



Below is the latest commentary from Pacific Life Fund Advisors LLC, the investment adviser to Pacific FundsSM.

Shifting Gears: Defensive Driving through Divergent Economic Policies

The Federal Reserve (Fed) went to unprecedented lengths to ensure recovery from the Great Financial Crisis of 2008. In this article, we examine the engine driving the Fed’s stimulus, commonly known as quantitative easing (QE), to see how its operation affected broader market volatility and returns. We look specifically at the difference in market dynamics when the Fed was running QE at full throttle and when it let the engine idle. Then, we take a broader look at how global monetary policy is growing increasingly divergent and what that means for investors looking to diversify.

With the Fed shifting into reverse with monetary tightening, and most foreign central banks experimenting with alternative “fuel sources” such as negative interest-rates to continue stimulating their recoveries, we see the road ahead to be full of blind turns and potholes for those who have grown accustomed to investing on cruise control.

Revvng up Growth

There have been three distinct QE programs that the Fed has launched since the 2008 financial crisis. In the first QE, the Fed purchased agency mortgage-backed securities and debt in direct support of the ailing housing market. Later, the program expanded to purchases of government Treasuries that had the impact of driving down Treasury yields (yields decrease as Treasury prices increase).

QE 1-2-3

The best way to get a sense of how the initial QE program impacted financial markets is to look at conditions just before QE started. In Figure 1, we can see the level of daily volatility¹ of the S&P 500 index (proxy for the domestic equity market) before, during, and between periods of QE. In the period just before the initial QE from July 1, 2008, until the initial announcement by Federal Reserve Board Chair Ben Bernanke on November 25, 2008, markets gyrated an average of 3.5% per day as the financial crisis hit a fever pitch, and the investment bank Lehman Brothers was allowed to fail. QE1 lasted just over 16 months,² and daily volatility fell from 3.45% to 1.69%, which was still high relative to the 30-year average of 1.16% shown by the line on the chart. Along with this significant reduction in volatility, we can see in Figure 2 that the S&P 500 index also gained an annualized 29.6% during QE1, demonstrating

¹Daily volatility is the average gain or loss from one day to the next, also known as standard deviation.

²We measure QE from the date of announcement until the last day of the month during which the program ended.

Figure 1: S&P 500[®] Index Daily Volatility

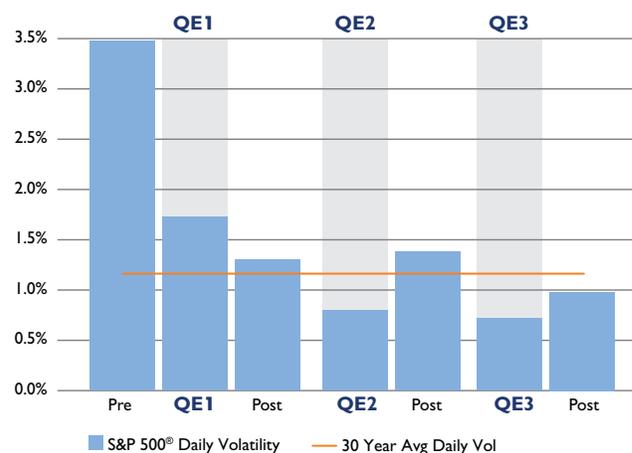
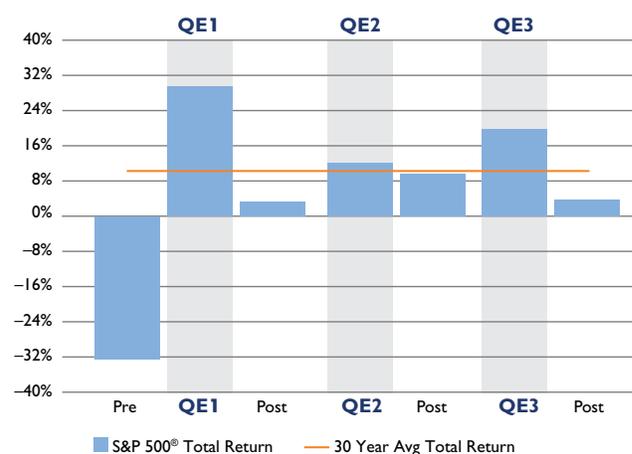


Figure 2: S&P 500 Index Total Return





the effect of QE1 to both smooth and increase returns. Post QE1, markets struggled to maintain momentum, earning a meager 3.2% return over the period, even though volatility remained relatively steady. Only seven months after QE1, the Fed decided it had to resume steering the economy.

The onset of QE2 continued to significantly reduce daily volatility, which fell to 0.78% during the eight months of the program, while the S&P 500 index gained more than 12%. QE2 ended inauspiciously in the summer of 2011, just as the debt ceiling debate heated up in the U.S. and the Greek fiscal crisis engulfed the European Union. Nevertheless, post QE2 lasted more than 14 months, with daily volatility rising to 1.35% and market returns falling to an annualized 9.7%. QE3 was announced on September 13, 2012, and began the longest and most impactful period of asset purchases during the recovery. QE3 lasted nearly 26 months and cut daily volatility in half, while the S&P 500 index grew by an annualized 19.8%.

QE Aftermath

In the 17 months since the end of the third QE,³ daily volatility has increased again to 0.96%, and the S&P 500 index has returned an annualized 3.7%. While it will be some time before we can determine the longer-term impact of the Fed's QE program on the underlying economy, we can clearly see the effect of monetary stimulus on financial-market returns and volatility. Our conclusion is that in the U.S., volatility will likely remain elevated, and returns for risky assets will be more modest now that the Fed has engaged the clutch to shift into the reverse of stimulus, which is monetary tightening. However, diverging monetary policy overseas may provide an attractive opportunity to diversify, although it may entail an even bumpier ride.

Overseas on Overdrive

Central banks of Europe and Japan still have a lead foot when it comes to stimulating their economies toward a smoother recovery. With additional recessions under their belts since the Great Financial Crisis, the European Central Bank (ECB) and the Bank of Japan have been forced to turn to more extreme measures than have been attempted in the U.S. Specifically, both have enacted negative interest-rate policies

and aggressive quantitative easing programs of their own, with the ECB extending the bond-buying program to include even corporate bonds.⁴ These unprecedented measures, if successful (and that's a substantial "if"), could allow returns for international equities to overtake domestic stocks, especially as global markets have more headroom in their valuations than the U.S. has.

Changing the Drivers for the U.S. Dollar

One of the most fundamental impacts of stimulative monetary policy (like cutting interest rates) is a weakening of the currency. We can see in Figure 3 that during the first two QE programs, the U.S. dollar declined in value relative to other currencies.

Figure 3: The U.S. Dollar and QE



Depreciating currencies can boost the impact of a stimulative policy as exports become more competitively priced in the global marketplace. However, we began to see a rising trend in the dollar after then-Fed Chair Ben Bernanke announced in May of 2013 that the Fed could "take a step down in our pace of purchases," and signaled the wind down of quantitative easing. Thus, the U.S. dollar spiked in the summer of 2013 before more details became available on the time frame of the plan. Then, as the third QE came to a close in 2014, the dollar began a multi-year upward surge as the active stimulus measures of other nations weakened their respective currencies against the U.S. dollar. The dollar shifted from having an outsized influence on international currencies with active Fed easing to being influenced (appreciating) as easing stopped in the U.S. but continued to ramp up abroad.

³Data measures through March 31, 2016.

⁴Corporate bond purchases are in addition to purchases of government securities typically undertaken in these programs.

Connecting the Dots

The rising U.S. dollar has had mixed impact on global markets. In the U.S., it has proved a headwind to exports and corporate earnings. For oil prices, the inverse relationship between commodities and the U.S. dollar has been a tailwind for the extreme drop in prices, which in turn further crimped profits in the U.S. energy industry. For Europe and Japan, the strong U.S. dollar has helped their economies by making their exports relatively more attractive. However, when Chinese stock market volatility and plunging oil prices set off global volatility early in 2016, the Federal Reserve revised its dot plot (where the Federal Reserve officials publish their forecasts for the central bank's key interest rate on a chart) for expected rate hikes and the dollar eased off its highs as investors anticipated lower rates for longer in the U.S.⁵ This latest adjustment to the initial interest-rate plan of the Fed may temper or even reverse some of the impacts mentioned previously. A weaker U.S. dollar may boost oil prices, act as a drag on eurozone and Japan stimulus efforts, and also boost exports and earnings here in the U.S.

Buckle Up

As the Fed stops actively using QE programs and begins considering the pace of its monetary tightening, investors should expect elevated levels of volatility and lower returns relative to the past QE periods. We also think this transition provides an opportunity to diversify with international stocks, as diverging monetary policy and heavy stimulus efforts overseas favor growth outside the U.S. However, investors should be aware of currency impacts on their return expectations. The race for returns in today's market environment may be won by those who take the time to develop a comprehensive and diversified approach that accounts for a multitude of unprecedented road hazards.

⁵All else being equal, lowered interest-rate expectations will generally cause a country's currency to depreciate.



The S&P 500 Index is a market capitalization-weighted index of 500 widely held stocks often used as a proxy for the U.S. stock market.

QE1: December 2008 to March 2010

QE2: November 2010 to June 2011

QE3: September 2012 to December 2013

The U.S. Dollar Index (USDIX) is an index (or measure) of the value of the United States dollar relative to a basket of foreign currencies.

Indexes are unmanaged and cannot be invested in directly. Further they hold no cash and incur no expenses.

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