Possible Framework for the Regulation of the Production and Use of Indices Serving As Benchmarks in Financial and Other Contracts at pp.6-7 (hereinafter "BlackRock", Nov. 29, 2012). See also, IIA at pp.5-6.

The usage of Benchmarks should not be controlled or restricted per se. It is incumbent on Benchmark providers to produce analytically sound Benchmarks and for the user of the Benchmark (whether the intended user or a user who discovers innovative uses for Benchmarks), to demonstrate an analytical causal relationship between a Benchmark and its purported usage. Absent fraud and collusion (which should be subject to rigorous regulation and enforcement, both public and private) financial markets, investors, consumers and government agencies will efficiently rout poorly constructed Benchmarks and condemn (commercially and legally via courts or regulatory enforcement) illogical/ill-conceived uses of Benchmarks. Russell commends Market Authorities for their focus on the users of Benchmarks with regard to documenting the suitability of the Benchmark for its intended use.[16]

Benchmark providers must produce analytically sound Benchmarks; Benchmark users/product creators providers bear the responsibility for intelligent and suitable usage of Benchmarks; investors and consumers must evaluate, and act upon, the results they achieve with Benchmark based products; financial/consumer intermediaries must prudently advise investors/consumers; financial markets must provide safe trading venues in accordance with law and regulation; and Market Authorities (financial and consumer) must establish reasonable, intelligent and commercially viable rules and standards governing investment products and trading venues, taking appropriate enforcement action when needed.

6. **What steps should an Administrator take to disclose to Market Participants and other stakeholders the contingency measures it intends to use in conditions of market disruption, illiquidity or other stresses?**

An Administrator should disclose its contingency measures it intends to use in conditions of market disruption, illiquidity or other stresses in two ways. A Benchmark's methodology should describe the treatment of certain of these issues (e.g., delistings, insolvency, currency devaluations, etc.). Other matters such as Benchmark error correction or force majeure issues should be governed by the Administrator's terms as stated in their contractual agreements with Market Participants.

7. **What steps should an Administrator take to notify Market Participants of material changes to a Benchmark Methodology (including to Benchmark components) and to take their feedback into account?**

Similar to the manner for addressing contingencies as noted in Question 6, Benchmark providers should address changes in Benchmark constituents and changes to the Benchmark methodology in its methodology document and in its agreements with market participants. Changes to Benchmark constituents should occur according to a periodically scheduled reconstitution (e.g., at least annually

---

[16] See Sarah Krouse, Index products in the eye of the storm, Financial News (Jan. 21, 2013) (noting that FINRA, the SRO for U.S. securities brokers and distributors, will review suitability on its regulatory agenda)

for the Benchmark as a whole and more frequently for periodic maintenance such as accounting for IPOs) as described by the Benchmark methodology. Administrators should provide reasonable notice to market participants of material methodology changes or intention to cease publishing a Benchmark pursuant to the Administrator's terms as stated in their contractual agreements with market participants and endeavour to provide at least 30 days written notice of such changes.

8. **How often should the Administrator review the design and definition of the Benchmark to ensure that it remains representative?**

    Benchmark should review their Benchmarks at least quarterly to ensure that the Benchmarks remain representative of the market that they describe.[17] Accordingly, Russell believes that its quarterly index maintenance process and annual reconstitution process is an ideal time to review the representativeness of its Benchmarks.

9. **The Consultation Report discusses a number of potential conflicts of interest that may arise at the level of the Submitters, between Submitters at different entities, and between Submitters, Administrators and other third parties. Are there other types of conflicts of interest that have not been mentioned that you consider may arise? If so, how best should these conflicts of interest be addressed? Are the measures discussed in the Consultation Report sufficient to address potential conflicts of interests at the level of the Submitters, between Submitters at different entities, and between Submitters, Administrators and other third parties?**

    The notion of Submitters and any related regulation of them are only applicable to Survey-Based Benchmarks. As noted in the Report, Survey-Based benchmarks are susceptible to manipulation and conflicts of interest. Russell believes that its response to Question 3, above, enhanced for the inherent inferiority of Survey-Based Benchmarks over Public Data Benchmarks, could mitigate conflicts of interest. In addition, Russell thinks that Submitters and Administrators must maintain corporate policies related to conflicts of interest that may arise in the context of personal securities trading, attempted improper influence of its associates or exorbitant gifts/hospitality given to or made by its associates. Russell maintains and enforces a strict global code of ethics designed to mitigate or eliminate these and other conflicts of interest and suggests that corporate codes of ethics be adopted as a best practice.

    Russell describes, in response to Question 3, detailed support for robust control frameworks and quality assurance processes within a Benchmark provider and reiterates the need for them, enhanced for the inherent inferiority of Survey-Based Benchmarks over Public Data Benchmarks, in response to this Question 9. Since these control frameworks and quality assurance processes, if well thought, are

---

[17] Accord IIA at p.6.

highly effective, Russell does not support the establishment of oversight committees and similar structure external to a Benchmark provider.[18]

Russell reiterates here its response to Question 4, above, in particular as it relates to the role of Submitters within a Benchmark providers' internal environment, the inability of Benchmark providers to dictate the internal policies of Submitters and the role of Market Authorities in the activities of Submitters.

10. **Do you agree that the Administrator's oversight committee or other body could provide independent scrutiny of all relevant activities and management of conflicts of interest? Please comment if and why any different approaches might be appropriate for different kinds of Benchmarks. For example, where Administrators simultaneously act as the trade body for Submitters to the Benchmark. What is the minimum level of independent representation this committee or body should include?**

Russell reiterates its answer to Question 9, above. Russell also supports the use of, and itself maintains, internal controls related to operational oversight in the production of Benchmarks as well as internal audits of its processing environment by internal auditors independent of the Russell Indexes business unit who report to the Chief Legal Officer of Russell Indexes' parent company. Russell thinks that this efficiently and effectively controls and mitigates any potential conflicts of interest for Public Data Benchmark Administrators but concedes that more may need to be done with respect to the Administrators of Survey-Based Benchmarks.

11. **Should the Submitters establish accountability procedures to assess their compliance with operational standards and scrutiny of Benchmark submissions?**

Russell reiterates its answers to Questions 4 and 9, above. Russell believes that Submitters should implement appropriate control frameworks and comply with any enhanced regulatory requirements that might be implemented by Market Authorities.[19] This requirement flows as a matter of basic corporate compliance and ethics in addition to any regulatory obligations imposed on Submitters.

12. **Are the measures discussed in the Consultation Report (e.g., Audit Trail, external audits and requirement for regulatory cooperation) sufficient to ensure the accountability of the Submitters? Should additional mechanisms be considered?**

Russell agrees that Submitters and Administrators, as appropriate to their respective responsibilities, should preserve the Audit Trail and cooperate with Market Authorities. Submitters' external auditors should review their submissions and apply procedures to ensure that the submissions reasonably

---

[18] Russell does support the use of external advisory groups convened by Benchmark providers such as a client advisory board provided that the opinions of such groups are truly advisory and not binding or otherwise imposed on Benchmark providers. See also CFA Institute at pp.5-6 (Nov. 29, 2012).
[19] Accord GFMA at p.7.

represent what they purported to represent.[20] For example, if a Submitter submitted their daily cost of capital as an input to a bank lending rate, those submissions should be reviewed by their auditors to ensure that the submissions were reasonable given the facts and circumstances prevailing as of the time of submission.

13. **How frequently should Submitters be subject to audits? Should these be internal or external audits?**

The notion of Submitters and any related regulation of them are only applicable to Survey-Based Benchmarks. Submitters' submissions should be audited at least annually and some form of assurance (e.g., an Agreed Upon Procedures Report) should be sent in confidence to the Administrator. Any required audits should be performed by independent accountants such as Certified Public Accountants or Charted Accountants.

14. **Are the measures discussed in the Consultation Report (e.g., complaints process, Audit Trail, external audits and requirement for regulatory cooperation) sufficient to ensure the accountability of the Administrator?** **Should** **additional mechanisms** **be considered?**

Russell believes that Administrators should preserve the Audit Trail and cooperate with Market Authorities. Russell also believes that Administrators should follow Russell's example and ensure that their administration operations are periodically audited by an independent internal auditor. Any required audits should be conducted by an internal audit function structured to be independent of the Administrator's business and operations. Russell points to the U.S. Anti-Money Laundering rules as a successful regulatory example for internal auditors being substituted for independent accountants. Russell believes that these procedures coupled with appropriate control frameworks will strengthen markets and protect investors.

15. **If recommended, how frequently should Administrators be subject to audits? Should these be internal or external audits?**

Administrators should conduct internal audits periodically, but not necessarily annually. Any required internal audits should be performed by an internal audit function structured to be independent of the Benchmark Administration function and, absent that, independent accountants such as Certified Public Accountants or Charted Accountants.

16. **Is public self-certification of compliance with industry standards or an industry code another useful measure to support accountability? This approach might also contemplate explanation of why compliance may not have occurred. If so, what**

---

[20] Id.

self-certification requirements would make this approach most reliable and useful to support market integrity?

> Russell does not support mandatory self-certification of compliance with industry standards, applicable codes or regulations. However, Russell anticipates that Submitters and Administrators may want to voluntarily and publicly promote its compliance with industry standards, applicable codes or regulations and should be allowed to do so.

17. **The Consultation Report discusses elements of a code of conduct for Submitters. Are the measures discussed (e.g., adequate policies to verify submissions, record management policies that allow the Submitter to evidence how a particular submission was given, etc.) sufficient to address potential conflicts of interest identified or do you believe that other control framework principles should be added?**

> Russell supports Market Authorities in their efforts to work with Submitters on an appropriate, fair and balanced code of conduct or similar control framework. This code of conduct or control framework should take into account the internal controls and other quality assurance processes in effect with Submitters and not impose sweeping new substantive requirements due to recent experiences with "outliers" in the recent Survey-Based Bnchmark scandals.

18. **What would be the key differences in the code of conduct for Benchmarks based on different input types, for example transactions, committed quotes and/or expert judgement?**

> Please see Russell's response to the Report at pages 2-4, above for a fuller discussion of the superiority of Public Data Benchmarks over Survey-Based Benchmarks which is a necessary predicate to this response.
> Benchmark inputs span a continuum from actual transaction data to surveyed expert judgments or estimated data. Actual transaction data is typically sourced from suppliers whose operations as they relate to the collection and transmission of data is itself regulated activity by Market Authorities and SROs (e.g., securities exchanges, securities brokers, market makers and other entities conducting and reporting actual securities transactions). It is entirely likely that relevant codes of conduct and control frameworks are already required by law or industry best practice and in effect at these organisations.
>
> The nature of the inputs to Public Data Benchmarks versus Survey-Based Benchmarks dictates a need for a high degree of substantive regulation of the inputs to Survey-Based Benchmarks. Submitters at the points on the continuum for Survey-Based Benchmarks who are not regulated by Market Authorities or SROs should implement substantive codes of conduct related to their submission activities. In addition to codes of conduct and subject to the responses to Question 19, below, it might be prudent for Market Authorities to adopt regulations similar to those proposed in Sections 3.4 – 3.6, 3.8-3.10 and Annex D,

Section 8.2.1 – 8.2.10 of the FSA Paper.[21] Russell urges Market Authorities and Submitters to work collaboratively and create an effective regulatory solution that does not unduly burden Submitters.

19. **What are the advantages and disadvantages of making Benchmark submissions a regulated activity?**

Russell reiterates its response to Questions 17 and 18, above. In light of the recent abuses in the submissions to Survey-Based Benchmarks, Russell can appreciate the need for SRO or Market Authorities' regulation of the submission process for Submitters that are not regulated in any other effective way as a means of ensuring the reliability of inputs to Survey-Based Benchmarks. However, care must be taken so that Submitters are not unreasonably or unduly burdened by such regulation otherwise the pool of Submitters will shrink to levels that preclude the production of Benchmarks that fairly represent the market or statistic being measured. Russell urges Market Authorities and Submitters to work collaboratively and create an effective regulatory solution making use of existing regulatory structures applicable to Submitters where possible.

20. **What are the advantages and disadvantages of making Benchmark Administration a regulated activity?**

Imposing governance regulation or self-regulation on Benchmark Administrators requires careful consideration. Successful Benchmarks that: (i) underlie prudent investment products; (ii) are appropriate for performance attribution and (iii) are useful for financial research and development, are a fusion of innovation and analytics. Regulation inevitably leads to a rigid structure that stifles creativity and innovation. In addition, regulation is a static rather than dynamic product. Investors and their fiduciaries pay the price for the rigidity of regulation and the inability of regulation to dynamically evolve with best practices in the form of fewer and less useful index products and performance measurement tools with which to achieve investment returns, reduce portfolio risk and benchmark investment outcomes and alternatives.

Russell can appreciate that prudent standards for Benchmark Administration, if crafted intelligently, would benefit investors, markets and the Benchmark industry. To that end, Russell thinks that an industry committee of recognized Benchmarking, performance measurement and legal professionals is best positioned to craft such standards which would be approved akin to the FSA confirmed industry guidance process as outlined in the FSA Paper.[22]

21. **Do you agree with the factors identified for drawing regulatory distinctions? What other factors should be considered in determining the appropriate degree of oversight**

---

[21] FSA Paper supra n.5.

[22] FSA Paper supra n.2 at p.12. See Response of Barclays to the European Commission Consultation on the Regulation of Indices at pp.12-13 (hereinafter "Barclays"; Nov. 30, 2012); London Stock Exchange Group to the Commission Consultation on the Regulation of Indices at pp. 3-4, 17 (hereinafter, "LSEG", Nov. 29, 2012).

of Benchmark activities (discussed in Chapter 3)? Please provide specific recommendations as to how the distinctions discussed in Chapter 3 should inform oversight mechanisms.

Russell agrees in concept that any proposed regulatory framework must first and foremost draw distinctions between Public Data Benchmarks and Survey-Based Benchmarks, lightly regulating the former and substantively regulating the latter. This will necessarily result in distinctions being made between the superiority of actual transaction data used in the creation of Public Data Benchmarks and the need to consider the inherent problems with inputs to Survey-Based Benchmarks notably: whether: (i) material incentives and opportunity for manipulation exist with respect to the input data to, and administration of, Survey-Based Benchmarks in a given set of facts and circumstances; (ii) there is a need for additional substantive regulation for Submitters and Administrators of Survey-Based Benchmarks, and (iii) Submitters and Benchmark Administrators are already subject to regulation which could accomplish any proposed regulatory goals.

22. **What distinctions, if any, should be made with regard to Benchmarks created by third parties and those created by regulated exchanges?**

Russell does not think that any distinctions should be made between Benchmarks created by independent Benchmark providers and index providers who are, or who are owned or controlled by, regulated exchanges. In fact, Benchmarks created by regulated exchanges or banks, and more importantly the exchanges or banks themselves, should be viewed similar to Survey-Based Benchmarks and must receive additional scrutiny above and beyond Benchmarks created by third parties because of the heightened potential for abusive practices such as insider trading, improper favouritism of exchange or bank clients over other clients as well as conflicts of interest with the exchanges' or banks' other lines of business such as brokerage, research, mergers and acquisitions, etc.[23] In addition, conflicts of interest may arise with respect to membership in a Benchmark where certain Benchmark constituents are also key clients of the exchange/bank.[24] As the Report duly notes, the fact that a Benchmark provider is subject to regulation is not dispositive. The focus needs to be placed on whether the regulation in question adequately addresses the factors noted in Response to Question 21, above.

Russell, for example, is regulated under the U.S. Investment Advisers Act of 1940, as amended (the "Advisers Act"). Under Section 206 of that Act and its attendant regulations, Russell is prohibited from engaging in a board range of fraudulent or deceitful acts in its Benchmark business that go the heart of the very issues discussed in the Report. Other Benchmark providers, including those

---

[23] Accord EDHEC-Risk Institute Contribution to the European Commission Consultation Document on the Regulation of Indices at p..6 (hereinafter, "Edhec", Nov. 29, 2012)

[24] See, e.g., Edhec at p.7.

regulated as exchanges, are not presently subject to such regulation. Although securities exchanges in the United States are regulated under the U.S. Securities Exchange Act of 1934 (the "34 Act", as amended) which also contains antifraud provisions, that act tends to focus on the integrity of securities transactions, data collection and dissemination rather than Benchmark Administration. Perhaps more importantly the periodic compliance and examination focus of the '34 Act is less likely to focus on Benchmarks while the Advisers Act could, as presently written, more readily and more appropriately focus on Benchmarks. While Russell has not studied global laws in detail, the content of the Report and our instincts tell us that this may be true in non-U.S. jurisdictions as well.

23. **Assuming that some form of enhanced regulatory oversight will be applied to an asset class Benchmark, should such enhanced oversight be applied to the Submitters of data as well as the Administrator?**

> The notion of Submitters and any related regulation of them are only applicable to Survey-Based Benchmarks. Russell thinks that enhanced regulatory oversight should not be a function of the subject matter measured by a Benchmark, i.e. asset classes, but rather whether the concerns noted in response to the foregoing Questions asked in the Report, in particular Question 21, above, can be successfully addressed.

24. **What are the considerations that should be taken into account if the Submitters to a Benchmark operate in an otherwise unregulated market (e.g., physical oil, gold or agricultural commodity markets) and are not otherwise under any obligation to submit data to an Administrator?**

> Please see Russell's responses to Questions 3-4, 9, 11-13, 17-19, 21 and 23, above.

25. **Do you believe that a code of conduct, either on its own or in conjunction with other measures outlined within the report, would provide sufficient oversight to mitigate the risks that have been identified in Chapter 2? What measures should be established in conjunction with a code of conduct? For which Benchmarks is this approach suitable?**

> Russell believes that substantive codes of conduct imposed by Market Authorities or SROs are appropriate to Submitters and Administrators of Survey-Based Benchmarks. Please see Russell's responses to Questions 3-4, 9, 11-13, 17-19, 21 and 23, above.

26. **What other measures outlined in the report, if any, should apply in addition to a code of conduct? If you believe a code of conduct, either on its own or in conjunction with other measures outlined within the report, would provide sufficient oversight to mitigate the risks that have been identified in Chapter 2, what type of code of conduct should apply (e.g.., a voluntary code of conduct, an industry code of conduct submitted to and approved by the relevant Regulatory Authority, a code of conduct developed by IOSCO, etc.)?**

Please see Russell's responses to Questions 3-4, 9, 11-13, 17-19, 21 and 23, above.

27. **Do you believe that the creation of a Self-Regulatory Organisation (e.g., one that exercises delegated governmental powers) and itself subject to governmental oversight, whether or not in conjunction with industry codes, is a viable alternative for sufficient oversight and enforcement to mitigate the risks that have been identified in Chapter 2? For which Benchmarks is this approach suitable? What if any complementary arrangements might be necessary, such as new statutory obligations or offences for Administrators and/or Submitters?**

> Russell does not think that the creation and implementation of an SRO is necessary or appropriate to resolve any actual or perceived conflicts of interest in the Public Data Benchmarking processes. As addressed in response to Questions 3-4, 9, 11-13, 17-19, 21, 23 and 25, above, Submitters and Benchmark providers for Survey-Based Benchmarks can and should be subject to substantive regulation, perhaps by an SRO.

28. **Do you believe that for some Benchmarks reliance upon the power of securities and derivatives regulators to evaluate products that reference a Benchmark or exercise their market abuse or false reporting powers creates sufficient incentives for the Administrator to ensure sure that Submitters comply with a code of conduct?**

> Russell believes that review and oversight of securities or derivative products by Market Authorities is an effective method of strengthening markets and protecting investors. However, compliance with a Submitter code of conduct might not be evident in such review and oversight. Please see Russell's responses to Questions 4, 9, 18-19, 21, 24-26, above, for Russell's other views related to Submitters and codes of conduct or control frameworks.

29. **Do you believe that users of a Benchmark, specifically the users who are regulated or under the supervision of a national competent authority, should have a role in enhancing the quality of Benchmarks? Which form should this role take: on a voluntary basis (e.g., the user being issued a statement that will only use Benchmarks that follow IOSCO principles), or on a compulsory basis (e.g., the competent authority could request that users who are registered under their jurisdiction should only use Benchmarks that fulfil IOSCO principles)?**

> Although Russell applauds the intention behind this question it does not think that Benchmark users (whether or not they are regulated) should have an official role in enhancing the quality of Benchmarks (i.e. a role in regulating Benchmarks), however Russell does believe that Benchmark users can play a critical role in the Benchmark creation process. Matters related to the regulation of Benchmarks must be reconciled between Benchmark providers and Market Authorities. However, Benchmark users are critical to the Benchmarking process. Russell consults client advisory boards to survey client preferences and ideas with respect to its Benchmarks. In addition, Russell consults with exchange traded product

sponsors in the creation of Benchmarks used in those products. In these consultations, Benchmark users have ample and effective ability to help Russell enhance the effectiveness of its Benchmarks. To that extent, Russell agrees that Benchmark users have a role to play in enhancing Benchmark quality. That said, Russell believes that Benchmark providers must retain absolute control and authority over the design, creation, calculation and maintenance of their Benchmarks and maintain effective control frameworks for their operations.

30. **Do you agree that a Benchmark should be anchored by observable transactions entered into at arm's length between buyers and sellers in order for it to function as a credible indicator of prices, rates or index values? How should Benchmarks that are otherwise anchored by bona-fide transactions deal with periods of illiquidity due to market stress or long-term disruption?**

    Russell believes that actual transaction data is the best, but not the only, credible input data for Benchmarks. Russell also thinks that periods of illiquidity, market stress or disruption should be addressed by Benchmark methodologies and in agreements with Benchmark users. Please see Russell's response to Questions 3-5, above, for a more detailed discussion of these concepts.

31. **Are there specific Benchmarks for which you consider that observable transactional data is not an appropriate criterion or the sole criterion? If so, please provide a description of such Benchmarks and what value you think such Benchmarks provide?**

    Please see Russell's response to the Report at pages 2-4, above for a fuller discussion of the superiority of Public Data Benchmarks over Survey-Based Benchmarks which is a necessary predicate to this response. Russell's responses above with respect to Survey-Based Benchmarks should be considered in response to this Question 31.

    Please see Russell's response to Question 30, above. To the extent that observable transaction data and other data included in a Benchmark whose integrity has been established continue to reflect the subject matter measured by a Benchmark, Benchmark Administrators should not interfere with the normal Benchmark Administration process. In the event that a Benchmark Administrator has reason to believe that a Benchmark no longer adequately measures its intended subject matter, it is imperative for, and in the best interests of, the Benchmark provider to review and possibly revise the Benchmark methodology so that the Benchmark does adequately measure its intended subject matter.[25]

32. **What do you consider the limitations or value in Benchmarks referencing asset classes and underlying interests where there is limited liquidity? Please describe the uses and value of such Benchmarks in the financial markets.**

---

[25] Accord IIA at p.6.

Russell believes that Benchmarks can be valuable tools for investors even if they may not be investable due to constraints like liquidity. For example, such benchmarks can provide indicative information about asset class potentials and the performance of assets in that class relative to more liquid or investable asset classes and the assets in those asset classes.

33. **Do you agree that the greatest weight should be given to transactions in the construction of a Benchmark and that non-transactional information should be used as an adjunct (e.g., as a supplement) to transactions?**

Russell agrees in concept that actual transaction data is the best evidence of historical market activity. However, Russell also believes that non-transaction information can be valuable inputs to a Benchmark.[26] Please see Russell's response to Questions 3 and 5, above, for a more detailed discussion on this point.

34. **What factors and how often should Administrators (or others) consider in determining whether the market for a current Benchmark's underlying interest is no longer sufficiently robust? What effective methods of review could aid in determining the insufficiency of trading activity within the market for a Benchmark's underlying interest?**

Administrators often have a number of measures by which they assess the robustness of a given market. Administrators for equity Benchmarks, for example, might look at the total number of issuers in an asset class, total float, transaction volumes, trade flow from primary listing exchanges to other venues, etc.

35. **What precautions by Benchmark Administrators, Submitters, and users can aid Benchmark resiliency during periods of market stress, mitigating the potential need for market transition?**

Russell believes that transparent, fulsome methodologies are the best aid for Benchmark resiliency during periods of market stress. In addition, this is a reason why brand matters and premier Benchmark providers like Russell are superior to unbranded or captive Benchmark providers with little market presence and experience. In short, markets, intermediaries and investors know and trust the expertise and integrity of a top brand Benchmark provider like Russell and this comforts them in times of market stress potentially eliminating the need for market transition.

Operationally, world class Benchmark providers like Russell maintain systemic measures that aid Benchmark resiliency during periods of market stress. Such systems include business continuity plans as required by the Advisers Act and its

---

[26] See also Markit at pp.6-7.

attendant regulations as well as fully redundant Benchmark platforms to mitigate physical systems failures.

36. What elements of a Benchmark "living will," drafted by a Benchmark Administrator, should be prioritised?

Russell does not think that measures such as a "living will" are appropriate to Public Data Benchmark Administrators. Please see the response to Question 37, below, for additional discussion on why Benchmark replacement is not a calamitous issue for Benchmark Administrators, their licensees or markets which would require a "living will." Market Authorities should, however, ensure that organizations like ISDA, the Options Clearing Corporation, and the issuers of financial contracts (e.g., mortgages, consumer loans, etc.) based on Benchmarks have provisions to ease the substitutions of underlying Benchmarks.[27]

37. By what process, and in consultation with what bodies, should alternatives be determined for Benchmark replacement?

Russell thinks there are two points of view to be considered in this question, that of the Benchmark provider and that of the issuer of products based on a Benchmark. Benchmark providers typically have substantial business interests based on the Benchmark data licensing for performance attribution and data licensing for use of that data in exchange traded or structured products. In the event that the Benchmark provider can no longer provide a particular Benchmark because, for example, key input data is no longer available or because the methodology no longer adequately measures a market, that benchmark provider will revise its methodology or redesign the Benchmark often in consultation with key licensees of that Benchmark to ensure acceptance and continuity of the Benchmark in question. In the unlikely case where a Benchmark provider must totally cease production of a benchmark that decision will be discussed with key licensees and the Benchmark provider will provide reasonable notice of the Benchmark's termination date and possibly assist Benchmark licensees in their transition plans where requested or practicable.

Issuers of product based on Benchmarks may have greater or lesser concerns and needs in connection with a Benchmark replacement. On one end of the spectrum, licensees of a Benchmark used in an exchange traded product may substitute one Benchmark for another. In extreme situations licensees of a Benchmark used in an exchange traded product can delist and liquidate the product in the event that a Benchmark ceases to be available or the product is no longer viable. Similarly, issuers of listed derivatives and OTC derivates can easily accommodate Benchmark substitutions and Benchmark eliminations with varying degrees of

---

[27] See, e.g., 2002 ISDA Equity Derivatives Definitions (containing provisions that mitigate Index Modifications, Index Cancellations as well as adjustments to exchange traded products); ISDA Credit Support Annex at para. 13(h) (1992 Bilateral Form, NY Law; providing for alternate interest rates on collateral).

administrative complexity.[28] In addition to the communications between Benchmark providers and their licensees, the licensees will typically consult with others internally, with the directors or trustees of exchange traded products, exchanges and shareholders in case of liquidated products, the purchasers of affected structured products, etc. These are the appropriate consultations to have and Russell sees no useful purpose in expanding the scope of consultations.

38. **What characteristics should be considered when determining an appropriate alternate Benchmark? (Examples below) Should any of these factors be prioritised?**
    o **Level and Type of Market Activity**
    o **Diversity/Number of Benchmark Submitters**
    o **Length of historical price series for the Benchmark alternative**
    o **Benchmark Methodology**
    o **Existing regulatory oversight**
    o **Existing enforcement authority**
    o **Volume, tenors and contract structure of the legacy trades**

    Russell believes that the characteristics for determining an appropriate replacement Benchmark are no different than those for choosing any other Benchmark. Please see Russell's response to Questions 2-5, 22, above, for a fuller discussion of these characteristics.

39. **What conditions are necessary to ensure a smooth transition between market Benchmarks?**

    Please see Russell's response to Questions 36-37, above.

40. **What considerations should be made for legacy contracts that reference a Benchmark in transition? To what extent does a substantive legacy book preclude transition away from a Benchmark? What provisions can be included in [new and existing] contract specifications that would mitigate concerns if and when a Benchmark transitions occurs?**

    Please see Russell's response to Questions 36-37, above.

41. **How should a timeframe be determined for market movement between a Benchmark and its replacement? What considerations should be made for:**
    o **Altered regulatory oversight?**
    o **Infrastructure development/modification?**
    o **Revisions to currently established contracts referencing the previous Benchmark?**
    o **Revisions to the Benchmark Administrator?**
    o**Risk of contract frustration?**

---

[28] Id.

The time required to implement a Benchmark change will depend upon the facts and circumstances surrounding the change. There are no standard timeframes, although absent exigent circumstances a Benchmark substitution would ideally occur in a matter of weeks and conjunction with a benchmark reconstitution date so as to minimize transition costs.

Most investment products and consumer contracts that reference Benchmarks provide for substitute Benchmarks as part of the contract/prospectus "boilerplate" or by regulation (e.g., the U.S. Investment Company Act of 1940, as amended (the "40 Act")). Issues related to regulatory oversight should have minimal effect on timelines for Benchmark substitutions. For example, the '40 Act contains processes for Benchmark substitutions and typically there are no altered regulatory oversight issues. Similarly, a Benchmark substitution in an OTC derivative product is easily handled within the confines of the ISDA Master Agreement and accompanying Schedules or, in the case of a wide scale substitution perhaps an ISDA protocol. Russell does note that some products, such as listed futures, may have minimal timeframes required for regulatory filings. It is possible that the new Administrator and Benchmark users may encounter infrastructure issues, however the time required to resolve such issues is usually short (relatively) and capable for being planned for. Finally, there are a number of consultations between stakeholders (directors, exchanges, shareholders, service providers, etc.) that must occur in a Benchmark substitution as noted in response to Question 37, above.

Sincerely,

/s/ Elliot S. Cohen

Elliot S. Cohen
Associate General Counsel
Frank Russell Company
1-206-505-4516
ecohen@Russell.com

Appendix A

Russell's Global Indexes Construction and Methodology

Russell Global Indexes
Construction and Methodology

Russell Indexes.

Russell Global Indexes Construction and Methodology

Russell Indexes benefits:

More 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 Russell sticks to those rules, making our indexes transparent and predictable.

More 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 more 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 Indexes 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 GDP weighting, equal weighting and fundamental weighting.

Accurate and practical. To ensure that market segments are accurately represented, Russell Global 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.

Contact us

Email: index@russell.com

Americas: +1-877-503-6437

APAC: +65-6880-5003

EMEA: +44-0-20-7024-6600

Web: www.russell.com/indexes

Russell Investments

Updated sections

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

Section 7: Update to reconstitution timing.

Section 8: Change in the handling of dividends effective January 1, 2013.

Addition of Appendix J: Predictive Index Data

Russell Global Indexes Construction and Methodology

TABLE OF CONTENTS

Russell
Investments

Russell
Investments

Russell
Investments

Russell
Investments

Introduction

Russell Investments provides float-adjusted, market capitalization–weighted indexes for a precise picture of the overall market. Today, $3.9 trillion in assets are benchmarked to the Russell Indexes and more institutional funds track them than all other U.S. equity indexes combined[29]. 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 83 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, styles, etc. See Appendix A for a list.

---

[29]U.S. Equity Indexes: Institutional Benchmark Survey, December 2011.

SECTION 2

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. 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

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. 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

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 and where access by non local investors is commonly via an ADR. These countries include but are not limited to: Philippines, Thailand, and Russia due to their restrictions on foreign ownership in local shares. See Appendix C for details of countries where ADR's 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 ADR's 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

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 Russell stock universe is $1,000,000 USD. Note, this $1M 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 $160 million USD. Total market capitalization is determined by multiplying outstanding shares by market price as of the last trading 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. Russell does, however, cover frontier countries in the Russell Frontier® Index (see Section 9). 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.

Russell Investments

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 score of 55 or higher for an existing 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: Custodian data and FactSet

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

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

Russell Investments

Universe liquidity screen

Prior to capturing 98% of the market, 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. Russell removes securities with inadequate liquidity by evaluating the average daily dollar trading volume (ADDTV) and the active trading ratio (ATR). ADDTV smoothes 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, Russell assigns stocks to individual countries according to a process described in Section 3, "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 4: "Russell Global Index membership").

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 3

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. 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, 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)

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), 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. 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, 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.

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:

		YES	NO
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, due to legacy, there are some individual security exceptions to this rule.

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, Russell recognizes China and the Hong Kong S.A.R as two distinct investment universes. All "red chip" companies (as identified by 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. 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 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.

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 country of incorporation within the index. The tax rate applied is the rate applied to nonresident institutions that do not benefit from taxation treaties. Tax rates are reviewed and updated quarterly. Russell uses Exchange Data International (Globe Tax) to determine country tax rates.

Russell Investments

Russell Global Index membership

When the total universe has been screened as described in Section 2, and after securities have been allocated to their home countries as described in Section 3, Russell determines index membership. 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 style 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

G L O B A L
Russell 3000
98% of the U.S. market

98% of the rest of the world
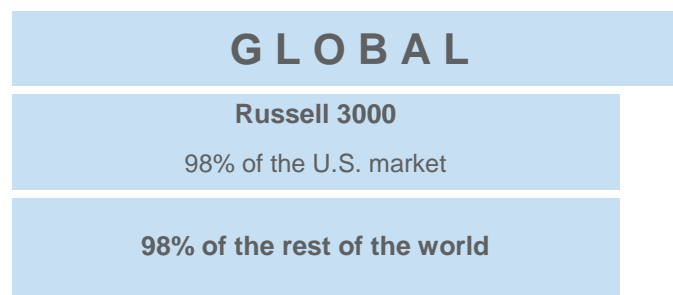
Global large cap and small cap indexes construction

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 Midcap and Global Mega Cap Indexes, which are sub-components 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.

Russell
Investments

Countries without critical mass

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, 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 this criteria, then 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, Russell includes depositary receipts for securities that fall under this rule.

Global SMID construction

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, 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 72.5th and 97.5th 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.

Russell Global Index		Russell Global Large Cap Index
(~10,000 securities)		(~3,000 securities)

Russell Global Small Cap Index
(~7,000 securities)

Russell 3000® Index	Russell Non-U.S. Index		Russell 1000® Index	Russell Non-U.S. Large Cap Index
(~3,000 securities)	(~7,000 securities)		(~1,000 securities)	(~2,000 securities)

Russell 2000® Index	Russell Non-U.S. Small Cap Index
(~2,000 securities)	(~5,000 securities)

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.

Emerging and developed markets

In consideration of the investing environments of existing emerging and developed 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—Russell uses a combination of macroeconomic and market-based criteria to distinguish developed from emerging and frontier markets. 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

Russell uses economic criteria as the first step in categorizing countries into developed and emerging 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

Russell Investments

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, 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
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 criteria

The second portion of 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 equally-weighted 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, 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
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

Sources: Russell Indexes, Custodian data, and FactSet.

Moving between developed and emerging markets

Prior to each reconstitution, 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[30]. Russell also looks for a sustained change in the

---

[30] 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.

Russell Investments

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. Russell Indexes will announce any final change to developed, emerging or frontier status in conjunction with the release of the Russell Indexes Country Guidebook 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.

Russell defines frontier markets separately through the Russell Frontier Index methodology. See Section 9 for more information.

Russell
Investments

SECTION 5

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.

Russell removes the following types of shares from index company weights:

Material employee stock ownership plans: Shares held in employee stock ownership plans comprising 10% or more of the shares outstanding are removed from index weights.

Large private holders: Material private holdings in excess of 10% are removed from index weights.

Government holdings:

- **Direct government holders:** Those holdings listed as "government of" are considered unavailable and will be removed entirely from available shares

- **Indirect government holders:** Shares held by government investment boards and/or investment arms will be treated similarly to large private holdings and removed if greater than 10%

- **Government pensions:** Any holdings by a government pension plan are considered institutional holdings and will not be removed from available shares

Corporate cross-owned shares: There are two types of adjustments for shares held by other corporations. All shares owned by another company in the Russell Global Index series are removed. Material shares held by companies outside the Russell Global Index series are also removed from index weights, because they are likely held for strategic reasons. If the index member's shares are held by:

- **Russell 3000E or Russell Global Index member companies:** 100% of the cross-owned shares are considered unavailable and are removed from index weights

- **A non-index member company owning more than 10% of total shares outstanding:** The cross-owned shares are considered unavailable and are removed from index weights

IPO lock-ups: Shares locked up during an initial public offering (IPO) are not available for purchase by general investors and are removed from index weights.

American depositary receipts (ADR) and global depositary receipts (GDR): Generally, ADRs and GDRs are removed from index weights to avoid potential double counting of share volume. There are exceptions (i.e., the Philippines, Thailand, Russia, Israel, Argentina) in which shares are added back to the float-adjusted capitalization following the foreign ownership limit adjustment.

Treasury shares: Treasury shares are company-owned shares, either by share re-purchase programs or by donations. These shares are considered strategic and are removed from index weights.

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. Companies with 5% or less will be removed from eligibility.

Step 2: Apply foreign ownership limit adjustment

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. Russell adjusts securities with foreign ownership limits (FOLs) and removes them from index weights as described below.

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, 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, 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, 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. 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.

Russell Investments

SECTION 6

Determining style

Russell Investments uses a "non-linear probability" method to assign stocks to the growth and value style valuation indexes and to assign stocks to the defensive and dynamic Russell Stability Indexes™.

Russell Growth and Value Indexes

Beginning with reconstitution 2011, Russell began using three variables in the determination of growth and value. For value, book-to-price (B/P) ratio is used, while for growth, the I/B/E/S long-term growth variable, which was used historically, was replaced by two variables—I/B/E/S forecast medium-term growth (2-year) and sales per share historical growth (5-year).

The term "probability" is used to indicate the degree of certainty that a stock is value or growth, based on its relative B/P ratio; I/B/E/S forecast medium-term growth (2-year), and sales per share historical growth (5-year). This method allows stocks to be represented as having both growth and value characteristics, while preserving the additive nature of the indexes. The process for assigning growth and value weights is applied separately to the large cap and small cap stocks in the Russell Global ex-U.S. Index. Research indicates that on average, valuations of small stocks differ from those of large stocks. Treating the large cap and small stocks separately prevents the possible distortion to relative valuations that may occur if the global index is used as the base index.

For each base index, stocks are ranked by their adjusted B/P ratio; their I/B/E/S forecast medium-term growth (2-year), and their sales per share historical growth (5-year). These rankings are converted to standardized units and combined to produce a composite value score (CVS). Stocks are then ranked by CVS, and a probability algorithm is applied to the CVS distribution to assign growth and value weights to each stock. In general, a stock with a lower CVS is considered growth, a stock with a higher CVS is considered value, and a stock with a CVS in the middle range is considered to have both growth and value characteristics and is weighted proportionately in the growth and value indexes. Stocks are always fully represented by the combination of their growth and value weights; e.g., a stock that is given a 20% weight in a Russell Global Value Index will have an 80% weight in the same corresponding Russell Global Growth Index.

Russell Defensive and Dynamic Indexes

The Russell Stability Indexes are designed to be comprehensive representations of the investable global defensive and dynamic equity markets. Defensive and Dynamic Indexes are created by splitting an existing applicable Russell index in half based on the combination of the stability indicators; the more stable half of the market is called "Defensive," and the less stable half is called "Dynamic."

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. Russell's defensive and dynamic indexes complement the existing Russell style framework – size (small/large) and valuation (growth/value) – expanding the style box into the style cube with the addition of Stability, the Third Dimension of Style™.

Russell
Investments

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 specific 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).

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. Russell uses debt/equity ratio 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 inputs to a company's stability probability.

Using the Russell non-linear style algorithm, companies with high stability probabilities are included in the Russell Defensive Indexes. Companies with low stability probabilities are included in the Russell Dynamic Indexes.

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.

A company may be included in both the defensive and dynamic indexes based on its stability probability. However, 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 parent index.

The stability of a company, also referred to as the stability probability, is determined by combining the quality variables with total return volatility. The quality score (derived by combining the three quality variables) represents 50% of the stability score, and the volatility score (derived by total return volatility) represents the other 50%.

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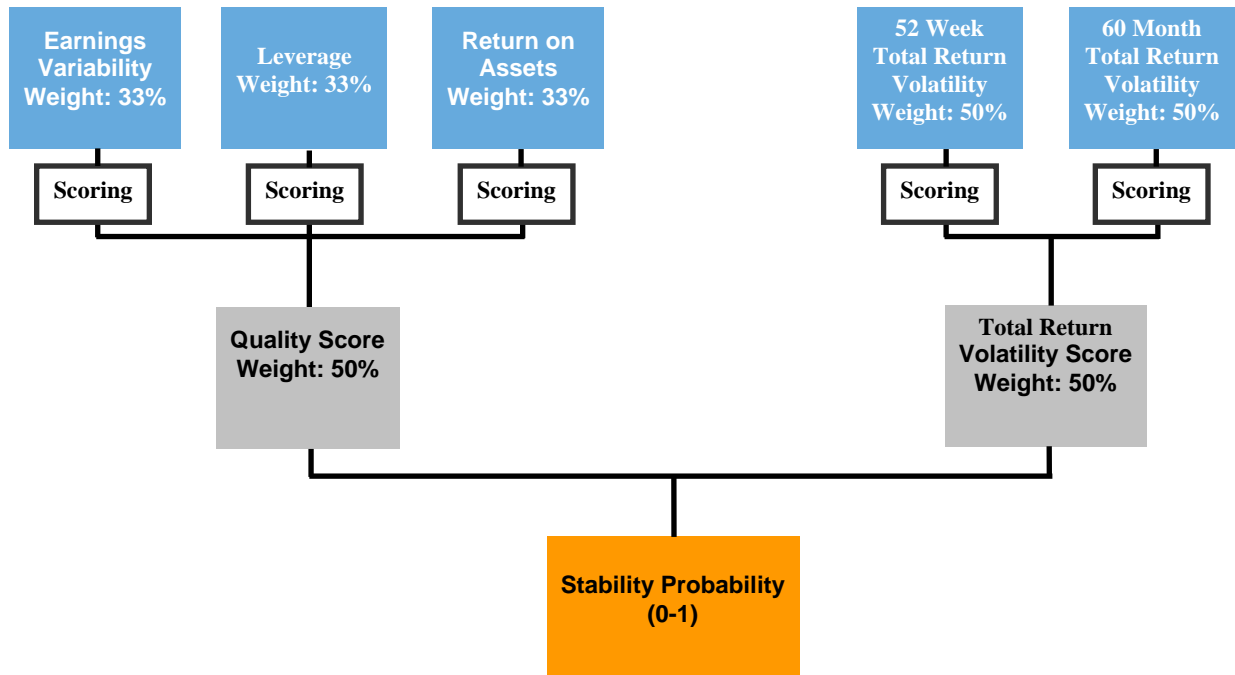
Quality score (comprises 50% of the overall stability probability)

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, 2010 data, the five-year volatility is based on the 60 monthly returns for the period that starts on May 31, 2005 and ends on May 31, 2010. 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, in Figure 1, is a security with 20% of its available shares assigned to the value index and the remaining 80% assigned to the growth index. The growth and value (or defensive and dynamic) probabilities will always sum to 100%. Hence, the sum of a stock's market capitalization in the growth and value indexes will always equal its market capitalization in the Russell Global Large Cap or Russell Global Small Cap indexes.

Figure 1: Non-linear probability function for index position weights

Russell Investments
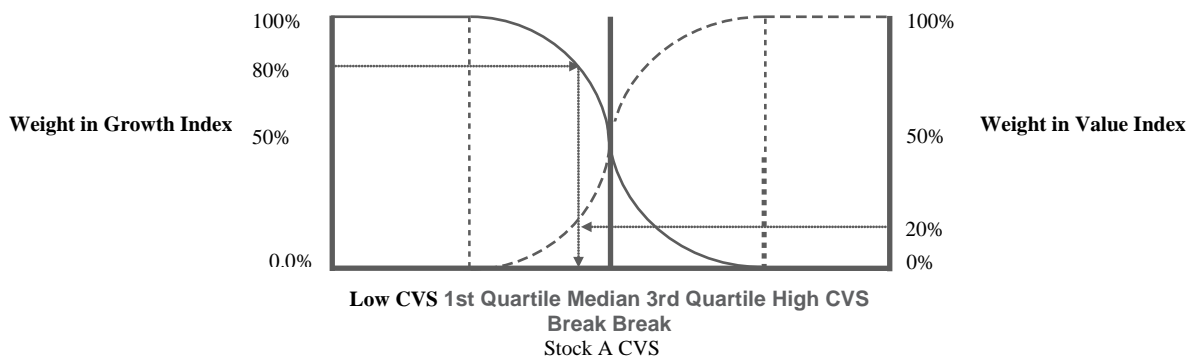
In Figure 1, the quartile breaks are calculated such that approximately 25% of the available market capitalization lies in each quartile. Stocks at the median are divided 50% in each style index. Stocks below the first quartile are 100% in the growth index. Stocks above the third quartile are 100% in the value 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-growth or all-value (or all-defensive or all-dynamic). The remaining 30% of stocks have some portion of their market value in either the value or the growth 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 Russell's decision to institute a small-position cutoff rule. If a stock's weight is more than 95% in one style index, we increase its weight to 100% in that index. This rule eliminates many small types of weighting and makes passive management easier.

Banding rule

In an effort to mitigate unnecessary turnover, Russell implements a banding methodology at the Composite value score (CVS) level of the growth and value style algorithm. If a company's CVS change from the previous year is ≤ to +/- .10 AND the company remains in the same core index, then the CVS remains unchanged during the next reconstitution process. Keeping the CVS static for these companies does not mean that the probability (growth/value) will remain unchanged in all cases due to the relation of that CVS score to the overall index. However, this banding methodology has proven to reduce turnover caused by smaller, less meaningful movements while continuing to allow the larger, more meaningful changes to occur, signaling a true change in a company's relation to the market.

Market capitalization of growth/value and defensive/dynamic indexes

The market capitalization of the growth and value style indexes, as well as that of the defensive and dynamic stability 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 CVS. When CVS is normally distributed, 50% will be in each index.

Missing values, negative values, or low coverage

For valuation styles (growth and value), stocks with missing or negative values for B/P, missing values for I/B/E/S forecast medium-term growth (2-year) (negative I/B/E/S medium-term growth is valid), or missing sales per share historical growth (5-year) (six years of quarterly numbers are required) are allocated by using the mean value score of the base index (Russell Global Large Cap, Russell Global Small Cap) industry, sub-sector or sector group into which the company falls. Each missing (or negative B/P) variable is substituted with the industry, sub-sector or sector group independently. An industry must consist of five members, or the substitution reverts to the next level (sub-sector or sector). This method was found to produce the fewest distortions, and it

Russell
Investments

has the added advantage of being very simple. In addition, a weighted value score is calculated for securities with low analyst coverage for I/B/E/S medium-term growth. For securities with a single analyst covering the security, 2/3 of the industry, subsector, or sector group value score is weighted with 1/3 the security's independent value score. For those securities with coverage by analysts, 2/3 of the independent security's value score is used and only 1/3 of the industry, subsector, or sector group value score is weighted. For those securities with at least three analysts contributing to the I/B/E/S/ medium-term growth, 100% of the independent security's value score is used.

For stability indexes (defensive and dynamic), if the quality or volatility indicator is not available, the company receives a stability score for that indicator of 0.25. 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.

Book value adjustments

Correct book value is critical in determining book-to-price measure. Therefore, the following method is used to estimate the proper adjustments to B/P and book value.

A company's reported book value is adjusted to reflect write-offs stemming from the Financial Accounting Standards Board (FASB)–issued Statement of Financial Accounting Standards numbers 106 and 109 (FAS 106 and 109) since June 30, 1993. Assuming that each company amortized the FAS 106 and 109 transition obligations over a 20-year period beginning with year of adoption, the unamortized portion of the write-off is added back to the reported book value. During reconstitution 2007, Russell also made an adjustment to book value for FASB 158. The date companies were required to be compliant left non-comparable book values across companies for reconstitution in June. However, in 2008, all companies were required to comply with the standard, making companies evenly compared and the adjustment unnecessary.

The adjusted book-to-price ratio is calculated by use of this adjusted book value; the adjusted ratio is used in place of reported book-to-price when ranking companies for style.

Russell non-linear probability algorithm

$$Y = 0 \qquad \cfrac{1}{1 + \exp\left(\cfrac{5(X_M - X)}{X_M - X_L}\right)} \qquad 0.5 \qquad \cfrac{1}{1 + \exp\left(\cfrac{5(X_M - X)}{X_U - X_M}\right)} \qquad 1$$

$$X_L \qquad\qquad X_M \qquad\qquad X_U$$
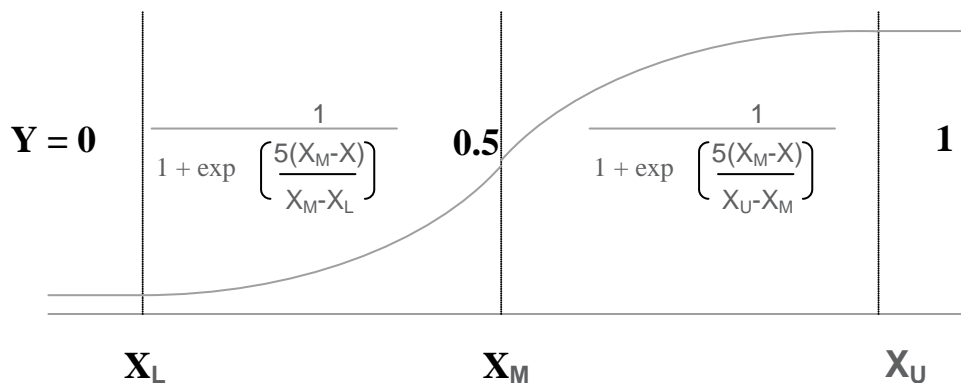
XL – Lower Breakpoint XM – Median XU – Upper Breakpoint

Russell Investments

SECTION 7

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. For exchanges that are closed during Russell events such as reconstitution and IPO additions, trades are made on the prior open trading day.

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

Monthly share capital adjustments to reflect material (more than 5%) changes in total shares outstanding, due to stock buybacks and equity offerings

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

Changes to shares outstanding

Changes to shares outstanding due to buybacks, secondary offerings, merger activity with non-index members, etc. are updated at the end of the month in which changes are reflected in vendor-supplied updates and verified by Russell. For a change in shares to occur, the cumulative change to outstanding shares must be greater than 5%. The float factor determined at reconstitution is applied to the new shares issued or bought back. If any new shares issued are unavailable, that portion will not be added to the index.

November and December month-end share changes as well as fourth-quarter IPO additions will be processed as one event after the close on the third Friday of each December. This is a result of low liquidity in the financial markets at year end and the proximity of a separate November process. IPO and share changes will be announced on the Monday prior to add date.

June month-end share changes are not processed at month end, residual share changes that are not addressed as part of the annual reconstitution process are rolled into the following July month-end process.

Quarterly initial public offerings (IPOs)

Russell adds IPOs each quarter in order to quickly reflect new additions to the global investing opportunity set. Because 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. Eligible IPOs will be added to the Russell Global style indexes using their industry's average style probability established at the latest reconstitution. All IPOs are assigned as 100% dynamic for the Russell Stability Indexes.

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, the date shown in this table is automatically adjusted to the previous business day.

**After the close.

† 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 style 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 last trading day of May each year, 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.

Russell Investments

SECTION 8

Corporate action-driven changes

Timing and treatment of corporate actions

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. 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 Russell deems trustworthy. Prior to the completion of a corporate action, Russell estimates the effective date on the basis of the same above sources. As new information becomes available, Russell may revise the anticipated effective date and the terms of the corporate action, before ultimately confirming its status, before the Russell effective date.

Depending upon the time an action is determined to be final, Russell either (1) applies the action before the open on the ex-date or (2) applies the action providing appropriate notice[31], 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. 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, Russell generally applies the most recently available market prices to the index for corporate action adjustments.

There are many types of global corporate actions, but the most common are described below, along with their treatment within the Russell Global Index series.

Mergers and acquisitions

A merger is the combination of two companies to form a new company. An acquisition involves an acquiring company purchasing a target company without forming a new company. Mergers and acquisitions (M&A) activity may result in changes to index membership as well as to the shares included in the Russell Global Index and a company's style probabilities. Adjustments due to mergers and acquisitions are applied to the index after the action is determined to be final, with provision of appropriate notice. This principle applies to all securities in all countries.

M&A between index members: If both the acquiring company and the target company are current Russell Global Index members, the target company is deleted from the index and the company's market capitalization simultaneously moves to the acquiring stock, according to the M&A terms. Cross-ownership and style of the surviving entity is determined by a weighted average (by market value) of the cross-ownership and style probabilities of the two (or more) previous companies prior to the merger. Given sufficient market hours after

---

[31] 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.

the confirmation of the M&A, Russell effects the action after the close on the last day of trade of the target company. In the event of a late notification, the action will be effected with provision of two full days' notice.

Any member of the Russell 3000E index is considered an index member for the purposes of applying this methodology.

M&A between an index member and a non-index member: A non-index member is defined as a company that is not a member of the Russell 3000E or the Russell Global Index. The M&A between an index member and a non-member can involve either of two scenarios: 1) the acquiring company is an existing member and the target company is not, or 2) the target company is an existing member and the acquiring company is not. If the target company is the index member, it is deleted from the index after the action is determined as final. Cumulative market capitalization in the country of the target company decreases. If the acquiring company is the index member, its shares are adjusted by adding the target company's market capitalization through a month-end share adjustment (if the increase in shares is greater than 5%).

Cross-border M&A: In the event of a merger or acquisition in which the acquiring company and the target company are in different countries, Russell applies the action when the M&A is determined as final. The target company is deleted from its local country index and the company's market capitalization moves to the acquiring stock according to the M&A terms. Cumulative market capitalization in the country of the acquiring company increases, while the cumulative market capitalization in the country of the target company decreases by the same amount. In the event of a late notification, the action will be effected providing two full days' notice.

Note: Microcap and frontier index members are not currently assigned a stability score. When a global index member is merging with a microcap or frontier index member the shares will be updated according to the terms of the merger, but the stability probability will not change.

Tender offers

A tender offer is an offer to purchase shareholders' shares in a corporation. The price offered is usually higher than the market price, providing an incentive to shareholders to "tender". The target company's shareholders are asked to "tender" or surrender their stock holdings for a stated value, subject to agreement by a minimum and/or maximum number of shareholders. For instance, if a corporation's stock were trading at $1 per share, an acquirer might offer the shareholders $1.15 per share on the condition that 51% of the shareholders agree.

In the case of a tender offer, the target company will be removed from the index when:

- The offer period completes (initial, extension or subsequent); and
- Shareholders have validly tendered, not withdrawn, and the shares have been accepted for payment; and
- All regulatory requirements have been fulfilled; and
- The acquiring company is able to finalize the acquisition via short-form merger, top-up option or other compulsory mechanism.

If the requirements have been fulfilled, with the exception being that the acquirer is unable to finalize the acquisition through a compulsory mechanism, an adjustment will be applied to the target company's float-

adjusted shares if they have decreased by 30% or more, and the tender offer has fully completed and closed. The adjustment will occur on a date pre-announced by Russell.

Reverse mergers

A reverse merger occurs when an existing index member is acquired by or merged with a private, non-publicly traded company that becomes public simultaneously with the acquisition/merger. For example, Archipelago Holdings, Inc., a public company, was acquired by NYSE, a then-private company, in 2006. NYSE's acquisition of Archipelago resulted in a new public entity, the NYSE Group.

Once an M&A is identified as a reverse merger, the newly formed entity is placed in the appropriate market capitalization and country index at the close of the first day's trading of the acquiring company, following the completion of the merger. Simultaneously, the target company is removed from the index. The delay is necessary in order to capture an opening price for the new entity. The growth/value style of the surviving entity is determined by the industry average. For defensive/dynamic, the surviving entity takes on the existing member's characteristic.

Spin-offs

A spin-off is a new entity resulting from the spinning off of assets and equity from a parent company. In a pure spin-off, a parent company distributes 100% of its ownership interests in a subsidiary operation as dividends to its existing shareholders. After the spin-off, there are two (or more) separate, publicly held firms with exactly the same shareholder base, and cumulative market capitalization as the original company. The spin-off company's style index is determined by the style index membership of the parent entity. As an exception, spin-offs entering the Russell Stability Indexes during the first two weeks of Recon will be (ranked appropriately) defaulted to 100% dynamic.

If the when-issued price of a spun-off company is not available by market close on ex-1, Russell will delay the application of the spin-off by one day. After the close of trading on ex-date, a synthetic price/performance will be calculated to account for the actual opening price of the spin-off. This price/performance is calculated to capture accurate performance of both the spin-off and parent for the day. Note, real time calculations will reflect only the estimated performance of the parent and child companies as actual performance is not captured until end of day.

Domestic spin-offs: Spin-off companies are added to the Russell Global Index at the time they are spun-off from their parent company, subject to the following rules:

- A spun-off company meets all index eligibility requirements and its market cap is larger than the market adjusted total market cap of the smallest company in the Russell Global Index at the latest reconstitution. (In the U.S., the smallest stock in the Russell 3000E will be used.)

- A newly formed entity will be placed in the parent's index on the completion date and the spun-off company's style index is determined by the style index membership of the parent entity.

- A parent company's market value will be reduced simultaneously on the Russell effective date.

Cross-border spin-offs: If a parent company spins off an eligible security that is incorporated in a different country, the spun-off company will be assigned to the new country according to the country-assignment rules

discussed in Section 3 and may become a member of the Russell 3000E. Otherwise, the same rules apply between domestic or cross-border spin-off additions.

Halted securities

When a stock's trading has been halted, Russell holds the security at its most recent closing price until trading is resumed or is officially delisted. In addition, Russell will review stocks in two categories for removal: (1) Stocks halted due to financial difficulty/debt or cash flow issues for a period longer than 40 calendar days or (2) those stocks suspended due to exchange listing rules or legal regulatory issues for more than one calendar quarter. Determination for removal will be made on a case-by-case basis and based upon reasonable likelihood of trade resumption and likelihood of residual value returned to equity holders.

Should removal be deemed appropriate, announcement will be made with monthly share changes and removed on month-end at zero value (for system purposes the actual value used is 0.0001, in local currency).

Stocks that are scheduled for removal but suspended or not trading through reconstitution due to low liquidity, or those that are suspended by the exchange or other governing body due to liquidity issues will be monitored for trade resumption. Once trading resumes, these securities will be removed from the index with announcement as usual. Securities will be removed using the primary exchange close price.

Delistings

Delisting one of many issues: If a company's stock is listed on multiple stock exchanges, Russell identifies a primary issue as the index member. If one of the company's listed issues is delisted from a non-primary exchange, no change is made to the Russell Global Index. However, if the previously defined primary issue is delisted, a new primary issue is assigned, as long as the alternate issue trades on an eligible exchange and meets all of the rules for index inclusion. Otherwise, the stock is removed from the index.

Delisting the company: A security is removed from the Russell Global Index if: (1) it is delisted from all stock exchanges, or (2) it is listed only on the OTC market. If a delisting notice is received on a timely basis, Russell removes the stock from the index at its last traded price on the primary exchange. If the delisting notice is not received on a timely basis, and the security trades on the OTC market, it is removed at the last traded price on the OTC market, providing two days' notice. Finally, if the security is halted prior to its delisting, and will not trade on the OTC market, it will be removed from the index at zero value if a residual value cannot be determined within 30 calendar days after its delisting date.

New listings of an existing security

When a company decides to list its stock at another stock exchange in addition to its primary stock exchange, no change is made to the Russell Global Index.

Stock splits, reverse splits and consolidations

Stock splits and stock dividends: Companies often split their stock when they believe the price exceeds the amount smaller individual investors will be willing to pay. By reducing the price, companies try to make their stock more affordable to these investors. When a company declares a stock split, the price of the stock will decrease, but the number of shares will increase proportionately. For example, if you own 100 shares of a company that trades at $100 a share and the company declares a two-for-one stock split, you will own 200

shares at $50 a share after the split. A stock split has no effect on the value of what shareholders own. Russell adjusts the increased number of shares and the decreased price proportionately.

Reverse splits and stock consolidation: Contrary to a stock split, a reverse stock split or a stock consolidation reduces the number of shares and increases the share price proportionately. Russell adjusts the decreased number of shares and the increased price proportionately.

Dividends

Regular cash dividends: Regular cash dividends are those paid to shareholders out of a company's profits or reserves. Regular cash dividends impact the total return and are reinvested across the index at the close on the dividend ex-date. Dividends that are announced on the ex-date or thereafter, will be reinvested across the index at the close on the following business day. A previously communicated dividend that is adjusted on the ex-date will be corrected. Late dividend announcements and adjustments are most common in Brazil due to market rules regarding dividend announcements.

Special cash dividends: In addition to paying regular dividends, a company may at times pay special cash dividends. These are usually paid outside a company's regular dividend schedule and can occur for a variety of reasons, such as a major litigation win, the sale of a business or liquidation of an investment. For non-regular special cash dividends, the price of the stock is adjusted to deduct the dividend amount before the open on the ex-date. Occasionally, special cash dividends and special dividends paid in-kind are subject to withholding taxes. In this case, a net negative dividend amount equivalent to the withholding tax is reflected in the net return in conjunction with the price adjustment and applied on ex-date.

Return of capital: Includes a price adjustment before the open on the ex-date. Please note, a return of capital or a special cash dividend that falls within the regular dividend cycle in size or timing will be processed as a regular dividend.

Late dividends in Japan: In Japan, dividends are officially declared after the ex-date has passed. To reflect the most up-to-date expectation for the dividends, Russell applies official estimates on the ex-date. Dividend estimates are vendor provided and sourced to Toyo Keizai, the official provider of Japanese dividend information. There is no correction mechanism in place if the exact dividend paid is different to the original estimate.

Late dividends in Korea and Russia: In Korea and Russia, dividends are officially declared after the ex-date has passed. Russell applies these dividends on the pay date.

Other types of dividends: Dividends can also take the form of properties, bonds and other types of assets. These types of dividends have no impact on the Russell Global Index. Russell will only process dividends that are payable in cash or stock. In the event of an optional dividend (a holder can elect cash or stock), Russell will default to cash, with any increase in shares (if greater than 5%) picked up at month-end.

Reclassification of share classes

When a company with multiple share classes converts an entire class of shares into another class, usually on the basis of a previously agreed-upon ratio, Russell changes the shares after the conversion is finalized. The old share class is deleted from the index after the close on completion day, and its market capitalization moves to the unified share class. The number of shares of the unified share class increases proportionately. The combined market capitalization of the two share classes remains unchanged for the company.

Russell Investments

Alternatively, if one share class splits into two or more share classes, Russell evaluates the new classes for eligibility and adjusts the index member class according to the agreed-upon ratio.

Rights offerings, RAPIDS, and stock warrants

Rights offers: A rights offering is a means of raising capital by offering shareholders the opportunity to purchase additional shares of the same stock at a price below the current market value.

Russell will only adjust the index to account for a right if the subscription price is at a discount to the market price of the common stock. A price adjustment will be applied before the open on ex-date, to account for the value of the rights and shares will be increased according to terms of the offer.

Russell will not apply poison pill rights, claw-back rights, or entitlements that give shareholders the right to purchase ineligible securities such as convertible debt.

RAPIDs: In certain markets, such as Australia, accelerated rights offerings (RAPIDs) have become more common in recent years. In a RAPID entitlement offer, the ex-date is theoretical and typically is not quoted by the exchange. On the theoretical ex-date the stock may be halted, at which time the company begins a two tranche offer to shareholders in the form of an Institutional Offer followed by a Retail Offer. Shares are increased, and a price adjustment is applied according to the terms of the offering, before the open on the day after the security resumes trade. The close price will be adjusted to delay the performance of the rights issue.

Stock warrants: A stock warrant is a security that provides the right to purchase a certain number of shares at a stated price during a specified time period. Similarly to its treatment of rights issues, Russell only adjusts the number of shares of a stock to account for warrants when (1) the warrants are exercised at a discount to the market price and (2) an appropriate implementation date can be determined.

Convertibles and contingent convertibles

Convertibles: Convertibles are securities—usually bonds, corporate debts or preferred shares—that can be converted to common stocks. Shares changed due to the exercises of convertibles are applied to the index during the month-end share adjustment. The price used for the index is the market price at the time of the share adjustment.

Contingent convertibles: Contingent convertibles differ from traditional convertibles in that there is a strike price when the bond or preferred stock converts. In other words, there is a fixed cost for the stock when the conversion happens. Additionally, in many cases, the underlying stock price has to be much higher than the strike price, to allow security holders to have the "right" to exercise the convertibles. This is known as "upside contingency." Russell adjusts the shares only when the conversion is finalized. The price used for the index is the market price at the time of the month-end share adjustment.

Other corporate events

The following corporate events are related to a company's fundamental structure change. They potentially impact the index's calculation, capital allocation and timing of applying corporate actions.

Russell
Investments

Bankruptcy and voluntary liquidations

Companies filing for Chapter 7 bankruptcy or filing a liquidation plan will be removed from Russell indexes at the time of filing providing two days notice. Companies filing for Chapter 11 reorganization bankruptcy will remain members of the index, unless the companies are delisted from the primary exchange. In that case, normal delisting rules will apply. If a company files for bankruptcy, and is delisted and if it can be confirmed that it will not trade OTC, Russell may remove the stock at a nominal price of $0.0001 (local currency).

Change of incorporation/domicile: A company might decide to move its incorporation or domicile from one country to another. All changes in country assignment (domicile) are reviewed only once per year during reconstitution. Changes of country of incorporation are made when effective. This ensures accurate taxation of dividends.

Change of company structure: Business Development Company: In the event a company changes its corporate designation from that of a Business Development Company (BDC), Russell will remove the member as ineligible for index inclusion and provide two days' notice of its removal.

Other corporate events: Other corporate events include change of fiscal year end, change of currency quotation, change of voting rights, new debt issues and corporate meetings. These corporate events usually have little impact on the index. Russell will closely monitor these activities and apply corporate actions to the index if impact is significant.

Extraordinary events

Russell defines the following as extraordinary events due to their rarity and their potential to significantly impact the capital markets. 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, 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. 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%), 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, 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.

Russell Investments

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: 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, Russell will work with clients invested in the affected securities to determine and publish an adequate index strategy to reflect the market condition. However, 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 9

Russell Frontier® Index

Determining frontier countries

The first step in the construction of Russell Frontier Indexes 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.

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

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, 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 are excluded from inclusion. The following countries are included on the sanctions list: Belarus, Burma, Congo, Cuba, Iran, Iraq, North Korea, Somalia, Sudan, Syria, Zimbabwe, Cote d'Ivoire and Lebanon.

A country which has been determined eligible to transition from Frontier to Emerging will need to sustain its eligibility for a two year period before graduating to Emerging.

Frontier securities types

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 2, "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. For the Russell Frontier Index, a single liquidity measure of average daily dollar trading volume (ADDTV) is used to determine eligibility in the universe. See Section 2, "Defining the total stock universe," for the formula of ADDTV.

At reconstitution, the Russell Global Index liquidity is determined by calculating the median of all securities in the global universe and including all securities above median. For the Russell Frontier Index, liquidity is determined by reducing the liquidity threshold established for the Russell Global Index by half. See Appendix I for historical median ADDTV.

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.

Float adjustments

Just as with all Russell indexes, securities within the Russell Frontier Index are adjusted for float. See Section 5, "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, 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 10

Gross Domestic Product (GDP) weighted indexes

Russell's global GDP weighted indexes are alternatives to market capitalization weighted indexes. The Russell GDP weighted indexes include:

Russell Global Large Cap GDP

Russell Developed ex-North America Large Cap GDP

Russell Developed ex-United States Large Cap GDP

In the calculation of Russell's GDP weighted indexes, each country is weighted by its corresponding GDP rather than by its available market capitalization. Each security within the corresponding country continues to be weighted by available market capitalization. To arrive at this result, each security's weight is adjusted in the Russell GDP indexes using the following formula:

Security_Weight_GDP(t, Cap Seg) = Security_Weight_Country(t, Cap Seg) * Country_Weight_GDP(t,CapSeg)

Where:

Security_Weight_GDP(t, Cap Seg) = Security weight in the GDP-weighted Index at time t, for a particular cap segment index.

Security_Weight_Country(t, Cap Seg) = Security weight in its corresponding country index at time t for a particular cap segment index.

Country_Weight_GDP(t, CapSeg) = Country weight by market-cap adjusted country GDPs at time t for a particular cap segment index (AC, LC or SC).

The Russell GDP indexes use Worldbank as the source for country GDP. Changes to GDP are updated annually each October to correspond with the updated GDP data from the Worldbank. At that time, country GDP weights are reset on the basis of the Worldbank GDP data. Throughout the year, the country weight of each country can fluctuate with market value changes.

SECTION 11

Russell Dividend Achievers Indexes

The Russell Dividend Achievers Index series is objectively constructed and based on transparent rules. Constituents indexes are also members of the Russell Global Index and they follow all the same objective rules for membership with the additional requirement of being defined as a dividend achiever.

Available indexes

Russell Global Dividend Achievers   Russell Global ex-U.S. Dividend Achievers
Russell Global Small Cap Dividend Achievers

Eligible securities

Russell Dividend Achievers Indexes start by including those companies which are members of the Russell Global Index or one if its subsets. The index is then reduced down to those securities which meet the requirements to be a Dividend Achiever.

Companies are considered Dividend Achievers if they have raised annual regular cash dividend payments for at least each of the last 10 consecutive calendar or fiscal years for U.S. companies, and five years for non-U.S. companies. In addition, U.S. and Canadian companies must have a two-month average trading liquidity of $500,000 average daily cash volume during the months of November and December. Dividend Achievers are established in February of each year using the latest available dividend payable date for the previous calendar or fiscal year to calculate the total annual regular dividend payment.

To be included during Russell's annual reconstitution, these companies are reviewed again on the last trading day in May to ensure that they have not reduced their dividend payments since the last annual Dividend Achievers reconstitution date. Liquidity is not re-assessed. For non-North American companies, the change in dividends will be reviewed on a trailing 12 month basis. For North American companies with a payment frequency code, the change in dividends will be based on their forward looking Indicated Annual Dividend (i.e., dividend payment amount * dividend payment frequency).

Index maintenance / corporate action-driven changes

The Russell Dividend Achievers Index and its subsets are proactively maintained and reflect daily changes in the global equity markets. Russell Dividend Achievers indexes follow all of Russell's rules for corporate actions with the following exceptions:

Mergers and acquisitions

In the event of a merger between two companies included in the Russell Dividend Achievers Index, the common shares of the combined surviving company are represented in the Russell Dividend Achievers Indexes. In the event of a merger between a company in the Russell Dividend Achievers Index and a company not in the Russell Dividend Achievers Index, if the company in the Russell Dividend Achievers Index is the surviving company, the surviving company is included in the broad Dividend Achievers Index.

Spin-offs

Spin-offs from Russell Dividend Achievers members are not added to the index at the time of spin-off

Russell Investments

SECTION 12

Russell-IdealRatings Islamic Index

Securities included in the Russell-IdealRatings Islamic Index are screened from the Russell Global Index universe, which is divisible by region, country, market (developed and emerging), capitalization size, sector, industry and style to provide fully modular benchmarks representing the diversified opportunity set within each segment. The Russell-IdealRatings Islamic Index contains around 3,100 securities and across 48 countries.

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 market, as well as individual segments, to be used in academic research and financial media reporting

Available indexes

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

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 GCC	Russell-IdealRatings Islamic MENA

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 that deal with interest or financial instruments that violate Shariah rules and traditional insurance companies

2. Production and distribution of alcohol

3. Production and distribution of tobacco

4. Production and distribution of meat not slaughtered according to Shariah rules in non-monotheistic countries

5. Production and distribution of pork and its derivatives

6. Management of casinos and gambling halls and production of games such as slot machines

7. Houses of prostitution or vice

8. Adult entertainment such as pornographic films and services

9. Production and distribution of magazines, advertising, music, satellite channels, and cinemas that violate Shariah rules, including violent or mature games

10. Restaurants, hotels and places of entertainment that engage in prohibited services such as the sale of alcohol

11. Trading of gold and silver as cash on deferred basis

12. Manufacturing and selling of weapons

13. Stem cell, human embryo, and genetic cloning (research firms, therapy clinics, etc.)

14. Anything not Shariah compliant as determined by the Russell-IdealRatings Islamic Board

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.

Russell
Investments

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

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.

Russell
Investments

SECTION 13

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.

Each quarter, each sector[32] 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.)

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.)[33]

The Russell Global Equal Weight Index methodology also applies an additional liquidity screen. The liquidity screen "captures" 95% of the liquidity in the marketplace. It removes securities that have a liquidity measure that is two standard deviations from the mean of a lognormal distribution of the average daily dollar trading value (ADDTV) of the securities in the Russell Global Large Cap Index.

For a security to be eligible for inclusion, it must have an average daily dollar trading value (ADDTV) greater than or equal to:

$$e^{\mu - 1.96\sigma}$$

Where: $x = \{x_1, x_2 \dots x_i, x_n\}$ where x_i is the average daily dollar trading value of security i

$$\mu = \frac{\sum_{i=1}^{n} \ln(x_i)}{n} \qquad \sigma = \sqrt{\frac{1}{N} \sum_{i=1}^{n} (\ln(x_i) - \mu)^2}$$

In the above equation, the mean and standard deviations are derived by use of the liquidity of the constituents in the Russell Global Large Cap Index. Small cap securities will be subject to an ADDTV cutoff point that is half of the cutoff point identified above.

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.

---

[32] 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
[33] After securities' weights are reset, they may change as often as daily as stock prices fluctuate.

Russell Investments

Corporate action–driven changes

Month-end share changes: Month-end changes to shares outstanding within the underlying index will not be reflected in the Russell Equal Weight Indexes. However, shares may be adjusted to reflect quarterly index re-weighting.

Price adjustments: Price adjustments for rights issues are delayed one day (t+1). Share increases resulting from rights being exercised will not be applied in order to minimize index turnover.

Dividends: Dividends are applied daily.

Splits: Splits are applied daily.

Spin-offs: Spin-offs are reflected on the ex-date, with the weight of the parent company being split on the basis of the float-adjusted market capitalization of the parent company on the day the spin-off is final.

Mergers and acquisitions between index members and non-members: If an index member acquires a non-index member, shares of the acquiring company will remain unchanged. If a non-index member acquires an index member, the acquired member will be deleted from the index once the action is final.

Mergers and acquisitions between index members: If both the acquiring company and the target company are current index members, the weight of the acquirer will be adjusted by adding the target's market capitalization if both the target and acquirer belong to the same capitalization tier. For example, if a Russell 1000 Index member (acquiring company) acquires another Russell 1000 Index member (target company), the weight of the acquiring company will be increased by the weight of the target company. Combining the weights of the acquirer and target companies maintains the value of both entities within the index and does not create a turnover event.

Similarly, merger activity between Russell 3000 Index members will cause the acquirer's weight to increase by the weight of the target entity. However, if a Russell 1000 Index member acquires a Russell 2000 Index member, the weight of the Russell 1000 Index member will not be adjusted.

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.

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 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.

Russell Investments

SECTION 14

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.

Russell Investments

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:

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

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:

> Dividends Per Share-Five Year Average
>
> 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:

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

Russell
Investments

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.

Russell
Investments

Equal Weighted Mean

Cap Weighted Mean
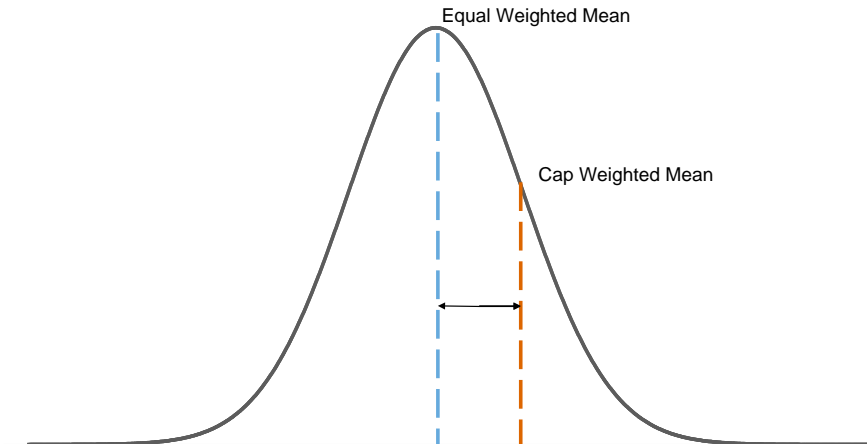
The equal weighting on the standard deviations is used to better capture the underlying range of the variables and to reduce the dominance of large capitalization stocks determining the range size (see Adams, Lin and Ross 2002).[34]

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.

---

[34] 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.

Russell
Investments

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. The Index follows the same rules for corporate actions as the Russell Global Index series with the following exceptions:

Month-end share adjustments: Month-end changes to shares outstanding within the parent index will not be reflected in the Russell Australia High Dividend Index. However, shares may be adjusted to reflect semi-annual reconstitution.

Price adjustments: Price adjustments for rights issues will be delayed one day (t+1). Share increases resulting from rights being exercised will not be applied in order to minimize index turnover.

Mergers and acquisitions: In the event of a merger between two companies included in the Russell Australia High Dividend Index, the common shares of the combined surviving company will continue to be represented in the Index. If an index member acquires a non-index member, shares of the index member will remain unchanged. If a non-index member acquires an index member, the index member will be deleted from the Index once the action is final.

Initial public offerings: Initial Public Offerings (IPOs) will be evaluated at each semi-annual reconstitution if they were members of the Russell Australia Large Cap Index as of the last business day in February or August.

Russell Investments

SECTION 15

Russell Australia High Value Index Methodology

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

Russell Investments uses a "non-linear probability" algorithm to assign stocks to the 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. and other global 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 Russell determines style, please refer to the Russell Global Indexes Construction & Methodology available at www.russell.com/indexes.

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

Russell Investments

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. The Index follows the same rules for corporate actions as the Russell Global Index series with the following exceptions:

Month-end share adjustments: Month-end changes to shares outstanding within the parent index will not be reflected in the Russell Australia High Value Index. However, shares may be adjusted to reflect semi-annual reconstitution.

Price adjustments: Price adjustments for rights issues will be delayed one day (t+1). Share increases resulting from rights being exercised will not be applied in order to minimize index turnover.

Mergers and acquisitions: In the event of a merger between two companies included in the Russell Australia High Value Index, the common shares of the combined surviving company will continue to be represented in the Index. If an index member acquires a non-index member, shares of the index member will remain unchanged. If a non-index member acquires an index member, the index member will be deleted from the Index once the action is final.

Initial public offerings: Initial Public Offerings (IPOs) will be evaluated at each semi-annual reconstitution if they were members of the Russell Australia Large Cap Index as of the last business day in February or August.

Russell
Investments

SECTION 16

Russell Global 1000, 2000, 3000 Indexes

The Russell Global 1000™, Russell Global 2000™, and Russell Global 3000™ indexes give investors convenient exposures to different market size segments, offer enhanced index investability and closely track to the parent index. This index series is ideal to serve as a basis for investable products and can be used by investors who seek index performances or use index baskets for asset allocation purposes. The Russell Global 1000, Russell Global 2000 and Russell Global 3000 Indexes are based on the Russell Global Index, a global equity index that truly represents the global investable opportunity set. The Russell Global Index is rules based, transparent, and comprehensive, making it a consistent and reliable indicator of global equity market performance. The Russell Global Index is designed to be a performance benchmark that accurately represents the investable opportunity set for active institutional managers. Its modular index construction supports a broad spectrum of sub-indexes based on country, region, sector, size or other customized need.

Starting universe

The Russell Global 1000, Global 2000, and Global 3000 Indexes utilize the Russell Global Index's investable universe to create a more liquid index that optimizes global exposure in convenient, small baskets - making them ideal as the basis of investable products. The starting universe for the Russell Global 1000 Index and the Russell Global 2000 Index are index members of the Russell Global Large Cap Index and the Russell Global Small Cap Index respectively. As of June 2011, there were roughly 3,000 securities in Russell Global Large Cap Index and about 7,000 securities in Russell Global Small Cap Index.

Country screening

The Russell Global Index is the parent index and countries that are eligible for the parent index are also eligible for the Global 1000, Global 2000 and Global 3000 indexes. See Section 2 for country eligibility rules.

Liquidity screening

To be eligible for the Russell Global 1000 and Russell Global 2000 indexes, a security must pass a two-step liquidity screening. A security must:

> Reach the minimum Average Daily Dollar Trading Volume (ADDTV)

> Achieve the minimum Active Traded Ratio (ATR)

See section 2 for a complete discussion of ADDTV and ATR. See Appendix I for historical ADDTV.

For the Russell Global 1000 Index, the minimum ADDTV is derived from the distribution of ADDTVs among the current year's members of Russell Global Large Cap Index. At reconstitution, a natural log-transformation is made to the original ADDTV distribution. The minimum value is then calculated by using the following formula:

> Min_Ln_ADDTV = Mean(Ln_ADDTV) – 1.96 * Stdev(Ln_ADDTV)

> Min_ADDTV = exp(Min_Ln_ADDTV)

To be eligible for the Russell Global 2000 Index, the minimum ADDTV must equal half of the Global 1000 Index's minimum ADDTV.

For both the Russell Global 1000 and the Russell Global 2000 indexes, the minimum ATR is set at 90% to ensure an index constituent has enough trading frequency. A stock must meet both ADDTV and ATR minimum requirements to be eligible for the Russell Global 1000 and the Russell Global 2000 indexes.

Membership
After the Russell Global Index members are screened for eligible country membership, and liquidity, the remaining members of the Russell Global Large Cap Index are ranked by their full security market capitalization and the largest 1000 become the Russell Global 1000. The remaining members of the Russell Global Small Cap Index are ranked by their full security market capitalization and the largest 2000 become the Russell Global 2000. The combination of the Russell Global 1000 and the Russell Global 2000 is the Russell Global 3000.

Float-adjustments
Just as with all Russell Indexes, members of the Russell Global 1000, Russell Global 2000 and Russell Global 3000 Indexes are float adjusted. See Section 5 for details on float-adjustment.

Reconstitution
The Russell Global 1000, Russell Global 2000 and Russell Global 3000 Indexes are reconstituted annually at the same time as the parent index, the Russell Global Index. See Section 7 for details regarding the annual reconstitution.

Banding at reconstitution
A 5% banding is applied to the Russell Global 1000 and Russell Global 2000 at the bottom of each index. The turnover resulting at the top of Russell Global 2000 Index is naturally controlled by the banding buffer zones applied to the Russell Global Index large cap and small cap constituents at annual reconstitution. If an existing member's market capitalization falls within this cumulative 5% of the market capitalization breakpoints, it will remain in its current index. New candidates of the parent index, the Russell Global Index, are assigned on the basis of breakpoints. See Section 4 for details on breakpoints.

Index maintenance
The members of the Russell Global 1000, 2000, and 3000 indexes are proactively maintained and reflect daily changes in the global equity markets. The Russell Global 1000, 2000 and 3000 follow the same rules for corporate actions as their parent index, the Russell Global Index. See Section 7 for details.

Russell
Investments

APPENDIX A

Russell Global Indexes: Core indexes

Available currencies

Performance data for the Russell Global Index are available in the following currencies. Currency conversions are applied using WM Reuters London Stock Exchange 4p.m. close.

AUD

CAD

CHF

EUR

GBP

JPY

LOC (local)*

USD

* Local currency available at the security and country level.

GLOBAL	
Global	Global Mega Cap Value
Global Growth	**Global ex-Australia**
Global Large Cap	Global ex-Australia Growth
Global Large Cap Growth	Global ex-Australia Large Cap
Global Large Cap Value	Global ex-Australia Large Cap Growth
Global Midcap	Global ex-Australia Large Cap Value
Global Midcap Growth	Global ex-Australia Midcap
Global Midcap Value	Global ex-Australia Midcap Growth
Global SMID	Global ex-Australia Midcap Value
Global Small Cap	Global ex-Australia Small Cap
Global Small Cap Growth	Global ex-Australia Small Cap Growth
Global Small Cap Value	Global ex-Australia Small Cap Value
Global Value	Global ex-Australia Value
Global Eurozone	**Global ex-Canada**
Global Eurozone Growth	Global ex-Canada Growth
Global Eurozone Large Cap	Global ex-Canada Large Cap
Global Eurozone Large Cap Growth	Global ex-Canada Large Cap Growth
Global Eurozone Large Cap Value	Global ex-Canada Large Cap Value
Global Eurozone Midcap	Global ex-Canada Midcap
Global Eurozone Midcap Growth	Global ex-Canada Midcap Growth
Global Eurozone Midcap Value	Global ex-Canada Midcap Value
Global Eurozone Small Cap	Global ex-Canada Small Cap
Global Eurozone Small Cap Growth	Global ex-Canada Small Cap Growth
Global Eurozone Small Cap Value	Global ex-Canada Small Cap Value
Global Eurozone Value	**Global ex-Japan**
Global Mega Cap	Global ex-Japan Growth
Global Mega Cap Growth	Global ex-Japan Large Cap

Global ex-Japan Large Cap Growth	Global ex-UK Small Cap Growth
Global ex-Japan Large Cap Value	Global ex-UK Small Cap Value
Global ex-Japan Midcap	Global ex-UK Value
Global ex-Japan Midcap Growth	**Global ex-US**
Global ex-Japan Midcap Value	Global ex-US Growth
Global ex-Japan Small Cap	Global ex-US Large Cap
Global ex-Japan Small Cap Growth	Global ex-US Large Cap Growth
Global ex-Japan Small Cap Value	Global ex-US Large Cap Value
Global ex-Japan Value	Global ex-US Midcap
Global ex-North America	Global ex-US Midcap Growth
Global ex-North America Growth	Global ex-US Midcap Value
Global ex-North America Large Cap	Global ex-US SMID
Global ex-North America Large Cap Growth	Global ex-US Small Cap
Global ex-North America Large Cap Value	Global ex-US Small Cap Growth
Global ex-North America Midcap	Global ex-US Small Cap Value
Global ex-North America Midcap Growth	Global ex-US Value
Global ex-North America Midcap Value	**Global ex-US ex-Japan**
Global ex-North America Small Cap	Global ex-US ex-Japan Growth
Global ex-North America Small Cap Growth	Global ex-US ex-Japan Large Cap
Global ex-North America Small Cap Value	Global ex-US ex-Japan Large Cap Growth
Global ex-North America Value	Global ex-US ex-Japan Large Cap Value
Global ex-UK	Global ex-US ex-Japan Midcap
Global ex-UK Growth	Global ex-US ex-Japan Midcap Growth
Global ex-UK Large Cap	Global ex-US ex-Japan Midcap Value
Global ex-UK Large Cap Growth	Global ex-US ex-Japan Small Cap
Global ex-UK Large Cap Value	Global ex-US ex-Japan Small Cap Growth
Global ex-UK Midcap	Global ex-US ex-Japan Small Cap Value
Global ex-UK Midcap Growth	Global ex-US ex-Japan Value
Global ex-UK Midcap Value	
Global ex-UK Small Cap	

REGIONAL

Asia	Asia ex-Japan Small Cap Value
Asia Growth	Asia ex-Japan Value
Asia Large Cap	**Asia Pacific**
Asia Large Cap Growth	Asia Pacific Growth
Asia Large Cap Value	Asia Pacific Large Cap
Asia Midcap	Asia Pacific Large Cap Growth
Asia Midcap Growth	Asia Pacific Large Cap Value
Asia Midcap Value	Asia Pacific Midcap
Asia Small Cap	Asia Pacific Midcap Growth
Asia Small Cap Growth	Asia Pacific Midcap Value
Asia Small Cap Value	Asia Pacific SMID
Asia Value	Asia Pacific Small Cap
Asia ex-Japan	Asia Pacific Small Cap Growth
Asia ex-Japan Growth	Asia Pacific Small Cap Value
Asia ex-Japan Large Cap	Asia Pacific Value
Asia ex-Japan Large Cap Growth	**Asia Pacific ex-Japan**
Asia ex-Japan Large Cap Value	Asia Pacific ex-Japan Growth
Asia ex-Japan Midcap	Asia Pacific ex-Japan Large Cap
Asia ex-Japan Midcap Growth	Asia Pacific ex-Japan Large Cap Growth
Asia ex-Japan Midcap Value	Asia Pacific ex-Japan Large Cap Value
Asia ex-Japan Small Cap	Asia Pacific ex-Japan Midcap
Asia ex-Japan Small Cap Growth	Asia Pacific ex-Japan Midcap Growth

Russell Investments

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

Russell
Investments

Developed Eurozone Large Cap Growth	Emerging EMEA Small Cap Value
Developed Eurozone Large Cap Value	Emerging EMEA Value
Developed Eurozone Midcap	**Emerging Europe**
Developed Eurozone Midcap Growth	Emerging Europe Growth
Developed Eurozone Midcap Value	Emerging Europe Large Cap
Developed Eurozone SMID	Emerging Europe Large Cap Growth
Developed Eurozone Small Cap	Emerging Europe Large Cap Value
Developed Eurozone Small Cap Growth	Emerging Europe Midcap
Developed Eurozone Small Cap Value	Emerging Europe Midcap Growth
Developed Eurozone Value	Emerging Europe Midcap Value
Developed Europe ex-UK	Emerging Europe SMID
Developed Europe ex-UK Growth	Emerging Europe Small Cap
Developed Europe ex-UK Large Cap	Emerging Europe Small Cap Growth
Developed Europe ex-UK Large Cap Growth	Emerging Europe Small Cap Value
Developed Europe ex-UK Large Cap Value	Emerging Europe Value
Developed Europe ex-UK Midcap	**Emerging Markets**
Developed Europe ex-UK Midcap Growth	Emerging Markets Growth
Developed Europe ex-UK Midcap Value	Emerging Markets Large Cap
Developed Europe ex-UK Small Cap	Emerging Markets Large Cap Growth
Developed Europe ex-UK Small Cap Growth	Emerging Markets Large Cap Value
Developed Europe ex-UK Small Cap Value	Emerging Markets Midcap
Developed Europe ex-UK Value	Emerging Markets Midcap Growth
Developed Pacific Basin ex-Japan	Emerging Markets Midcap Value
Developed Pacific Basin ex-Japan Growth	Emerging Markets Small Cap
Developed Pacific Basin ex-Japan Large Cap	Emerging Markets Small Cap Growth
Developed Pacific Basin ex-Japan Large Cap Growth	Emerging Markets Small Cap Value
Developed Pacific Basin ex-Japan Large Cap Value	Emerging Markets Value
Developed Pacific Basin ex-Japan Midcap	**Europe**
Developed Pacific Basin ex-Japan Midcap Growth	Europe Growth
Developed Pacific Basin ex-Japan Midcap Value	Europe Large Cap
Developed Pacific Basin ex-Japan Small Cap	Europe Large Cap Growth
Developed Pacific Basin ex-Japan Small Cap Growth	Europe Large Cap Value
Developed Pacific Basin ex-Japan Small Cap Value	Europe Midcap
Developed Pacific Basin ex-Japan Value	Europe Midcap Growth
Emerging Asia	Europe Midcap Value
Emerging Asia Growth	Europe Small Cap
Emerging Asia Large Cap	Europe Small Cap Growth
Emerging Asia Large Cap Growth	Europe Small Cap Value
Emerging Asia Large Cap Value	Europe Value
Emerging Asia Midcap	**Europe ex-UK**
Emerging Asia Midcap Growth	Europe ex-UK Growth
Emerging Asia Midcap Value	Europe ex-UK Large Cap
Emerging Asia Small Cap	Europe ex-UK Large Cap Growth
Emerging Asia Small Cap Growth	Europe ex-UK Large Cap Value
Emerging Asia Small Cap Value	Europe ex-UK Midcap
Emerging Asia Value	Europe ex-UK Midcap Growth
Emerging EMEA	Europe ex-UK Midcap Value
Emerging EMEA Growth	Europe ex-UK Small Cap
Emerging EMEA Large Cap	Europe ex-UK Small Cap Growth
Emerging EMEA Large Cap Growth	Europe ex-UK Small Cap Value
Emerging EMEA Large Cap Value	Europe ex-UK Value
Emerging EMEA Midcap	**Greater China**
Emerging EMEA Midcap Growth	Greater China Growth
Emerging EMEA Midcap Value	Greater China Large Cap
Emerging EMEA Small Cap	Greater China Large Cap Growth
Emerging EMEA Small Cap Growth	Greater China Large Cap Value

Russell Investments

Greater China Midcap	Latin America Small Cap Growth
Greater China Midcap Growth	Latin America Small Cap Value
Greater China Midcap Value	Latin America Value
Greater China Small Cap	**North America**
Greater China Small Cap Growth	North America Growth
Greater China Small Cap Value	North America Large Cap
Greater China Value	North America Large Cap Growth
Latin America	North America Large Cap Value
Latin America Growth	North America Midcap
Latin America Large Cap	North America Midcap Growth
Latin America Large Cap Growth	North America Midcap Value
Latin America Large Cap Value	North America Small Cap
Latin America Midcap	North America Small Cap Growth
Latin America Midcap Growth	North America Small Cap Value
Latin America Midcap Value	North America Value
Latin America Small Cap	

Country

Australia	Brazil Growth
Australia Growth	Brazil Value
Australia Value	Brazil Large Cap
Australia Large Cap	Brazil Large Cap Growth
Australia Large Cap Growth	Brazil Large Cap Value
Australia Large Cap Value	Brazil Midcap
Australia Midcap	Brazil Midcap Growth
Australia Midcap Growth	Brazil Midcap Value
Australia Midcap Value	Brazil Small Cap
Australia Small Cap	Brazil Small Cap Growth
Australia Small Cap Growth	Brazil Small Cap Value
Australia Small Cap Value	**Canada**
Austria	Canada Growth
Austria Growth	Canada Value
Austria Value	Canada Large Cap
Austria Large Cap	Canada Large Cap Growth
Austria Large Cap Growth	Canada Large Cap Value
Austria Large Cap Value	Canada Midcap
Austria Midcap	Canada Midcap Growth
Austria Midcap Growth	Canada Midcap Value
Austria Midcap Value	Canada Small Cap
Austria Small Cap	Canada Small Cap Growth
Austria Small Cap Growth	Canada Small Cap Value
Austria Small Cap Value	**Chile**
Belgium	Chile Growth
Belgium Growth	Chile Value
Belgium Value	Chile Large Cap
Belgium Large Cap	Chile Large Cap Growth
Belgium Large Cap Growth	Chile Large Cap Value
Belgium Large Cap Value	Chile Midcap
Belgium Midcap	Chile Midcap Growth
Belgium Midcap Growth	Chile Midcap Value
Belgium Midcap Value	Chile Small Cap
Belgium Small Cap	Chile Small Cap Growth
Belgium Small Cap Growth	Chile Small Cap Value
Belgium Small Cap Value	**China**
Brazil	China Growth

Russell Investments

China Value	Egypt Small Cap Value
China Large Cap	**Finland**
China Large Cap Growth	Finland Growth
China Large Cap Value	Finland Value
China Midcap	Finland Large Cap
China Midcap Growth	Finland Large Cap Growth
China Midcap Value	Finland Large Cap Value
China Small Cap	Finland Midcap
China Small Cap Growth	Finland Midcap Growth
China Small Cap Value	Finland Midcap Value
Colombia	Finland Small Cap
Colombia Growth	Finland Small Cap Growth
Colombia Value	Finland Small Cap Value
Colombia Large Cap	**France**
Colombia Large Cap Growth	France Growth
Colombia Large Cap Value	France Value
Colombia Midcap	France Large Cap
Colombia Midcap Growth	France Large Cap Growth
Colombia Midcap Value	France Large Cap Value
Colombia Small Cap	France Midcap
Colombia Small Cap Growth	France Midcap Growth
Colombia Small Cap Value	France Midcap Value
Czech Republic	France Small Cap
Czech Republic Growth	France Small Cap Growth
Czech Republic Value	France Small Cap Value
Czech Republic Large Cap	**Germany**
Czech Republic Large Cap Growth	Germany Growth
Czech Republic Large Cap Value	Germany Value
Czech Republic Midcap	Germany Large Cap
Czech Republic Midcap Growth	Germany Large Cap Growth
Czech Republic Midcap Value	Germany Large Cap Value
Czech Republic Small Cap	Germany Midcap
Czech Republic Small Cap Growth	Germany Midcap Growth
Czech Republic Small Cap Value	Germany Midcap Value
Denmark	Germany Small Cap
Denmark Growth	Germany Small Cap Growth
Denmark Value	Germany Small Cap Value
Denmark Large Cap	**Greece**
Denmark Large Cap Growth	Greece Growth
Denmark Large Cap Value	Greece Value
Denmark Midcap	Greece Large Cap
Denmark Midcap Growth	Greece Large Cap Growth
Denmark Midcap Value	Greece Large Cap Value
Denmark Small Cap	Greece Midcap
Denmark Small Cap Growth	Greece Midcap Growth
Denmark Small Cap Value	Greece Midcap Value
Egypt	Greece Small Cap
Egypt Growth	Greece Small Cap Growth
Egypt Value	Greece Small Cap Value
Egypt Large Cap	**Hong Kong**
Egypt Large Cap Growth	Hong Kong Growth
Egypt Large Cap Value	Hong Kong Value
Egypt Midcap	Hong Kong Large Cap
Egypt Midcap Growth	Hong Kong Large Cap Growth
Egypt Midcap Value	Hong Kong Large Cap Value
Egypt Small Cap	Hong Kong Midcap
Egypt Small Cap Growth	Hong Kong Midcap Growth

Russell
Investments

Hong Kong Midcap Value	Ireland Large Cap Value
Hong Kong Small Cap	Ireland Midcap
Hong Kong Small Cap Growth	Ireland Midcap Growth
Hong Kong Small Cap Value	Ireland Midcap Value
Hungary	Ireland Small Cap
Hungary Growth	Ireland Small Cap Growth
Hungary Value	Ireland Small Cap Value
Hungary Large Cap	**Israel**
Hungary Large Cap Growth	Israel Growth
Hungary Large Cap Value	Israel Value
Hungary Midcap	Israel Large Cap
Hungary Midcap Growth	Israel Large Cap Growth
Hungary Midcap Value	Israel Large Cap Value
Hungary Small Cap	Israel Midcap
Hungary Small Cap Growth	Israel Midcap Growth
Hungary Small Cap Value	Israel Midcap Value
Iceland (ineligible 2012)	Israel Small Cap
Iceland Growth	Israel Small Cap Growth
Iceland Value	Israel Small Cap Value
Iceland Large Cap	**Italy**
Iceland Large Cap Growth	Italy Growth
Iceland Large Cap Value	Italy Value
Iceland Midcap	Italy Large Cap
Iceland Midcap Growth	Italy Large Cap Growth
Iceland Midcap Value	Italy Large Cap Value
Iceland Small Cap	Italy Midcap
Iceland Small Cap Growth	Italy Midcap Growth
Iceland Small Cap Value	Italy Midcap Value
India	Italy Small Cap
India Growth	Italy Small Cap Growth
India Value	Italy Small Cap Value
India Large Cap	**Japan**
India Large Cap Growth	Japan Growth
India Large Cap Value	Japan Value
India Midcap	Japan Large Cap
India Midcap Growth	Japan Large Cap Growth
India Midcap Value	Japan Large Cap Value
India Small Cap	Japan Midcap
India Small Cap Growth	Japan Midcap Growth
India Small Cap Value	Japan Midcap Value
Indonesia	Japan Small Cap
Indonesia Growth	Japan Small Cap Growth
Indonesia Value	Japan Small Cap Value
Indonesia Large Cap	**Korea**
Indonesia Large Cap Growth	Korea Growth
Indonesia Large Cap Value	Korea Value
Indonesia Midcap	Korea Large Cap
Indonesia Midcap Growth	Korea Large Cap Growth
Indonesia Midcap Value	Korea Large Cap Value
Indonesia Small Cap	Korea Midcap
Indonesia Small Cap Growth	Korea Midcap Growth
Indonesia Small Cap Value	Korea Midcap Value
Ireland	Korea Small Cap
Ireland Growth	Korea Small Cap Growth
Ireland Value	Korea Small Cap Value
Ireland Large Cap	**Luxembourg**
Ireland Large Cap Growth	Luxembourg Growth

Russell
Investments

Luxembourg Value	Netherlands Small Cap Value
Luxembourg Large Cap	**New Zealand**
Luxembourg Large Cap Growth	New Zealand Growth
Luxembourg Large Cap Value	New Zealand Value
Luxembourg Midcap	New Zealand Large Cap
Luxembourg Midcap Growth	New Zealand Large Cap Growth
Luxembourg Midcap Value	New Zealand Large Cap Value
Luxembourg Small Cap	New Zealand Midcap
Luxembourg Small Cap Growth	New Zealand Midcap Growth
Luxembourg Small Cap Value	New Zealand Midcap Value
Malaysia	New Zealand Small Cap
Malaysia Growth	New Zealand Small Cap Growth
Malaysia Value	New Zealand Small Cap Value
Malaysia Large Cap	**Norway**
Malaysia Large Cap Growth	Norway Growth
Malaysia Large Cap Value	Norway Value
Malaysia Midcap	Norway Large Cap
Malaysia Midcap Growth	Norway Large Cap Growth
Malaysia Midcap Value	Norway Large Cap Value
Malaysia Small Cap	Norway Midcap
Malaysia Small Cap Growth	Norway Midcap Growth
Malaysia Small Cap Value	Norway Midcap Value
Mexico	Norway Small Cap
Mexico Growth	Norway Small Cap Growth
Mexico Value	Norway Small Cap Value
Mexico Large Cap	**Peru**
Mexico Large Cap Growth	Peru Growth
Mexico Large Cap Value	Peru Value
Mexico Midcap	Peru Large Cap
Mexico Midcap Growth	Peru Large Cap Growth
Mexico Midcap Value	Peru Large Cap Value
Mexico Small Cap	Peru Midcap
Mexico Small Cap Growth	Peru Midcap Growth
Mexico Small Cap Value	Peru Midcap Value
Morocco	Peru Small Cap
Morocco Growth	Peru Small Cap Growth
Morocco Value	Peru Small Cap Value
Morocco Large Cap	**Philippines**
Morocco Large Cap Growth	Philippines Growth
Morocco Large Cap Value	Philippines Value
Morocco Midcap	Philippines Large Cap
Morocco Midcap Growth	Philippines Large Cap Growth
Morocco Midcap Value	Philippines Large Cap Value
Morocco Small Cap	Philippines Midcap
Morocco Small Cap Growth	Philippines Midcap Growth
Morocco Small Cap Value	Philippines Midcap Value
Netherlands	Philippines Small Cap
Netherlands Growth	Philippines Small Cap Growth
Netherlands Value	Philippines Small Cap Value
Netherlands Large Cap	**Poland**
Netherlands Large Cap Growth	Poland Growth
Netherlands Large Cap Value	Poland Value
Netherlands Midcap	Poland Large Cap
Netherlands Midcap Growth	Poland Large Cap Growth
Netherlands Midcap Value	Poland Large Cap Value
Netherlands Small Cap	Poland Midcap
Netherlands Small Cap Growth	Poland Midcap Growth

Russell
Investments

Poland Midcap Value	Spain Large Cap Value
Poland Small Cap	Spain Midcap
Poland Small Cap Growth	Spain Midcap Growth
Poland Small Cap Value	Spain Midcap Value
Portugal	Spain Small Cap
Portugal Growth	Spain Small Cap Growth
Portugal Value	Spain Small Cap Value
Portugal Large Cap	**Sweden**
Portugal Large Cap Growth	Sweden Growth
Portugal Large Cap Value	Sweden Value
Portugal Midcap	Sweden Large Cap
Portugal Midcap Growth	Sweden Large Cap Growth
Portugal Midcap Value	Sweden Large Cap Value
Portugal Small Cap	Sweden Midcap
Portugal Small Cap Growth	Sweden Midcap Growth
Portugal Small Cap Value	Sweden Midcap Value
Russia	Sweden Small Cap
Russia Growth	Sweden Small Cap Growth
Russia Value	Sweden Small Cap Value
Russia Large Cap	**Switzerland**
Russia Large Cap Growth	Switzerland Growth
Russia Large Cap Value	Switzerland Value
Russia Midcap	Switzerland Large Cap
Russia Midcap Growth	Switzerland Large Cap Growth
Russia Midcap Value	Switzerland Large Cap Value
Russia Small Cap	Switzerland Midcap
Russia Small Cap Growth	Switzerland Midcap Growth
Russia Small Cap Value	Switzerland Midcap Value
Singapore	Switzerland Small Cap
Singapore Growth	Switzerland Small Cap Growth
Singapore Value	Switzerland Small Cap Value
Singapore Large Cap	**Taiwan**
Singapore Large Cap Growth	Taiwan Growth
Singapore Large Cap Value	Taiwan Value
Singapore Midcap	Taiwan Large Cap
Singapore Midcap Growth	Taiwan Large Cap Growth
Singapore Midcap Value	Taiwan Large Cap Value
Singapore Small Cap	Taiwan Midcap
Singapore Small Cap Growth	Taiwan Midcap Growth
Singapore Small Cap Value	Taiwan Midcap Value
South Africa	Taiwan Small Cap
South Africa Growth	Taiwan Small Cap Growth
South Africa Value	Taiwan Small Cap Value
South Africa Large Cap	**Thailand**
South Africa Large Cap Growth	Thailand Growth
South Africa Large Cap Value	Thailand Value
South Africa Midcap	Thailand Large Cap
South Africa Midcap Growth	Thailand Large Cap Growth
South Africa Midcap Value	Thailand Large Cap Value
South Africa Small Cap	Thailand Midcap
South Africa Small Cap Growth	Thailand Midcap Growth
South Africa Small Cap Value	Thailand Midcap Value
Spain	Thailand Small Cap
Spain Growth	Thailand Small Cap Growth
Spain Value	Thailand Small Cap Value
Spain Large Cap	**Turkey**
Spain Large Cap Growth	Turkey Growth

Russell Investments

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

Russell
Investments

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
Botswana	BW	Frontier
Brazil	BR	Emerging
Bulgaria	BG	Frontier
Canada	CA	Developed
Chile	CL	Emerging
China	CN	Emerging
Colombia	CO	Emerging
Croatia	HR	Frontier
Cyprus	CY	Frontier
Czech Republic	CZ	Emerging
Denmark	DK	Developed
Egypt	EG	Emerging
Estonia	EE	Frontier
Finland	FI	Developed
France	FR	Developed
Gabon	GA	Frontier
Germany	DE	Developed
Ghana	GH	Frontier
Greece	GR	Developed
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
Korea	KR	Emerging
Kuwait	KW	Frontier
Kyrgyzstan	KG	Frontier
Lithuania	LT	Frontier
Luxembourg	LU	Developed
Macedonia	MK	Frontier
Malaysia	MY	Emerging
Malta	MT	Frontier
Mauritius	MU	Frontier
Mexico	MX	Emerging

Country	Country_ISO	Market
Morocco	MA	Emerging
Namibia	NA	Frontier
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
Serbia	RS	Frontier
Singapore	SG	Developed
Slovakia	SK	Frontier
Slovenia	SI	Frontier
South Africa	ZA	Emerging
Spain	ES	Developed
Sri Lanka	LK	Frontier
Sweden	SE	Developed
Switzerland	CH	Developed
Taiwan	TW	Emerging
Tanzania	TZ	Frontier
Thailand	TH	Emerging
Trinidad and Tobago	TT	Frontier
Tunisia	TN	Frontier
Turkey	TR	Emerging
UAE	AE	Emerging
Ukraine	UA	Frontier
United Kingdom	GB	Developed
United States	US	Developed
Vietnam	VN	Frontier
Zambia	ZM	Frontier

Russell
Investments

APPENDIX C

Eligible share classes by country

Country	Eligible share classes	Remarks
Australia	Common shares Preferred shares	Preferred shares are usually non-voting.
Austria	Common shares Preferred shares Participation certificates	
Belgium	Common shares Preferred shares	
Botswana	Common shares	
Brazil	Common shares Preferred shares	Preferred shares are usually non-voting and traded heavily at the stock exchange.
Bulgaria	Common shares	
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.
Czech Republic	Common shares	
Denmark	A shares B shares	B shares have lower voting rights.
Egypt	Common shares	
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.
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	B shares have lower voting rights.
Hungary	Common shares	
India	Common shares	

Russell Investments

Country	Eligible share classes	Remarks
Indonesia	Common shares	
Ireland	Common shares	
Israel	Common shares Preferred shares	
Italy	Common shares Preferred shares Savings shares	Preferred shares and savings shares are non-voting.
Japan	Common shares	
Latvia	Common shares	
Lithuania	Common shares	
Luxembourg	Common shares	
Malaysia	Common shares	Common shares are classified as local/foreign shares.
Mexico	Common shares Participation certificate	Participation certificates are usually non-voting.
Morocco	Common shares	
Netherlands	Common shares Preferred shares	
New Zealand	Common shares Preferred shares	Preferred shares are usually non-voting.
Norway	A shares B shares Equity Certificates	B shares are non-voting.
Pakistan	Common shares	
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	
Romania	Common shares	
Russia	Common shares Preferred shares	Preferred shares are usually non-voting and are guaranteed dividends no less than common shares.
Singapore	Common shares	Subject to Foreign Board Action.
Slovak Republic	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.
Sweden	A shares B shares C shares	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.

Russell Investments

Country	Eligible share classes	Remarks
Taiwan	Common shares Preferred shares	Preferred shares have limited or no voting rights.
Thailand	Common shares Preferred shares	Common shares are classified as local/foreign shares and are subject to Foreign Board Action. Preferred shares are usually non-voting.
Turkey	Common shares	
United Arab Emirates	Common shares	
United Kingdom	Common shares	
United States	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.

Russell
Investments

Eligible stock exchanges and bourse codes

Country	Eligible stock exchange	Bourse code
Australia	Australia Stock Exchange	111
Austria	Vienna Stock Exchange	50
	XETRA	44
Belgium	NYSE Euronext	399
Botswana	Gaborone Stock Exchange	329
Brazil	Sao Paulo Stock Exchange	83
Bulgaria	Bulgaria Stock Exchange	308
Canada	Toronto Stock Exchange	61
	TSX Venture Exchange	63
Chile	Santiago Stock Exchange	84
China	Shanghai Stock Exchange	215
	Shenzhen Stock Exchange	214
Colombia	Bolsa de Bogota Stock Exchange	85
Czech Republic	Prague Stock Exchange	320
Denmark	Copenhagen Stock Exchange	12
Egypt	Cairo Stock Exchange	374
Finland	OMX Helsinki Stock Exchange	40
France	NYSE Euronext	399
Germany	Deutsche Borse	13
	XETRA	44
Ghana	Ghana Stock Exchange	330
Greece	Athens Stock Exchange	34
Hong Kong	Stock Exchange of Hong Kong	104
Hungary	Budapest Stock Exchange	213
India	Mumbai Stock Exchange	114
	National Stock Exchange	326
Indonesia	Indonesia Stock Exchange	146
Ireland	Irish Stock Exchange	145
Israel	Tel Aviv Stock Exchange	105
Italy	Mercato Continuo Italiano	46
Japan	Tokyo Stock Exchange	106
	Osaka Stock Exchange	107
	JASDAQ	112
	Nagoya Stock Exchange	122
	Nippon New Market Hercules	373
	Fukuoka Stock Exchange	118
Lithuania	Vilnius Stock Exchange	307
Latvia	Riga Stock Exchange	306
Luxembourg	Luxembourg Stock Exchange	47

Country	Eligible stock exchange	Bourse code
Malaysia	Bursa Malaysia Stock Exchange	143
Mexico	Bolsa Mexicana de Valores	80
Morocco	Casablanca Stock Exchange	102
Netherlands	NYSE Euronext	399
New Zealand	New Zealand Stock Exchange	116
Norway	Oslo Stock Exchange	48
Pakistan	Karachi Stock Exchange	216
Peru	Lima Stock Exchange	89
Philippines	Manila Stock Exchange	108
Poland	Warsaw Stock Exchange	243
Portugal	NYSE Euronext	399
Russia	Russia Trading System	565
	Moscow Inter-Currency Exchange	549
Singapore	Singapore Stock Exchange	120
Slovak Republic	Bratislava Stock Exchange	187
South Africa	Johannesburg Stock Exchange	100
South Korea	South Korea Stock Exchange, KOSDAQ	358
	South Korea Stock Exchange (KRX)	123
Spain	Mercado Continuo Espana	54
	Madrid Stock Exchange	55
	Barcelona Stock Exchange	56
Sweden	OM Stockholm Stock Exchange	53
Switzerland	Swiss Stock Exchange	4
	SWX Europe Ltd. (VIRT-X)	380
	Switzerland Stock Exchange (USD)	349
Taiwan	Taiwan Stock Exchange	103
	GreTai Securities Market	372
Thailand	Stock Exchange of Thailand	117
Turkey	Istanbul Stock Exchange	109
Ukraine	PFTS Stock Exchange	309
United Arab Emirates	Dubai Financial Market	824
	Abu Dhabi Securities Exchange	548
	Dubai International. Financial Exchange (DIFX	824
United Kingdom	London Stock Exchange	36
	London Stock Exchange – SETS	361
	London Stock Exchange – Seats	272
	London Stock Exchange – IOB	507
United States	New York Stock Exchange	65
	NYSE ARCA	69
	NASDAQ	67
	American Stock Exchange	66
	Pacific Exchange	95
	NYSE MKT (formerly NYSE Alternext US and NYSE Amex)	66
Zambia	Lusaka Stock Exchange	333

Russell Investments

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, 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%

Russell Investments

APPENDIX F

Assigning a 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 3.

With limited exceptions, 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 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, Russell then considers dual listings on foreign exchanges. Russell takes the most liquid foreign listing (provided it passes the 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 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, 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

Benefit Driven Incorporation countries (BDI), No Domestic Exchange countries (NDE), and U.S. territories

NDE countries
Falkland Islands
Liechtenstein
Monaco
Suriname
BDI countries
Anguilla
Antigua and Barbuda
Aruba
Bahamas
Barbados
Belize
Bermuda
Bonaire
British Virgin Islands
Cayman Islands
Channel Islands
Cook Islands
Curacao
Faroe Islands
Gibraltar
Isle of Man
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.

Russell Investments

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: Russell defines headquarters as the address of principal executive offices. For those companies reporting in the U.S., 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 Russell research are used. In the case where multiple headquarters are listed on the SEC filings and a HCI needs to be determined, 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 last trading day in May. Any filings after that date are not used. 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.

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	Global 1000	Global 2000
2012	$75,000	$37,500	$1,022,735	$511,367
2011	105,000	52,500	1,100,265	550,133
2010	80,000	40,000	829,273	414,636
2009	40,000	20,000	791,416	395,708
2008	140,000	70,000	1,299,412	649,706
2007	150,000	75,000	1,255,612	627,806
2006	155,000	77,500	1,131,566	565,783
2005	85,000	42,500	794,373	397,187
2004	85,000	42,500	746,483	373,241
2003	30,000	15,000	356,778	178,389
2002	45,000	22,500	443,195	221,598
2001	65,000	32,500	399,874	199,937

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. 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. 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 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.

RUSSELL'S DISTRIBUTION OF THE PREDICTIVE INDEX DATA IN NO WAY SUGGESTS OR IMPLIES AN OPINION BY 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.

Russell
Investments