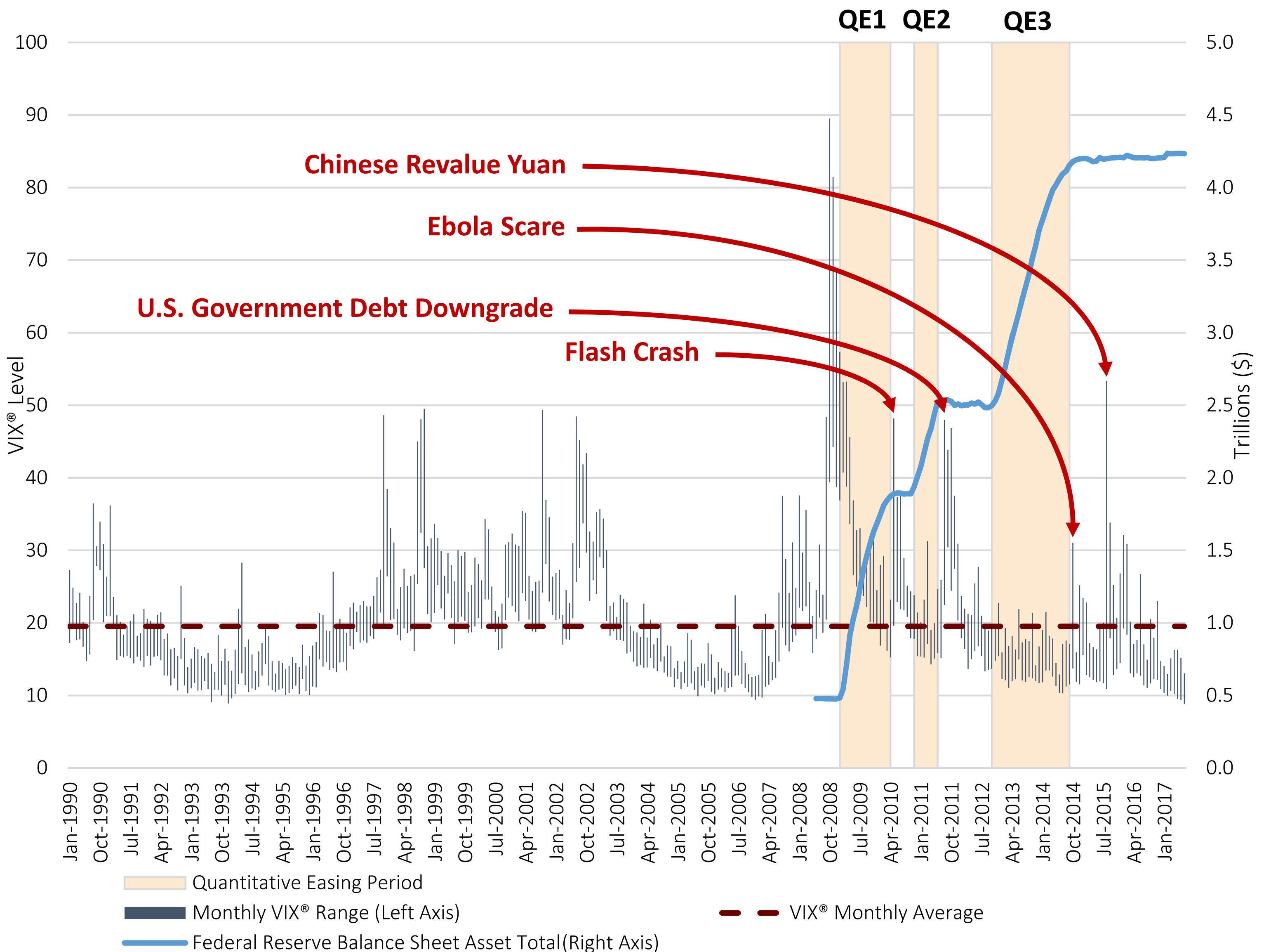
With the Federal Reserve (the Fed) discussing plans for shrinking the size of its balance sheet, it is worthwhile to revisit the relationship between the Fed's asset purchase programs, or quantitative easing (QE), and equity market volatility.

As the chart shows, the first round of QE began shortly after implied volatility had reached an all-time high during the financial crisis of 2008. As the Fed's balance sheet expanded rapidly, implied volatility steadily declined to below-average levels. Implied volatility also exhibited a generally downward trend during QE2 and QE3.

Quantitative Easing and Equity Market Volatility
January 1990 – July 2017



Source: Bloomberg, L.P., Federal Reserve

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It is interesting to note that almost all the significant post-crisis spikes in implied volatility came between rounds of QE when the growth rate of the Fed's balance sheet slowed or paused. The simplistic conclusion that slowing or pausing Fed asset purchases caused spikes in implied volatility would probably be incorrect. Each spike was driven by events unrelated to the Fed, e.g. the 'Flash Crash' and the downgrade of U.S. Government debt by Standard & Poor's. However, it does appear that the equity market was more susceptible to bouts of volatility when the Fed was on hold. The volatility spike associated with the Ebola scare during the fall of 2014 is a good illustration of this. Though Ebola is a horrific disease, in retrospect its potential impact on the value of financial assets was clearly overemphasized by market participants, as infections outside of Africa remained rare and its economic impact was negligible.

The history of QE and implied volatility show that when the Fed steps back from a program designed to bring stability to financial markets, events that create even a marginal increase in uncertainty have the potential to roil the markets. With the Fed now prepared to not just keep its foot off the gas pedal, but actively apply the brakes and shrink the size of its balance sheet, investors should not be surprised if market volatility increases as the Fed implements the next phase of normalizing monetary policy.

It remains to be seen whether the next volatility spike will begin a new phase of persistent elevated volatility. There have been both short-term volatility-dampening forces, such as the surge in corporate profitability and low-correlation across individual stocks, as well as longer-term phenomena that have contributed to the generally low volatility environment over the past five years. The longer-term forces that have likely helped keep a lid on equity market volatility include slow but steady economic growth, low rates of growth-oriented fixed investments and low interest rates that have supported gains in corporate capital efficiency by facilitating stock buy-back programs funded with bond issuance. Until there are interruptions in these longer-term forces, the next volatility spike may be as temporary as recent ones. As always, Gateway will maintain a vigilant watch on market conditions and apply judgement and experience in an effort to manage risk while seeking return for its clients.