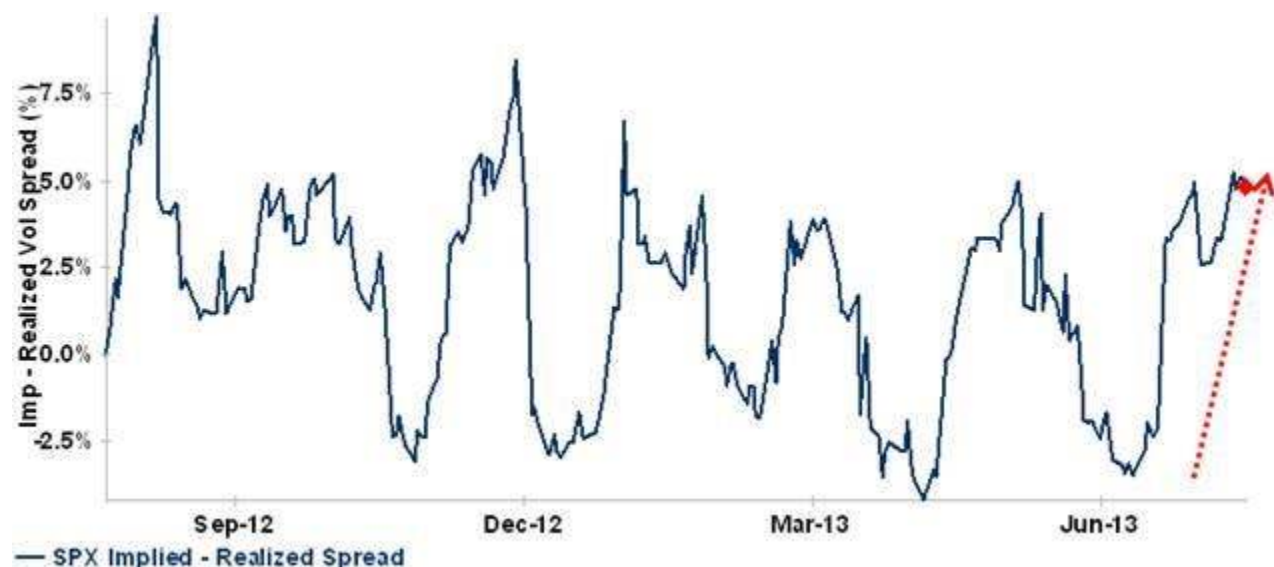


**From:** Ben Hunt [mailto:ben.hunt@epsilontheory.com]  
**Sent:** Monday, August 19, 2013 2:42 PM  
**To:** Ben Hunt  
**Subject:** Epsilon Theory: Increased Instability in US Markets

The Credit Suisse Equity Derivatives group put out this chart in their weekly note today, and I thought it was worth forwarding to the Epsilon Theory list. If you're not already familiar with the stellar work of Ed Tom and the rest of the CS Equity Derivatives team, drop me a note and I'll put you in touch.

The chart shows the spread between the 1M implied volatility (taken from 1-month forward option prices) and the current realized volatility (taken from historical price changes) in the S&P 500. The greater the spread, the more expensive options are on the SPX relative to the actual volatility that is occurring. Basically, it's an indication that **\*relative\*** expectations or fears of bad things happening in the short term future have increased.

**Chart: S&P 1M Implied-Realized Volatility Spread Widens to 90<sup>th</sup> Percentile High**



Source: CS Equity Derivatives Strategy

My interest is less in whether the spread is at the 99th percentile high or the 1st percentile low (both of which have occurred in the past 12 months), but in the violence and rapidity of moves between very high percentile spreads and very low percentile spreads. **This is what an unstable market looks like from an information or game theoretic perspective.** Realized volatility is what it is (currently very low), and expectations of short-term volatility march to a totally different drummer. In the absence of a strong Common Knowledge structure for the US market, investor behavior becomes unmoored, and that's what we're seeing here. An unstable market is like a marble on a glass table ... it takes very little "news" to make the marble roll for a long way in **\*either\*** direction.

The Common Knowledge structure around the US market has weakened in the past few weeks. That's NOT the same thing as saying that sentiment has grown more negative, although in terms of the US growth outlook it happens to be true. What I'm saying is that a few weeks ago everyone knew that everyone knew that the US economy was on a self-sustaining growth trajectory. Even if you believed privately that growth was likely to be weak, you believed that everyone else thought otherwise because there was a monolithic media Narrative telling you that everyone else thought otherwise. But then the Fed talked down growth after their July 30-31 meeting (without talking down the Taper), and since then more and more opinion leaders have joined the chorus on slower-than-expected growth. I have no idea what the "truth" is regarding US growth, and my private opinion is not particularly useful in any event. But I do think it's useful to be aware of increased instability in the US markets, because it makes the risk/reward assessment of ALL exposures -- both long and short -- less certain.

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