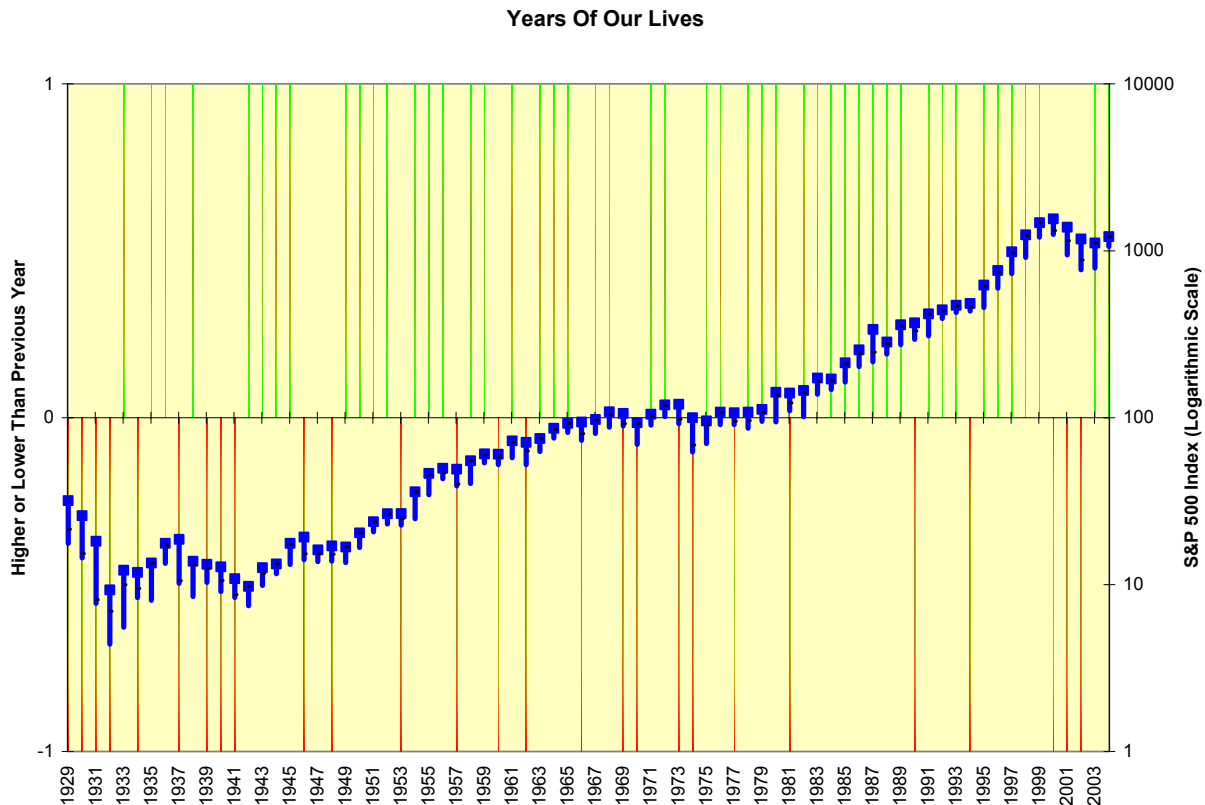


Poor Howard's Almanac

Former basketball star Charles Barkley earned a special place in my heart by claiming he was misquoted in his autobiography. I sort of, kind of, did the same thing to myself in a [Columnist Conversation](#) post last week wherein I recalled a long-ago debunking of the January Effect and the supposed importance of the first week's trading.

Unlike the Round Mound of Rebound, I will not only own up to the error, but will extend the study recalled improperly. I will also plead in my own defense how one of the key variables, the historic price of ten-year note futures, differs now from the one used in the 1998 study; it is back-calculated to reflect the current 6% notional coupon on the bond as opposed to the 8% notional coupon prevailing before the March 2000 contract. The results as recalculated show we should care even less about how the first week of trading unfolds.

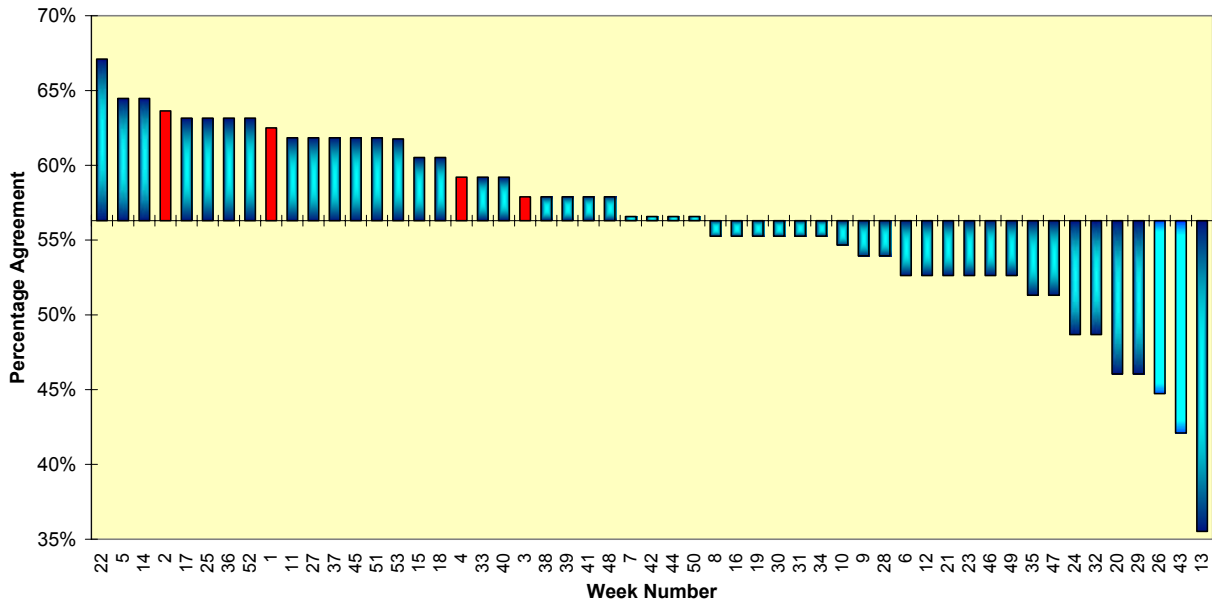
The study itself is relatively straightforward. The long-term history of the S&P 500 back to 1929 is classified into up years, down years and unchanged years (1947 was unchanged from 1946 at a closing value of 15.30. You can look it up). The data sample contains 48 up years, 27 down years and one tie. A map of this history is depicted below.



Next, weekly data for the SPX over the 1929-2004 period would be ranked, by week number, to how often that week number's change matched the change for the year. The weekly change is defined as Friday-to-Friday, and the week number is defined as the number of that week's Sunday; this creates 53 weeks. This little twist makes for some counterintuitive classifications. As New Year's Day in 2005 was on a Saturday, the first trading week of the year actually gets classified as Week 2.

Then the matching game begins. Each weekly change in the SPX is matched against the ultimate change for that year. A simple tabulation of how many times each week's change matches the year's change is made. We should expect the concurrence rate between weeks and the year to be close to 50%, and it is, 56.3%. A histogram of the weeks ranked by concurrence with the year's change is depicted below; the first four week of the year, all of which must lie within January, are highlighted.

**Concurrence Of Weekly SPX Change With Annual Change
1929-2004**

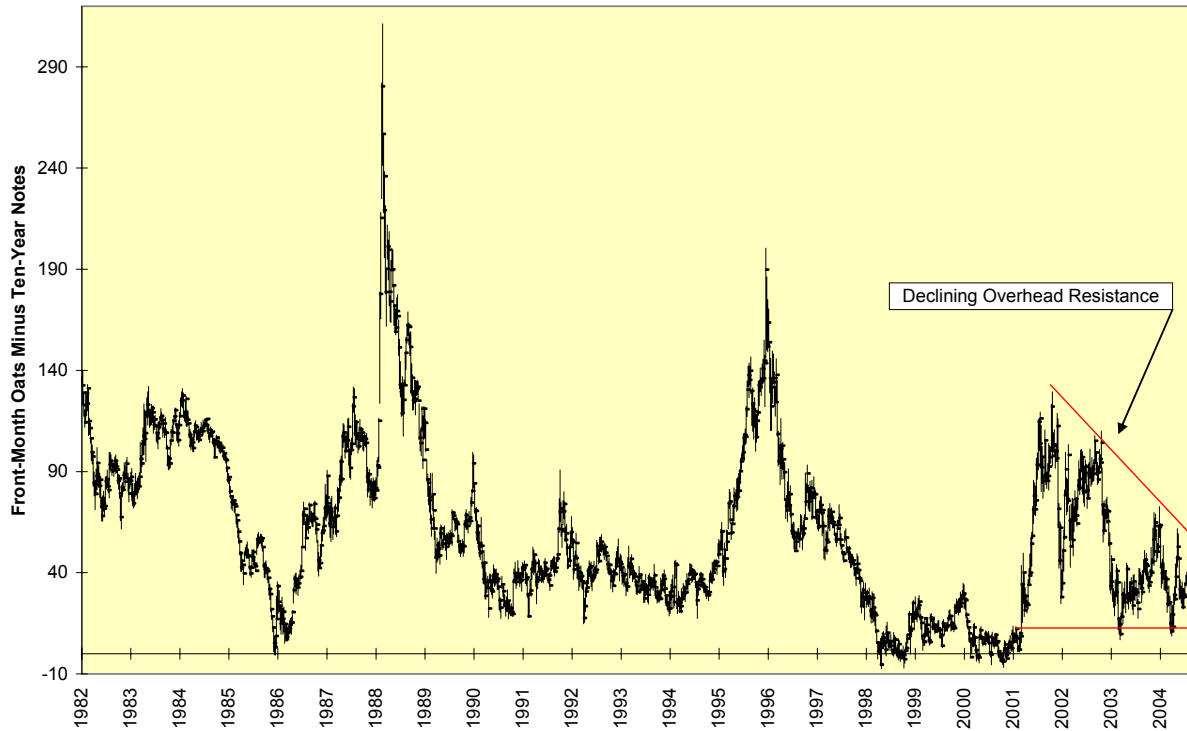


The January weeks all rank above the average in their concurrence, but there is nothing particularly dominant about them. The best predictor of the year, Week 2, has a weekly change directionally equivalent to the year's change of 63.6%; this is equivalent to taking a bet with 1.75:1 odds in your favor. It is not an overwhelming factor in your favor, nor is it even a statistical expectation you will make money over time; that would depend on the subsequent distribution of gains and losses.

As Good As Fictitious

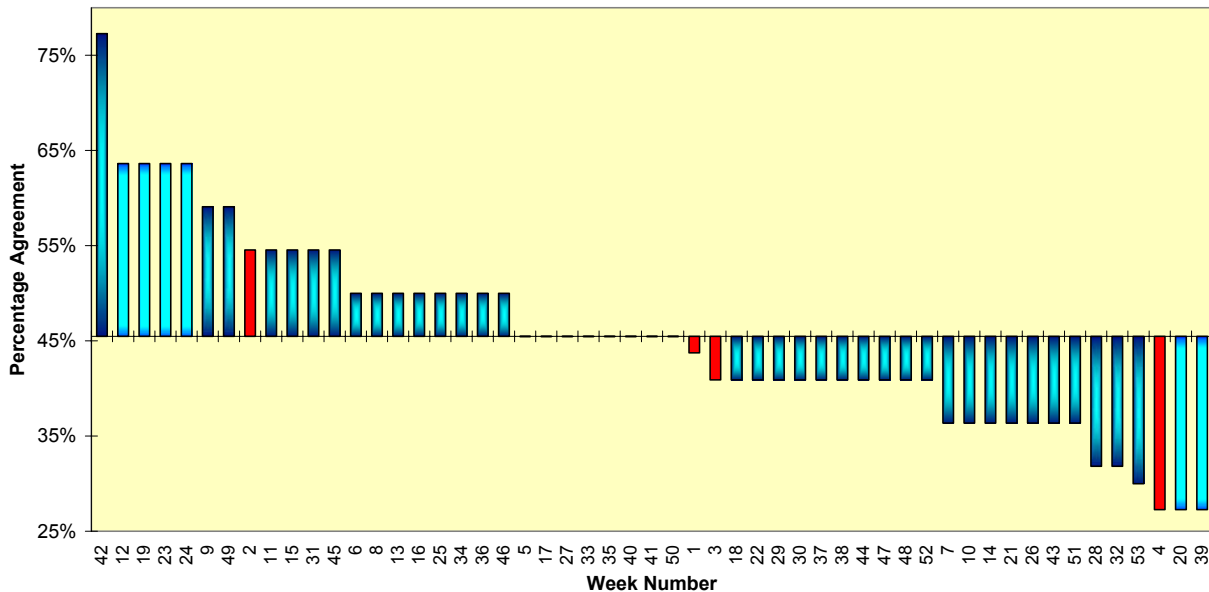
Now let's take a look at a tongue-in-cheek indicator calculated from real data, the oats-notes spread. You subtract the front-month futures contract of ten-year notes from that of oats. Here's what the series looks like going back to the start of ten-year note futures in 1982.

A Compleat History Of Oats/Notes



The combination of a weak grain market and a remarkably resilient bond market has put the oats-notes spread into a very long-term declining overhead resistance range formation. But who did not know that already? Presumably this information is built into all sorts of markets by now; the real question is how has this fictitious spread done as a predictor of annual changes in the SPX?

Concurrence Of Weekly Oats-Notes Change With Annual Change In S&P 500 Cash Index, 1983-2004



The same methodology employed in the SPX autocorrelation study is employed for oats-notes. The change for the spread for each week is matched against the annual change for the SPX. The overall correlation was not as great, 45.47% as opposed to 56.3%. While this difference is statistically significant, it is hardly overwhelmingly so,

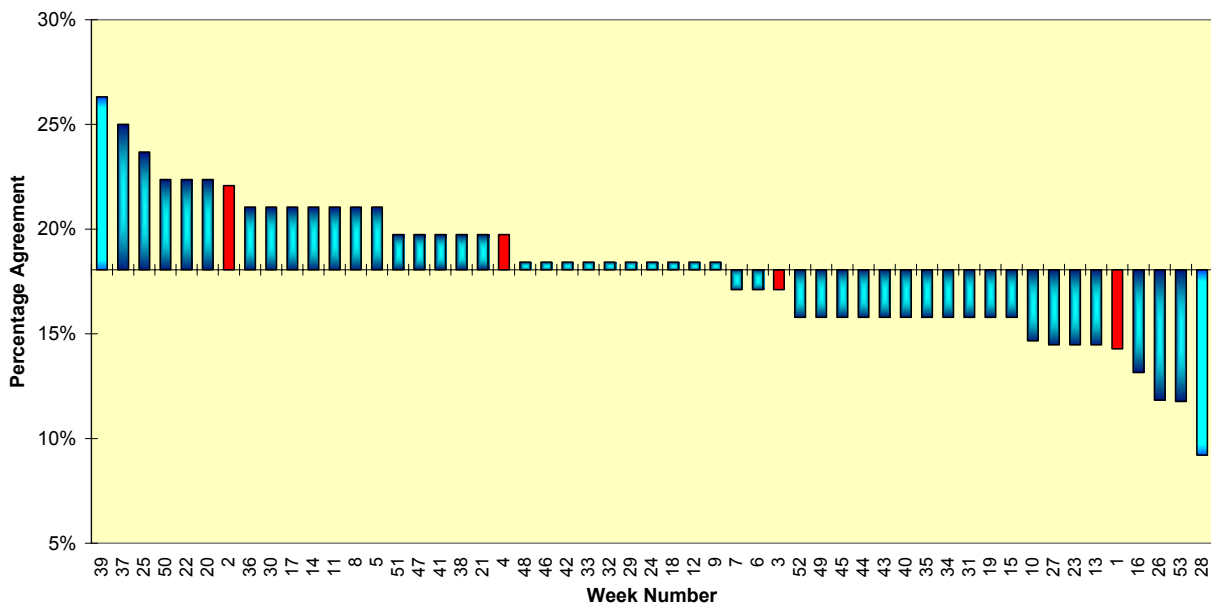
especially in light of how one series deliberately was chose to be unrelated to the S&P 500 and the other series contributes to the S&P 500's annual change.

Get My Drift

The stock market is a geometric Brownian motion process with a positive drift term; this is a fancy way of saying that prices rattle about in a random walk fashion with one direction, upwards, dominating ever so slightly. That ever-so-slightly adds up over time, which is why we have to depict the annual march since 1929 on a logarithmic scale. It is also why a buy-and-hold strategy can work over time for stocks when it works for few other markets.

The emphasis placed on January is misplaced: All else held equal, we should expect the month to have a positive return if for no other reason than it is a sample drawn from a population, stock prices, with a positive trend, more than 10% a year since the mid-1920s. If January falls on its face, the year is in the hole already and has eleven months to make up the damage. And using the same methodology as above, we can see that negative weeks in January have little predictive value for negative years as a whole.

**Concurrence Of Negative Weekly SPX Change With Negative Annual Change
1929-2004**



Drug manufacturers are required to test their new products not against an absolute standard of whether the patient got better but rather if the drug was statistically better than a placebo; this is why I injected the oats-notes spread into the analysis. Market pundits, especially those who rely on data mining the calendar, would do well to take a few placebos and see whether they feel better in the morning.