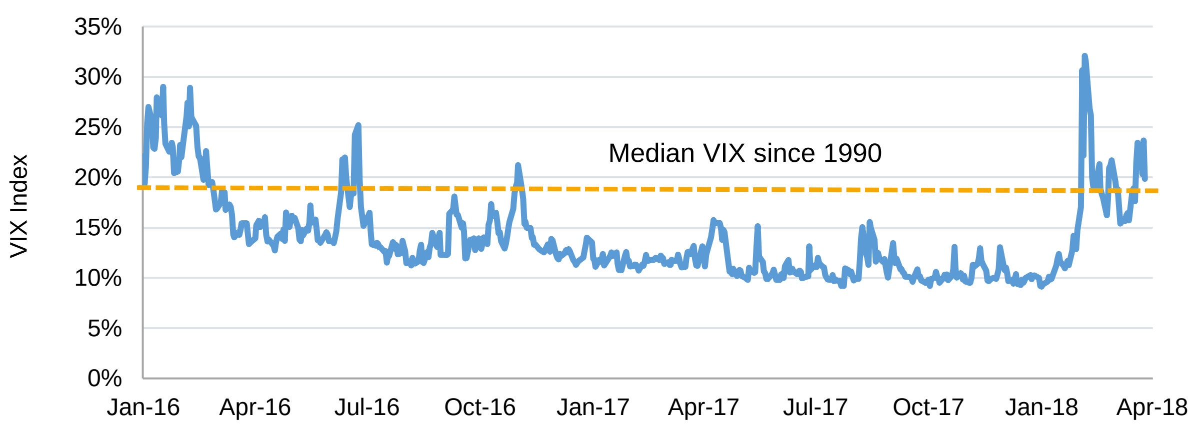
# Recent Market Volatility

May 3, 2018

The calm that would never end did so in a big way this quarter as markets finally began to react to geopolitical developments and White House jawboning. The end result was that global equities ended modestly down for the quarter after a strong January. Bond yields were slightly higher over the period and the dollar declined against most currencies. Some diversifying asset classes, notably real estate (REITs), had a particularly poor quarter and ended down -6.5%.

The volatility experienced in February and March is striking, not because it was so elevated, but because markets had been so uncharacteristically calm, especially in 2017. The VIX index of volatility returned to where it was in early 2016, and not much higher than its median value since 1990 (**Exhibit 1**).

**Exhibit 1: Market Volatility (US VIX) Has Returned to More Normal Levels**




Of course, volatility itself is not risk, but it does correlate with an increased probability of future loss. To evaluate implications for portfolio risk going forward, one must understand the underlying causes of volatility. We normally think of the main drivers of volatility as falling into two buckets:

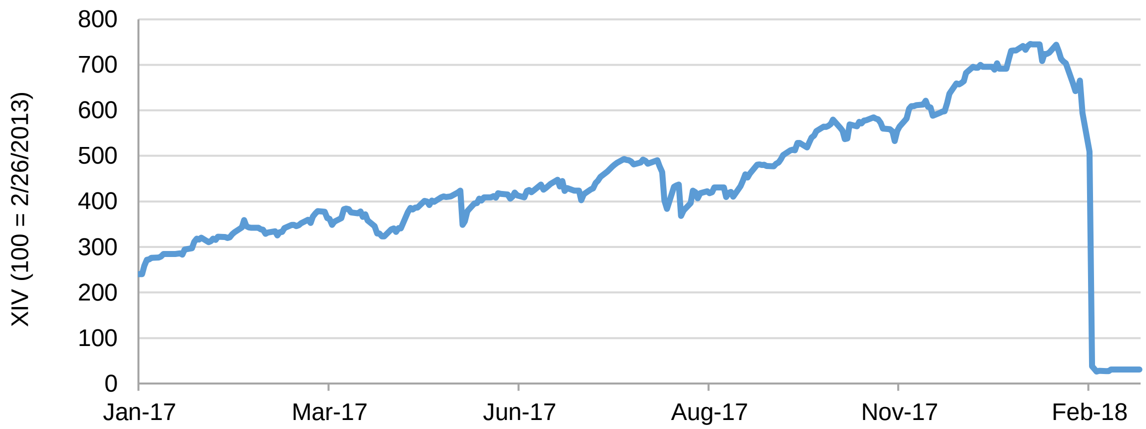
1. **Fundamental shocks.** These matter because they are the prime determinant of value. Shocks to fundamentals would include changes in interest rates, tax rates and news that may affect the earnings outlook for the market or a subsector. Greater uncertainty about fundamentals usually results in greater market volatility and risk.

2. **Technical shocks.** These factors stem from someone's need to buy or sell, i.e., supply/demand imbalances. Because price is the ultimate equilibrator of supply/demand, markets can be very volatile when the imbalances are large. This source of volatility is usually more temporary.

Fundamental and technical shocks are both always present, but it is not necessarily easy to disentangle which is which. In fact, being able to distinguish between them is the holy grail of investing. It's the holy grail because technical shocks create return opportunities while fundamental shocks by themselves generally involve a resetting of prices to reflect the new economic reality.

The volatility experienced in February had a significant technical component. While it began as bond yields were rising and the dollar was falling, a spike in the VIX index triggered significant selling of equities by "vol sellers"—who had been betting that volatility would remain low. They also had to cover short VIX positions, and the VIX for a brief period after hours reached 50, a level it has experienced very rarely. The effects were significant enough to drive some vol sellers out of business, as exemplified by the XIV exchange-traded instrument which was liquidated early in the month (**Exhibit 2**).

**Exhibit 2: The Dangers of Vol Selling (XIV)**




In contrast, the volatility experienced in March seems to have been much more fundamentally based. It began with President Trump's announcement of trade tariffs on imported steel and was exacerbated by the escalation with China. While we are a long way from an all-out trade war (or at least we hope we are), the restriction of trade poses a very significant fundamental and long-term concern. The tail risks in such circumstances are greater and would be validly manifested in the elevated volatility we have been witnessing.

Our research long ago convinced us that equity market volatility is an important gauge of broad market risk. While far from perfect, we know of no measure that is more reliable, and we believe strongly that we cannot just avoid the question of how much risk is embedded in a portfolio. Since our inception, we have adhered to a discipline of moderating exposures in volatile periods, and it has unambiguously helped us to protect capital. In February, we placed less weight on the VIX as a gauge of risk given its significantly technical nature, but not so in March when the risks appeared to be more fundamentally based. We ended the quarter closer to neutral levels of equity market exposure versus the fully invested posture we had maintained last year.

Elevated volatility and macroeconomic risks aside, the positives for global equities have largely remained in place: broad-based economic and earnings growth, coupled with tame inflation and reasonable market valuations. At quarter end, P/E multiples (on estimated 2018 earnings) were 17.1x, 14.0x and 12.5x respectively for US, non-US developed, and emerging market equities—all only modestly higher than historical averages.

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