The Flight To Quality Trade

While many traders can spend their entire careers without meeting anyone describable as “cultured,” we all live within a culture nevertheless. A culture is nothing more than a shared, learned system of beliefs, those unwritten rules and mental codes that guide our daily behavior.

Any guide to superstitions is full of interesting stories about why we consider it unlucky to break mirrors, walk under ladders and other nonesuch. None of them will have any stories about why Treasury notes and bonds get bid higher as soon as the stock market starts to wobble in a big way, and that is their loss.

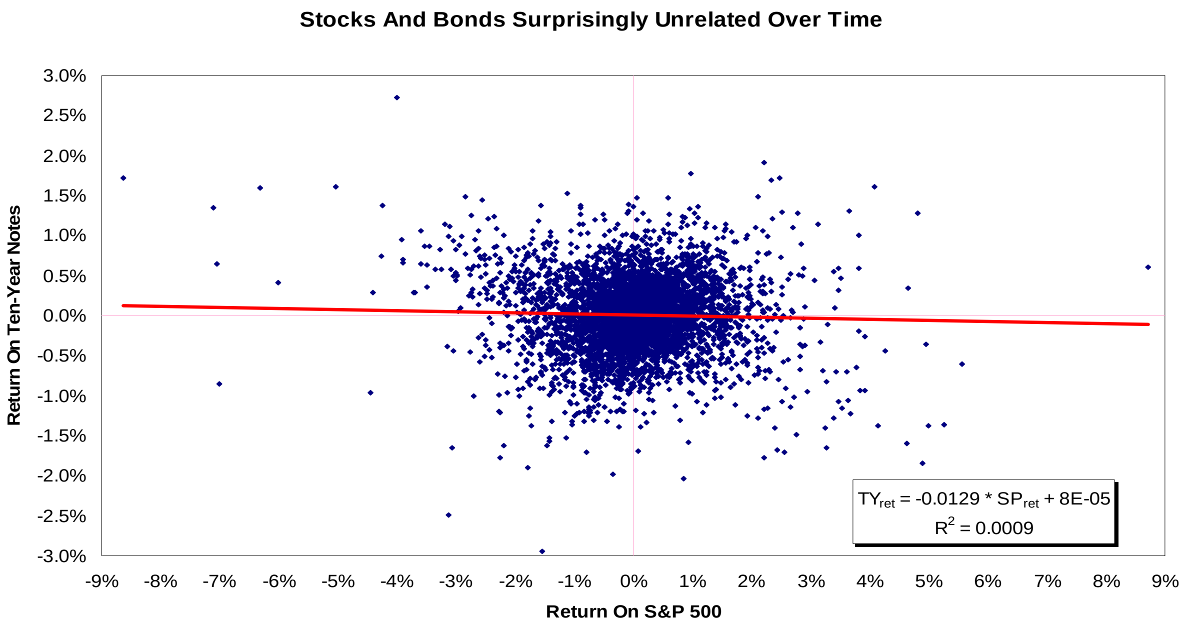
The answer goes back to the crash of October 1987. Bond yields hit their high for the year on the morning of the crash, even though global equity markets had already sold off quite hard before the U.S. opening. This alone tells us there was no short-covering in bonds that morning. The flight-to-quality trade had not been born at that time. In fact, traders had ample opportunity to buy bonds all through that afternoon’s collapse. It was not until the Federal Reserve under then-new chairman Alan Greenspan lowered interest rates sharply overnight did bonds surge. And surge they did: They went their then three-point limit move higher over the next three days even though stock prices recovered sharply on the Tuesday and Wednesday following the crash of Monday, October 19.

But the lesson was learned: Do not, under any circumstance, be short bonds when stocks are getting clobbered. How has this flight-to-quality mental rule advanced over the years as part of our trading culture?

The Long-Term Relationship

We will use the data sample from October 20, 1987 forward. Ten-year note yields will be converted into constant-maturity ten-year note prices and the daily percentage changes or returns will be extracted from them and from the S&P 500. The first order of business is to map ten-year note returns against SPX returns over the entire sample to see whether there is a demonstrable long-term relationship. Please recall the standard financial definition of a stock’s price being the discounted stream of its expected future dividends; given this, we should expect lower interest rates to support stock prices, all else held equal.

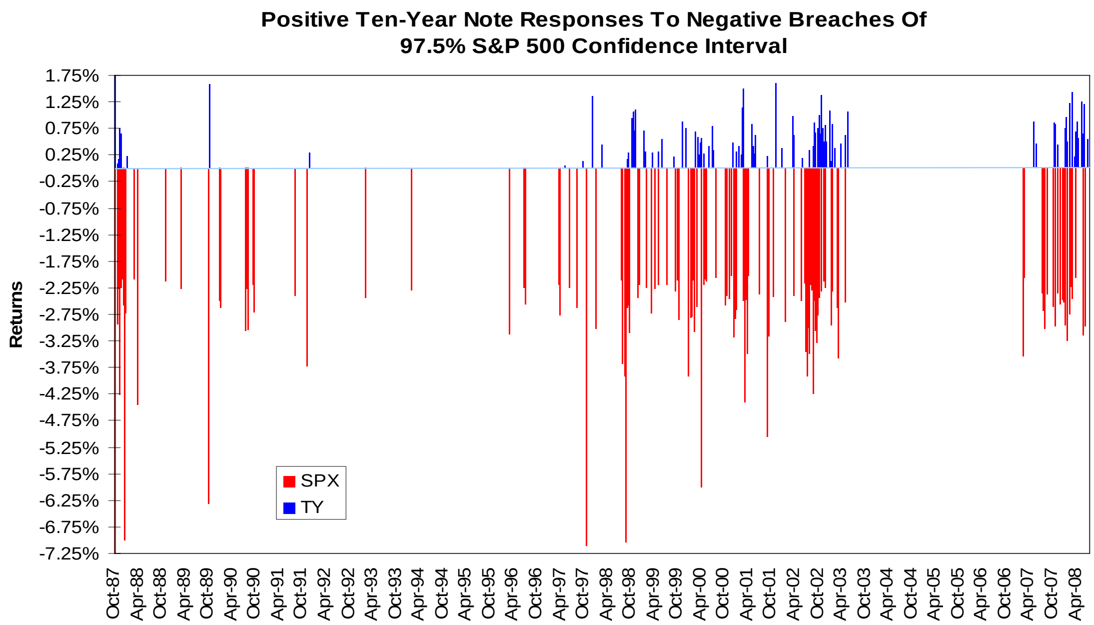
At various times, this question would have been considered silly by the trading culture. Veterans recall the entire period of 1982-1986 when stock prices rose as a function of rising bond prices. In recent years, the question would have been considered silly in the opposite direction; bond prices rose only when stocks were under pressure and lower long-term interest rates did nothing to support stock prices.



Over time, no relationship exists. Not only is the slope of the regression line a near-zero -.0129, the r-squared or percentage of variance explained is a wholly insignificant .09%. Restated, any cultural attempt to impose a direct relationship between stock and bond returns is lowbrow indeed.

A Filtered Test

Now let's filter the data set for those big down days in the stock market. As there is no accepted definition for "big down day," we are free to make up one of our own, a move outside a one-sided 97.5% confidence interval. This interval corresponds to a 2.018% decline in the SPX on a given day. If we plot those negative returns and match them with the positive responses (there are a few negative responses, discussed below) in the bond market, several striking patterns emerge.



First, there are long periods without any combination of collapsing stocks and surging bonds. If fact, between the October 13, 1989 downturn involving the collapsed leveraged buyout of United Airlines and March 31, 1997, there was one such flight-to-quality trade, November 15, 1991. This was when then-Senator Alphonse D'Amato of New York proposed restrictions on banks' credit card charges. Then there was near four-year gap between May 19, 2003 and February 27, 2007; not only were there no flights-to-quality, there were no major downturns in stocks.

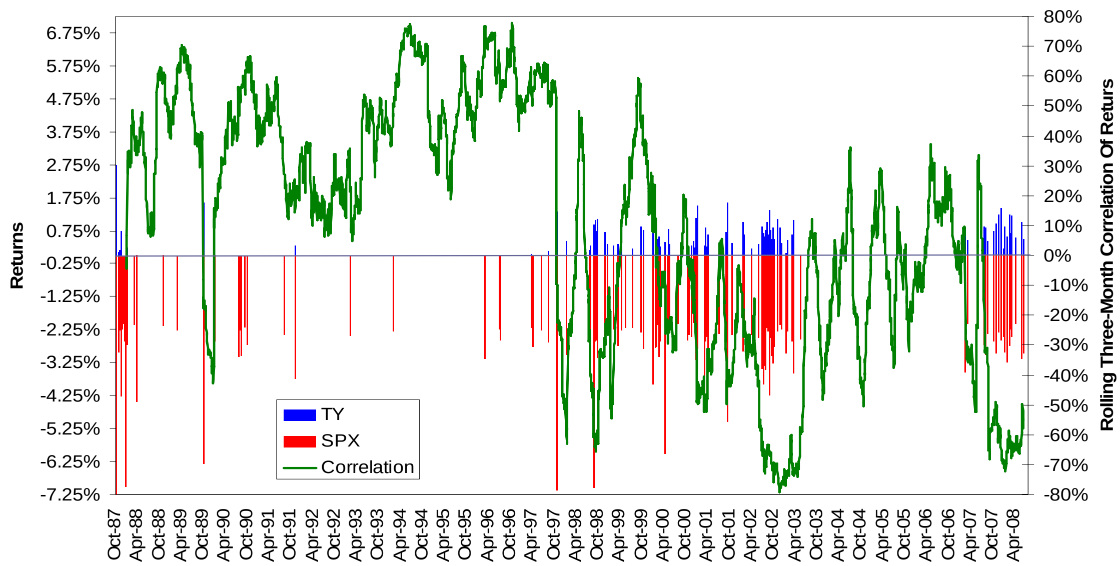
Second, the clusters of big down days in stocks between October 1997 and March 2003 and after February 2007 often were paired with bond market rallies. After October 1997, there were 108 big down days in stocks matched with 96 bond rallies. But between January 20, 1988 and October 1997, there were 25 big down days in stocks matched by only 4 bond rallies.

What might account for this significant change in pattern? The October 27, 1997 downturn involved an early closure of the stock market, the first and only time this has happened under the various post-1987 "circuit-breaker" rules. The selloff was matched to the Asian financial crisis – remember that? – which signaled a change in how the Federal Reserve approached monetary policy. It had been on the verge of tightening credit, but it saw the U.S. needing to become the world's consumer of last resort to forestall an economic collapse in Asia. This so-called "risk management" approach to monetary policy under Greenspan has continued under Bernanke. If downturns in stocks are to be met by lower interest rates, it is quite logical for bonds to rally in a flight-to-quality response.

Correlation Counts

We can return to an earlier observation for a third reason, and that is the non-stable correlation of returns between stocks and bonds. If we superimpose a rolling three-month correlation of returns on the chart above, we see how flights-to-quality cluster during periods of negative correlation between stocks and bonds and with the exception of the 1999 technology stock bubble, are nearly absent when stocks and bonds are positively correlated. This is equivalent to saying the flight-to-quality trade is a function of the trading environment; bonds rally when stocks fall only when that is the market's prevailing wind.

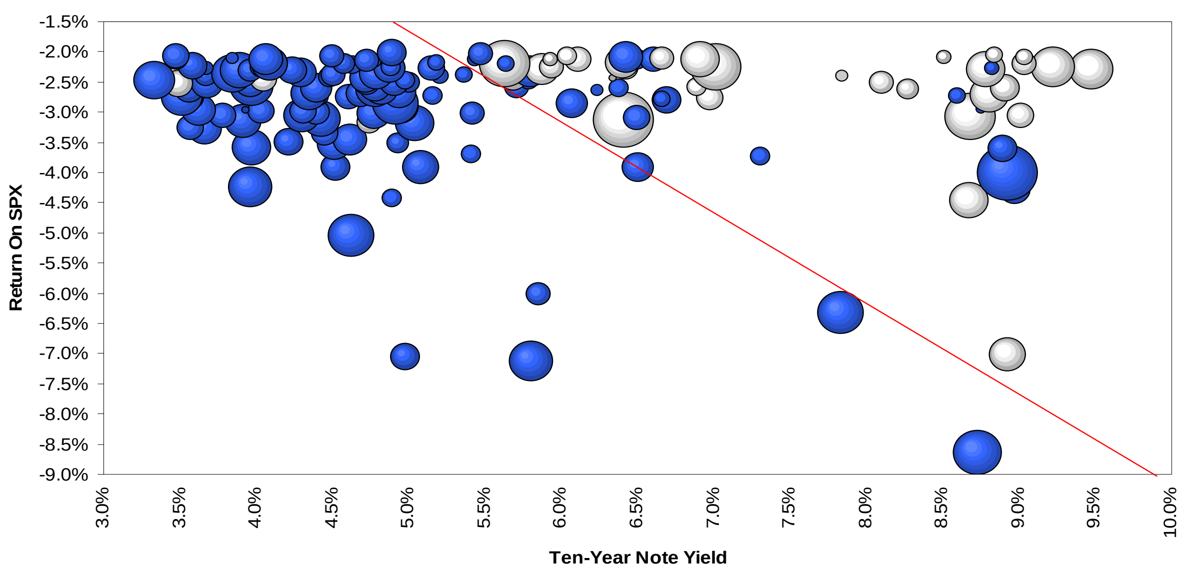
Flight-To-Quality Is Environment-Dependent



Interest Rate Level Dependence

Now let's add back the 36 occasions when a big down day in the stock market was accompanied by a decline in the bond market as well. We can map the returns on bonds as a function of the ten-year note's yield and the return on the SPX on those aforementioned big down days. Positive bond returns are marked in blue bubbles; negative in white bubbles, with the size of the bubbles corresponding to the magnitude of the ten-year note's returns.

Flight To Quality Is Dependent On Levels



The white bubbles, with a few exceptions, are concentrated in the upper-right hand triangle of the chart below. Negative returns on bonds, or flights-from-quality if you will, occurred during a combination of smaller stock market selloffs and high levels of interest rates. Twenty-four of the 36 observations of flights-from-quality occurred prior to October 27, 1997, which is consistent with the hypothesis the Federal Reserve's risk-management policy has produced the pronounced concentration of flight-to-quality trades after that critical date.

The Federal Reserve would like to re-establish its inflation-fighting credibility lost after August 2007. This may argue for an end to the risk-management approach and for a cultural change. We will be fleeing from the flight-to-quality.