## **Corporate Bonds Do Not Lead Stocks**

As more than one person has discovered, often to their regret, the question, "Who are you going to believe, me or your lying eyes?" has different answers before and after closing time. But any data analyst worthy of the name should be able to tell you lying eyes have no place in our hard-bitten world: While charts and graphs are indispensable for taking a first pass at investment relationships, you have to run the numbers – crunch them, as the saying goes – as your eyes are programmed to lie to you.

That last statement is correct. Your brain is hard-wired to patterns even when they do not exist. Toss out a set of random numbers or random events and someone will come up with a perfectly logical explanation for them. Worse, they will change their explanation at the drop of a hat; think of how many times someone will have ten reasons for why the market opened as it did, got an intraday pie in the face for each, and then told you another ten reasons why the market was bound to have closed as it did.

## **Corporate Bonds And Stocks**

Bond traders, especially for investment-grade issues, focus on spreads more than on prices are therefore view the market through the <u>lens of option-adjusted spreads</u> (OAS) as opposed to the intermarket arbitrage that may exist between stocks and bonds. They combine this worldview with a few major life-changing events in the markets, such as the 2007-2008 crash and subsequent 2009 in both corporate bonds and stocks, note how OAS levels seemed to move in advance of stock prices and then conclude, as bond traders often do, they are much smarter than their stock-trading brethren, a group they regard as barely separate from the beasts in the field.

Ah, but the comparisons are off-base. Not only is the fundamental arbitrage relationship between stocks and corporate bonds the expected price/earnings ratio adjusted for dividend yield in the former and yield to maturity in the latter, we have to account for the increasing dollar value of each basis point lower in bond yields. Thus a proper measure is total return to total return.

If we take three stock indices, the large-capitalization Russell 1000, the small-capitalization Russell 2000 and the combined Russell 300 and three bond indices, the Bank of America-Merrill Lynch High-Yield Master II, the A-Rated+ and the broad Corporate & High-Yield Master and test the nine possible for causality, we find only one pair, the High-Yield bonds to the Russell 2000, are even in the zone of plausible causality. The test, for the stat-hounds who are interested is Granger Causation, which says if lagged values of Y improve the fit of a regression of X on its lagged values then Y "causes" X.

Moreover, if we take a set of longer lags, out to three months in five-day increments, we find there is absolutely no time dependence in any of these leading structures.



This is exactly as it should be. For bond traders to insist their market sees the future of corporate cash flow and its risks before stock traders do begs the question as to why these very same bond traders then forego the opportunity to use this advantage to close what would be a very open arbitrage. Kindness, I suppose.

The answer is simple: Stocks do not lead bonds and bonds do not lead stocks on any regular basis. Anecdotes exist; they always do. But those are your lying eyes talking, not your impartial calculations, and you are well-advised to ignore them.