S&P Dow Jones Indices

A Division of S&P Global

Defining An Index: What are indices and how do they work?

Whether you're looking to track a market's performance, evaluate your portfolio, or invest in index-linked investment products, indices are indispensable financial tools.

Indices can be used as

- Economic indicators
- Performance benchmarks
- The basis for index-linked investment products
- Tools for research & analysis

Is the stock market healthy? What's happening in the bond market? Are commodity prices going up?

The answers to all of these questions involve indices — that's because they are designed to measure market performance. It's probably fair to say that the closing level of the Dow Jones Industrial Average® gives you a sense not only of what happens on any given day in the U.S. stock market, but also where the U.S. economy stands at any given moment.

In fact, indices can have an impact on your financial life in many ways. The changing value of the S&P 500® can determine the interest you earn on your market-linked certificate of deposit (CD) or the capital gains you realize on a U.S. equity exchange traded fund (ETF). Government indices determine how much is withheld from paychecks for Social Security and how much the variable-rate on a mortgage loan will change.

Given the practical impact of indices, it is important to know what they are and how they work. But what exactly is an index?

An index is a group or basket of securities, derivatives, or other financial instruments that represents and measures the performance of a specific market, asset class, market sector, or investment strategy. In other words, an index is a statistically representative sampling of any set of observable securities in a given market segment. For instance, the well-known S&P 500 is a representation of the large-cap segment of the U.S. equity market. As the combined value of the securities in the index moves up or down, the numerical value, or the index level, changes to reflect that movement.

No information, except maybe the weather, is more widely reported than the current levels of The Dow® and the S&P 500. And there's a reason why people pay attention.

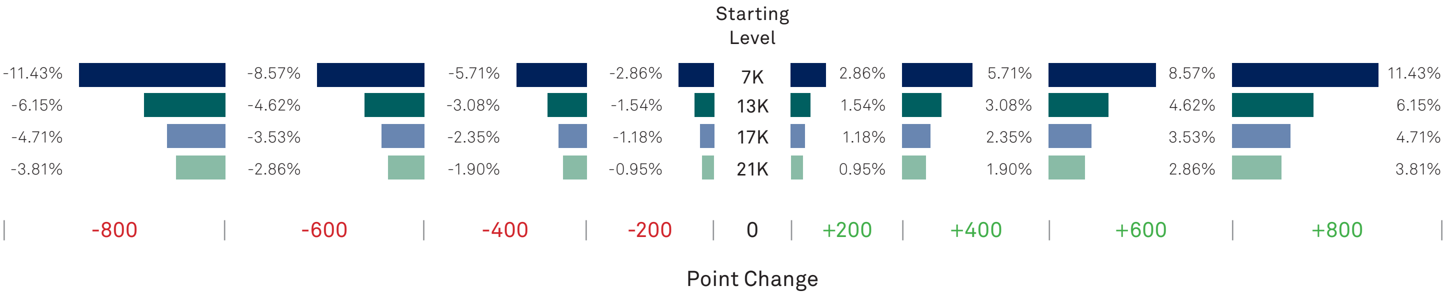
Indices provide both real-time information about the health of financial markets and a regularly updated snapshot of market direction.

When equity indices are rising, it's because investors are buying more shares of the indices' component stocks than they're selling, and their prices are going up. The opposite is occurring when index levels are declining.

Good or Great Day?

When investors and the media talk about market performance, they typically cite the number of points an index gained or lost. But the actual impact of these numbers is based on the prior index level. The table below shows how starting level actually affects the impact of a point change.

Percentage change based on starting level



Indices enable investors to evaluate the performance of securities, actively managed funds, and investment portfolios relative to the market.

In this way, indices act as yardsticks or benchmark measures. For example, large institutional investors, financial advisors, and individual investors alike benchmark their investments to indices to determine whether they are outperforming or underperforming the markets in which they invest.

Why we need benchmarks

Indices are used by financial professionals to benchmark the portfolios they manage against market performance. Even individual investors can evaluate how their investments are performing relative to the market using indices as a reliable reference point.

Why choosing the right benchmark matters

To make a meaningful comparison between an investment portfolio and an index, it is crucial to use the right benchmark. It would be misleading to compare the results of a mutual fund that invests primarily in mid-sized companies to those of an index tracking large- or small-sized companies.

This need to compare apples to apples is one reason there are millions of indices. Each index measures a specific market, market segment, or investment strategy in which investors, whether individual or institutional, might choose to invest.

INDEX-BASED INVESTMENT PRODUCTS

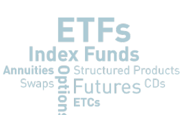
The number of indices continues to grow because there is growing appetite for new ways to invest in the capital market using index-linked products, such as ETFs.

Knowing the difference between an index and an index-linked product is crucial for understanding the nature and role of both indices and the investment products that track them.

AN INDEX is created by an index provider such as S&P DJI to track the performance of a market, market segment, investment strategy, or asset class. Investors cannot invest directly in an index, but they can invest in an index-linked product.

AN INDEX-LINKED INVESTMENT PRODUCT is created by a financial institution such as an investment company, bank, exchange, or other regulated third-party as an investable vehicle that is designed to replicate the performance of the underlying index as closely as possible, before deduction of product management fees.

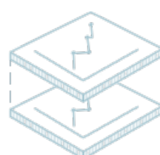
Before publicly offering index-linked products to investors, the product issuer first enters into a license agreement with the index provider whereby the product issuer states their intention to match the index composition and performance as closely as possible, before fees.



INDEX-LINKED MUTUAL FUNDS AND ETFs are among the best-known investable index-linked products, but the full range of products is extensive.

Other types of products that use indices as the basis for an investment objective, settlement value, or other pricing mechanism include futures contracts, options contracts, annuities, life insurance, CDs, swaps, and structured products.

To be the basis of an investable index product, **all of the constituents in the underlying index must meet liquidity requirements**—in other words, they can be readily bought and sold in the markets where they trade. Otherwise an investable product couldn't buy or sell essential components needed to replicate the index performance.



An investment product may own all or a representative sampling of the securities or other assets in the index in order to track its performance. **Alternatively, an investment product may replicate an index through the purchase of derivative instruments, such as options contracts or swaps, based on that index.** In the case of derivatives, replication is sought by pegging the investment return or strike price to the performance of an index.

A SPECTRUM OF INDICES

There is an index for nearly every corner of the market. Indices typically fit into one of a few broad categories that can be segmented and even cross-segmented into much narrower niches.

BROAD MARKET INDICES track large segments of the market or a major asset class. Some examples are the S&P 500, the S&P Global BMI (Broad Market Index), the S&P/ASX 200, the S&P/TSX Composite, or the S&P GSCI for the commodities market.

SECTOR INDICES track industry-based market segments, slicing the broad markets into narrower categories, such as the health-care and technology sectors. These indices can track at an even more specific level, allowing investors to gain exposure, not just to technology but specifically to software companies. Sector variations drill into industry groups, industries, and sub-industries to provide the most granular market views.

Similarly, there are indices that segment the global markets into countries and regions, or into capitalization ranges based on stock size (large cap, mid cap and small cap) or even into investment styles (growth and value stocks).

STRATEGY AND THEMATIC INDICES, which have gained in popularity over the past decade, are designed to mimic an investment strategy, or capture a specialized segment of the market. Thematic indices often represent market niches or specialized themes such as infrastructure, clean energy, or biotech stocks. Strategy indices often apply alternative methodologies or play on fundamentals or other factors such as high dividends or low volatility, for instance.

FIXED INCOME INDICES are designed to track various segments of the bond market, which is currently redefining itself as a more transparent and easy-to-access asset class on a global scale. The fixed income market and the indices that track it are well-known for their diversification, lower volatility, and yield benefits.

COMMODITY INDICES stand out from equity and fixed income indices in that they track real, tangible assets whose prices are driven solely by global supply and demand. The liquidity-seeking indices can range from equal weighting to capture diversification and liquidity benefits to factor-weighted approaches, to modified roll strategies. Commodity indices are considered important benchmarks for measuring the inflation risk management component of many asset allocation decisions.

The wide availability of market indices has contributed to the proliferation of passive investment products. Originally, passive investing meant purchasing shares in an index fund linked to the U.S. market. But now it's possible to invest in a variety of index-linked products across multiple asset classes and investment strategies.

Because indices are stable and publicly recognized measures, they are where analysts and market participants come together to evaluate trends, debate consensus, and publish proprietary investment strategies.

All walks of market professionals use index data as the basis for evaluating market behavior and trends. Financial analysts might use index data for company or sector attribution to determine what is driving individual stock prices and to make buy/sell recommendations.

An analyst at a hedge fund may use real-time data to identify quantitative signals that have historically represented buy or sell opportunities.

An index tracking healthcare costs or jobs might even inform a government official's views on policy.

Indices help financial professionals and investors speak the same financial language.

CONGRATULATIONS

You've completed chapter 1. Now, test your knowledge by taking a brief quiz.

Which asset class can serve as the basis for an index?

A. Equities
B. Commodities
C. Fixed income
D. All of the above

Which matters most when evaluating index performance?

A. The change in the index level points, e.g. from 12,245 to 11,568
B. The percentage change between index levels
C. Neither

Which came first?

A. Broad market indices
B. Sector indices
C. Strategy indices
D. Dividend indices

It's not possible to directly invest in:

A. Indices
B. Index-linked funds
C. Futures and options
D. None of the above

What does it mean if an index is liquid?

A. All of the securities in the index can be bought and sold easily in the market
B. The index is composed of environmentally conscious securities
C. Only stocks from developed markets are eligible to be included

Answers: D, B, A, A, A