

Understanding The Dow

What Makes it Tick

Television and radio business news reports lead with it almost daily. Serious financial discussions begin with it. Many economic discussions are often centered on it. The “it,” of course, is the “Dow,” and it remains an article of faith as the most widely used measure of stock market performance.

Most people know that the Dow is an “average” of the stock prices of thirty large industrial companies. But, just how that average is compiled, and what it really *reveals*, are not the burning questions of typical social conversations.

Nevertheless, a brief look at market history, and how the Dow has changed over time, may create some interesting thoughts about its usefulness as a measure of equity performance.

Charles Henry Dow first devised his market “average” in 1884. The first “Dow” average consisted of 11 stocks, nine of which were railroads—the large growth companies of that era. *The Wall Street Journal* first published the Dow in 1896, covering an average of 12 stocks. During the period of 1916 to 1928, the Dow average increased to 20 stocks and, in 1928, the now familiar 30-stock Industrial Average was born. Most of the original names have disappeared, the companies having long since merged, changed their names, or gone out of business.

If we were to use an example Dow of 12,000, it would mean that the average share price of the thirty Dow stocks was \$12,000, and, of course, no Dow stock sells for anything close to that level. How then, do we make sense of this “average”? Here’s how it works.

The Dow average is constantly adjusted for stock splits, stock dividends, and changes in capitalization of the component stocks. Stock splits occur because corporate directors know that investors have a “psychological barrier” against high stock prices. When a stock splits, the share price *decreases* and the number of shares *increases* proportionally, with total value to the shareholder unchanged.

For example, a stock selling for \$50 per share splits two-for-one. If you owned 100 shares, your investment before the split was \$5,000. After the split, you own 200 shares, but the price has been halved to \$25 per share. Your total investment is still \$5,000; you own more shares, but each share is worth less than before the split. You’re probably now seeing that this function is going to impact the average price because even though the price of the shares came down the value of the company remained unchanged. So, this creates some complexity.

While the impact of stock splits on individual investor holdings is straight forward, such changes in share price can have an impact on the Dow. Consider the hypothetical Dow “average” of 12,000, and, on the same day, all of the stocks split two-for-one. If no adjustments were made to allow for the split, the Dow would “fall” to 6,000 overnight without any real change in underlying value! That of course would be a great source of stress to investors trying to keep it all straight.

In order to compensate for these price changes which produce no effective change in total value, the Dow average is constantly adjusted by altering the “divisor.” The divisor is simply that number which, when divided into the total share prices of the 30 component stocks, creates an equivalent basis on which to compare a current reading with any other historical reading since 1928. Each time a split occurs, the divisor must be adjusted downward; if this did not happen, the average share price of a Dow component stock (based on a Dow of 12,000) would really be \$12,000. (Remember, the Dow is what it says it is—namely, an *average* share price of the 30 stocks of which it is composed.)

When the 30-stock Dow average was created in 1928, the divisor was 16.67. This number was derived to establish a price relationship to earlier averages so that historical comparisons would be meaningful. Over the years, the divisor has declined steadily, falling below 1.0 in 1986, at which time it effectively became a **multiplier**. (A quick review of the math will show the result of dividing a number by a number less than 1.0 is a larger number—that is, a divisor less than 1.0 effectively becomes a multiplier.)

While Dow statisticians are aware of the problem created by this mathematical anomaly, they have shown little inclination toward producing a remedy. However, without a change in the Dow formula, as the divisor continues on its march toward zero, investors should expect greater daily swings in the reported “average.” Changes of more than 100 points in the Dow have become commonplace. Yet, this increase in Dow volatility has little real meaning.

Unfortunately, other broader measures of market activity such as Standard & Poor’s 500 Index (the S&P 500) or the Russell 2000 are still not as thoroughly covered by the popular media. That the Dow is still considered an accurate reflection of the overall stock market is both a testimony to how powerfully ingrained in our thinking the “average” is, and an indication of how little it is understood.

While the “market tick” of future price-swings will surely attract headline attention, wise investors should be aware of the Dow’s inherent limitations and realize that much of this short-term volatility is more “noise” than substance. Frequently, more meaningful information can be gleaned by probing other broader market indexes.

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