

Time Of The Season

"Seasonally adjusted, there is no Santa Claus"
-- *The Statistician Who Stole Christmas*

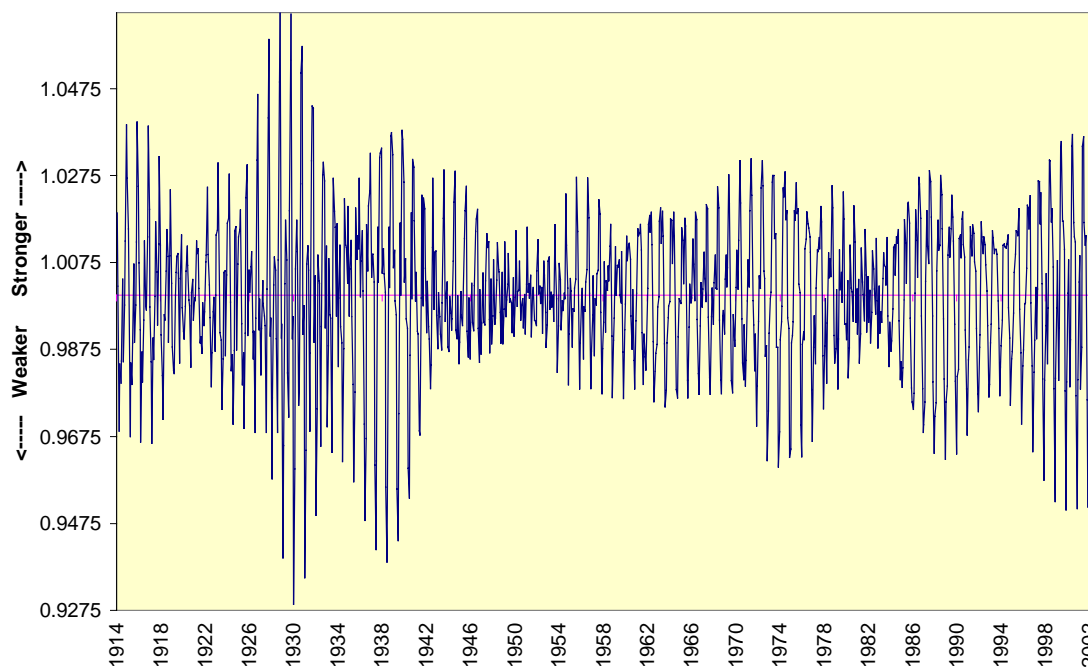
If the task of the journalist is to comfort the afflicted and afflict the comfortable, then this will be just another day at the office. How many times have we heard about this being a seasonally strong time of the year in the stock market? Yes, sir: As goes January, so goes the year. Sell in May and go away. April showers bring... you get the idea.

After our recent completion of the Best October Ever, an award about as coveted as the Best Chicago Cubs Season Ever, the question arose whether any of these prattling pundits has ever sat down and run the seasonal adjustment numbers. If you want an insight into Census Bureau X-11 seasonal adjustment, the method used to decompose an economic time series into its trend, seasonal, factors and irregular components, [click here](#). But there are more interesting things on the Internet, trust me.

How Now, Seasonal Dow?

Let's start with the granddaddy of them all, the Dow Jones Industrial Average; we will have to start this analysis not in 1896, but in December 1914 as the market was closed for four months at the outbreak of World War I. It is easy to see over this very long time period just how non-constant seasonal factors are. Raw DJIA numbers are divided by the seasonal adjustment factors below to produce the final seasonally adjusted data.

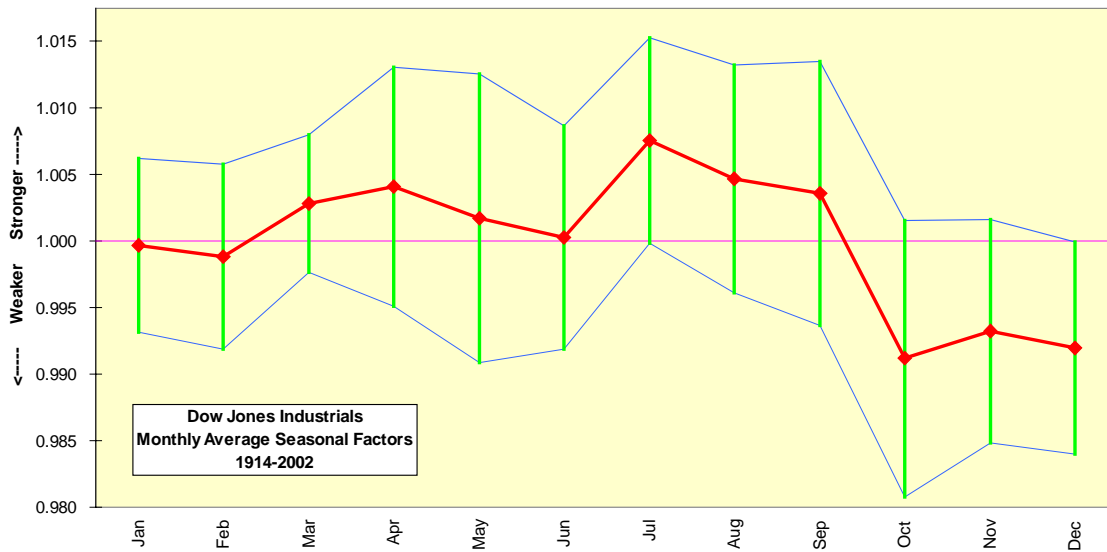
Dow Jones Industrial Average Seasonal Factors



As is the case for so much of stock market data, the bear markets of the Great Depression had the greatest seasonal variation; both the 1970s and our present market rank high in seasonal volatility as well. By contrast, the bull markets of the 1920s, 1950s, mid-1980s and mid-1990s had low seasonal variation; curiously, the late 1990s bubble was highly seasonal. Please recall the summer swoons and winter wonders of those years.

Can we consolidate this time series into average monthly seasonal patterns? Would I be asking otherwise? The consolidated data contains some surprises, most notably the distinct presence of a summer rally and seasonal weakness in the vaunted November-February period. The averages are shown \pm one-half standard deviation.

Yes, Virginia, There Is A Summer Rally

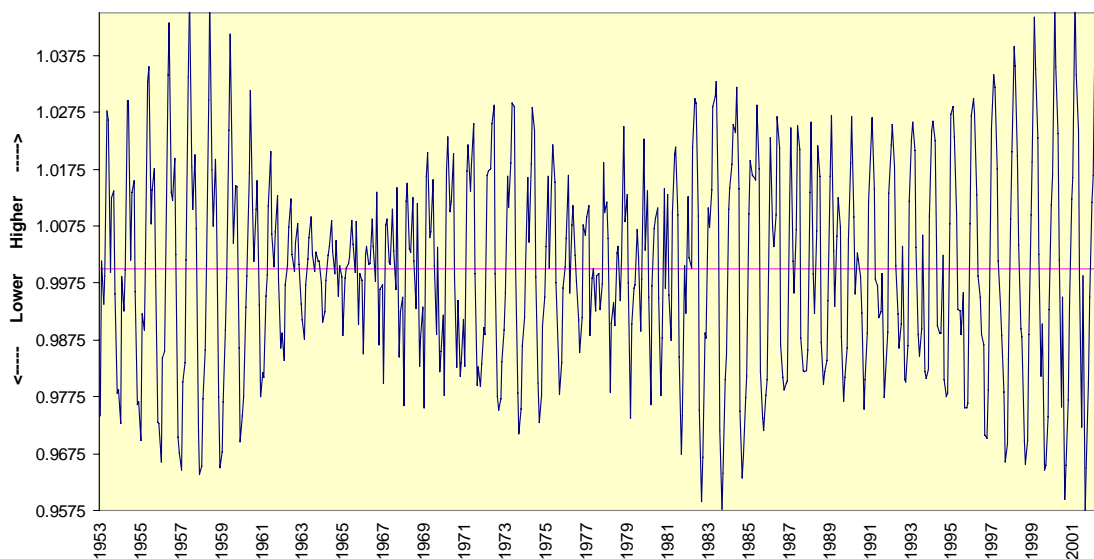


Why would this picture differ from the received wisdom of assorted Wall Street shibboleths? One answer may be its long history; few ever take the time to go back to the Wilson administration anymore. But the real answer is a lot more obvious: The dream merchants need something to sell, and what's better than the promise of a year-end rally?

Interest Rate Seasonality

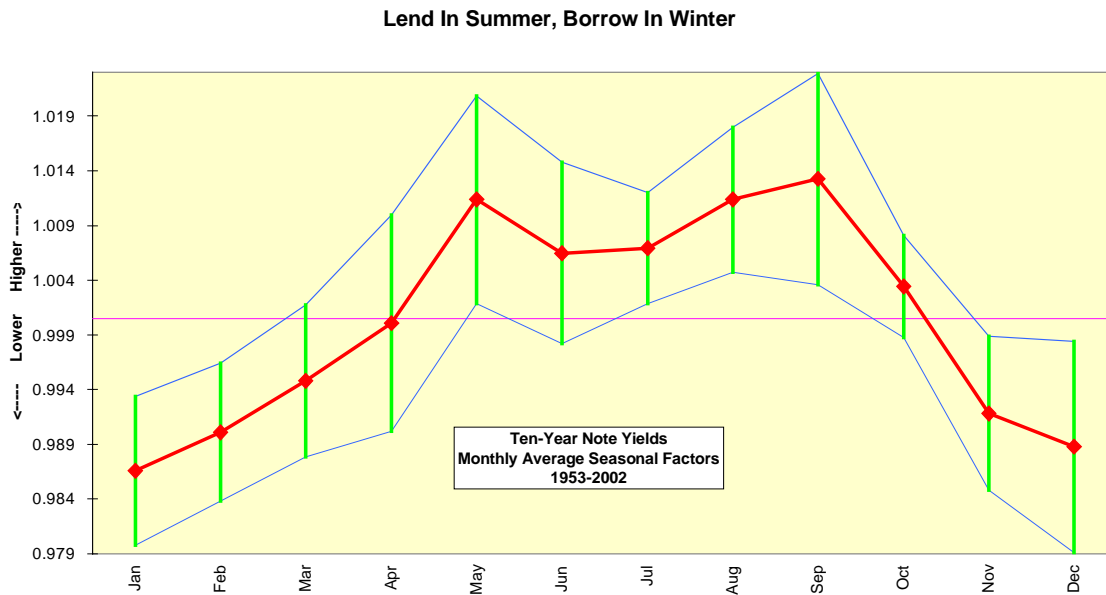
As long as we are having such fun with seasonality, let's take a peak at ten-year Treasury note yields, available in a consistent form back to 1953. The seasonal volatility of yields is now at its highest levels over the past half-century, which is something of a puzzle. After all, the highly seasonal credit cycle in agriculture is a much smaller component of the overall economy and inventory cycles have been dampened by improved management information systems. And, as hard as it may be for many to believe, interest rate derivatives, like all derivatives, effectively lower swings in the bond market by transferring risk across time. Finally, the seasonal volatility of note yields does not bear any apparent resemblance to the level of yields, either nominal or real, themselves.

Ten-Year Note Yield Seasonal Factors



What is even more surprising is how much more seasonal yields are than stock index prices. If we consolidate the data above into average monthly seasonal factors and display them \pm one-half standard deviation, we see a very

clear pattern of higher yields in the summer and lower yields in the winter. This would almost suggest an annual cycle in the supply and demand for Treasury notes. In an economy dominated increasingly by non-cyclical service businesses, that simply does not make sense. However, it does conform in an odd way to the standard impression of seasonally stronger equity prices in the winter and weaker equity prices in the summer – if you are old enough to remember when stocks and bonds rose and fell together.



Will It Go Around In Circles?

I have always had a mixed mind about the use of seasonality and cycles in trading. The *reducto ad absurdum* is that all we would ever need to trade successfully is a calendar, and while I have seen people use astrological charts, I have never seen this calendar-only system. However, many markets, including grains, livestock and energy have such obvious seasonal influences that only the foolish would dare ignore them.

Other industrial cycles exist as well, and generally are produced by investment booms and busts. All participants in an industry see the same signals at the same time and pursue them in the same manner, much to the amusement of the wildebeest and other herding animals watching the spectacle. However, these cycles are irregular in their periodicity, and anyone who is ready to bet their money on a four-year replacement cycle on personal computers should be aware that this is a tendency, not a certainty.

So, if this is a seasonally strong period in stocks, let’s enjoy it for what it is worth. If not, mark your calendar for late February and the four most joyous words in the English language: “Pitchers and catchers report.”