

## Stock Market Perspective: “Real” Dow and S&P Returns

Jason Zweig’s “The Intelligent Investor” weekly column in the March 3 *Wall Street Journal* discusses the significance of the Dow exceeding 13,000 for the first time since 2008, and similar thoughts apply to the S&P 500 crossing 1,400. Except for so-called “psychological” effects on investors and traders, which I have never seen documented, crossing round numbers does not have any importance with regard to technical analysis of stock price movements.

The Zweig article points out the indices are based only on the prices of their components, so they do not include the dividends paid by these stocks. He asked a noted finance professor to calculate what the value of the Dow would be if dividends were included. Such a calculation is highly theoretical because until relatively recently there was no practical way to reinvest dividends received into the index. The article does not say if it was assumed that the dividends were reinvested in the Dow index, which would be the easier computation, or to buy more shares of the specific stocks that paid them. The two methods might not yield similar results.

The article reports a value of the Dow with dividends invested, what might be called the “total return” of the index as an astounding 1,339,410 at the end of February. That made for an attention grabbing headline since the number is about one thousand times the Dow. The calculation went further and took inflation into account to produce a “real wealth Dow” value of 46,986, which is about three and a half times the index.

One reason for these very large values is that they are computed over the entire history of the Dow, which began in May 1896, almost 116

years ago. As such, it is yet another example of the power of compounding over long periods of time.

I doubt that any humans have an investment horizon nearly that long. Also, until the so-called “diamonds” exchange traded fund (ticker DIA) that tracks the Dow began in January 1998, there was no practical way to “own” that index. Consequently, I decided to apply a similar approach to the S&P 500 index. The Vanguard Index 500 fund began in 1976, so by buying it one could invest in the index with dividends automatically reinvested less very low fund expenses. To get a somewhat longer perspective, I decided to look at the 50-year period, 1961-2011, and focus on returns over ten year periods since we often think in those

terms.

The table on this page shows the returns by “decade” for both the “raw” total return index and adjusted for inflation using the consumer price index (CPI). The differences between the two numbers indicate the compounded rate of inflation over the ten year periods.

### ANNUALIZED TEN-YEAR RETURNS OF S&P 500 TOTAL RETURN INDEX

	Raw	Inflation Adjusted
1961-71	7.0%	3.7%
1971-81	6.4%	-2.0%
1981-91	17.6%	13.2%
1991-2001	12.9%	10.2%
2001-11	2.9%	0.4%

There are some interesting facets of the data in the table. The 1971-81 period was completely in the 1966-81 secular bear market, and was a time when inflation was extremely high. Although the index showed a positive

compounded rate of return over the period, its “real” after inflation return was negative. The 2001-11 time frame is also completely within a secular bear market, and the comparison to the earlier period is striking. The raw rate of return is lower, but inflation has been much tamer, so there has been a very small positive real return over the past ten years. That shows how poorly stocks have been doing in the current long-term bear market, but it is better than losing ground to the cost of living.

The 1981-91 and 1991-2001 periods were almost entirely within the great 1982-99 secular bull market. The values in the table show how being invested in stocks during one of the markets can greatly increase one’s real wealth.

ANNUALIZED RETURNS THRU 2011 OF S&P 500 TOTAL RETURN INDEX		
	Raw	Inflation Adjusted
1961-2011	9.2%	4.9%
1971-2011	9.8%	5.2%
1981-2011	11.0%	7.8%
1991-2011	7.8%	5.2%
2001-11	2.9%	0.4%

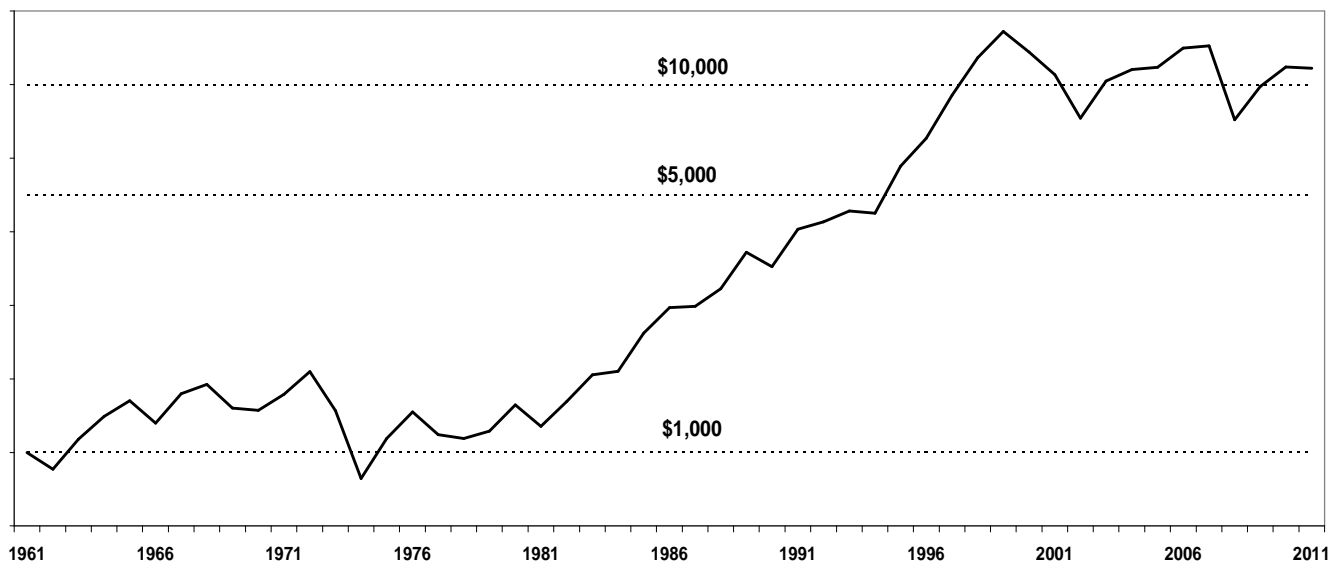
The table above looks at the longer term returns for the periods ending in 2011, so they are for 50, 40, 30, 20, and 10 years.

The fifty year period 1961-2011 encompasses both secular bull and bear markets and periods of high and modest inflation. As such, it should provide a reasonable estimate of the very long returns that can be expected from investing in stocks. That can be useful for some planning exercises. The much lower returns for the past ten years are due to not having the benefit of a secular bull market. They are not representative of longer term stock market performance, but they illustrate the dangers of buying and holding stocks during a long-term bear market, the one we are currently “enjoying.”

Finally, let’s take a look at a chart showing the inflation-adjusted performance of the total return index for the 50 years. It shows the end of year values. The scale is logarithmic, so equal vertical distances correspond to equal percent changes.

The differences between the two types of long-term or “secular” markets are quite clear in the graph. The early 1960s were at the tail end of a secular bull market, so most of the rise is not included. The following secular bear shows the essentially sideways movement with some severe drops along the way. The spectacular

INFLATION ADJUSTED GROWTH OF \$1,000 IN S&P 500 TOTAL RETURN, 1961-2011  
(Logarithmic vertical scale)



secular bull market that ended in early 2000 is clear. In the current secular bear, we once again see the “real” stock market as represented by the S&P 500 total return moving sideways with two sharp drops so far. Note that the high at the end of 1999 has not been matched. At the end

of last year, the real total return index was a little more than 20% below the 1999 high, so it will need to gain over 25% before we can even think about the current bear going back into a cave to hibernate.