As long ago as 135 years ago, investors sought an effective way to measure the equity market. The initial efforts by Charles Dow and Edward Jones followed 72 years later by Standard & Poor’s began the debate as to which measure more accurately reflects the market.

Understanding the structure of any measure is key to determining its efficacy. In this regard, the Dow Jones Industrial Average (DJIA) and the S&P 500 are vastly different.

Investors generally know the DJIA consists of 30 stocks, but this was not true until 1928. Nonetheless, its name alone implies that calculating DJIA requires simply adding the prices of all stocks in the Average and dividing by the number of issues. In the early days of the DJIA, this simple calculation worked. However, Mr. Dow and Mr. Jones did not foresee changes that would alter the original calculation method.

**CALCULATING THE DJIA**

As stock prices increased, companies split their shares, which cosmetically made them appear to be more attractive. Dividends in stock in lieu of cash plus additions or deletions in DJIA components complicated computing the Average. Altering the divisor was the only way to account for these changes while continuing to provide an accurate tally of the entire list. By 1986, the divisor had fallen below 1.0 and it now is rounded off to 0.1458.

A divisor below 1.0 effectively creates a multiplier effect. A one-point change in the price of any DJIA stock produces a 6.8587-point change in the Average. This gives greater weight to higher-priced stocks. A 1% move in a $300 stock would produce a 20.58-point change in the DJIA while a 1% change in a stock at $20 would move the DJIA only 1.37 points, which is why the DJIA often is referred to as a price-weighted index.

**THE S&P 500 METHOD**

The S&P 500 contrasts from the DJIA in two significant ways. The most obvious is the inclusion of many more individual stocks, which theoretically offers a more comprehensive view of the entire market that is spread over 11 distinct economic sectors. Calculating the S&P 500, however, is the most significant difference.

Unlike the DJIA, the price of an individual stock is not a key factor. The stock's total market capitalization is. This calculation takes the number of outstanding shares (the free float) in public hands of a company and multiplies that by the current share price. This total then is divided by the total market capitalization of the S&P 500 to produce the percentage weight of each S&P 500 component. Obviously, the larger the capitalization of a stock the more influence it has on the total S&P 500.

The table on the left shows the 50 most heavily weighted stocks in the S&P 500 as of June 22, 2020. (Source: Janney Investment Strategy Group)
**DJIA vs S&P 500**

Through many years, the DJIA and S&P 500 have undergone major component changes, but each change was designed to integrate a new entry into the index without altering the index value at the time of the change. Through mid-June this year, nine changes have been made to the S&P 500 components following 20 changes all of last year. In the last 35 years, one or more changes in the DJIA have been relatively common.

Differences in calculating DJIA and S&P 500 still leaves the question of which index offers the better picture of the market. At least directionally, neither measure has an edge.

As illustrated in the chart below, through the last 35 years, the DJIA and S&P 500 tracked each other extremely closely. The major exception in the late 1990s was a major warning as the tech sector led the S&P 500 temporarily to separate from the rest of the market. By early 2001, the two indices reverted to their traditional relationship.

The performance of the technology stocks and the large representation of the sector within the S&P 500 might suggest that the S&P would vastly outperform the DJIA. However, the DJIA on June 22, 2020, was 835 times its value 30 years ago, while the S&P 500 was 7.79 times higher than its 30-year-ago value. The chart below illustrates the percentage gains for both indices.
Part of the explanation for the DJIA’s performance stems from the openly stated desire to keep the Average relevant by making changes that correspond to the current economy regardless of a stock’s market capitalization. For example, within the last decade, among several other changes, Goldman Sachs Group (GS), Nike (NKE) and Visa (V) were added to the Dow, but the big change came five years ago when Apple (AAPL) replaced AT&T (T).

The S&P 500 and the DJIA dominate general press coverage of the stock market, but in the prior 30 years, the technology-heavy Nasdaq Composite Index increasingly became a widely followed market measure. Technology’s rapid ascendance in the 1990s propelled the Composite sharply higher. Excessive valuation created the tech bubble of the late 1990s, but as the chart below shows, through the previous 30 years, the Nasdaq Composite produced a gain 2.5 times greater than the DJIA. Nearing the end of this June, the Nasdaq was outperforming the Dow and S&P by the most since 1983 while topping the S&P 500 by more than 20% over the previous 12 months.

Over time, all market measures tend to follow the same general path. Temporary divergences can present warnings as well as opportunities. Debate about which index best measures the market largely is irrelevant. The state of the economy, interest rates and earnings should be the focus. The indices will take care of themselves.

Disclaimer

Past performance is no guarantee of future performance and future returns are not guaranteed. There are risks associated with investing in stocks such as a loss of original capital or a decrease in the value of your investment.

This report is provided for informational and educational purposes only and shall in no event be construed as an offer to sell or a solicitation of an offer to buy any securities or a recommendation for any strategy or to buy, sell, or hold any product. The information described herein is taken from sources which we believe to be reliable, but the accuracy and completeness of such information is not guaranteed by us. The opinions expressed herein may be given only such weight as opinions warrant. This Firm, its officers, directors, employees, or members of their families may have positions in the securities mentioned and may make purchases or sales of such securities from time to time in the open market or otherwise and may sell to or buy from customers such securities on a principal basis.