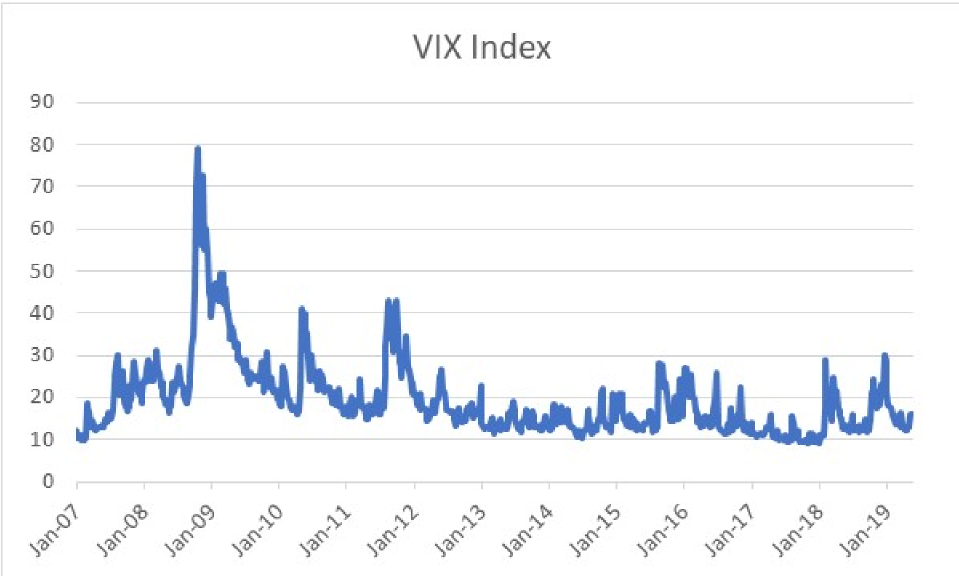
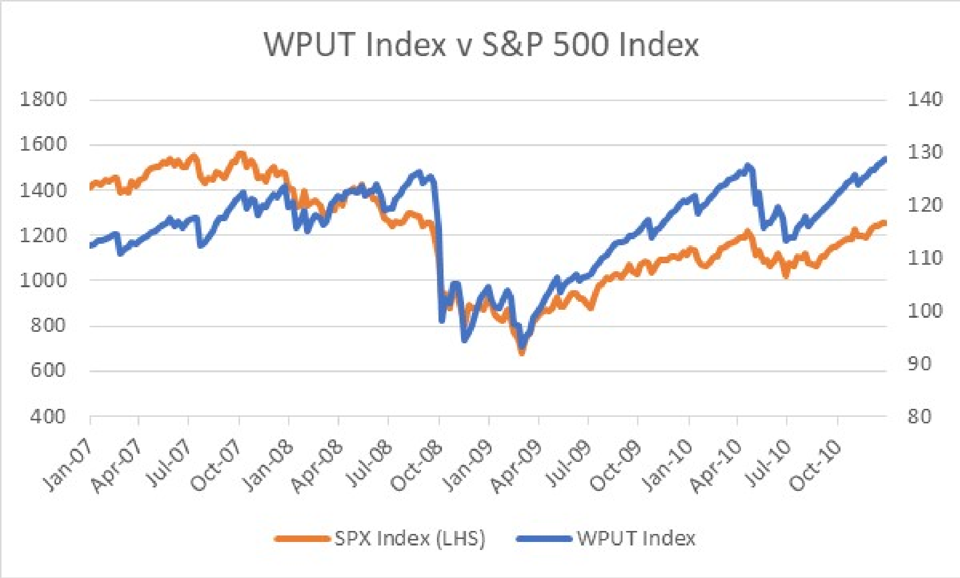
ARE MACRO MARKETS SAYING THAT IMPLIED VOLATILITY IS TOO LOW?

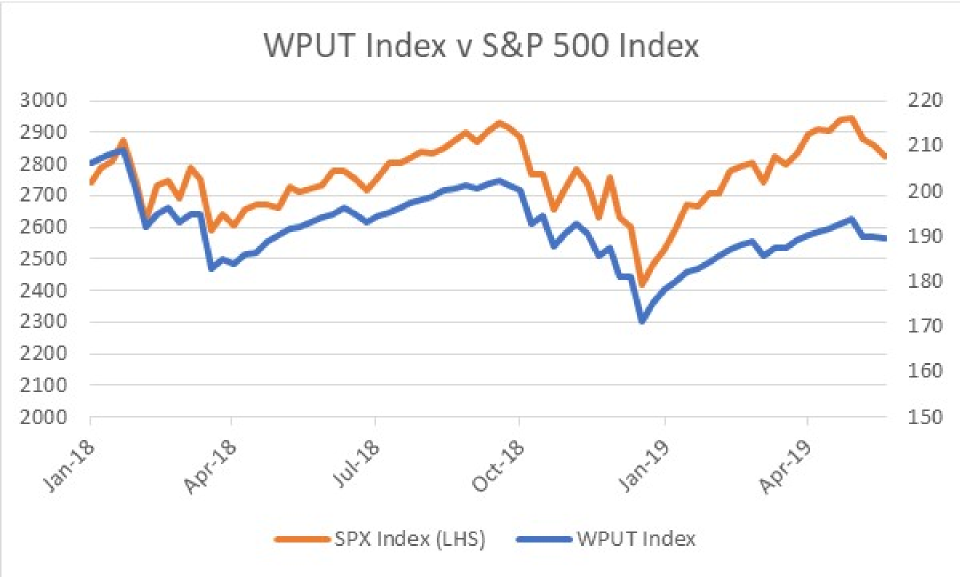
Volatility was low at the start of 2007, and then quickly rose through 2007 as the markets fell and stayed elevated to 2012. While 2018 had two large selloffs, it is noticeable how quickly volatility fell to low levels again.



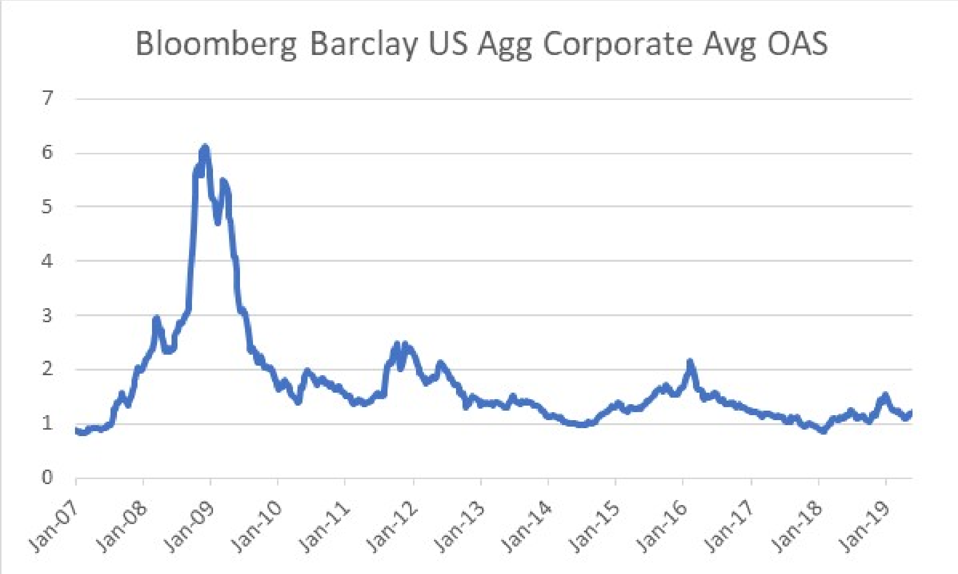
VIX in 2018 and so far in 2019 looks to be systematically too low. One way we can see this it to look at the returns of a put writing strategy on the S&P 500 (WPUT Index). A put writing strategy works well when investors are bearish and want to buy insurance on the market. This allows the sellers of insurance to make higher returns, and the WPUT Index shows the returns to investors willing to offer insurance on the market. In the 2007 to 2009 period the WPUT strategy outperformed the S&P 500. Particularly in 2007 and early 2008, as high price of VIX in that period meant that puts were sold at an attractive price.



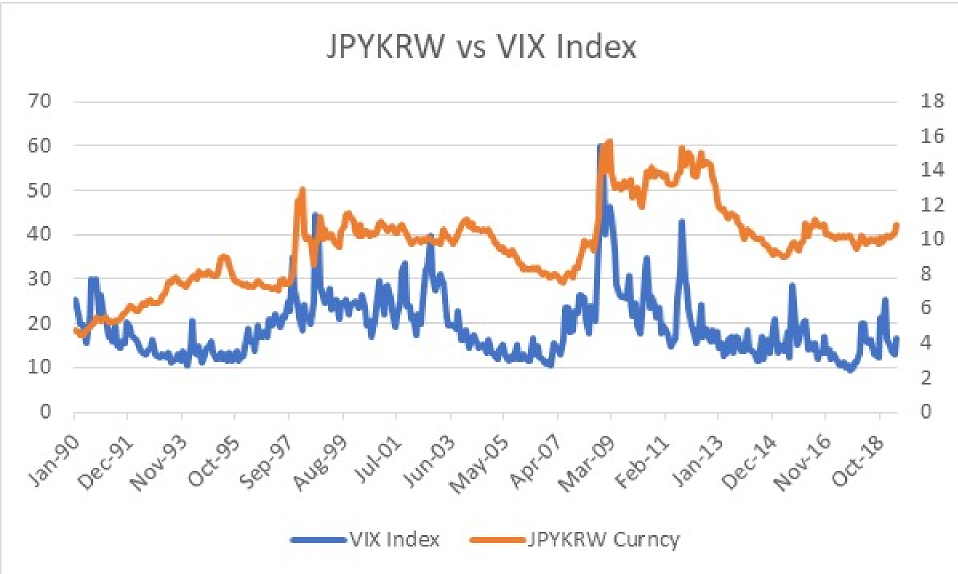
This is in stark contrast to the performance of WPUT from early 2018 where it has performed much worse than the S&P 500, even in sell offs. Strong evidence that the market volatility is the wrong price.



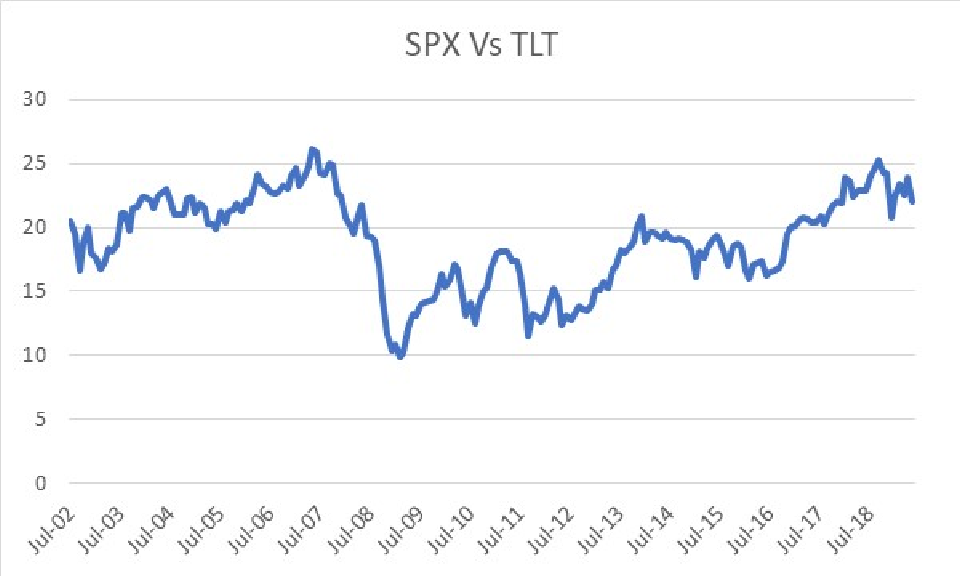
With the proliferation of volatility selling and strategies that use volatility targeting, we believe the VIX index no longer offers a good indicator of future movements in equities. Other lead indicators in the currency and bond markets still tend to work well and now tend to lead movements in the VIX. They are exhibiting a change in behaviour, for example high yield bond spreads are beginning to widen again. The Bloomberg Barclay US Aggregate Corporate Average Option Adjusted Spread (BB US ACA OAS) is beginning to widen again.



The VIX index has also been highly correlated to movements in the Japanese Yen versus the Korean Won. In a bull market, Japanese investors are often attracted to higher rates in Korea, while in a bear market, Japanese investors sell Won to bring capital home. Sharp sell offs in the Korean Won versus the Yen have occurred in 1997, 2007 and 2015. All these periods have seen VIX subsequently move higher. In April and May of 2019, Korean Won / Japanese Yen ("JPY/KWN") exchange rates moved from 10.1 to 10.9, not yet a huge move but maybe a precursor.



The S&P 500 is beginning to underperform versus long dated bonds (TLT Equity). In both 2007 and in 2014, this marked a period when volatility traded higher.



Even before contemplating US – China relations, or problems in the Eurozone, markets are sending signals that market prices of volatility are too low and about to move higher. Market implied volatility looks too low, and may be the lull before the storm.

INFORMATION

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