

Product Profile

FTSE GEIS

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Indexing the world

Building a better benchmark—the FTSE Global Equity Index Series (FTSE GEIS)

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Introduction

In this paper, we show how the FTSE Global Equity Index Series (FTSE GEIS), the leading global equity benchmark, embeds the principles of a good benchmark. The paper includes:

- A brief history of FTSE GEIS, from its origins as the FT-Actuaries World Index in 1987 to its role today as an internationally recognized series of global benchmarks.
- An illustration of the broad coverage and modular design of FTSE GEIS.
- An explanation of how FTSE's Equity Country Classification process has evolved, including an introduction to its unique four-tiered approach to classifying markets.
- A step-by-step overview of the FTSE GEIS review process, including the region-relative approach to universe construction and size segmentation.
- An introduction to the FTSE Russell index governance process.
- An example of how global equity markets have changed over time and how FTSE GEIS has evolved to reflect this change.

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Executive summary

Financial market indices are nearly a century old and their role has evolved over time. Initially, indices were used as an information tool, primarily as a means of gauging business conditions and market sentiment. In the last few decades, indices have assumed a central place in the investment business, both as a means of benchmarking investors' performance and as the basis for index-based fund management.

Today, FTSE GEIS provides a robust global equity benchmark framework with coverage of the entire opportunity set, including large, mid, small, and micro cap companies across both developed and emerging markets.

In their role as benchmarks, the leading indices now play a vital role in the global capital markets. But despite the variety of index choices now available to professional and retail investors, there are some design standards that any market-leading benchmark should follow. In particular, we believe that three important principles help define a good benchmark: **objectivity**, **modularity** and **reliability**.

The history of FTSE GEIS

The predecessor to FTSE GEIS, the FT-Actuaries World Index, was conceived in 1986 by four founding partners: the Financial Times, the Institute and Faculty of Actuaries, Goldman Sachs and broker Wood Mackenzie. While each partner viewed the world of international investing through its own lens, all four firms recognized the need for a new breed of global equity index.

The drawbacks of existing benchmarks for investors with an increasingly global outlook were clear. At the time of the new index's introduction in 1987, Eric Short, a Financial Times journalist and Fellow of the Institute of Actuaries, said: "Local stock market indices are not sufficient in themselves to provide the fund manager and adviser with all the tools needed to assist in their international investment, especially if certain stocks on the market are not freely available to overseas investors."¹

The FT-Actuaries World Index, which at the outset covered roughly 70% of the market capitalization of the 23 countries included in the index at the outset,² was the founders' solution to this problem.

In the succeeding decades, the index has undergone some significant changes, which have had the effect of broadening and deepening its coverage. Other changes have reflected the continuing evolution of the global equity markets. And the classification of markets for index inclusion now follows a more clearly defined process than in 1987.

Some of the more notable changes are the following:

- In 1995, the London Stock Exchange and the Financial Times formed a joint venture (FTSE) which took over the calculation of the index in 1997 and bought out the other partners in 1999.³
- At a time of increasing investor interest in emerging equity markets, in 2000 the Barings Emerging Market Index was incorporated into the index, adding 20 countries and extending its target market coverage from 70% to 90% of the underlying markets' capitalization. At the same time, the new, broader global equity index was renamed as the FTSE All-World Index.
- In 2003, the series was renamed as the FTSE Global Equity Index Series (GEIS) and extended to include small cap stocks. At the same time, the process for reviewing index constituents was reorganized along regional lines, with index reviews now taking place in seven regions: Asia Pacific ex Japan, Developed Europe, Emerging Europe, Japan, Latin America, Middle East & Africa and North America.
- In 2014, the London Stock Exchange Group acquired the Frank Russell Company, including the Russell Indices, creating the FTSE Russell brand.. FTSE Russell products, including FTSE GEIS, are used extensively by institutional and retail investors around the world.
- In 2018, FTSE Russell enhanced FTSE GEIS by introducing global micro cap stocks from both developed and emerging markets. The addition of the FTSE In 2019, FTSE Russell began reviewing China separately from the Asia Pacific ex Japan region, creating an eighth region. This decision reflected the size of China's equity market and the impact it would have on other companies captured within the region during the semi-annual review process.

¹ Assessing World Stock Markets: The Design, Calculation and Production of the Financial Times–Actuaries World Indices", Eric Short, FIA, presentation to the Faculty of Actuaries Students' Society, November 1987.

² This was achieved by setting a target of at least 70% coverage of the aggregate value of all listed equities in each local market, and at least 10% (and up to 30%) by number of the available companies in each market.

³ Wood Mackenzie sold its share to Standard and Poor's in 1995.

FTSE GEIS today

Today, FTSE GEIS consists of a number of modular global equity indices (see Figure 1), available to benchmark the performance of different global equity markets, combinations of markets or their capitalization segments.

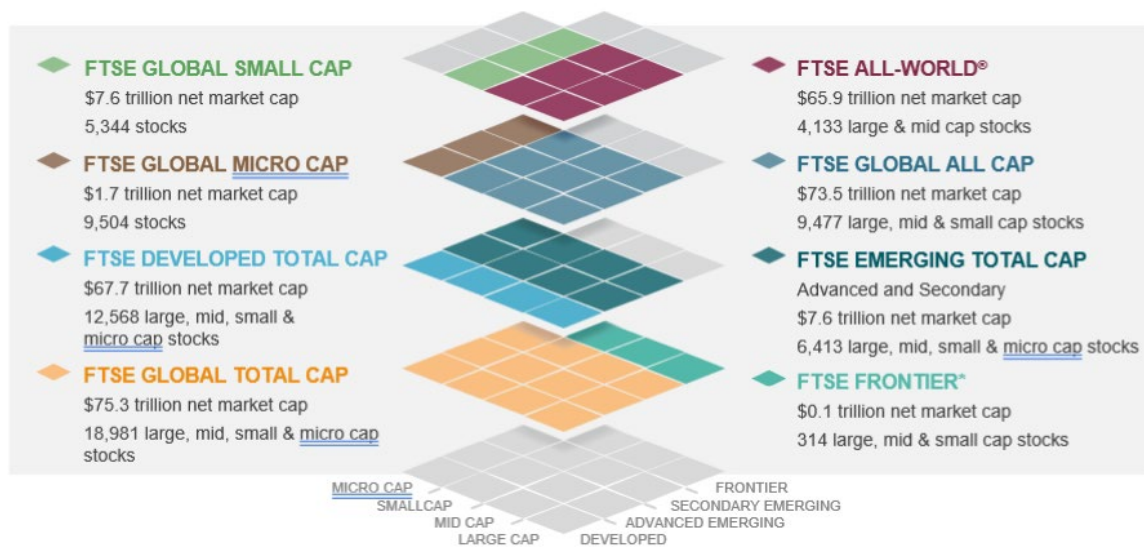
As of March 21, 2022, the **FTSE Global All Cap Index** (of large, mid and small cap stocks) included 9,477 stocks (worth \$73.5 trillion in net market capitalization) across 48 developed and emerging markets. The FTSE Global All Cap index includes the top 98% of stocks by full market capitalization, measured within each FTSE GEIS region.

At the same date, the **FTSE Global Micro Cap Index**, included 9,504 stocks with \$1.7 trillion in net market capitalization. The FTSE Global Micro Cap index extends the target market capitalization coverage of FTSE GEIS to 99%, measured within each region.

For investors looking for a complete global view of the equity market opportunity set, the **FTSE Global Total Cap Index** aggregates the FTSE Global All Cap Index and the FTSE Global Micro Cap Index to cover large, mid, small and micro cap stocks across both developed and emerging markets.

FTSE GEIS is divisible into other modular components as well, including the well-known **FTSE All-World Index**, which includes large and mid-cap stocks from all covered markets, the **FTSE Global Small Cap Index**, and the **FTSE Global Small/Micro Cap Index**. A wide range of sub-indices are available to segment the global market further into industries, regions, and individual countries.

Figure 1: FTSE GEIS coverage and modularity



Source: FTSE Russell, data as of March 21, 2022. For more information, please see the [FTSE Global Equity Index Series Ground Rules](#).

The evolution of the FTSE Equity Country Classification process

The designers of the FT-Actuaries World index faced an important and challenging question: which markets should they include?

According to Eric Short, writing in 1987, the decision was made to include only those countries with "an established stock market with viable, reliable stock prices and company data." But even with these rather vague conditions, some countries initially fell short. Finland, for example, was not included in the FT-Actuaries World Index until a year after its launch because of doubts about the reliability of the country's published company data.

When the distinction between developed and emerging markets was introduced in 2000 (with the launch of the FTSE All-World Index), the eligibility guidelines were still somewhat arbitrary. They tended to focus first on the relative wealth of a country, with an added layer of subjective judgment around its equity market's quality. FTSE set out to improve this process by conducting extensive consultations with over 100 institutional investors to propose a more efficient, transparent method of classifying countries. During the consultation process, FTSE tested the notion of a more structured, objective framework for determining a country's development status. The proposed process considered additional criteria and was designed to encourage less developed countries to adopt global best practices in the pursuit of promotion to the next (higher) classification level.

As it exists today, the FTSE Equity Country Classification process still largely reflects the outcome of those market-wide consultations, although the governance framework follows a more formal process than two decades ago. The Country Classification process is now supported by the FTSE Equity Country Classification Advisory Committee and the FTSE Russell Policy Advisory Board, with the final approval of any changes provided by the FTSE Russell Index Governance Board. The guiding principles for this formal market classification process, along with the FTSE Quality of Markets Matrix against which markets are objectively judged and compared, are published on the FTSE Russell website. To further improve transparency, FTSE Russell also publishes a Watch List of countries likely to be reclassified, enabling index users to monitor possible upcoming changes.⁴

Two levels of emerging markets

An attribute exclusive to the FTSE Equity Country Classification process is its unique four-tiered country classification structure, which classifies countries as Developed, Advanced Emerging, Secondary Emerging and Frontier (see figure 2). By providing two layers of classification at the emerging markets level, users are able to identify which emerging markets are closer to achieving developed market status. While some FTSE GEIS users may choose to simply view the emerging markets universe as one combined opportunity set, having the added option of dissecting where these markets fall along the advanced emerging/secondary emerging market spectrum allows for added flexibility in the development of portfolio strategies. For example, investors may choose to weight their emerging markets portfolio based on risk by focusing on countries with higher or lower country risk profiles.

⁴ For more information about the FTSE Equity Country Classification process please visit: <http://www.ftse.com/products/indices/country-classification>

FTSE Frontier

Countries classified as frontier markets are included in the FTSE Frontier Index Series⁵ (shown in Figures 1 and 2). Frontier markets are those that are still developing, and they tend to attract investors looking to benefit from diversification opportunities and growth potential. There is a tendency to associate frontier markets with low-income countries, but according to the World Bank, 11 of the 30⁶ countries included in the FTSE Frontier Index Series are actually considered to be high-income economies (defined for the 2022 fiscal year as having a per capita Gross National Income (GNI) of \$12,696 or more) and another 8 are considered upper-middle income economies.⁷

FTSE's Equity Country Classification process is largely independent of GNI or economy size, and instead focuses on a country's political and market environment. Criteria considered include the depth and breadth of financial markets, legal and regulatory infrastructure, and the general ease with which foreign investors can do business.

Figure 2: FTSE Russell's unique 4-tiered equity country classification structure

FTSE equity country classification					
DEVELOPED		ADVANCED EMERGING	SECONDARY EMERGING	FRONTIER	
Australia	Japan	Brazil	Chile	Bahrain	Macedonia
Austria	Netherlands	Cz. Republic	China	Bangladesh	Malta
Belgium/	New Zealand	Greece	China A	Botswana	Mauritius
Luxembourg	Norway	Hungary	Colombia	Bulgaria	Morocco
Canada	Poland	Malaysia	Egypt	Côte d'Ivoire	Nigeria
Denmark	Portugal	Mexico	India	Croatia	Oman
Finland	Singapore	South Africa	Indonesia	Cyprus	Palestine
France	South Korea	Taiwan	Kuwait	Estonia	Peru
Germany	Spain	Thailand	Pakistan	Ghana	Serbia
Hong Kong	Sweden	Turkey	Philippines	Iceland	Slovakia
Ireland	Switzerland		Qatar	Jordan	Slovenia
Israel	UK		Romania	Kazakhstan	Sri Lanka
Italy	USA		Saudi Arabia	Kenya	Tanzania
			UAE	Latvia	Tunisia
				Lithuania	Vietnam

Source: FTSE Russell. As of March 2022. For more information please visit: <http://www.ftse.com/products/indices/country-classification>

The FTSE GEIS region-relative approach

Another unique design principle of FTSE GEIS is its region-relative approach to defining the global investment universe and segmenting stocks into market capitalization bands. Our regular consultations with FTSE Russell index users indicate that this approach most closely reflects established practices across global portfolios. By employing a regional approach to global index design, the indices included in the FTSE GEIS family therefore align with the most common global investment management process.

Reviewing each region independently, rather than on a global scale, also reduces the influence some of the world's largest markets could have on the index's representation of smaller countries. By capturing each of the eight regional universes separately, countries are grouped and reviewed

⁵ For more information about the FTSE Frontier Index Series, please visit <http://www.ftse.com/products/indices/frontier>

⁶ Includes Iceland, which will be reclassified from Frontier to Secondary Emerging market status from September 2022.

For more information, refer to https://research.ftserussell.com/products/downloads/FTSE_Interim_Country_Classification_Review_2022.pdf

⁷ <https://datahelpdesk.worldbank.org/knowledgebase/articles/906519>

with their peer markets, resulting in a comprehensive, balanced approach to universe capture and size segmentation.

The five steps below, also shown in Figure 3, summarize the semi-annual process for reviewing the FTSE GEIS indices and capturing the global investable universe.

Step 1: Countries are classified as Developed, Advanced Emerging, Secondary Emerging or Frontier.

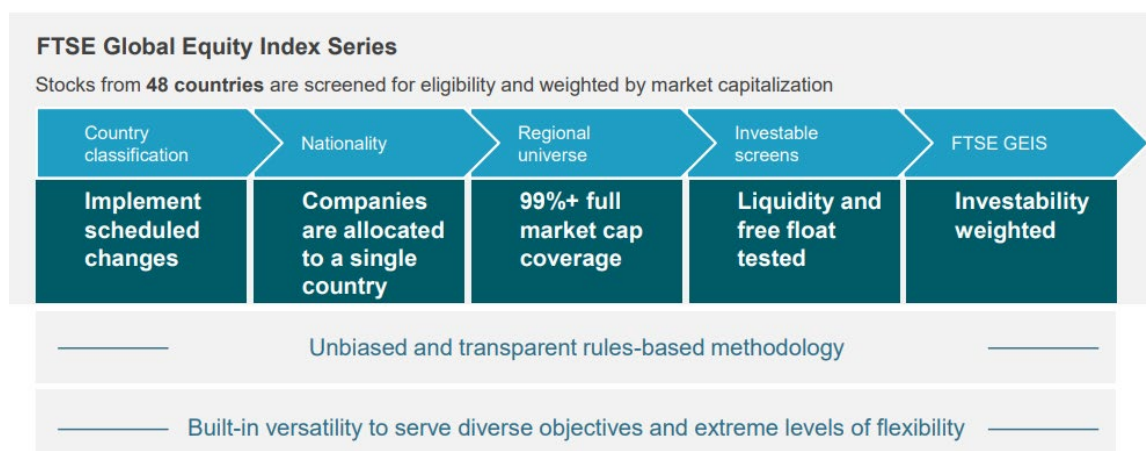
Step 2: Companies are assigned to a single country based on an assessment of a number of factors including country of incorporation, country of domicile for tax purposes, and location of headquarters.⁸

Step 3: Companies are grouped according to their country assignment into eight regional universes. Within each universe, companies are ranked in descending order by their total market capitalization and then allocated to large, mid, small or micro cap based on a combination of their regional rank, size and current index membership. Buffer zones are applied to ensure existing constituents are only moved between market capitalization tiers (e.g., from small to mid cap) when material shifts in size occur, a common practice among index providers that helps to mitigate unnecessary turnover.

Step 4: Investability screens are applied to eliminate stocks considered unavailable to institutional investors.

Step 5: Index weights are determined based on market capitalization, adjusted for available float and foreign ownership limits.

Figure 3: The FTSE GEIS review process



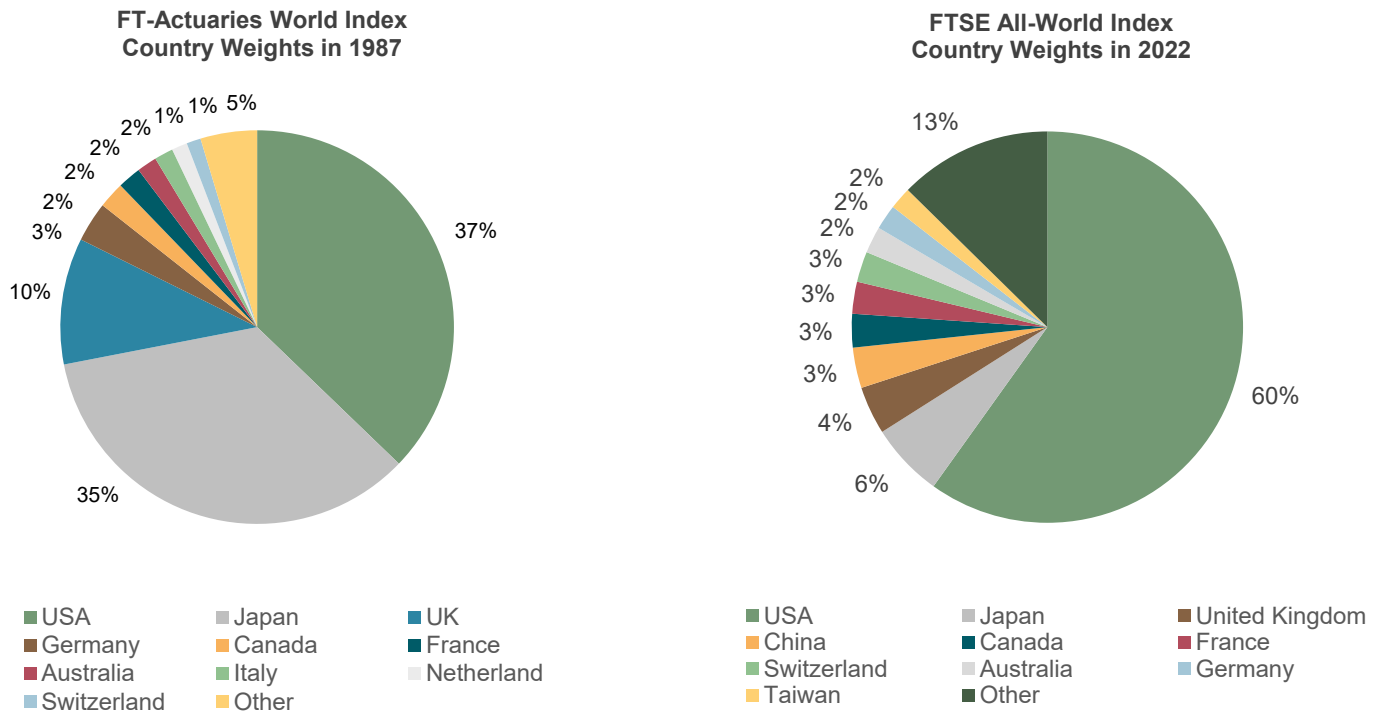
A changing global equity market

Global equity markets have grown and changed dramatically over the last thirty years, and because FTSE Russell is committed to providing accurate coverage of the global opportunity set via FTSE GEIS, users can rely on the indices to accurately capture this evolution. In Figure 4, we compare the weights of the countries included in the FT-Actuaries World Index at its inception in 1987 to the country weights of FTSE All-World Index as of 2022. In 1987, Japan represented roughly 35% of the FT-Actuaries World Index while the US represented 37%. Over thirty years

⁸ For a complete list of factors assessed in determining nationality, please review the [FTSE Global Equity Index Series Ground Rules](#)

later, Japan's representation has dipped to 6%, while the weight of the US has grown to 60%. The dramatic increase in the relative importance of the US equity market is especially notable, given that the number of countries included in the index has increased substantially over the same period (from 23 in 1987 to 48 in 2022).

Figure 4: Country weights comparison



Source: FTSE Russell, FT-Actuaries World Index Country Weights, September 30, 1987.

Source: FTSE Russell, FTSE All-World Index Country Weights, March 31, 2022.

FTSE GEIS governance

Transparency, reliability and accuracy are key attributes of FTSE GEIS. From its launch over thirty years ago, the FT-Actuaries World Index was supervised by a diverse group of investment managers and industry professionals. The first Policy Group, responsible for ensuring that the indices remained independent, broad, accurate and objective, included representatives of the founding firms as well as members from external international investment and advisory firms.

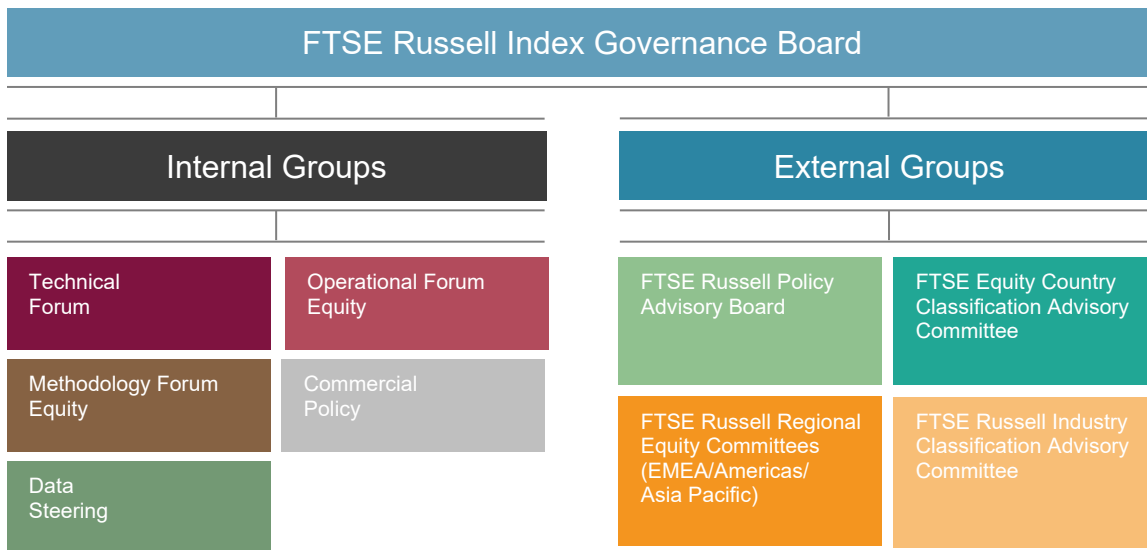
Today, like all FTSE Russell indices, FTSE GEIS is governed by a well-defined framework that draws from strong internal expertise, with support from external independent committees of leading market participants (see Figure 5).⁹ The external committees are made up of investment market professionals from around the world, including pension plan trustees, investment managers, consultants, and other market participants that make use of FTSE Russell indices. Members serve in a personal capacity, and they are chosen for their ability to provide strategic input.

This formal process proactively evaluates all of the construction and maintenance rules applied to the indices, from equity country classification to corporate action reflection, to ensure they are responding to and adapting to the evolving markets. Approval of index construction and

⁹ For additional details on the index governance process and committees please visit: <http://www.ftse.com/products/indices/index-support-guides>

methodology changes to FTSE Russell equity indices is provided by the FTSE Russell Index Governance Board.

Figure 5: FTSE Russell’s Index Governance Groups



Conclusion

Since 1987, use of the indices that now form part of FTSE GEIS has expanded enormously. Today, FTSE Russell indices are used by institutional and retail investors around the world. Leading asset owners, asset managers, ETF providers and investment banks have chosen the indices to benchmark their investment performance and to create investment funds, ETFs, structured products and index-based derivatives. As at end-December 2020, approximately \$17.9 trillion was benchmarked to our indices, \$2.2 trillion of which tracks our global equity benchmarks, including FTSE GEIS.¹⁰

FTSE Russell is committed to maintaining strong relationships with market participants, regulators and exchanges globally. As the global investment landscape has evolved over time, so has FTSE GEIS thanks to our global perspective and dedicated index governance process. Today, FTSE GEIS provides investors of all types with accurate, comprehensive coverage of global equity markets using an approach to index construction that is objective, modular, transparent and reliable.

¹⁰Data as of December 31, 2020 as reported on April 1, 2021 by eVestment for institutional assets, Morningstar for retail mutual funds, insurance products, and ETFs, and additional passive assets directly collected by FTSE Russell. AUM data includes blended benchmarks and excludes futures and options. AUM data will not include active and passive assets not reported to a 3rd party source or FTSE Russell. Passive assets directly collected by FTSE Russell have been removed from third party sources to prevent double counting. No assurances are given by FTSE Russell as to the accuracy of the data..

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