FOURTH QUARTER 2013

PIEDMONT PEAKS

TO TAPER OR NOT TO TAPER? THAT IS THE QUESTION…

Given the heavy media focus on the potential “tapering” of Quantitative Easing (QE), this quarter’s Piedmont Insights is about the mechanics and potential consequences of QE and the beginning of the end of the program (the so-called “taper”).

Economic Impacts of Quantitative Easing

To begin, we offer a definition of Quantitative Easing. Generally speaking, Quantitative Easing is an unconventional monetary policy that allows a central bank to increase the money supply; this is often referred to as “printing money”. The purpose of QE is to promote increased lending and liquidity in an effort to stimulate the economy. Central banks tend to use Quantitative Easing when interest rates are near 0% levels, but the economy remains stalled. Since the peak of the financial crisis in 2008, the United States, the United Kingdom, and others have used quantitative easing policies to alleviate financial crises. QE impacts markets in three primary ways. First, decreases in longer term interest rates are meant to encourage borrowing. Secondly, an expansion of the money supply is meant to encourage consumption. Lastly, the “portfolio effect” occurs, which encourages investors to buy riskier assets, pushing up market prices of assets and increasing confidence through the wealth effect.

Has US Quantitative Easing Worked?

Given that we have experienced neither deflation nor a double-dip recession, the answer would seem to be unambiguously yes. The next question is if QE has worked well and will it continue to work. The main goal of the U.S. QE program has been to drive down interest rates to encourage consumers and businesses to borrow and spend, and ultimately create economic growth. There have been other effects of the Quantitative Easing program. For example, consumer mortgage rates have been directly impacted because over half of the monthly Federal Reserve asset purchases are currently Mortgage Backed Securities (MBS). This has driven yields down. In addition, from a capital markets perspective, the low yields in both Treasury and MBS securities pushed investors into riskier asset classes, spurring capital markets lending and equities purchases. Lastly, there have been real economy impacts, with lower mortgage rates accelerating the housing recovery and corporations borrowing at record low levels. Quantitative Easing, however, cannot continue forever. As a result of positive economic data, the Federal Reserve has decided that asset purchases or QE, will slow, or “taper”, before ultimately ending at some point in the future.

QE Effect on Money Supply and Lending

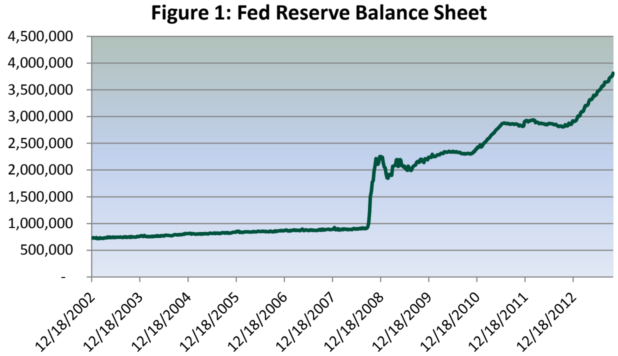
Our focus for the remainder of this discussion will center on the money supply impacts of Quantitative Easing. To understand the mechanics of QE, we also need a basic understanding of the Federal Reserve’s balance sheet. In normal times, the Fed conducts open market operations to sterilize the size of the money supply and to control interest rates. On the money supply side, when a bank requests currency, the Fed debits that institution’s account and sends out the currency. It then buys securities in an equivalent amount in order to avoid “printing money”. Money supply will generally increase over time with the increase in nominal GDP and currency in circulation, but this keeps the money supply equal to money demanded.

In the case of Quantitative Easing, the currency was not demanded in the classic sense (i.e. by a bank adding currency to its vaults or ATMs). What happened, in essence, is that the Fed attempted to push the money into the system by buying securities first, thus crediting the accounts of the sellers with newly "printed" money that previously did not exist.

"Tapering" Does Not Reduce the Balance Sheet

The Fed is currently engaging in QE of $85 billion per month ($40 billion MBS, the remainder in Treasuries). This has swelled the size of the balance sheet from less than $1 trillion in 2008 to greater than $3.81 trillion as of 10/16/13, according to the Fed's weekly data release (Figure 1). We note that this figure is roughly 20% of GDP. Moreover, the expansion equates to the money "printed" during the QE program. This should put a potential "taper" in perspective. The pace of accommodation might well slow by $10-$15 billion monthly, but the overall size of the balance sheet will still expand. Even then, by the Fed's own milestones, the size of the balance sheet will not ***shrink*** in the foreseeable future even after asset purchases have ended.

Figure 1: Fed Reserve Balance Sheet

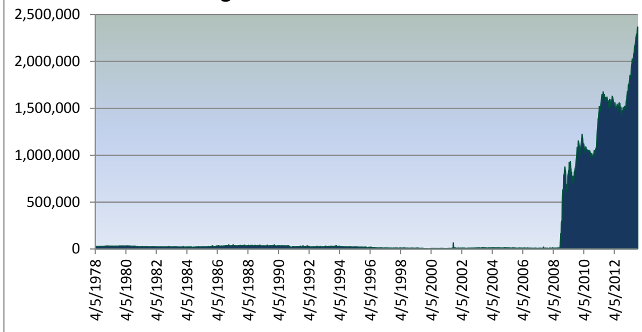


Source: Bloomberg, Federal Reserve

Excess Reserves at the Fed: Gas in the Tank?

Another feature of the Fed's monetary remit is the reserve requirement, which sets the minimum percentage of deposits that each bank must hold to account for unforeseen withdrawals. Reserves must be in the form of cash in vaults or deposits at the Fed (currently around $120 billion between the two). Required reserves cannot be lent. ***Excess reserves***, however, currently stand more than $2 trillion above minimum required levels (Figure 2). Excess reserves represent money that could be lent but is currently sitting idle. As we note in the excess reserves exhibit, banks have generally never kept excess reserves on deposit. There is a technical reason for the increase (the Fed has paid 25bps interest on excess reserves since 2008) but we will not delve into that here. The other main reason for the excess reserves is simply that banks have decided these reserves could not be profitably lent given the uncertain outlook.

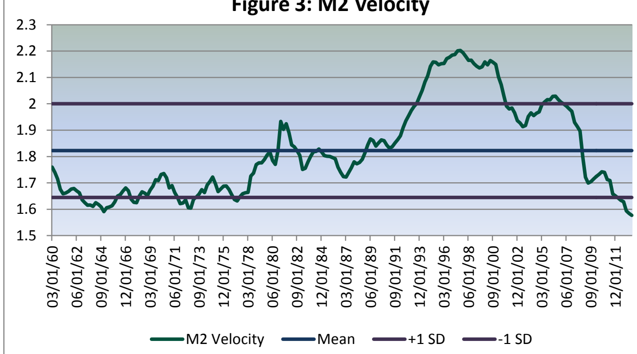
Figure 2: Reserve Balances



Source: Bloomberg, Federal Reserve

If we think of the excess reserves in a money supply sense, we can see that M2 has continued to expand (as it should, from an increasing nominal GDP perspective). Recall M2 is M1 money supply (currency and checking deposits) PLUS time-deposits, savings deposits, and non-institutional money funds. What has not expanded, however, is ***velocity*** of money. In fact, M2 velocity is at the lowest levels seen since the 1970s (Figure 3). M2 velocity is simply the number of times $1 moves through the economy. If we look at the velocity chart, below, we can see that the expansion of credit in the 1990s and 2000s necessarily contributed to an increase in monetary velocity. Much of this was driven by securitization and irresponsible lending. Lending standards became extremely tight following the crisis, however, and are beginning to loosen again.

Figure 3: M2 Velocity



Source: Bloomberg, Federal Reserve

Impacts of a Potential Taper

Merely discussing the "taper" has led to a large increase in interest rates and a larger increase in mortgage rates, though these have moderated since the initial spike following the Fed's May "taper" announcement. Though this has dampened refinancing activity, mortgage rates remain low and affordability high by historical standards.

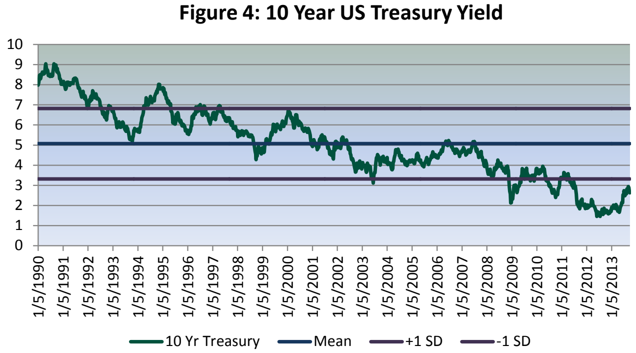
We think a hard stop in the housing recovery seems unlikely. In fact, this is a primary reason the Fed chose not to "taper" at the September FOMC meeting. Chairman Bernanke spoke about "tightening" financial conditions, though most measures of financial conditions have continued to moderate, with mortgage rates being the primary one to actually tighten. Clearly, the Fed also realizes that monetary policy has to make up for the political reality.

The Fed chose not to alter its asset purchase program at the September meeting, which begs the question if it will occur this year, given the ongoing uncertainty regarding the budget and the debt ceiling. Nonetheless, QE cannot continue forever, and an early 2014 timeframe for the *beginning* of the wind-down (as originally envisioned) seems likely.

Interest Rates to Move Higher, but with a Cap

Our view has long been that interest rates were too low from a fundamental perspective. Given the rate move we saw in June, we believe that rates are closer to fair value given low levels of nominal GDP. 10-year rates remain low by historical standards but the initial market reaction to the "taper" could be similar to June with nearly all assets selling off simultaneously. 10-year Treasury rates should ultimately not move much higher than nominal GDP (currently 3.1% with some potential upside if our view is correct). Figure 4 details 10 year interest rates going back to 1990.

Figure 4: 10 Year US Treasury Yield



Source: Bloomberg

Will QE Improve Growth, Spark Inflation or…?

Market participants often use various analogies to describe Federal Reserve activities. We think an apt description of the current state of Fed policy is "filling the gas tank". Now we just need ignition so the economy can motor down the highway. Credit expansion (i.e. lending excess reserves) could well be that spark. Clearly, however, there are other potential outcomes or implications of the "taper" that is likely to occur relatively soon. What, then, are the potential consequences of the Quantitative Easing that has already occurred and the implications for a "taper"? Many observers take a monetarist approach to QE, which should lead to an inflationary environment by definition (i.e. inflation is a monetary phenomenon created by easy monetary policy, whether traditional or unconventional). We tend to agree with this view in the medium-term, given the unprecedented monetary conditions present in much of the developed world, and in the US in particular.

Will Banks Lend?

Given the fact that lending standards at many financial institutions have loosened considerably, and are likely to continue to do so, given renewed incentive for banks to lend, we believe excess reserves are an indicator of potential economic growth to come. In fact, higher intermediate and longer term interest rates have the counter-intuitive effect of encouraging lending as banks can still borrow cheaply while simultaneously increasing the spread (net interest margin) they earn by lending. In general, though, the pickup in growth that would precede any inflationary activity would be positive for the economy and risk assets, if ultimately negative for rate sensitive bonds.

There are other aspects of Federal Reserve policy that we have touched on, above, but which we will leave for another discussion. We think there will be significant market effects in the years to come as unprecedented monetary policy is removed from the system. Nonetheless, the US and global economy look poised to finally begin to move beyond the aftershocks of the financial crisis.