

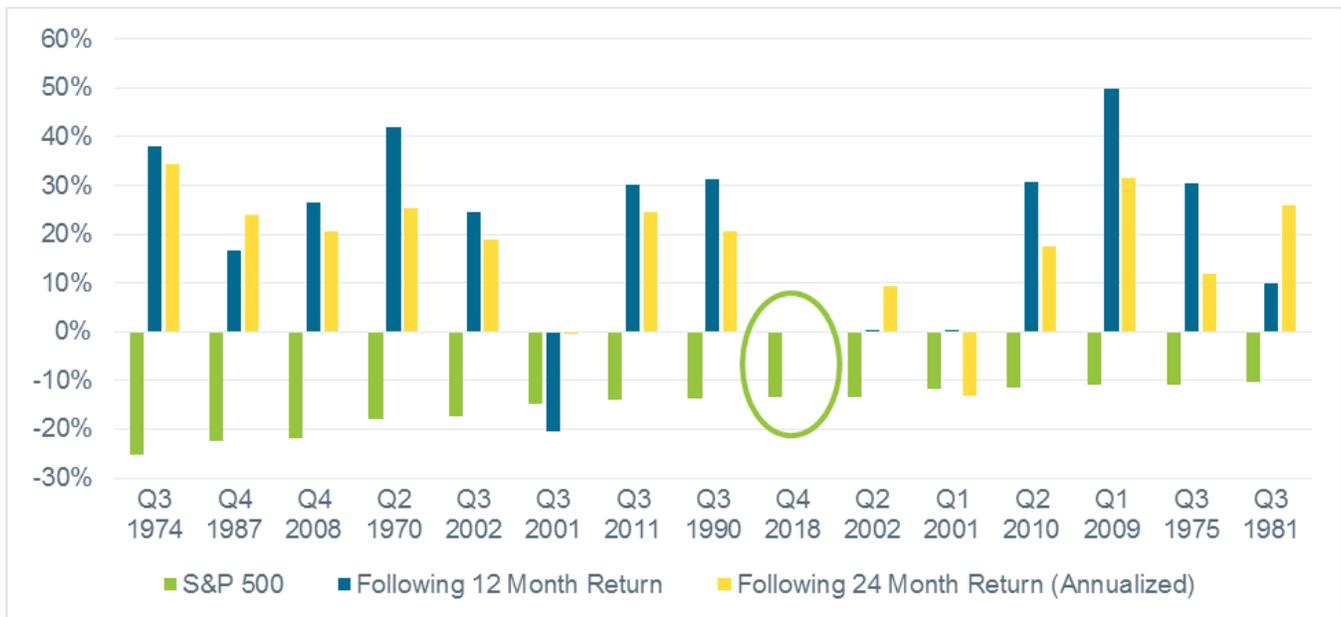
## Overview

As of the January 3, 2019 market close, the S&P 500 Index declined by more than 14% from the market peak reached on September 20, 2018. The sell-off in equities has been global in scope with the MSCI EAFE Index and the MSCI Emerging Markets Index declining by nearly 13% and 8%, respectively, since the start of October. As a result of the regional equity market declines, the global equity market, as measured by the MSCI All Country World Index, finished 2018 with negative annual returns for the first time since 2015. This memo provides a brief overview of the market environment and guidance for long-term institutional investors to remain committed to their strategic objectives.

## Equity Market Drawdown in Context

The initial market sell-off in October was sudden, but it was comparable to several similar equity market declines during the current nine year bull market. While monthly corrections of this magnitude have been less frequent following the financial crisis, they have still been fairly common. Since 1980, the market had experienced an 8% drop over a five day period on 39 different occasions. After a slight rebound in November, the market decline resumed in December and the quarterly results now rank within the top 15 most significant quarterly drawdowns since 1970. **Exhibit 1** shows quarterly drawdowns of over 10% since 1970 for the S&P 500 Index. Q4 2018 ranks near the middle of the group.

**Exhibit 1: Past Quarterly Drawdowns**



Source: RVK calculation based on Standard & Poor's data. The 24-month returns after Q3 2001, 12-month returns after Q2 2002, and 12-month returns after Q1 2001, are all near zero.

**Exhibit 1** also shows the 12-month and 24-month returns of the S&P 500 following these quarterly drawdowns. While there are exceptions, specifically in 2001 and 2002, where equity returns remained subdued or decreased further, there is historical precedent for rebounds in market performance. Leading up to this drawdown, it is important to keep in mind that this was the longest equity bull market in history and even with this recent drawdown the S&P 500 Index earned cumulative returns of approximately 270% since March 9, 2009 (see **Exhibit 2** on next page). There were multiple drawdowns during this period, notably in 2011 and 2015, but this drawdown is the longest and most significant from peak to trough.

Exhibit 2: S&amp;P 500 Index Gains Since March 9, 2009



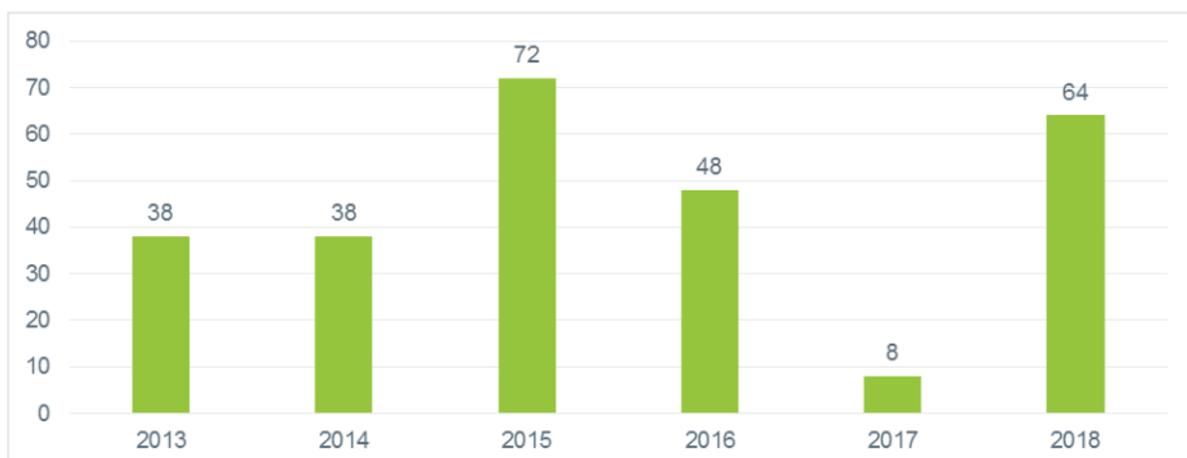
Source: Wall Street Journal

The data in **Exhibit 1** underscores the general need to view these types of sharp declines in the context of long-term equity assumptions and not overreact to short-term data, but certainly does not guarantee a market rebound. **Exhibit 2** shows that this recent event differs in scale compared to other downturns post-crisis. The market is reacting to significant changes, including the unwinding of unprecedented quantitative easing and global trade disruptions. In addition, the cyclically adjusted valuation of the US equity market remains elevated, albeit below recent peaks, as discussed in the next section. For long-term investors, it is important to understand the drivers of this recent drop, preceding environment and current market characteristics to discern whether any adjustments are needed to their strategic plan.

### Contributing Factors

Generally, market volatility had been muted in recent years, but this calm has given way to increased pricing activity as shown in **Exhibit 3**. In 2018, the number of daily positive or negative S&P 500 price changes greater than 1% is well above 2017, and other recent years, and closer to the type of volatility experienced in 2015. In 2018, the price changes greater than 1% were evenly split with 32 being positive and 32 being negative; notably 16 of the negative days occurred in the fourth quarter. The recent increase in equity market volatility can be attributed to investor reactions to both macro and bottom-up risks. Macro concerns include the ongoing US trade dispute with China, the uncertainty surrounding a Brexit deal, interest rates rising from historically low levels, and the fear of global economic growth slowing. Regarding the monetary policy concerns, the decision by the FOMC to raise the target rate range to 2.25-2.50% amid rising equity market volatility was met with some criticism, but the tight labor market served as basis for their decision. The FOMC did reduce their projection of rate increases in 2019 from three to two in light of softening inflation expectations. Nonetheless, the confluence of these factors led to the VIX, a measure of implied market volatility, spiking higher than one standard deviation above its long-term historical average (see **Exhibit 4** on next page) for the second time in 2018.

Exhibit 3: Number of S&amp;P 500 Price Changes Greater than 1%



Source: RVK calculation based on Standard & Poor's data.

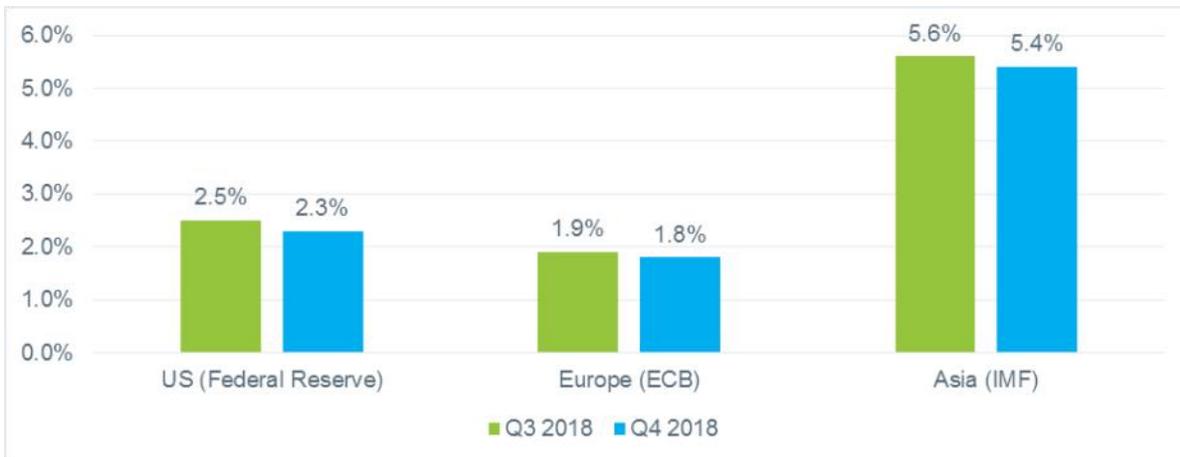
Exhibit 4: VIX Index



Source: RVK calculation based on CBOE data.

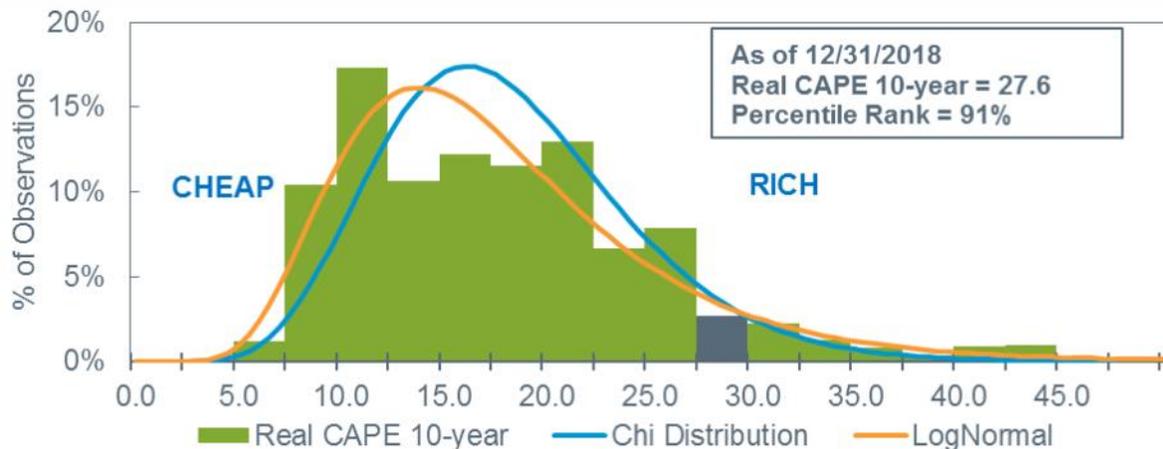
An increase in market volatility and some reset of investor expectations was not unexpected given that forecasts for 2019 GDP growth across regions declined recently (see **Exhibit 5**), however the near-term projections remain in positive territory. In a recent Reuters poll of economists the median predicted probability of a recession within the next year is 20%, while the probability of a recession within the next two years rose above 40%. However, as noted before, recent economic data indicates inflation remains in check and labor markets are still tight. The December jobs report showed labor force participation and job gains above expectations. While the impact of the trade dispute with China and looming Brexit deal deadline are significant outstanding variables, other current economic conditions appear to be stable.

Exhibit 5: 2019 GDP Growth Forecasts Revised Lower



In the US market, declining growth projections injected uncertainty over earnings growth into a market characterized by elevated valuation levels. Real US equity valuations, as measured by the cyclically adjusted price-to-earnings ratio ("CAPE"), reached 32 as of June 30, 2018 which was within the 95<sup>th</sup> percentile based on data starting in 1926. Following the recent drawdown this measure has declined to below 28 (see **Exhibit 6** on next page) indicating that valuations remain elevated compared to past levels.

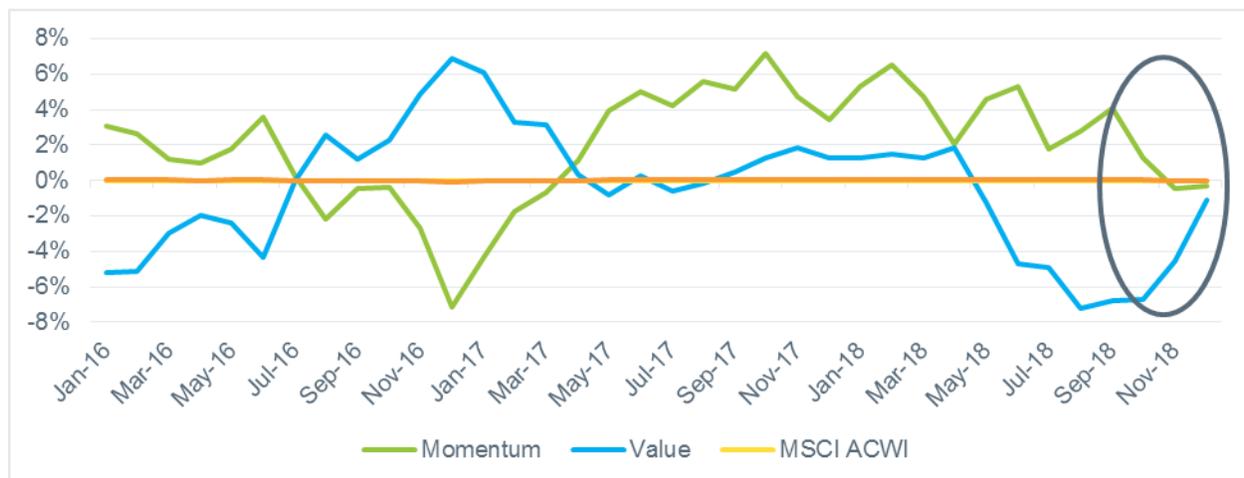
Exhibit 6: US Real Valuations (as of December 31, 2018)



Source: Shiller website (<http://www.econ.yale.edu/~shiller/data.htm>)

During the first 9 months of 2018, many noted that US market appreciation was being driven by a small number of stocks, indicating a narrow market rally. In the US, this group of stocks faltered in response to the combined concerns of declining growth expectations and elevated valuations. While this effect was less significant in the EAFE and EM regions, neither were at valuation extremes, the sell-off of the best performing stocks was also noticeable. Most recently, weakened revenue guidance from Apple and Delta has contributed to unstable investor sentiment. **Exhibit 7** showcases the excess returns of momentum and value stocks within the MSCI All Country World Index (“MSCI ACWI”) and the sharp shift experienced in the fourth quarter.

Exhibit 7: MSCI ACWI Momentum &amp; Value (Rolling 6 Month Rolling Excess Returns)



Source: RVK calculation using the MSCI ACWI, MSCI ACWI Momentum and MSCI ACWI Enhanced Value Indexes.

## How Should Investors Respond

It is worth restating what we believe to be the key ingredients of a successful long-term investment strategy and how they might apply to current conditions:

1. Strategic continuity is one of the most important attributes of successful investment programs. This means developing a deliberate long-term strategy appropriate to the circumstances and purpose of the plan, and applying it consistently over time. Attempts to time short-term swings in the equity market or frequently changing long-term strategy based on near-term events are extremely difficult to execute successfully and potentially detrimental to long-term performance.

2. Diversification matters, even if it does not appear to work all of the time. No one knows how future events will unfold. History tells us that abandoning long-term principles based on recent events is often the surest path to potentially costly decision making.

3. Valuation is one of the most reliable drivers of return across asset classes over the long-term. Even after the recent correction, the US equity market appears to be richly priced compared to non-US equity markets. We believe that to the extent possible, nearly all investors should have globally diversified portfolios.

4. Disciplined rebalancing is an important total portfolio management exercise. Markets can be fueled in the short-term by hyper attention to near-term data. However, long-term trends are often different than the near-term hysteria suggests, creating an opportunity for disciplined rebalancing, which can add to incremental returns and reduce risk.

As always, your RVK consulting team stands ready to assist you in addressing any further questions or concerns.

## Disclaimer

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