Note

January 8, 2010

The Predictive Behavior of Money Market, Credit Spread and VIX in "Crazy" and "Normal" Periods

The purpose of this study was to analyze the predictive power of changes in the Money Market (MM), Credit Spreads (BBB-AAA) (CS), and VIX over three types of investment climates: market declines, "Crazy" (volatile) and "Normal" (smooth market change). We used the Wilshire 5000 (W5) as a proxy for the market.

We have run all variations of regressions between changes in the Money Market, Credit Spread, and VIX, and the lagged changes in the Wilshire 5000. We looked at one-year periods in which the stock market experienced declines. We also split the period between 1986 to 2009 into three distinct periods. The periods are: from '86 to '93 - "Crazy" volatile years; '93-'99 - "Normal" years; '99 to '09 - "Crazy" years again.

Our conclusion is the following: We cannot build trustworthy models for "Crazy" and Declining market periods. A trustworthy model can only be built for "Normal" periods. In "Normal" periods, Money Market, Credit Spread and VIX predict future market moves to some extent. MM, CS and VIX grow over five quarters before the market starts going up over the subsequent five quarters.

Credit spreads usually grow when investors are concerned about the quality of corporate debt and the state of the economy. If these concerns fuel sentiment to the point where the market becomes volatile (VIX goes up) in the short-term and investors flee to the sidelines (MM goes up), then the market bottoms out. From our observations it seems that it usually takes up to 5 quarters for the market to bottom out and turn around. So after the market turns around it grows for the next five quarters.

Mind the fact that such a relationship doesn't work when the market experiences high volatility in comparison to historic averages.

In the future we will look at more market inflection points and see what other macro indicators could help us predict which way the market will go.

Eugene