GoldenBell
FINANCIAL PLANNING

The Dow is a Bad Accident of History (December 2016)

I was a recent college graduate and there I was on the trading desk of a large institutional investment manager, entrusted with a role well beyond the pay grade of a newly minted liberal arts history major. Like many people in their first job out of college, my primary objective was not to make a fool out of myself – to 'fake it until I could make it'.

One of my first failures in that regard, and among the most memorable signals of my early-career naivete or financial ignorance, was not a bad trade or a erroneous reconciliation. A portfolio manager asked for an update on the stock market and I diligently pulled up a quote of the Dow Jones Industrial Average ("The Dow" or DJIA). It seemed logical at the time. Like most people, I grew up knowing the Dow to be synonymous with the stock market and the stock market to be synonymous with the Dow.

What I quickly learned from this exchange and my early career experience was that the investment industry does not use, cite, or pay attention to the Dow. The portfolio manager in this exchange did not care how the Dow was doing – he wanted to know how the stock market was doing. Just about any other stock index I could have pulled up on the screen that day would have been a better choice to avoid demonstrating my financial ignorance.

The Dow Jones Industrial Average – An Accident of History

The Dow Jones Industrial Average is the accepted stock market measure of mainstream media. It is what we hear everyday reported on the radio, discussed on the nightly TV news, or the benchmark people use when discussing the stock market with a co-worker. But the Dow is not a benchmark you will hear cited at meetings of CFA charterholders, in hedge fund conference rooms, or from sophisticated investment managers who are comparing their performance to an appropriate benchmark.

To be clear, the investment community is not arrogantly trying to establish some country club "we know more than you" environment. Instead, the Dow is quite simply an antiquated and admittedly terrible measure of stock market results. As the Washington Post explains, "It is an accident of history that the Dow is the most widely cited measure of how the overall stock market is doing, and a bad accident."

Created in 1896 by Charles Dow, the Dow Jones Industrial Average was launched in a period that obviously preceded computers or calculators. Dow needed an approach to calculating the index value that could be done quickly by hand. He chose to take 12 large stocks and simply add their respective prices which would constitute the index value. A month after the first modern Olympic Games were held in Greece, the Dow was born.

So why does the financial industry largely ignore the Dow and what makes the Dow an antiquated and terrible measure of stock market returns? We highlight below the key shortcomings of this index.

The Dow Is Not Representative of the Stock Market

In 1896, the 12 stocks that Charles Dow chose for the DJIA largely represented the United States stock market. Today, the 30 stocks in the Dow Jones comprise less than 22% of US market capitalization (as compared with 78% for the S&P 500) and less than 9% of global market cap. To treat an index that represents less than 9% of the global stock market as "the stock market" is an egregious sampling error.

The Dow Is Weighted Based on the Most Arbitrary of Metrics

Perhaps the biggest criticism of the Dow is that it weights the 30 constituent stocks not by a rational measure of market size like revenues, earnings, or market capitalization but on the stock price. Importantly, stock price is not a measure of how large a company is – it is just the result of an equation: the market value of a company divided by the number of shares. Because a company has ability to control the number of shares it issues, it has control over the stock price. For example, the Russell 2000 company, Isramco, has only 2.7 million shares outstanding and a market value of $331 million which translates to a stock price of $122. This $122 stock price compares to a stock price of $72 for Wal Mart – a company that generates more revenues every 80 minutes than Isramco does in a year. While Wal Mart's per share stock price is $50 less than Isramco, the stock market values Wal Mart at a value of $221 billion – roughly 670 times the size of Isramco. Because of the arbitrary value of stock prices, countless examples just like this one exist.

Since the Dow weights using stock prices, a company like Microsoft with a stock price of $63 gets roughly half the weight in the index of Travelers Corp ($121 stock price). This occurs despite the fact that Travelers is 1/14 the size of Microsoft's $490 billion market value. This arbitrary weighting system means that if Goldman Sachs, the highest priced stock in the Dow ($239/share), gains 5%, the Dow increases by 82 points. Alternatively, if General Electric, a company valued at nearly 3x the size of Goldman Sachs but with a stock price of $32, gains 5%, the Dow only increases by 11 points.

Indices are no longer created using this price-weighted methodology and there are two good reasons. First, modern technology means that we don't have to do calculations by hand like in 1896. We have calculators in our pockets and computers now (and even air conditioning and electric washing machines). Second, it's a terribly irrational way to construct an index. The price-weighted construction process is the equivalent of walking into a store and not buying the products that you need the most in the amount that you need them but, rather, buying the most of the products with the highest price, regardless of their importance to you.

The Dow Is Not Diverse

The DJIA includes just 30 stocks that have their headquarters in the US. To help scale that index concentration, keep in mind that there are approximately 4,000 US-based actively traded public companies and several thousand more outside the borders of the US.

The Dow Does Not Keep Pace with the Economy

Unlike many other indices that reconstitute annually or more frequently based on economic changes, the Dow is a largely stagnant index. Consider that between 1959 and 1976, there was not a single change to the 30 Dow companies. Additionally consider that in 1997, after a period of six years without an index change and an economy that had dramatically shifted to industries such as healthcare and technology, the slow moving Dow still contained stocks that reached their peak in the 1960's and 1970's such as Bethlehem Steel, Eastman Kodak, FW Woolworth, Sears Roebuck, Westinghouse Electric, and US Steel.

Decisions to add or remove companies from the DJIA are made by the editors of the Wall Street Journal but this group takes a decidedly languid approach to keeping pace with the times. The editors waited until 2015 to include the world's largest company by market cap – Apple. Currently, half of the ten largest companies in the world are still not in the Dow – companies like Amazon, Alphabet (Google), and Facebook that better represent today's modern economy. All told, the Dow often represents a better picture of the economy from two decades ago than the one today.

The Dow Should Have Become Obsolete with Slide Rules

Over the coming days or weeks, it seems likely that the Dow will eclipse the ballyhooed 20,000 level. Television media will over-publicize the event and it will be reported on the front page of every business section in the country. The investment community will care little. There is long aged understanding that ever since we stopped needing slide rules for complex multiplication calculations, this index should have gone the way of 8-track cassettes, Myspace, and New Coke.