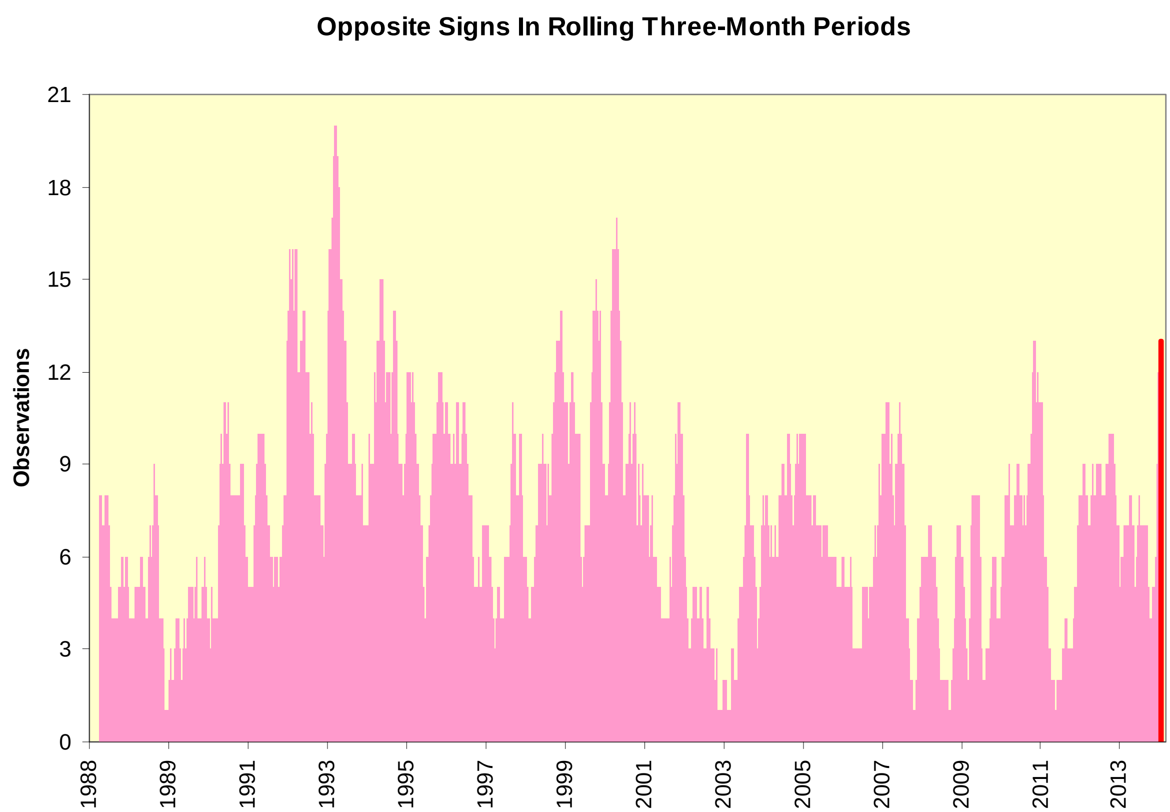
Dow Industrial – S&P 500 Disconnects Not Unusual

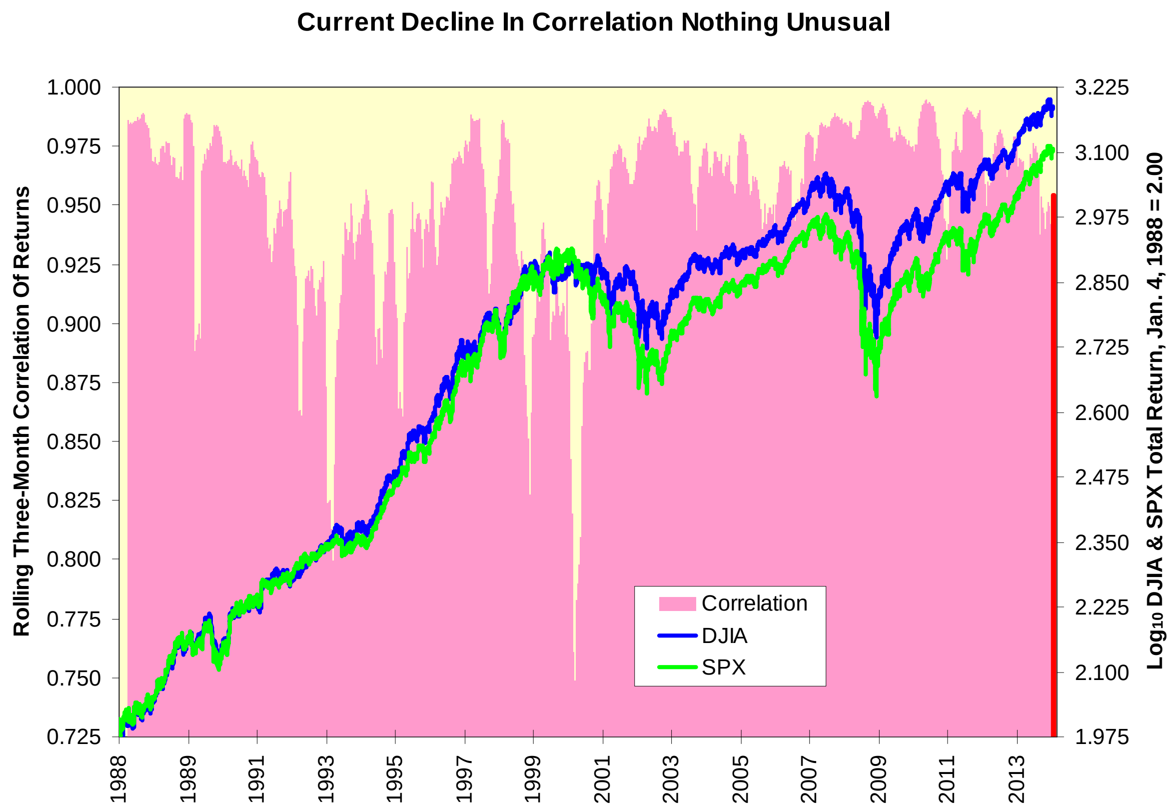
A common perception is perception is reality, which is why the seemingly large number of trading days where the Dow Jones Industrial Average and the S&P 500 have gone in opposite directions since the last batch of changes in the DJIA makes it feel as if the Dow's selection committee went a stock too far in their selections. Let's not mince words; if the Dow is alleged to be the blue-chip indicator of America's industrial might, what do the presence of sneaker-maker Nike (NKE) and credit-card processor Visa (V) say about our state of affairs? Of course, two of the stocks that got the boot in September 2013 were Bank of America (BAC) and Hewlett-Packard (HPQ); one is identified by the mortgage mess it chose to acquire during the financial crisis and the other sells ink cartridges for a king's ransom.

I set out to see whether the two indices as measured by their total returns were in an unusual period of disconnection. Long-term, the r^2 or percentage of variance explained by one against the other is a very high 0.976. The Dow has had a higher average daily return, 0.040% vs. 0.037%, and a lower standard deviation of those returns, 0.012% vs. 0.013%, since January 1988. This is in spite of decisions such as adding Microsoft (MSFT) months before the Justice Department shaved it in half or Intel (INTC) as the dotcom bubble approached its peak.

The answer, surprisingly, is the current sensation of index disconnection is nothing more than an illusion. It has happened 12 times over the past three months, well below peak frequency levels reached in early 1994 and late 2000.



The rolling three-month correlation of returns has declined, too, but the present 0.954 level is well over those 1994 and 2000 levels.



The more interesting question is why a price-weighted narrowly based index of 30 stocks should track a capitalization-weighted broad-based index this closely. The three largest stocks in the Dow's weighting scheme are Visa, IBM (IBM) and Goldman Sachs (GS); each accounts for more than 6.5% of the index. This makes the index unusually susceptible to the occasional bad-hair day from one of them. The largest members of the S&P 500, Apple (AAPL), ExxonMobil (XOM) and Google (GOOG) all have weights under 3.0%.

This relative concentration in the Dow should make instruments such as the SPDR Dow Jones Industrial Average Trust (DIA) more volatile than the SPDR S&P 500 ETF Trust (SPY). However, implied volatility on the DIA of 11.77% is below the SPY's 12.74%. Comparable figures for 21-day realized volatility are 15.63% and 16.52%.

Such an inversion in volatility expectations is not a permanent state of affairs. If you trade the spread between the two indices either in their futures, options or their ETFs, be sure to update your hedge ratios on a regular basis, especially after the index committee decides to get busy and boot industrial stocks such as Alcoa (AA) out of the index just because its price fell below $10 per share.