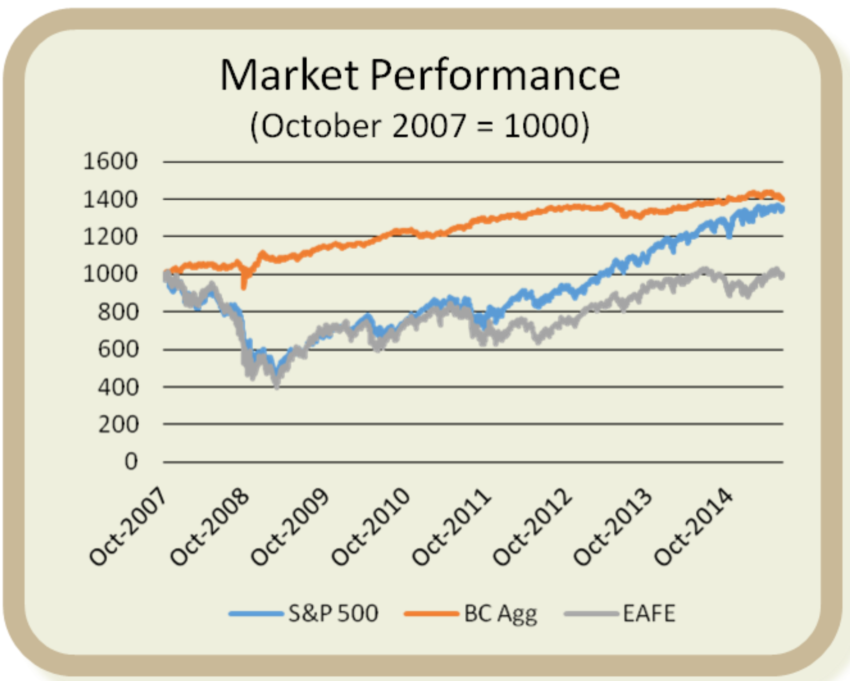
Economy Check-In: Post 2008 Crisis

Market Update Special Report

By Kevin Chambers

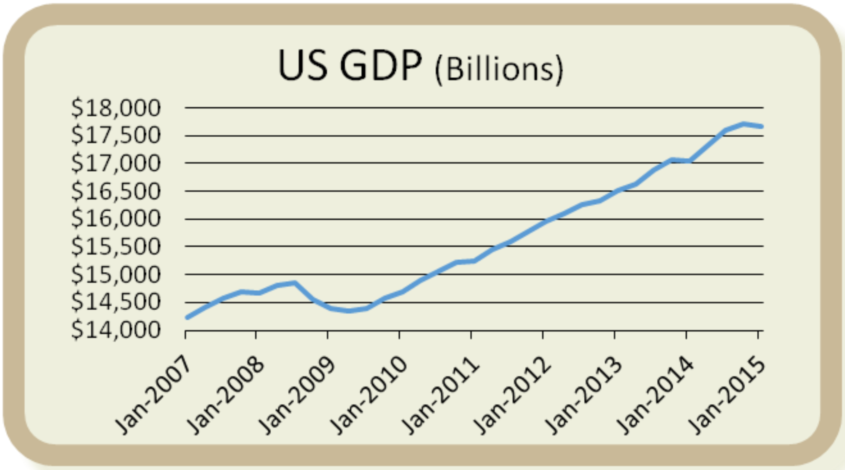
The 2008 crisis was one of the worst downturns in American economic history. News reports and financial media reports are teeming with differing opinions regarding how much the American economy has recovered. As the US presidential election heats up, there are sure to be some conflicting views on the strength and outlook for the health of the economy. Now is a good time to review how the economy and asset classes have fared since the 2008 crisis and to show a few possible future scenarios.



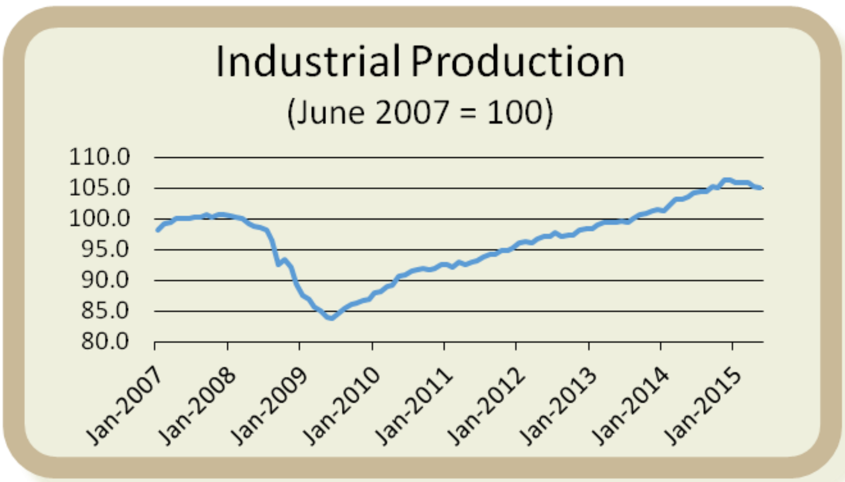
Source: Yahoo

US Economy

The US economy has been a bright spot in the global economy. The "Great Recession" officially ended in June 2009 after 19 months of negative economic growth, as measured by GDP. Gross Domestic Product (GDP) is the sum of all goods and services in an economy. Starting in 2007, the GDP of the United States was just over $14 trillion. As of May 2015, GDP has risen to just under $17.6 trillion, an increase of 20%. GDP actually didn't fall that much through the recession. From peak to trough, GDP fell about 3.4% through the recession. By the second quarter of 2010, GDP had already surpassed pre-recession levels. US GDP shrank by 0.7% in the first quarter of 2015. That is the third time since the recession that GDP has contracted in a quarter. This retraction seems like



Source: Federal Reserve



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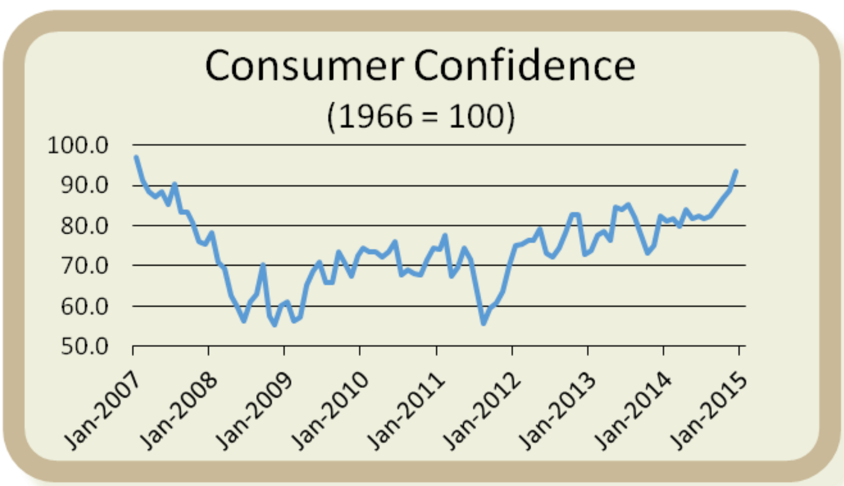


Source: Federal Reserve & University of Michigan

an anomaly as the general trend since 2009 has been strongly upward.

Manufacturing

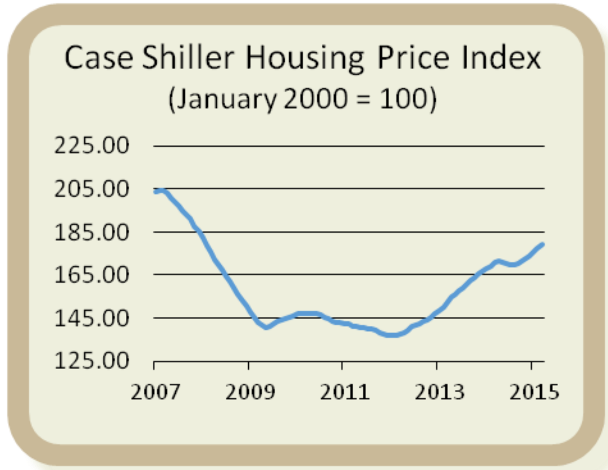
The manufacturing sector, considered to be an essential backbone of any economy, has recovered in the United States. The Purchasing Managers Index (PMI) is an indicator that shows the health of the manufacturing sector. It is based on data including new orders, inventories, production, and employment. Values over 50 represent a growing sector. Since late 2009 PMI has been above 50 and has average 54.6. Industrial production has also recovered to pre-recession levels. The Industrial Production Index (IPI), which measures the output of the manufacturing sector, has surpassed 2007 levels.

Consumer Confidence

Consumer confidence has climbed back to levels experienced before the reces-sion. During the recession, consumer confidence levels fell to their lowest point since the 1980s. Consumer confidence as of the end of 2014 was the highest it has been since 2007. Consumption expenditures by households, adjusted for inflation, has also surpassed 2007 levels, indicating that Americans are more likely to spend money, usually a good sign for the economy.

Housing Prices

However, the housing market has not come back to pre-recession levels. The housing market peaked earlier than the stock market, early in 2006. House prices, new home sales, and home ownership levels all lag 2007 levels and are significantly below the housing market peak. Existing homes sales are up from the start of the recession, but are still over 70% below their previous high. Despite this lag, it seems as though the housing market has somewhat stabilized, which could be a good thing. Rapidly increasing prices could have pushed the housing market into another bubble. Most people agree that the housing market before the crash was overinflated and unsustainable. It looks as though the US housing market won't get to pre-recession levels, but that may be for the best. Every quarter more people are buying and selling houses, showing that it is an expanding industry.

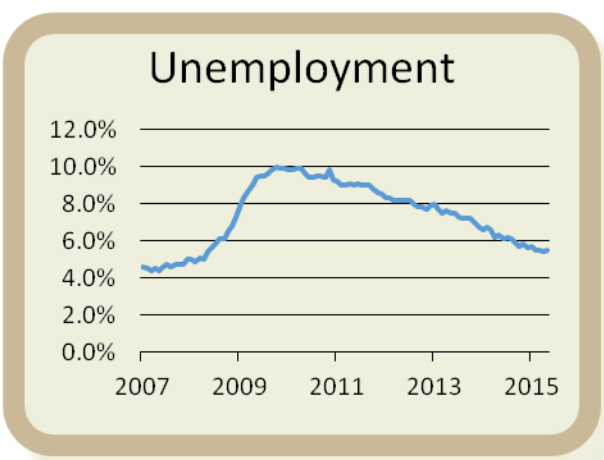


Source: S&P/Case Shiller

Employment

Even though there are some positive stories, the US economy faces some challenges. First, the labor market has not yet recovered and seems to be stuck in the doldrums. The unemployment rate has not recovered. At the stock market peak in 2007, the unemployment rate in the US was 4.7%. At the worst point of the recession, national unemployment grew to over 10%. Recent reports list the national unemployment rate at 5.5%, significantly lower than the recession high point, but not back to pre-recession levels.

Secondly, wages have been stagnant throughout the recovery. With inflation adjusted dollars, wages have been essentially flat since 2007. The median weekly wage in the United States averaged about $335 from 2005-2007. From 2013 through the first quarter of 2015, the average weekly wage is $339. One positive labor statistic is that the total number of workers has increased since 2007. The Non-Farm Payroll statistic is released by the Bureau of Labor and encompasses about 80% of the US workers that produce the total amount of GDP. Non-Farm workers rate is up about 2.5% since the start of the recession, and up 7% since the depths of the recession in 2009. In May 2015, firms hired 280,000 new workers, a sign that the hiring market could be heating up.



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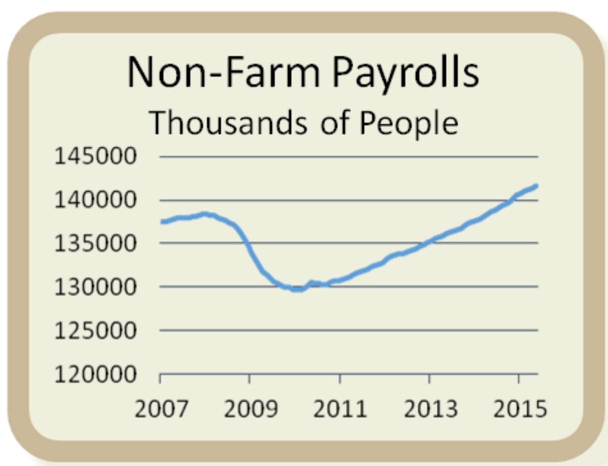
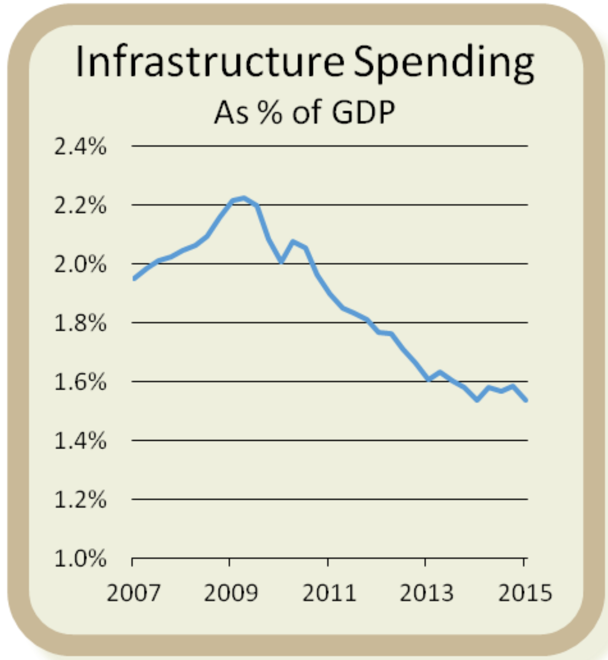


Source: Federal Reserve

Infrastructure

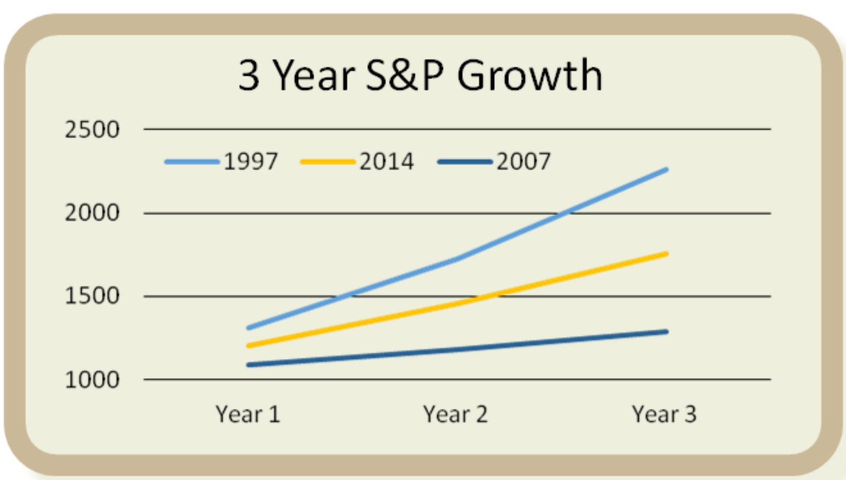
A third economic struggle is the lack of infrastructure spending. The level of spending on roads, bridges, airports, train lines, and utilities has continued to fall since the crisis. After the two previous recessions, infrastructure spending has rebounded rather quickly. Spending peaked in 2009 due to the stimulus packages approved by Congress and Presidents Bush and Obama. From this peak, spending has dropped 14%. Current infrastructure spending is at a level that only covers wear and tear of existing projects (Wessel, 2015). That means there is no money for new investment in projects. Infrastructure spending can help stimulate the construction and engineering industries, and help create the backdrop of future growth.



Source: Federal Reserve

Financial Markets

As the underlying economy has been strengthening, financial markets have been increasing significantly. The stock market has continued to hit record highs throughout the recovery. By March 2013, the stock market had recovered to the 2007 peak, and has been going up ever since. In 2012, 2013, and 2014, the S&P 500 returned 16.4%, 33.5%, and 12.6%, respectively, making this time frame one of the best performing 3 years since 1970. Only the lead up to the internet bubble returned more. For comparison, in the three years leading up to 2007, the stock market cumulatively increased by 26% at an average of 8.7% annually. The stock market has averaged 20.7% annually from 2012-2014. This build up has worried investors that the stock market is overvalued in contrast with the health of the general economy.

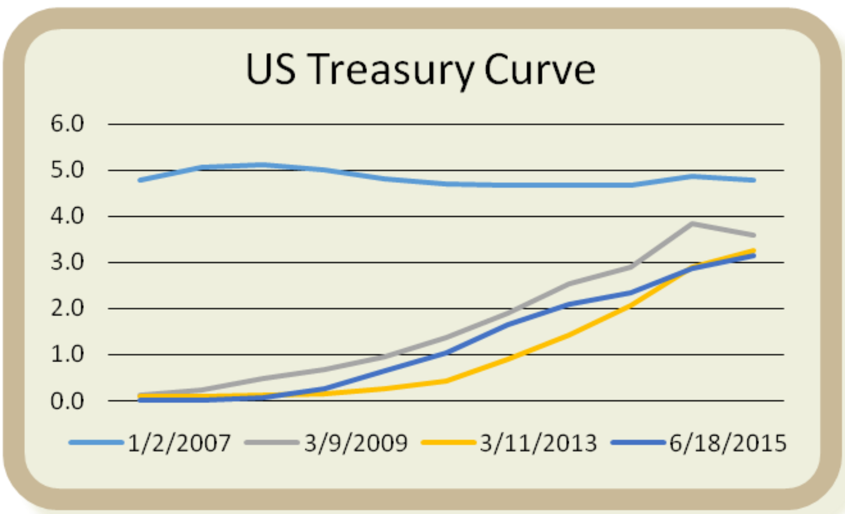


Source: Morningstar

No Bullets Left

To combat the problems of the 2008 crisis, the US government used three main tactics: lowering interest rates, government spending, and quantitative easing. These actions would be difficult or risky for the US government to enact currently.

In response to the crisis, the Federal Reserve lowered interest rates, making the Fed Funds essentially 0%. Interest rates across the board are lower than they were in 2007, leaving no room for the Fed to cut interest rates again if a new recession were to hit the economy. Right now the Federal Reserve is trying to decide when to start increasing rates.



Source: Federal Reserve

The Fed wants to raise interest rates to give them room to lower interest rates if a new recession threatens the economy. However, the Fed is concerned with the stagnant wages and the lower than target inflation. Inflation has been growing under the 2% target set by the Fed. The combination of low wage growth and low inflation could send the economy into deflation if interest rates are raised, bringing more trouble to the US economy and possibly causing the recession the Fed is trying to avoid. The Federal Reserve is also worried that the stock market will react negatively to the increase in interest rates.

One interesting fact to note is that interest rates in the middle and long end of the curve have been increasing slightly. At the end of January, interest rates fell to their lowest point in 2015. Interest rates for the 5-30 year are up 32% over that period. For example, the 10 year treasury increased from 1.7% to 2.3%. This increase still leaves interest rates across the board very low. However, it has happened relatively unnoticed by the media. The S&P 500 is up 2.5% over the same period. So far in 2015, the price of the S&P 500 and changes in interest rates have been moderately positively correlated. The correlation coefficient was 0.5 between the S&P 500 and the 10 year treasury. That means, so far in 2015 as interest rates have increased the S&P has also increased, but not in perfect tandem.

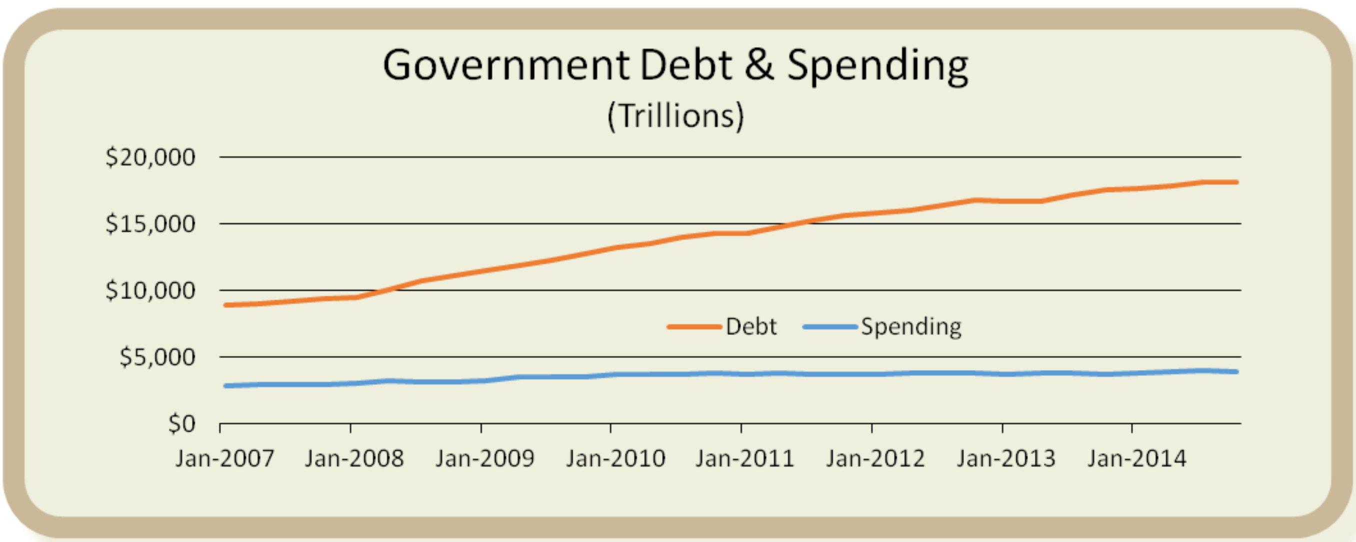
As interest rates increase, bond investments will also be affected. So far bond investments have a very strong negative correlation with interest rates. This is to be expected. As interest rates rise, the value of current bonds decreases, because bonds with higher coupons are available. Likewise, as interest rates rise, the income being produced by bond investments increases as well. The last period of history that saw dramatic increasing interest rates was in the 1970s and 80s. The Federal Reserve increased interest rates to their highest point in history to try and curb inflation. A $10,000 investment in bonds in 1976 would have grown to $19,000 by the end of 1983. Most of this increase is due to the higher income payments that were generated by higher interest rates. Because bond prices have an inverse relationship with interest rates, this year US bonds (BC Agg) have been down -0.24%.

The other bullet that the US government used to combat the recession was government spending. After the 2008 crisis, Congress passed and President Bush signed the Economic Stimulus Act of 2008. This act provided tax rebates for many Americans and tax incentives for business investment. These provisions cost about $152 billion.

The second government spending action was the American Recovery and Reinvestment Act of 2009 (ARRA) that was signed by President Obama. The ARRA was colloquially known as the "stimulus." The stimulus had a few different focuses: funds for state and localities, supporting people in need, investment and infrastructure, and tax relief. The ARRA cost about $831 billion. According to the Congressional Budget Office, the stimulus helped increase GDP and lowered unemployment from 2009-2013 (Congressional Budget Office, 2012).

of the federal government is more than the entire country produces for the entire year.

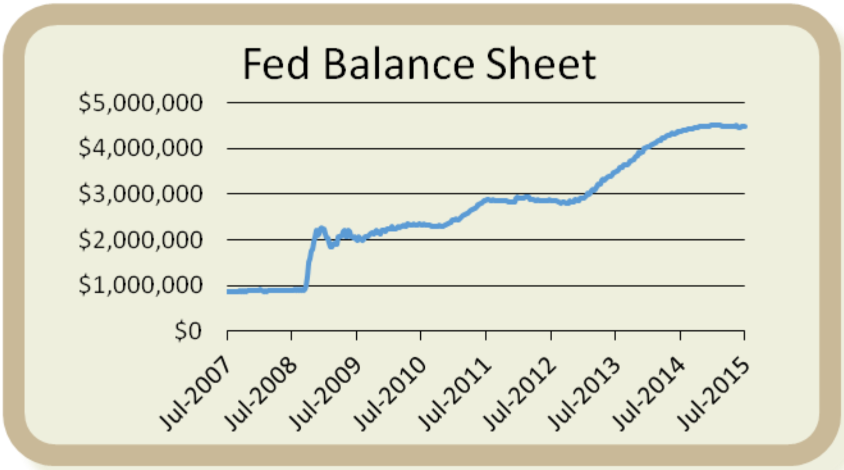
The ballooning of US debt, due in part to the increase in spending to get the economy out of the crisis, has left the United States with their hands partially tied. As the economy has been coming out of the previous recession, government debt has not decreased. If another recession starts, there is little room for the government to take on more debt to fund similar problems. After the Great Depression, US debt reached its highest level at about 120% of GDP in 1946. However, by 1950 it was already below 100%, and continued down through to its lowest point in 1974 at 32%. The US debt-to-GDP level fell after the 1940s mostly because the massive military spending during WWII came to an end. After the recovery from 2007 -2008, the debt to GDP ratio hasn't fallen, which could make it politically difficult and fiscally unwise for the government to spend their way out of future financial trouble.



Source: Federal Reserve

The government spending bullet has the possibility of being less effective today then back in 2007. To fund most of their spending, the US government increased their debt significantly. From 2007 to 2009, government debt increased from $9 trillion to $11.5 trillion. Now total government debt is $18 trillion, almost double its levels pre-crisis. More importantly, the US debt to GDP ratio has also ballooned. In 2007, the ratio was at 63%. Since the 4th quarter of 2012, the ratio has been above 100%. That means that the debt

The third strategy used by the Fed was quantitative easing (QE). QE was a new program created in the wake of the 2008 crisis when the Fed had lowered the overnight interest rate to zero. Without any room to lower rates further, the Fed looked for other methods to continue to artificially control interest rates. Therefore the Fed started buying massive amounts of US treasury securities. QE injects large amounts of money into the economy and has ballooned the amount of money on the Feds balance sheet. This action stimulated the stock market and kept interest rates on all securities and debt instruments at historic lows. As of October 2014, the Federal Reserve completed their final QE program. They weaned the economy off their bond purchases through a strategy called "tapering." Through tapering, the Fed slowly lowered their purchase amounts over time.



Source: Federal Reserve

Because QE is a relatively novel and new program, some of the side effects may not be known. The massive increase of the Fed's balance sheet has many investors concerned about their ability to institute more quantitative easing programs in the future. In 2007, the total balance sheet of the Fed was about $870 billion. Since the crisis and QE programs, the balance sheet is almost at $4.5 trillion. That is over a 400% increase. The Fed's balance sheet is at its largest point, and even though the bond purchases have stopped, the level of assets on their books is not expected to change. This is because the Fed is planning on reinvesting their balance sheet as bonds mature. There is no indication that the balance sheet will decrease anytime soon.

Conclusion

Going forward, there are many indicators in the US economy that are positive, painting a picture of a recovered economy after the 2008 crisis. However, there are also some signs that there could be a stock market correction in the future. Risk factors such as raising interest rates, problems in Europe, and possible deflation could all threaten the US economy. Although it is unlikely that a major recession is imminent, some of the best tools the Fed used to combat a struggling economy may not be options in a future downturn. Although generally things are looking up, there is still reason to be cognizant of the changing economy.

Works Cited:

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Wessel, D. (2015, March 10). Spending on Our Crumbling Infrastructure. Economist's View.