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MARKET VOICE

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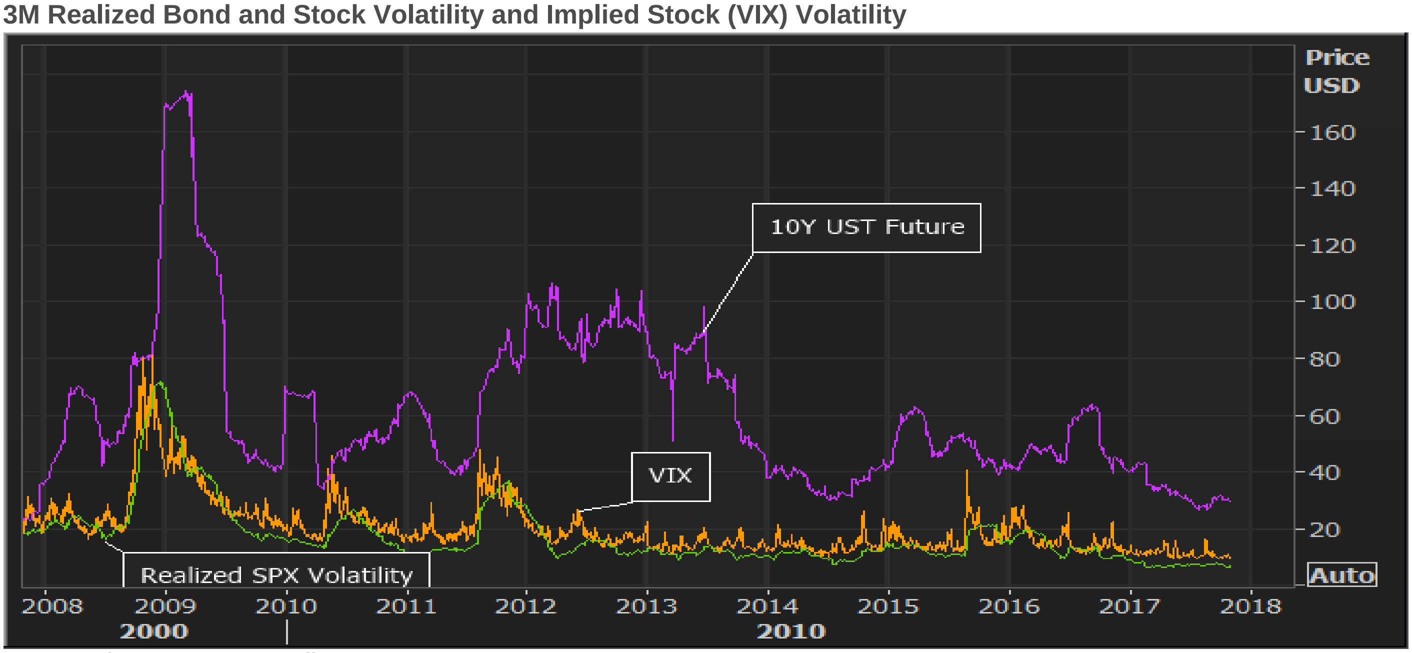
VOLATILITY HIDING IN PLAIN SIGHT

A recurrent theme in the Market Voice has been the lack of volatility in asset markets which has extended through this year. As shown below, realized 3-month bond volatility has dropped to a post-financial crisis low while equity market realized volatility is pushing at all-time lows. The persistent low realized equity volatility put gravitational force on the VIX (implied volatility) dragging it to all-time lows.

It might seem particularly surprising that bond market volatility would be in decline when tightening Fed policy is pushing interest rates higher. But as was discussed in the July Voice, the priced-in expected level of Fed funds at the end of 2018 has not budged since the end of 2015. So the Fed has done a good job of telegraphing its intent and sticking to the plan. Notably, the uncertainty over Janet Yellen's status next year and potential impact on Fed policy did not have material impact on volatility. The recent announcement that she would be replaced by Jerome Powell was also a non-event.

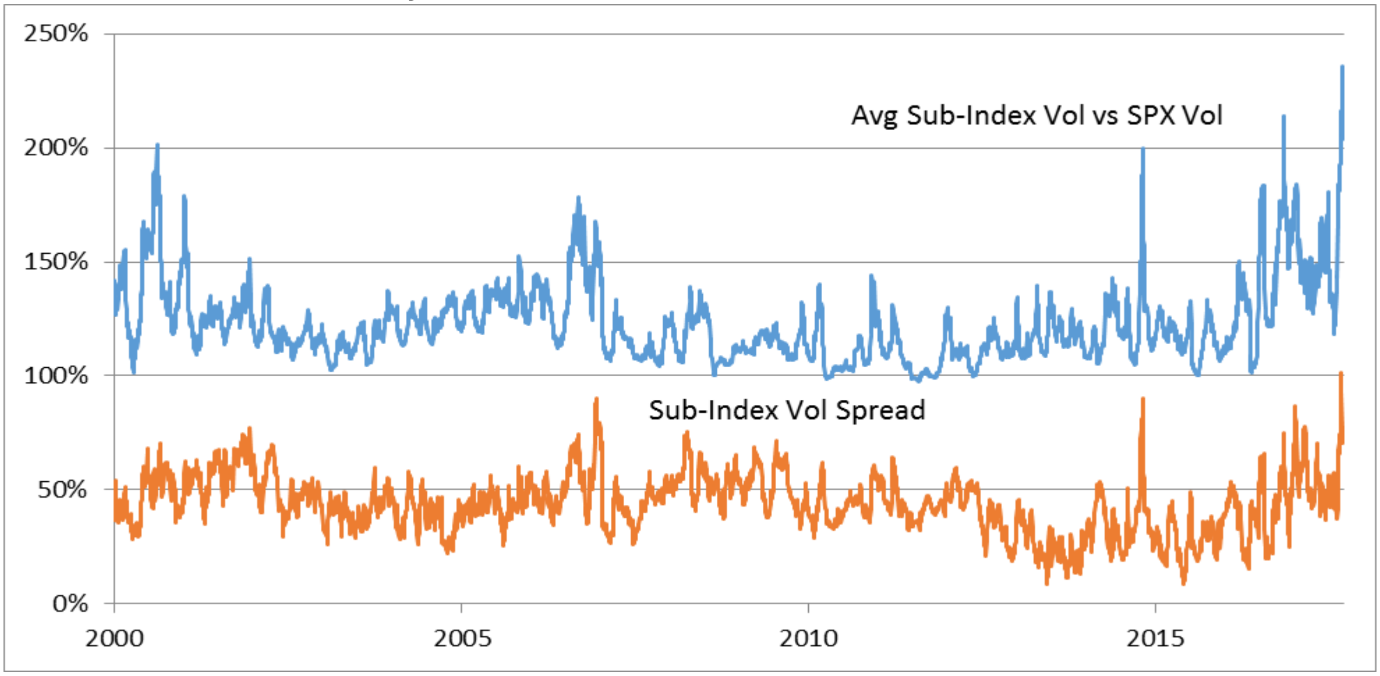
Low bond volatility and a continued price uptrend are both weighing on equity volatility (equity volatility tends to be higher in bear markets) but, here too, economic and political conditions seem at odds with the benign pricing of risk. In addition to a widespread belief (which we do not agree with) that equities are overpriced the prospect of higher rates should be cause for concern. More immediately, the Trump proposed corporate tax cuts remain highly problematic and this has substantial implications for market valuation. But perhaps there has been a hidden pickup in volatility; a rise in volatility in SPX sub-indices that is not apparent in the headline index.

3M Realized Bond and Stock Volatility and Implied Stock (VIX) Volatility



Source: Thomson Reuters Eikon

SPX Sub-Index 1-Month Volatility



Source: Thomson Reuters Eikon

A Deep Dive into SPX Volatility

S&P publishes ten industry-based sub-indices of companies that comprise the SPX (S&P 500). Normally, the volatility of the sub-indices is modestly above the volatility of the overall index; but currently there is an unprecedented relative surge in sub-index volatility which is evident in the measures shown in the chart above. The blue line compares the average 1M volatility of the ten different sub-indices as a ratio to the volatility of the SPX itself (we use 1-month volatility to increase sensitivity to recent market conditions). The average sub-index volatility is normally 100% to 150% over SPX volatility but currently it is more than double overall SPX volatility. The high average volatility is not uniform as the spread between the lowest and highest volatility is also unusually large.

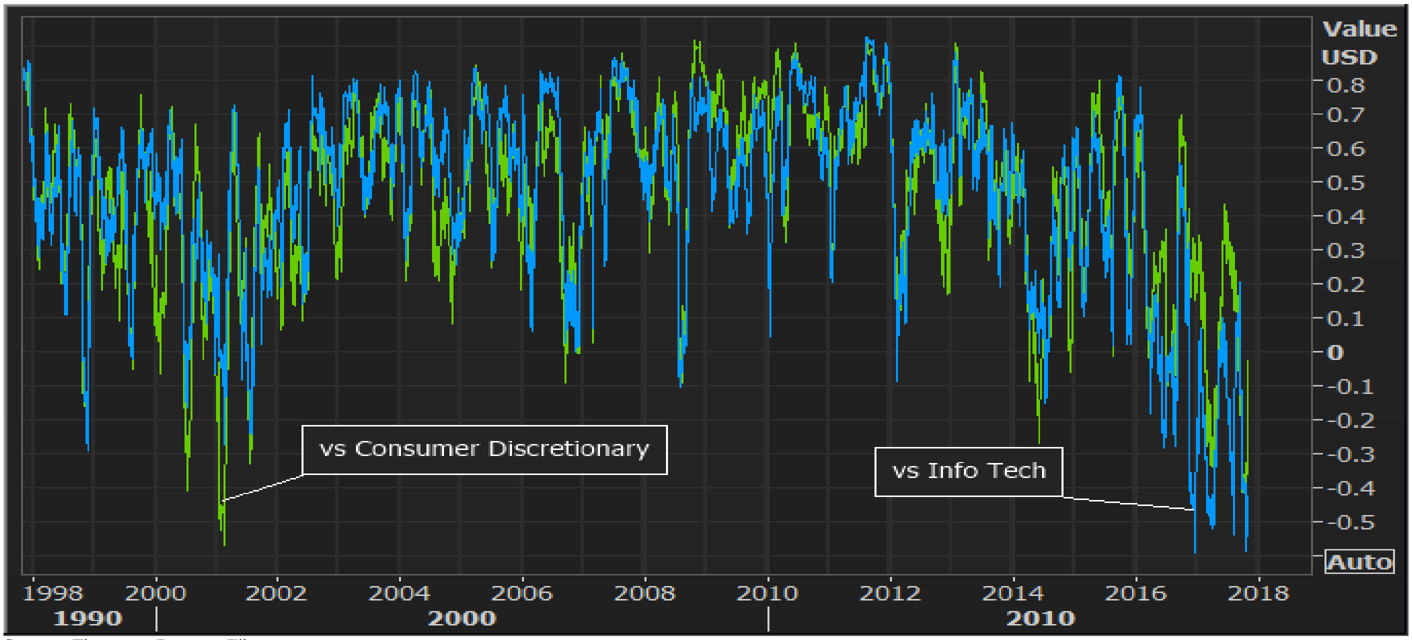
How is it possible for sub-index volatility to be so much higher than overall volatility? The implicit answer is that negative correlation has increased across the indices so moves are cancelling each other when aggregated in the headline index. It is not clear why this is happening but it is probably tied to the Fed shift away from quantitative ease (QE) and tighter monetary policy. One of the main intents of QE was to inflate asset prices as a way to stimulate demand. QE's success in broadly pushing up asset prices also resulted in a sharp rise in cross-market correlation – i.e., higher "Beta". So it is quite possible that with the Fed now moving away from QE cross-market correlation is reverting back to historic norms. Unusually high negative sub-index correlation is also indicative of portfolio rotation – i.e., investors instead of buying the market en masse are liquidating an out-of-favor sector to invest in the desired sector. This may also be a byproduct of tighter monetary policy as it may be crimping investors from expanding their overall.

But the collapse of cross-market correlation is ominous as the two past times relative average volatility shot above 200 was in 2000 and 2007 both of these surges were followed over the subsequent year by major stock market downturns (the dot-com and financial crises, respectively). These periods were also times of Fed tightening which likely was a major contributing factor to the two market declines.

And an even Deeper Dive into Sub-Index Correlation – Still Spooky even though Halloween is over

If investors engaging in rotation is underlying the volatility pattern then this should be apparent in unusually high negative correlation among at least some of the indices (implicitly the sectors experiencing rotation) where exposure is being adjusted. Indeed, the utilities index, in particular is experiencing unusually high negative correlation against consumer-discretionary and info-tech stocks. The chart on the following page shows the historic patterns for these correlations and utility-stock correlation is abnormally negative for consumer-discretionary and at a record low vs info tech. The only other time this correlation pattern is observed was in the run-up to burst of the dot com bubble. While this particular correlation pattern did not occur ahead of the financial crisis, it is, nevertheless, ominous because the dot com rally like the current uptrend is heavily focused on high tech stocks.

SPX Utilities 1M Correlation vs Consumer Discretionary and InfoTech Stocks

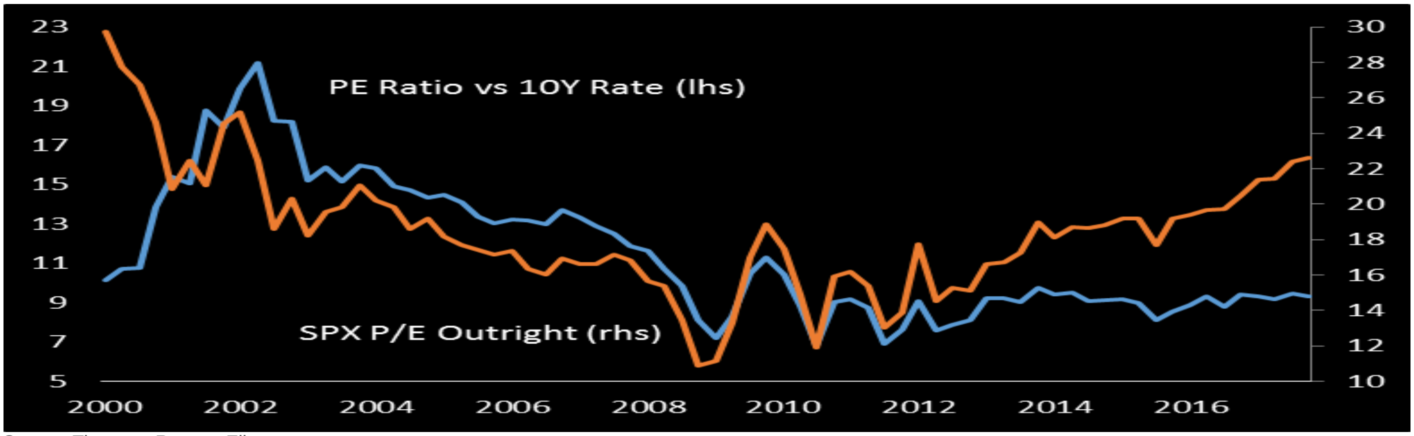


Source: Thomson Reuters Eikon

But Equities still not Expensive

In the July Market Voice we indicated that despite Price/Equity (P/E) ratios being at decade highs we were not concerned about market downside because effective equity prices remained in historic ranges when put into the context of historically low bond yields. As shown below, this is still the case so despite the correlation pattern we are not immediately concerned about market downside. Even failure of Congress to pass a corporate tax cut would probably induce only a temporary downturn – of few percent – in equities. That said, we see increasing risk of a major market downturn over the course of the next year, particularly if rates increase more than currently priced in the market whether this reflects a shift in Fed monetary philosophy as the Chairmanship changes hand but even more so if it is triggered by a surge in inflation.

SPX PE Ratio Relative to the 10-Year UST Rate



Source: Thomson Reuters Eikon

Market Voice

Send comments or questions on this publication to trading@thomsonreuters.com.