S&P Dow Jones Indices

A Division of S&P Global

Who’s behind the index? Index providers bring indices to life.

An index provider is a specialized firm that is dedicated to creating and calculating market indices and licensing its intellectual capital as the basis of passive products.

The work of an index provider includes four distinct phases:

- **Conceptualization & Creation:** Defining the scope of an index and the rules needed to build it
- **Calculation & Dissemination:** Generating and distributing index values
- **Maintenance & Rebalancing:** Ongoing real-time monitoring and daily maintenance
- **Licensing & Support:** Helping to make indices accessible among investment professionals and the general public

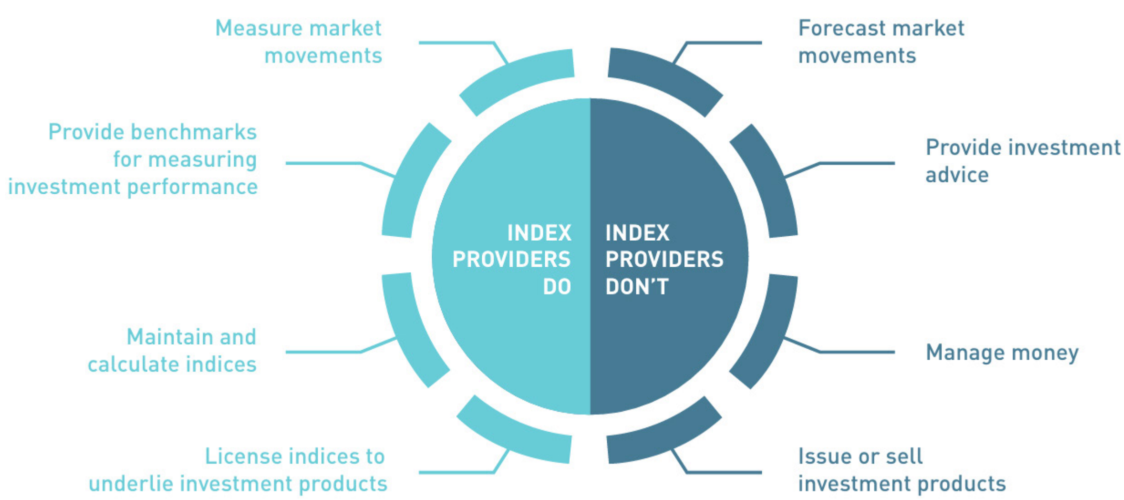
An index provider’s job is a crucial one. Financial professionals and investors worldwide depend on indices for real-time information about market performance, and use index data as inputs for investment and economic decisions, big and small.

What’s more, assets totaling over USD 2 trillion are linked to the performance of market indices. The investment professionals who manage these assets rely on index providers for sound index construction, rigorous index maintenance, and uninterrupted data distribution.

In terms of its business model, an index provider can be compared to a software company in that it creates specialized products that are IP intensive and typically delivered digitally. And like a software company, an index provider’s operations revolve around developing new products, licensing and distributing these products, and providing related service and support.

What Do Index Providers Do?

To better understand what index providers do, it can be helpful to consider what they don’t do:



CONCEPTUALIZATION & CREATION

Conceptualizing and building an index requires a deep understanding of asset classes, market mechanics, and securities classification, as well as the investment products that may eventually be needed to track the index.

The process of index creation begins with an idea. Every viable index must have a clear and sound purpose, although the purpose may vary. From there, an index provider will ask the following questions before moving forward with index creation:

What market, asset class, or strategy is the new index intended to measure?

For example, an index may cover U.S. mid-cap stocks, European bonds, or gold prices. This underlying market is sometimes described as the index's universe, exposure, or opportunity set. The universe may be extremely precise—for example, large-cap Japanese technology stocks—or complex—such as high dividend-paying, low-volatility stocks—but it must always be clearly defined and readily quantifiable.

Is the index calculable?

The determination hinges on whether or not there are readily—and publicly—available prices for the types of constituents the index will include. Without these prices, there is no way to establish a reliable index value. What's more, the provider must ensure that the securities in an index are sufficiently liquid so that financial firms seeking to replicate that index's performance will be able to acquire these securities readily and in sufficient quantity when the index portfolio or its weighting changes.

Will the index generate interest?

The index should have utility either as a benchmark or as the basis of an index-based product, ensuring that it meets a particular need and is marketable. Unless it seems likely that the index will be of value to potential users, it's unlikely the index provider will pursue its creation.

Is the index investable?

If the index is intended to be licensed as the basis of index-based products, the index provider must confirm that the securities or instruments to be included in an index are sufficiently liquid so that financial firms seeking to replicate that index's performance will be able to acquire these securities or instruments in sufficient quantity initially and when the weightings of the constituents change upon rebalancing.

CALCULATION & DISSEMINATION

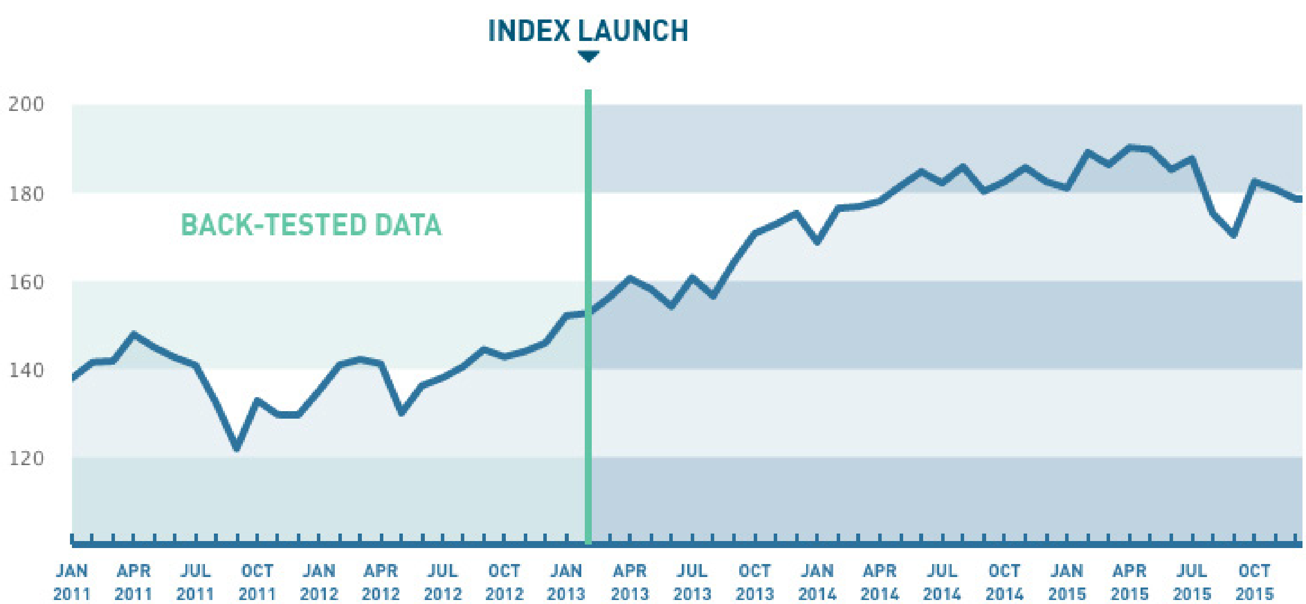
When the index constituents have been selected and weighted, the index provider begins calculating the index in accordance with the methodology. Most indices are computed on a daily basis, many of them in real-time.

For example, the Dow Jones Industrial Average® is computed once every two seconds. However, a select few may be calculated monthly or on some other schedule, based on when the input data is available.

Index providers distribute these index values in various ways, such as on a provider's own website, through data redistributors such as Bloomberg and Reuters, and in data files that are transmitted directly to index licensees. "Back-tested" daily historical index levels may also be calculated when an index is launched. These back-tested values, which are created by applying the current index methodology to historical databases of securities, indicate how the index would likely have performed had it existed in the past. However, back-tested data should be interpreted with caution, because it provides only a theoretical estimation of how the index would have performed, and past performance, real or theoretical, is not a guarantee of future results.

What Is Back-Tested Data?

Back-tested data includes any index values that represent how an index might have performed, had it existed prior to its launch date.



MAINTENANCE & REBALANCING

Once the index has been published, ongoing real-time monitoring and daily maintenance begin so it can run 24 hours a day, 7 days a week.

Since market and other conditions constantly affect the securities included in an index, the provider must periodically rebalance the index. Regular rebalancing requires that the provider track every component security to be sure it still meets the criteria for inclusion, determine which stocks should be added or removed based on the rules in the methodology, and establish new weightings.

Ongoing maintenance also involves tracking corporate actions such as mergers, spin-offs, stock splits, and dividend and interest payments that can impact index components–and applying the changes as they occur. For example, if a company in an index has been made private, it will be dropped because its stock is no longer publicly traded.

LICENSING & SUPPORT

An index provider's business objectives are to license its indices to qualified firms for professional use, to retain these clients by providing the services and support needed to use the indices, and to market the indices.

To cultivate demand for its products, an index provider:

- Licenses its indices to asset managers and other financial institutions, who use the indices to create investable financial products, such as ETFs and benchmark portfolios, and to conduct research and analysis.
- Licenses its indices to the media for real-time display on television and financial websites.

An index provider also supports its clients and seeks to market its indices through the services it provides and builds relationships with financial advisors and other intermediaries who, by promoting index-based products to their clients, help to popularize index investing which, in turn, creates greater demand for its indices.

MECHANICS BEHIND INDEX PROVIDERS

All indices are not alike. Neither are all index providers. So it's important to know how to distinguish an outstanding provider from those that may not measure up. One way to do this is by looking closely at five key characteristics:

EXPERTISE: A topnotch index provider knows how to create indices that accurately track the market they are seeking to measure and meet client objectives, whether that means serving as a benchmark or underlying an investment vehicle.

RELIABILITY: A reliable index provider calculates and disseminates data on a continuous and timely basis, delivering the uninterrupted stream of data that index users require. The reliable provider also affirms that it will be in business to calculate and publish its indices for the long term, which has benefits for users.

INDEPENDENCE: An independent index provider does not sell any investment funds or other products. Operationally, it seeks to ensure independent decisions through separation of its index maintenance teams from the commercial side of the business.

INTEGRITY: A reputation for integrity is built over time. A good provider embraces, and often exceeds, best industry practices, taking precautions to protect against potential threats to its good name. A trustworthy provider rejects index concepts that aren't sound to avoid potential harm to investors who might purchase products that replicate such an index. It also makes appropriate disclosures about any potential conflicts of interest or other matters that may affect or appear to affect the objectivity of its indices.

TRANSPARENCY: A transparent index provider makes its methodology and index data publicly available. This eliminates any questions about how its securities are selected and weighted or the rules for updating its components. It also makes very clear how its indices are calculated. This allows investors to understand exactly what universe the index is measuring and how it accomplishes the feat.

CONGRATULATIONS

You've completed chapter 2. Now, test your knowledge by taking a brief quiz.

An example of a function performed by an index provider is:

A. Managing money
B. Selling investment products
C. Providing investment advice
D. None of the above

Which of the following is typically accounted for during index rebalancings?

A. Corporate actions such as mergers and stock splits
B. Corporate earnings announcements
C. Changes in company leadership
D. All of the above

To whom might an index provider license an index?

A. Individual investors
B. Asset managers and other financial institutions
C. Students and academics
D. Both A and B

Why should back-tested data be viewed with caution?

A. Because it is based on theoretical performance only
B. Because past performance is not a guarantee of future results
C. Both A and B
D. None of the above

Which of the following factors will an index provider typically consider when creating an index?

A. Whether the market to be tracked contains securities that are readily tradable
B. Whether there are active funds covering the market
C. Whether the index will meet the needs of all investors globally
D. Whether it can ensure that the index will perform well

Answers: D, A, B, C, A