Insights

FTSE Russell

Indexes and benchmarks made clear

The terms “index” and “benchmark” are often used synonymously, which can understandably confuse investors. In simple terms, in the world of investing, a benchmark is a standard point of reference against which the performance of an investment can be measured. When benchmarking the performance of an investment, an index—a hypothetical portfolio of stocks designed to represent the relative asset class, market or market segment—is typically used.

Institutional investors such as pension plans, as long-term investors, seek to meet their investment objectives through a variety of investment methods, and the use of indexes throughout this process extends beyond simply benchmarking the performance of the investment portfolio. This guide provides an introduction to the various purposes indexes can serve and shares some of the important attributes one should consider when selecting an index.

This guide is organized as follows: first, we discuss how important it is for those responsible for institutional investment plans to select appropriate indexes throughout the entire investment process. We share a list of steps, from setting initial plan objectives to performance attribution and reporting, and provide explanations of how indexes are used along each step. Second, we delve into the use of indexes as the basis for investment products, outlining the reasons why some market participants might choose this form of investing over actively managed options to target the same market or market segment, and identifying important considerations for selecting an index as the basis of a product. Finally, we touch on the newest era of indexing—what many refer to as “smart beta”— and discuss the different purposes these types of indexes serve.

Indexes as benchmarks: Why index selection matters

Indexes constructed to measure the characteristics and performance of specific markets or asset classes are typically market cap weighted, meaning the index constituents are weighted according to the total market cap or market value of their available outstanding shares. The indexes play an important role in the design, implementation and evaluation of an institutional investment portfolio. Using a defined benefit pension plan as an example, Table 1 illustrates how the use of indexes expands beyond just reporting investment performance.

Table 1. How an institutional investor such as a defined benefit pension plan may use indexes

<table>
<tr><th>Step</th><th>Example(s)</th><th>How indexes are used</th></tr>
<tr><td>Set investment objectives</td><td>Maximize surplus or adequately fund liabilities</td><td rowspan="4">Indexes help the plan, its trustees, and consultant(s) set objectives and make asset allocation decisions. Indexes provide a framework for portfolio construction</td></tr>
<tr><td>Determine asset allocation</td><td>Usually divided between asset classes such as public equity, fixed income, real estate, and private equity to ensure diversification</td></tr>
<tr><td>Identify strategic allocation to sub-asset categories</td><td>Divide public equities allocation into the separate categories of international equity and domestic equity</td></tr>
<tr><td>Define ranges, or buffers, around target allocations to allow for tactical investment decisions to be made as market conditions change</td><td>Allocation to international equities is set at 10% with buffers +/- 2% to allow for tactical investment decisions</td></tr>
<tr><td>Communicate investment goals to investment manager(s)</td><td>Goals and objectives are communicated to the investment manager chosen for the international equities allocation</td><td>Indexes are often used to establish the universe of securities from which the manager will likely invest</td></tr>
<tr><td>Determine whether the plan objectives are being met and how (or why not)</td><td>Analyze the different components of the investment portfolio to attribute performance to manager success, market growth, strategic positioning or other sources</td><td>Indexes are used to measure the performance of the entire investment portfolio relative to that of the established asset allocation targets (sometimes referred to as the “policy benchmark”). Indexes therefore allow for performance attribution</td></tr>
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Given the integral roles played by indexes throughout the entire investment process, it is imperative that those with fiduciary responsibility for the plan grasp how index selection can impact a plan’s ability to meet its objectives. Table 2 lists some of the most crucial attributes a benchmark index should possess and rationale as to why these qualities are important to consider.

Table 2. Considerations for selecting a benchmark index

Attribute	Rationale
Comprehensive representation of the intended market or market segment	When utilizing indexes as tools to help define the mix of asset classes appropriate for a plan or investment portfolio, it is important that each index delivers an accurate and comprehensive representation of its intended market segment. Omitting eligible securities from an index can lead to unintended consequences such as errors in the asset allocation structure of the total portfolio. Complete market coverage is also important when using an index to benchmark an actively managed investment. Comprehensive coverage of the entire investible opportunity set provides an appropriate basis from which to accurately distinguish alpha (manager skill) from beta. In other words, measuring the success of an actively managed investment using an index that fails to offer complete coverage of the assigned asset class can result in an inaccurate evaluation of manager performance.
Transparent and objective index construction	A transparent, objective approach to index constituent selection provides a more accurate, unbiased representation of the market it is designed to measure rather than a subjective, committee-based method. Objective rules allow users to understand and potentially anticipate why and when changes are made to the index. A subjective, committee-driven method of selecting index members can result in delayed inclusion of newly available securities, which can impact an index's representativeness. If the index is not truly representative, its ability to help define appropriate asset allocation is undermined, as is its effectiveness in providing a means of gauging investment performance as compared to that of the overall market or market segment.
Regularly rebalanced and maintained	Regularly scheduled rebalances and clearly stated maintenance rules to adjust for more frequent changes such as those due to corporate actions like spin-offs and IPOs ensure that the indexes are always aligned with market conditions. This allows for accurate and up-to-date measurements of the markets and market segments.
Modular structure with no gaps or overlaps	Index families designed to represent broad markets as well as more granular market segments should be modular in design. Modular indexes can be used as building blocks, offering a precise picture of the market and its segments. This enables accurate asset allocation implementation without unintended over/under-allocations to small, mid or large capitalization asset classes. A pension plan allocating specific portions of their investment portfolio to large and small capitalization, for example, should be able to rely on indexes to clearly differentiate between these market segments with no gaps or overlaps. If the market cap coverage ranges of the large and small cap indexes overlap significantly, the investor could experience unintended overexposure to the midcap market segment, undermining their intended allocations to large and small cap.

FTSE Russell offers a wide range of indexes and data solutions. For more information on our market-cap weighted indexes and other products, please explore the FTSE Russell website.

Indexes as the basis for investment vehicles

Because an index is a hypothetical basket of stocks, it cannot be invested in directly. However, indexes are often licensed by fund managers to be used as the basis for passively invested products that track an index such as mutual funds, ETFs, separately managed accounts, swaps and structured products.

While many investors prefer actively managed investments, which rely on a manager's stock selection skill, others turn to investing in these passively managed investment products. Rather than making active investment decisions, the passively managed index product designed to track an index is usually comprised of the same securities and at the same weights as the index on which it is based. Passively managed investments that track equity indexes are typically less costly than their actively-managed counterparts since they simply track an index rather than requiring a manager to make investment decisions based on their own opinions and analysis.

For example, an investor may feel strongly that large cap stocks in the US are going to outperform small cap over the long term, so they would like exposure to the entire large cap market segment. Rather than purchasing each US large cap stock individually, the investor may adopt a passive investment strategy by choosing an investment product that tracks an index designed to represent the entire large cap segment of the US market.

When evaluating an index to be used as the basis of an investment product market participants may want to consider index design features that make the index easy for the fund manager to replicate and its constituents easy to trade, in addition to determining whether the index captures a comprehensive representation of the market or market segment. Table 3 provides a list of attributes to consider when evaluating an index to be used as the basis of an index-linked investment product.

Table 3. Considerations for choosing an index as the basis of a passively invested investment product

Attribute	Rationale
Representative	Since the goal of the investment vehicle is to target a particular market or market segment, the chosen index should be as representative of this market segment as possible.
Cost	Transaction costs are incurred by passively managed investments when changes to the underlying index constituents and weights are made. It is important that the index balances its goal of being representative with the need to keep turnover costs manageable.
Objective and transparent	Because the investment vehicle is replicating the index, it is important that the rules that govern the index design and calculation are published openly and transparently. The fund manager should be able to understand and anticipate changes to the index. If not, replicating the index can be difficult and unintended tracking error may occur.
Investable	The index should limit its holdings to those readily available to the investor. For example, index weights should be calculated using float-adjusted market cap, meaning the index should only include the shares that are freely available for purchase by the average investor rather than those held by employees or other investors who are restricted from selling their shares. If shares not available to public investors are included in the index, replicating the index can be difficult, and the demand for shares from investment funds replicating the index can actually cause unnatural stock price spikes.

FTSE Russell is one of the world's leading providers of indexes for ETFs. Please refer to the FTSE Russell ETF Center for a list of funds available.

Smart beta indexes. What are they, and what purpose do they serve?

In addition to market-cap weighted indexes designed to represent an entire market or market segment, a newer breed of indexes often referred to as “smart beta” indexes has become increasingly popular in recent years. These options aim to reflect a variety of exposures that are academically recognized drivers of risk or reward, helping users gain more control as they fine tune their portfolios toward their specific investment objectives. Smart beta indexes can be divided into two categories: Alternatively Weighted and Factor.

Alternatively weighted: Alternatively weighted indexes are designed using rules based methodology to capture particular factors within the index such as volatility reduction or higher levels of diversification. The indexes come in many forms, including equally weighted indexes, which are essentially alternatively weighted versions of their underlying market-cap weighted parent index. Rather than assigning constituent weights according to market capitalizations, each company in the index is given an equal weight in the index at each scheduled rebalance. Indexes designed to weight constituents using a composite of fundamental factors such as total cash dividends, free cash flow, total sales and book equity value are also included in this category. These alternatively weighted indexes are typically less prone to excessive concentration that can arise from market fads, which can result in over-exposure to individual companies, sectors or countries. They can also alter the parent index’s exposure to factors such as value or momentum. Another type of alternatively weighted index aims to reduce index volatility while maintaining full allocation to the relative equity market.

Factor: Academic research has long maintained that stock performance can largely be explained by several common characteristics such as size, value, price momentum, quality, and volatility. The rules of factor indexes are designed to capture these characteristics within the index. These indexes are intended to offer more focused exposures to factors than their market cap weighted counterparts in a controlled and transparent way. Single factor indexes and factor combination indexes, which can be tailored depending on the desired exposures, are common tools for market participants.

In evaluating the appropriateness of any of these indexes, users should take a holistic approach and explore, for example, how well the index design suits their objectives, risk constraints, and beliefs as well as how well it compliments or interacts with the allocations designated across the rest of the portfolio.

For more information on FTSE Russell’s approach to Smart Beta index design, including an introduction to our pioneered method of combining traditional factor tilting with smart sustainability investing, please refer to The Anatomy of Smart Beta.

Conclusion

Institutional investors today are faced with a wealth of important decisions beyond deciding to which markets or market segments their assets should be allocated. They must also assess the cost/benefit tradeoff of choosing actively managed or index-linked, passively managed forms of investing. With the recent emergence of extensive choices in smart beta indexes, market participants now have access to a series of far more complex and sophisticated tools designed for a multitude of purposes and outcomes.

As index solutions continue to expand and evolve, you can rely on your index provider to offer the tools you might need as you look to achieve your investment goals. Index providers should be expected to ensure that users are well informed, providing them with tools and information as they consider their opportunities across markets, asset classes, styles or strategies.

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

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FTSE Russell is a leading global index provider creating and managing a wide range of indexes, data and analytic solutions to meet client needs across asset classes, style and strategies. Covering 98% of the investable market, FTSE Russell indexes offer a true picture of global markets, combined with the specialist knowledge gained from developing local benchmarks around the world.

FTSE Russell index expertise and products are used extensively by institutional and retail investors globally. More than $10 trillion is currently benchmarked to FTSE Russell indexes. For over 30 years, leading asset owners, asset managers, ETF providers and investment banks have chosen FTSE Russell indexes to benchmark their investment performance and create investment funds, ETFs, structured products and index-based derivatives. FTSE Russell indexes also provide clients with tools for asset allocation, investment strategy analysis and risk management.

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