Smart Markets, Foolish Choices

My brother is smart, so smart.
I love my brother; I send him money every week.
 -- David Brenner

The conundrum of the moment is the apparent divergence between stocks and bonds. Which market is "smarter" and therefore to be believed? Let's review the bidding to-date:

- Stocks have firmed from last October's lows and are presently toying with levels first reached in July 1997. How much more bullish about the state of the world can you get?
- Bond yields have moved down to, depending on the maturity, levels last seen during the Eisenhower administration. Our solons at the FOMC, when they are not dispensing advice to Congress about fiscal policy and buying copies of "Useful Japanese Phrases," are fretting about deflation and hinting that rate cut number 13 may be necessary. That's bearish, isn't it?
- Corporate bond spreads are falling. Bondholders stand ahead of stockholders when the sheriff arrives, so it stands to reason that if you are not willing to invest in the bond, you should not be willing to invest in the stock. There are, however, many cases wherein you should be willing to buy the bond and avoid the stock like the plague, and that has significance for answering our key question. Overall, the interpretation of narrower corporate bond spreads is bullish.
- The yield curve remains very positively sloped, which reflects optimism about future growth and concern over future inflation. Historically this has been bearish for bonds, but that has not held true in this cycle to say the least.
- The European Central Bank (motto: 12 countries, no clues) refused to cut its benchmark rate from 2.50% due to concerns over inflation. Let's see: The stronger economy with the weakening currency and the massive twin deficits is worried about deflation, while the weaker economy with the strengthening currency is worried about inflation. Wow. As a friend says, "you can't fix stupid." Our continued exposure to such mismanagement must be considered bearish for the economy and quite possibly for the entire solar system.
- The dollar, which like bond yields remained strong during the 2001 rate-cut extravaganza on the mistaken belief that monetary policy would stimulate the economy, is falling like a rock.

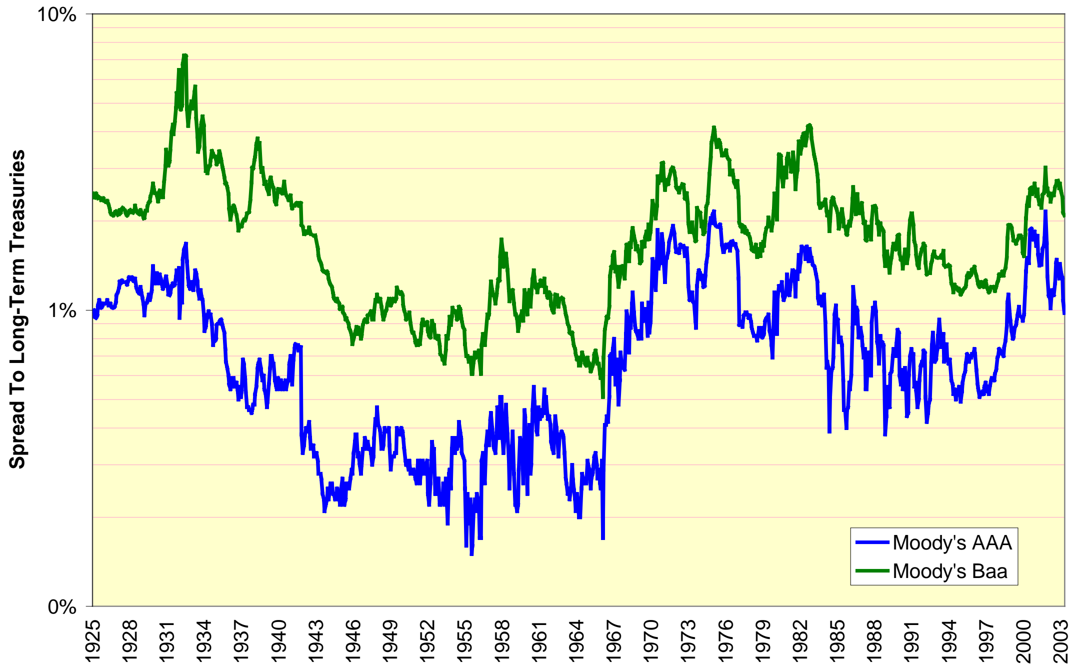
There are those who hold the falling dollar to be bearish; I do not count myself in this camp as its opposite, that a stronger currency is good for a country, cannot be demonstrated. Consider that the S&P 500 is up 6.1% this year, while the Dow Jones STOXX index is down 4.65% in euro terms (up 4.4% in dollar terms). I have said it before about both stocks and bonds, and I suspect I will be saying it again: Markets are indifferent to the absolute level of a currency, or even its trend so long as they believe the currency to be valued fairly and without (snicker) undue political influence.

Cause And Effect

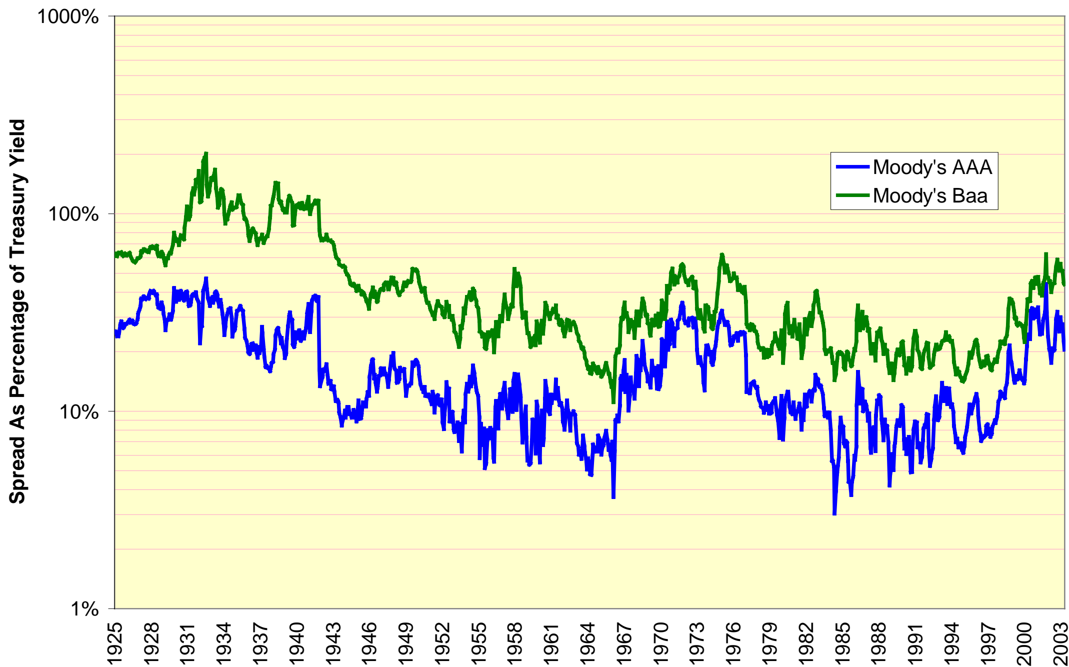
Let's pose a Clintonesque retort to the key question: "Depends on what you mean by smart." After all, the stock and bond markets have different objective functions. Bonds need to assess the probabilities of default and inflation and unless they are convertible, have a fixed upside. Bonds tend to be purchased on the motivations of income and capital preservation. Stocks are exposed to the same forces of business failure and inflation, but have a substantial upside. Their purchase is motivated by growth.

The proper question for stocks is how well they forecast both future corporate profits and interest rates. By extension, it should be entirely reasonable that stocks forecast corporate bond spreads as well. A concept called Granger causation, wherein we can say X causes Y if the past values of X can be used to predict Y more accurately than simply using the past values of Y will be used. In other words, if past values of X statistically improve the prediction of Y, then we can conclude that X "Granger-causes" Y.

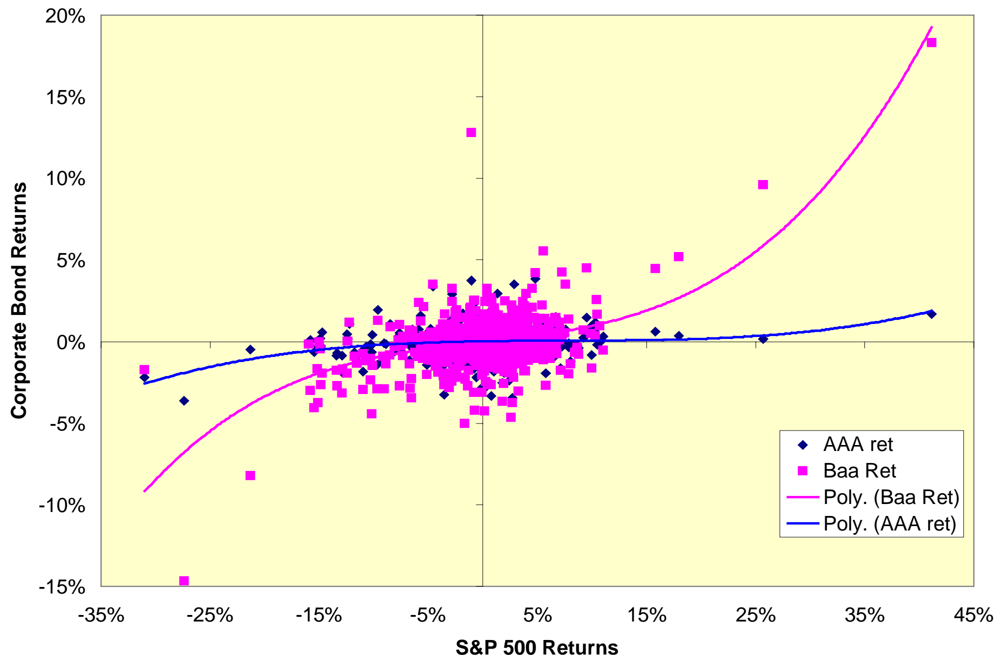
First, let's take a look at a long-term history of corporate bond spreads, specifically the Moody's AAA and Baa grades. On an ordinal basis, spreads are about where they were during the bull market of the late 1920s, the bull market of the late 1960s, and the beginning of the 1982-2000 bull market. Their recent downward moves parallel the downturns seen at the start of bullish moves of recent vintage, including November 1974, September 1986, and September 1982.



If we restate the data above to display the spread as a percentage of the underlying Treasury yield, (Corporate - Treasury) / Treasury, the picture changes. We are still within an upward channel of rising credit spreads that began, incredibly, with the breakout to the upside of the stock market in January 1995. Equally surprising in this chart is how the dreadful stock market of the 1970s coincided with a period of decreasing corporate spreads as a percentage of the Treasury yield.



The Results
The monthly returns on the two corporate bond series and on the S&P 500 were analyzed from the beginning of 1928. A simple visual inspection of the series on a coincident basis did not hold out a lot of promise for a strong statistical relationship. That a stronger relationship between lower quality bonds and stocks existed compared to the higher quality issues should surprise no one.



When the data were examined for Granger causation, the results were similarly inconclusive. None of the cross-correlations were as strong as strong as the autoregressive (the series itself) correlations; we cannot say that corporate bond returns cause stock returns or vice-versa. All we can say is that the stock market does a better job of forecasting the corporate bond market - R-squares of 1.2% and 4.7% for the AAA and Baa, respectively - than either bond market does for stocks, 0.4% and 2.7% for the AAA and Baa, respectively. The final tidbit is the S&P 500's autoregressive R-squared of 7.9% is higher than that of either bond market.

Autoregressive

S&P 500	AAA	Baa
7.9%	2.4%	7.0%

Cross

Independent	Dependent: S&P 500	Dependent: AAA	Dependent: Baa
S&P 500		1.2%	4.7%
AAA	0.4%		
Baa	2.7%		

Based on these data, we have to grant stocks an advantage over corporate bonds as the smarter market. Not a win, an advantage, one derived from a single test over a very long sample and at a monthly frequency. But there's no crying in baseball and no ties, either. Stocks get the win by default in this, the first game of the World Series. I'll be back shortly with other tests.