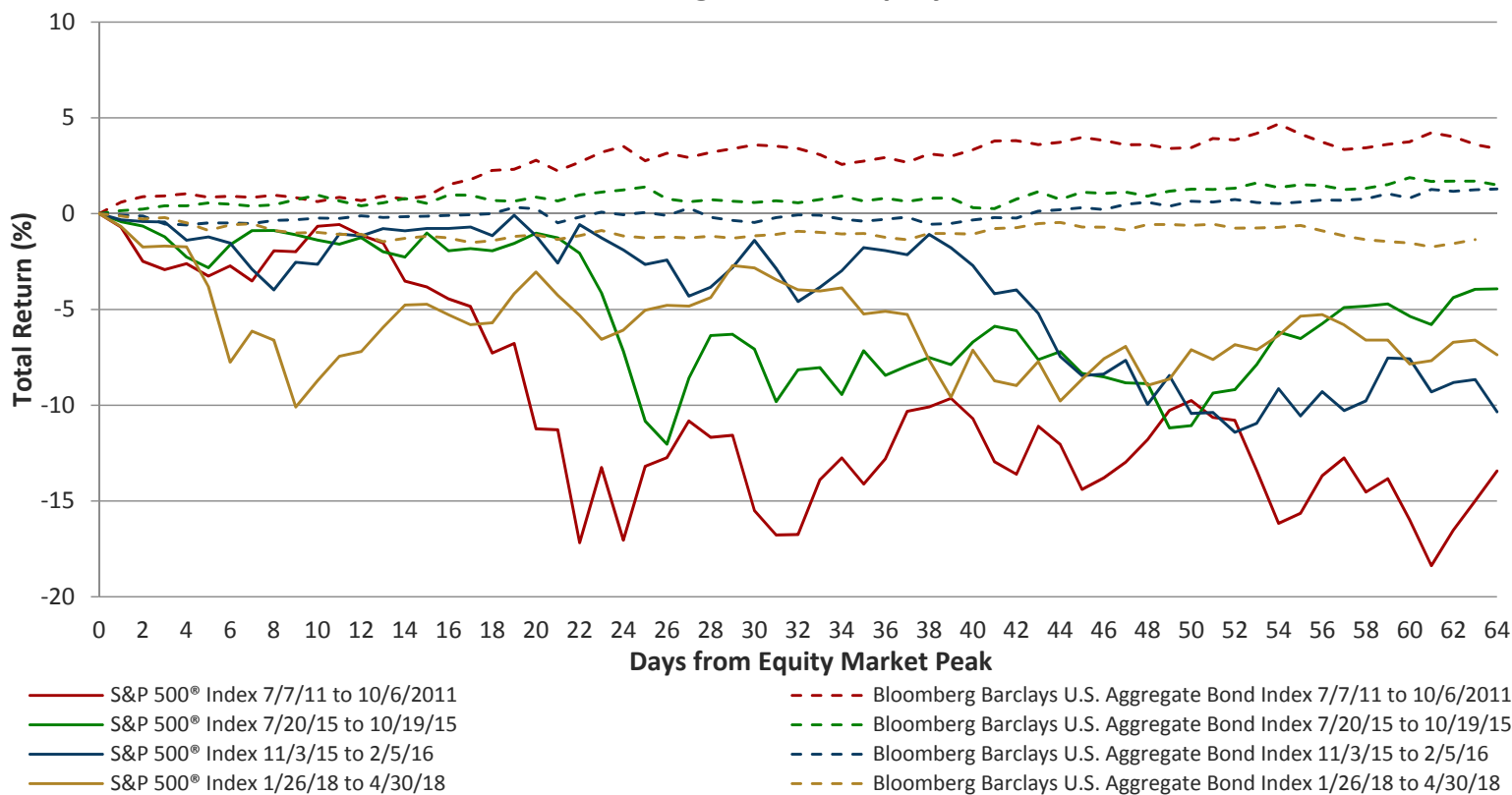


The beginning of 2018 has reminded investors that equity markets are risky. After nine consecutive calendar years of positive equity market returns and the record low volatility levels of 2017, volatility levels, since spiking in early February, have been in-line with longer-term averages. Moreover, the S&P 500® Index lost 10.10% from January 26<sup>th</sup> to February 8<sup>th</sup> after nearly two years without a decline of 10% or more. The last decline of more than 10% started on November 3, 2015 and ended on February 11, 2016 after a drop of over 12%.

2018 has also provided additional evidence that low interest rates combined with the prospect of inflation and shifting monetary policy, have changed the nature of fixed income markets. Historically, high quality bonds have been a source of income, total return, volatility dampening and protection against equity market losses. In the current environment, it is becoming increasingly difficult for high quality bonds to deliver on all these objectives. Low interest rates clearly reduce the income that high quality bonds produce. And though interest rates have increased, they are still low by historical standards, especially for intermediate to long-term maturities. In addition, as we've noted in previous Market Perspectives, the annualized rates of return for high quality bonds declined along with interest rates (see chart) and, now that rates have been trending up, total returns have gotten even lower. The three-year annualized return for the Bloomberg Barclays U.S. Aggregate Bond

**Bond Market Returns During Last Four Equity Market Corrections**

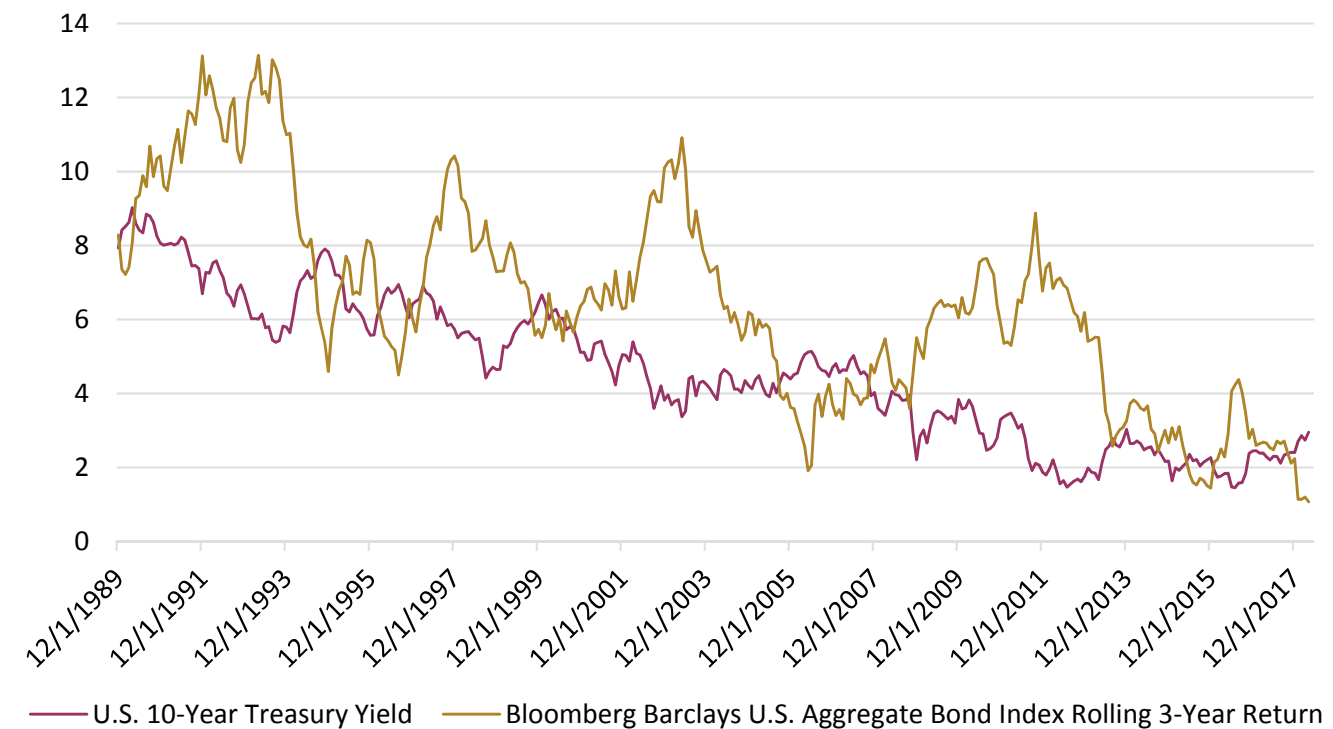


Source: Bloomberg, L.P.

In addition, the prospect of a long-term trend of rising interest rates may be muting the “flight to quality” response that typically benefits holders of high quality fixed income instruments when equity markets swoon. Each of the last three equity market corrections have had a smaller response from the bond market than was seen during the 2011 equity market correction that preceded them. Moreover, during the most recent equity market correction in 2018, the bond market actually had a negative return as rates rose while equities declined. Though the equity market drawdown in 2011 was ultimately larger than the three equity market corrections since, the bond market response was more pronounced during the first 10% of the 2011 equity market decline.

### U.S. 10-Year Treasury Yield vs. Bloomberg Barclays U.S. Aggregate Bond Index Returns

January 1, 1990 – April 30, 2018



Source: Bloomberg, L.P., Morningstar Direct<sup>SM</sup>

One could conclude that investors who manage risk exclusively with high quality bonds may be sacrificing not only long-term return but may also be facing diminishing prospects for high quality bonds to deliver the other benefits they have historically produced. With widespread anticipation of rising interest rates, investors may be disappointed by a lackluster bond market response to future equity declines and may want to consider the potential benefits of being less reliant on high quality bonds for managing risk. Low-volatility strategies that combine equity exposure with cash flow from index option writing may offer investors greater participation in equity market returns over the long-term than traditional portfolios of stocks combined with high quality bonds.