MARKETS ARE WORRIED DESPITE LOW-VOL SLUMBER

June 2017

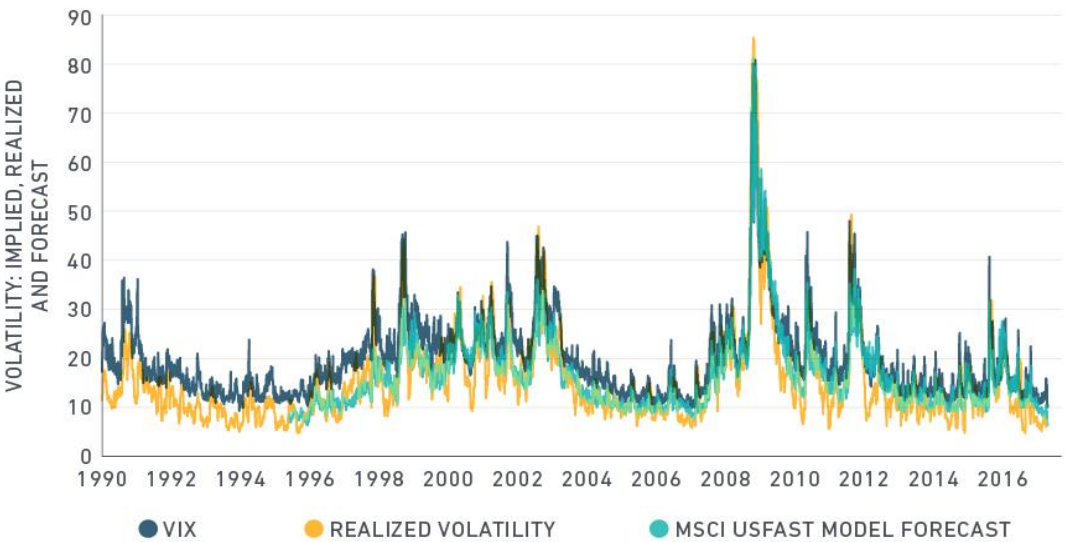
Institutional investors may be scratching their heads at why the widely watched measure of market concern known colloquially as the “fear index,” or VIX, recently reached a 23-year low despite plenty of reasons for the sort of uncertainty that makes markets jittery. Looking at a measure called “options skew,” which tracks the price investors are willing to pay for downside portfolio protection, we see that investors may not be as fearless as VIX would suggest.[1]

MSCI research shows that the fear index (formally the CBOE Volatility Index, or VIX) and two other measures of volatility do accurately reflect market conditions. Aside from the VIX, which tracks “implied” volatility (a projection of future market variability) there is “realized” or “historical” volatility (how prices have actually moved) and “forecast” volatility, which for purposes of this exercise we measure using the MSCI Barra US Total Market Equity Trading Model, or USFAST.[1]

Implied volatility, as represented by VIX, has generally been above both realized and forecast volatility through the entire period and into 2017, as one can see in the exhibit below, which displays all three measures of volatility over time in the U.S. We have also examined the three measures of volatility in other markets and found them consistent with what we observe in the U.S. Given that all three measures of volatility are consistent with each other, what else could explain the current low readings?

[1] Bayraktar, M., I. Mashtaler, N. Meng, S. Radchenko. (2015.) “Barra US Total Market Equity Trading Model Empirical Notes.” MSCI Model Insight.

Exhibit 1: U.S. Market Volatility is Low Given the Relatively High Degree of Uncertainty



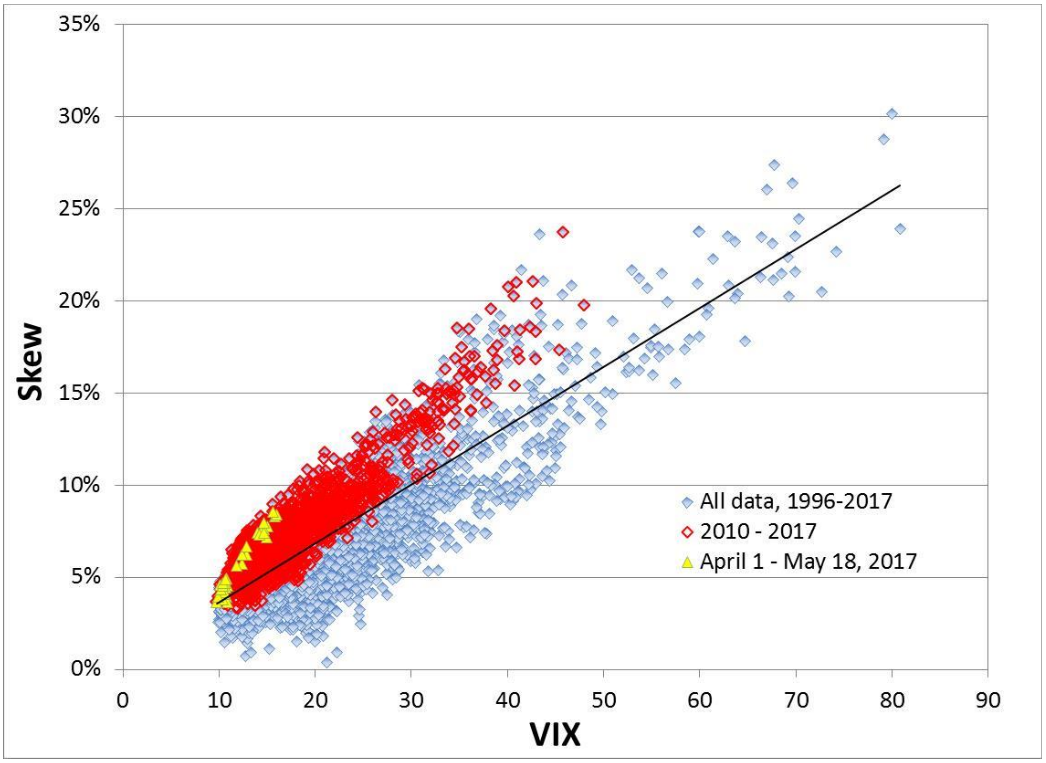
VIX, realized and USFAST model forecast volatility over time

One possibility is that correlations among stocks – the degree to which they move in tandem – are at low levels. When correlations are low, stocks are moving relatively independent of one another, which imparts a diversification effect that mutes overall market volatility. Our research shows that correlations have indeed dropped to their lowest levels in over 10 years.

Whatever the cause of low volatility, investor concern appears high when we examine another measure of fear -- perceived “tail risk,” the chances of rare and largely unpredictable adverse events. We see it in “options skew,” the price investors are willing to pay for insurance against large downward moves in stock prices. The price of tail-risk protection has generally increased since the financial crisis, and has persisted into the low-volatility environment of 2017.

In Exhibit 2, we plot our skew metric against the VIX, along with a regression line showing the “average” relationship between the two. Points that are above the line reflect conditions when there is “excess skew”, i.e., when investors are willing to pay a higher-than-normal price for tail-risk protection for a given VIX level. Almost all the points since the financial crisis, including those in the recent low-volatility environment, show excess skew.

Exhibit 2: Options skew remains elevated in 2017



Relationship between our skew metric and VIX, with points color coded by time period

In summary, despite the low-volatility regime experienced in 2017 -- which has been partially driven by low correlations between stocks that has helped suppress realized volatility -- investors continue to display elevated fear of tail-risk events.

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