ON OUR MINDS

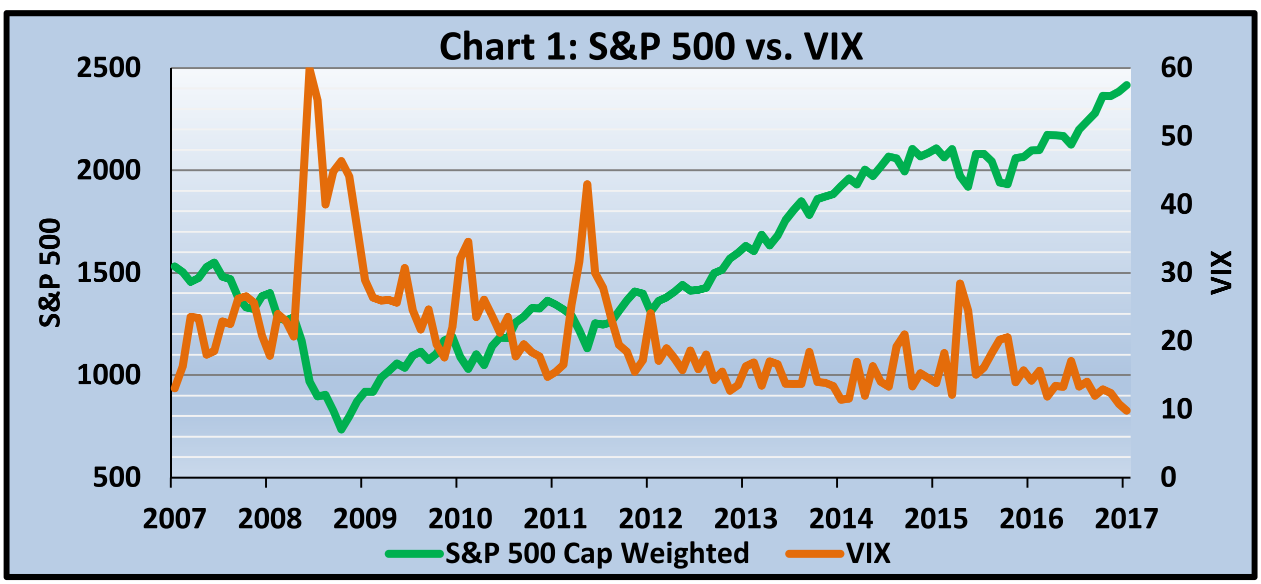
Should We Fear the Fear Gauge?

Timothy Garvey, Senior Investment Associate
Michael A. Tyler, CFA, Chief Investment Officer
May 31, 2017

In the course of our morning investment meetings, we often discuss the tone and character of stock market behavior, among many other topics. Tim Garvey recently noted that the market's volatility has been exceptionally subdued this year, especially in light of all of the political and economic drama transpiring in the U.S. and around the world. I invited Tim to investigate the idea, and he developed this report. After rigorous editorial scrutiny, I am happy to share it here.
– Michael A. Tyler

The S&P 500 hit an all-time record high again last Friday, the 20th time it's done so this year. Some investors may consider that sufficient reason for their 19th nervous breakdown of the year, but most market participants have remained calm – exceptionally, preternaturally, disturbingly calm. Are we whistling past the graveyard?

One way to assess volatility and anxiety is by watching the Chicago Board of Options Exchange Volatility Index (VIX), the so-called "fear gauge." Because it uses the expected volatility of the S&P 500 as derived from options contracts, the VIX is a measure of future market risk.[1] Historically, VIX values greater than 30 indicate significant investor uncertainty about market movement and values lower than 20 indicate more complacency from investors. Chart 1 shows the VIX in comparison to the S&P 500 over the past decade:



Source: FactSet

[1] When investors are worried, they typically pay higher prices for put options, which give them the right to sell stocks at predetermined prices. Higher prices for put options then translate into higher VIX levels. When greed trumps fear, investors pay lower prices for put options, and the VIX declines.

Last Friday, the VIX closed at 9.82, its lowest level since 1993. The markets are undeniably calm, at least with respect to the broad indexes. The average daily change in the S&P 500 for the first three months of this year was 0.32%, the quietest quarter in 52 years. In fact, there have only been two days all year that the S&P 500 has dropped by more than 1%. So is the VIX worth following, and what does it mean for investors today?

Some investors are beginning to anticipate a pickup in volatility, based on past trends. The last time the VIX reached 20 was back in November, immediately after Election Day. The market rarely goes this long with such muted volatility. History suggests that when volatility rises, stock prices often fall; perhaps we should be expecting some sort of pullback soon. As can be seen in Chart 1, spikes in the VIX have been associated with sharp drops in the stock market. It can be useful to look at the most recent pullbacks to study how prices and volatility interact. What is even more interesting is how long it takes for the market to recover from these downturns.

- The large spike in the VIX in mid-August 2015 was caused by fears that China's economy was slowing, and that this could slow the global economy. The associated S&P 500 reaction was a drop of almost 11%. It took a little over two months to regain this lost ground, as investors ultimately concluded that the anxiety over China was overblown.

- The next VIX spike occurred during the 2016 winter selloff when the price of oil was falling dramatically. The S&P 500 fell nearly 12% from the end of December until mid-February. Again, it took about two months for the market to regain what it had lost, as the price of oil recovered and stabilized.

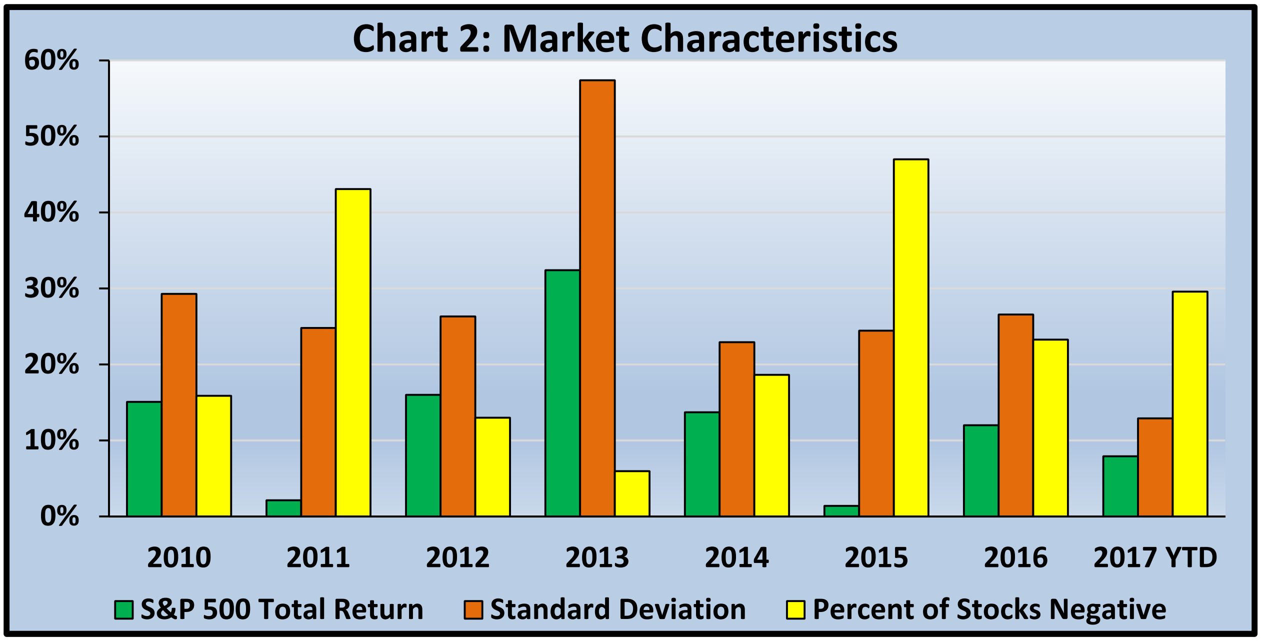
- Last June, the Brexit vote pushed the VIX higher. Investors had not anticipated the possibility that Britain would vote to dissociate from the European Union. The result of the Brexit vote caught investors off guard and the market dropped 5%. As investors regained confidence that Brexit would not cause significant damage to either the Eurozone or the global economy, it took only a few weeks for stocks to recover.

- The most recent increase in volatility came around the surprising outcome of the U.S. Presidential election, as investors became concerned about the victorious Trump administration. The uncertainty following the election only caused a 3% decline in the S&P 500; stocks rebounded almost immediately and have been on an unrelenting winning streak ever since.

These four recent instances of higher volatility accompanied by market selloffs share several common attributes: Each occurred during a bull market in which the economic fundamentals have been sound. Stocks recovered quickly because the U.S. economy is resilient and these uncertainties did not derail economic growth.

Conversely, some spikes in volatility are completely warranted, as in the credit crisis of 2008-2009. The extreme volatility associated with the credit crisis was due to many serious flaws in the financial system; it took 4 years for the market to recover from the resulting economic downturn; unlike the four recent instances, higher volatility and lower stock prices in 2009 accompanied serious economic distress.

Even if the economy today is healthier than it was in 2009, the extremely low levels of index volatility can feel discomfiting. If markets are said to "climb a wall of worry" and the VIX tells us that no one is worried, isn't that itself cause for worry? A close look at Chart 2 provides some comfort:



Source: FactSet

The green bars on Chart 2 show the S&P 500's total return for each calendar year, and the orange bars indicate the market's standard deviation (another measure of volatility). The chart confirms that volatility has indeed been muted this year, as the standard deviation of returns is considerably lower than that of any prior year on the chart.

Yet the yellow bars tell a very different story; these bars represent the percentage of the stocks in the index that have lost value in each time period shown. In years like 2011 and 2015 when the market index was nearly flat (the green bar is barely positive), it's not surprising that nearly half of the 500 stocks in the index had negative returns. It's also not surprising that in 2013, when the market was up over 30%, very few stocks declined.

This year, despite the market's overall robust 8% advance so far, almost one-third of stocks are down. In other words, while *the market* has been calm, *individual stocks* have been more volatile. Until this year, "macro" factors like interest rates and economic growth drove the entire stock market up or down; this year, "micro" factors are driving individual stocks up or down, while the aggregation of those moves is itself edging ever higher. For every Apple or Facebook that has soared this year, there is a Macy's or Qualcomm that has been clobbered.[2]

[2] When stocks are all moving in the same direction (up or down), it's almost impossible for an active stock picker to beat the market indexes. Conversely, when there is a wider dispersion of returns among index constituents, as there is this year, smart stock pickers can outperform more readily. For a more complete discussion, please refer to "Active Strategies vs. Passive Index Funds: A Look at Portfolio Construction and Performance," *On Our Minds,* August 31, 2016.

The wide dispersion of individual stock performances within an outwardly calm market is very healthy. Despite headlines suggesting future volatility and impending market corrections, the economy and market are ultimately resilient. The market has been chugging along with only minor hiccups because earnings growth is solid and the economy is in good shape. Perhaps the market has been behaving too well for too long; it is certainly unusual to go for so long without a correction or bear market. When one does occur, it is vital to understand the reasons behind it.

We continue to focus our attention on company earnings in the upcoming quarters, actions by central banks regarding tightening cycles, and political risk. Each of these factors can cause volatility and a market pullback. What is important is determining the impact each of these factors would have on economic growth and on the appropriate valuation of the market as a whole. Today, the stock market is calm and steadily increasing, but the economic fundamentals warrant this behavior. In other words, we should not be fearful of the fear gauge; instead we should be aware that its exceptionally low level is an alert to focus on and understand the factors that could cause a prolonged correction in the market.