## Some Surprises In Stock Market Risk

Back in the day when journalists were a hard-bitten lot for whom Scotch was one of the four food groups and reporting meant getting out of the office and asking actual people tough questions as opposed to re-tweeting each other's blog posts, the Chicago City News Bureau had a culture of, "If your mother says she loves you, check it out."

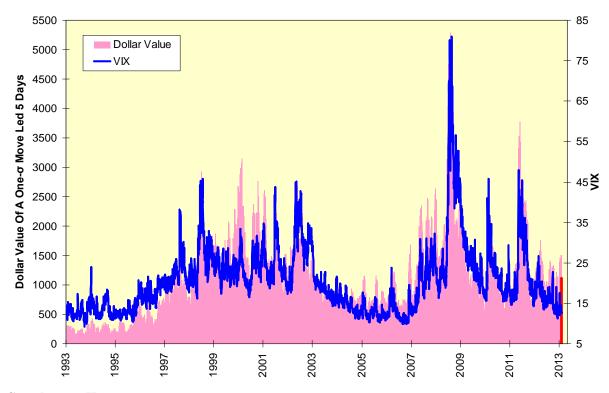
This attitude should extend to market analysis: The answer to the question, "Who do you believe, me or your lying eyes?" quite often comes down against lying eyes. That certainly is the case with stock market volatility.

## **Dollar Value Of One Standard Deviation**

Economists put dollar signs on deviations; work backwards from there and other things start to fall into place. However, the dollar value of a one standard deviation move in a market forms the basis for most risk-based margining systems. It also explains why the VIX spent much of the late 1990's bull market in an upward drift; option writers had to contend with large dollar-risk swings in the market.

The dollar-value of a one standard deviation move is based on realized volatility and therefore is backward-looking; the VIX is based on implied volatility and is forward-looking after a fashion. In reality, the VIX leads 21-day realized volatility by five days on average, meaning "now-casting" often is present.

## VIX Tracks Dollar Value Of One-σ Move



## **No Complacency Here**

As realized volatility in the S&P 500 has dwindled during the latest swing higher, the dollar value of a one standard deviation move has declined to a level equal to the start of January 1998, when the index was trading at 975 and the Asian financial crisis dominated the news.

While this decline has been underway, the VIX itself has been drifting higher and has not made a new low since March. Those who believe volatility trading can be done by selling the VIX during market rallies justifiably have received nothing for their efforts here. What is happening here is option writers are demanding compensation for future price moves not reflected yet in actual volatility. Restated, a forward-looking market is, *mirabile dictu*, looking forward.

A second behavioral effect is in order. We anchor our wealth states to the last new high and measure drawdowns therefrom. As the market has been setting new highs with great regularity, we become increasingly fearful of losing what we already have, forgetting it was shoved into our hands with a forceful, "Take it!" by the world's central banks. Such a fear level, while mild in comparison to those seen during market collapses, pushes the VIX higher than it would be otherwise.

Does this mean the perennial talk of "complacency" is little more than the bitter recriminations of those who missed the rally and are searching for excuses to fight it? Yes; thank you for asking.