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INDICES AND BENCHMARKS

MADE SIMPLE GUIDE

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1 INTRODUCTION

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 indices throughout this process extends beyond simply benchmarking the performance of the investment portfolio. This guide provides trustees with an introduction to the various purposes indices serve and shares some of the important attributes one should consider when selecting an index.

This guide is organised as follows: first, we discuss how important it is for those responsible for institutional investment plans to select appropriate indices 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 indices are used along each step. Second, we delve into the use of indices as the basis for investment products, outlining the reasons why some investors choose this form of investing over actively managed options to target the same market or market segment, and identifying important considerations when choosing an index for this purpose. Finally, we touch on the new era of indexing—what many refer to as "smart beta"— and discuss the different purposes these types of indices serve.

A BENCHMARK IS A STANDARD POINT OF REFERENCE AGAINST WHICH THE PERFORMANCE OF AN INVESTMENT CAN BE MEASURED

2 INDICES AS BENCHMARKS: WHY INDEX SELECTION MATTERS

INDICES 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 INDICES 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 INDICES EXPANDS BEYOND JUST REPORTING INVESTMENT PERFORMANCE.

Table 1: How an institutional investor such as a defined benefit pension plan may use indices

STEP	EXAMPLE(S)	HOW INDICES ARE USED
Set investment objectives	Maximise surplus or adequately fund liabilities	Indices help the plan, its trustees, and consultant(s) set objectives and make asset allocation decisions. Indices provide the framework for portfolio construction
Determine asset allocation	Usually divided between asset classes such as public equity, fixed income, real estate, and private equity to ensure diversification	
Identify strategic allocation to sub-asset categories	Divide public equities allocation into the separate categories of international equity and domestic equity	
Define ranges, or buffers, around target allocations to allow for tactical investment decisions to be made as market conditions change	Allocation to international equities is set at 10% with buffers +/- 2% to allow for tactical investment decisions	
Communicate investment goals to investment manager(s)	Goals and objectives are communicated to the investment manager chosen for the international equities allocation	Indices are often used to establish the universe of securities from which the manager will likely invest
Determine whether the plan objectives are being met and how (or why not)	Analyze the different components of the investment portfolio to attribute performance to manager success, market growth, strategic positioning or other sources	Indices 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"). Indices allow for performance attribution

Given the integral roles played by indices 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 utilising indices 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, it cannot be used to define appropriate asset allocation, nor can it be trusted as an effective means of gauging investment performance as compared to 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 indices 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 indices 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 cap asset classes. A pension plan allocating specific portions of its investment portfolio to large and small capitalisation, for example, should be able to rely on indices to clearly differentiate between these market segments with no gaps or overlaps. If the market cap coverage ranges of the large and small cap indices overlap significantly, the investor could experience unintended overexposure to the mid cap market segment, undermining their intended allocations to large and small cap.

3 INDICES AS THE BASIS FOR INVESTMENT VEHICLES

BECAUSE AN INDEX IS A HYPOTHETICAL BASKET OF STOCKS, IT CANNOT BE INVESTED IN DIRECTLY. HOWEVER, INDICES 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 HAVE TURNED 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 indices 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 UK 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 UK 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 UK market.

An investor evaluating an index to be used as the basis of an investment product 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 one should consider when evaluating an index to be used as the basis of an index-linked investment product.

Table 3: Considerations for choosing a benchmark 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 index should aim to 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.

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SMART BETA INDICES. WHAT ARE THEY, AND WHAT PURPOSE DO THEY SERVE?

IN ADDITION TO MARKET CAP WEIGHTED INDICES DESIGNED TO REPRESENT AN ENTIRE MARKET OR MARKET SEGMENT, A NEWER BREED OF INDICES OFTEN REFERRED TO AS "SMART BETA" INDICES HAS BECOME INCREASINGLY POPULAR IN RECENT YEARS. THESE OPTIONS OFFER A VARIETY OF EXPOSURES TO ACADEMICALLY RECOGNISED DRIVERS OF RISK OR REWARD, HELPING USERS GAIN MORE CONTROL AS THEY FINE-TUNE THEIR PORTFOLIOS TOWARD ACHIEVING SPECIFIC INVESTMENT OBJECTIVES.

Smart beta indices can be divided into three categories: Alternatively weighted, Factor, and Thematic.

Alternatively weighted: Alternatively weighted indices are designed to target specific investment objectives within their rules such as volatility reduction or improved levels of diversification. The indices come in many forms, including equally weighted indices, which are essentially alternatively weighted versions of their underlying market cap weighted parent index. Rather than assigning constituent weights according to market capitalisations, each company in the index is given an equal weight in the index at each scheduled rebalance. Indices 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 indices 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 deliver reduced index volatility, thereby offering an alternative risk reward trade-off to that of the parent index 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 indices are designed to capture the performance of these characteristics. These indices are intended to offer more focused exposures to factors than their market cap weighted counterparts. A factor index sets out to capture factor exposures in a controlled and considered way. Single factor indices and factor combination indices, which can be tailored depending on the desired exposures, are common solutions used by investors.

Thematic: A thematic index is designed to select securities according to a generally accepted investment theme rather than a particular country, sector or market segment. An example is an index comprised of stocks of companies listed in developed markets such as the UK and US that derive significant revenue from emerging markets. The purpose of this index would be to target exposure to emerging markets without directly purchasing stocks issued by companies listed in emerging market countries, hence avoiding the country and currency risks and higher trading costs associated with some emerging markets investments.

In evaluating the appropriateness of any of these indices, 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 complements or interacts with the allocations designated across the rest of the portfolio.

CONCLUSION

In 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 trade-off of choosing actively managed or index-linked, passively managed forms of investing. With the recent emergence of extensive choices in smart beta indices, investors 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 as a partner 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.

INDEXES PLAY AN IMPORTANT ROLE IN THE DESIGN, IMPLEMENTATION AND EVALUATION OF AN INSTITUTIONAL INVESTMENT PORTFOLIO

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