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Money Supply and Federal Reserve Policy

Summary:

The Federal Reserve met on June 28th and "decided to keep its target for the federal funds rate at 5 ¼ percent" (Federal Reserve Statement). Leading into the meeting there has been much concern about the direction of fed policy given the volatility in the headline number for both PPI and CPI, which in turn has caused tremendous volatility in the stock market in recent months.

We believe that the premise of this volatility is unnecessarily based on a misunderstanding of the manner in which the Federal Reserve is pursuing its policy. Vast confusion has occurred in the past year and one half since Ben Bernanke became Chairman of the Federal Reverse, because traditional economists have failed to embrace the importance of money supply policy within his stewardship.

There are two basic tools, which interact with one another, and are available to the Federal Reverse Board. These are the control of the fed funds rates, and the money supply. During the past administration of Alan Greenspan there was a bias toward the short term interest measure, but for Bernanke there is a preference for the use of money supply as the predominant determinant.

We further believe that the Federal Reserve Board has not make this modification more public simply because of the fear of appearing to base their policy on a theoretical framework, which we expect they feel would spook the markets. We believe and aim to demonstrate that not only is the fed operating from the perspective of pure theory, but more specifically from a premise of monetary policy, while concentrating on money supply.

Introduction

On January 31, 2006 one day before Chairman Bernanke assumed the chairmanship of the Federal Reserve Board we wrote that:

> Bernanke believes that by establishing inflation targets, or perhaps more precisely the attempt to achieve the "optimal long-run inflation rate" (OLIR), it is possible to achieve the best average economic performance. Bernanke stated it this way: "The optimal long-run inflation rate is the long-run (or steady-state) inflation rate that achieves the best average economic performance over time with respect to both the inflation and output objectives" (Bernanke's remarks at the 28th Annual Policy Conference, Federal Reserve Bank of St. Louis, St. Louis, Missouri: October 17, 2003). Following this logic, if a long-run inflation target is set, resulting in a stable fed funds rate, it may be possible to achieve the highest rate of growth for the economy. Bernanke, however, does not fully embellish how this would be accomplished. Some clues, however, may be ascertained from the remarks that he gave during his speech on March 2, 2004 entitled "Money, Gold and the Great Depression." Bernanke followed the logic of Friedman and Schwartz in their classic study "A Monetary History of the United States, 1867-1960" by recognizing the critical importance of money supply as the prime cause of the Great Depression. Bernanke, however, extends the Friedman and Schwartz argument by emphasizing that the gold standard was a major factor internationally that caused the reduction in money supply for many countries, not just the United States. Bernanke argued that the primary cause for the contraction in money supply, which caused the Great Depression, was the gold standard.
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> The central point for present consideration, we believe, is that Bernanke clearly recognizes the importance of money growth within an international context. It is therefore possible that the economic growth driver for Bernanke will be money supply growth. If this is correct, it can have a major impact on the growth of the economy, the equity markets, exchange rates, the deficit, the price of oil, trade with China and even import deflation. We feel that Bernanke believes that optimizing money growth with a stable rate of inflation, while also keeping the fed funds rate stable, is the key to an optimally growing economy and a steady, stable, and growing stock market with reduced uncertainty." (New York Global Securities, *The Bernanke Effect).*

The New York Times on Friday interestingly highlighted the fact that: 'the central bank's "pause" in rate increases is now one year old – **a record of sorts** for a policy that was originally billed as tentative" (New York Times p. C1 June 29, 2007). The Times like the majority of readers are thinking in traditional terms with the Federal Reserve's control of interest rates by using their open market operations, as the principal tool of the Federal Reserve. In fact the Federal Reserve's own web site encourages this thinking with the principle article explaining their open market operations stating:

> Open market operations are the Federal Reserve's principal tool for implementing monetary policy. These purchases and sales of U.S. Treasury and federal agency securities largely determine the federal funds rate—the interest rate at which depository institutions lend balances at the Federal Reserve to other depository institutions overnight. The federal funds rate, in turn, affects monetary and financial conditions, which ultimately influence employment, output, and the overall level of prices.

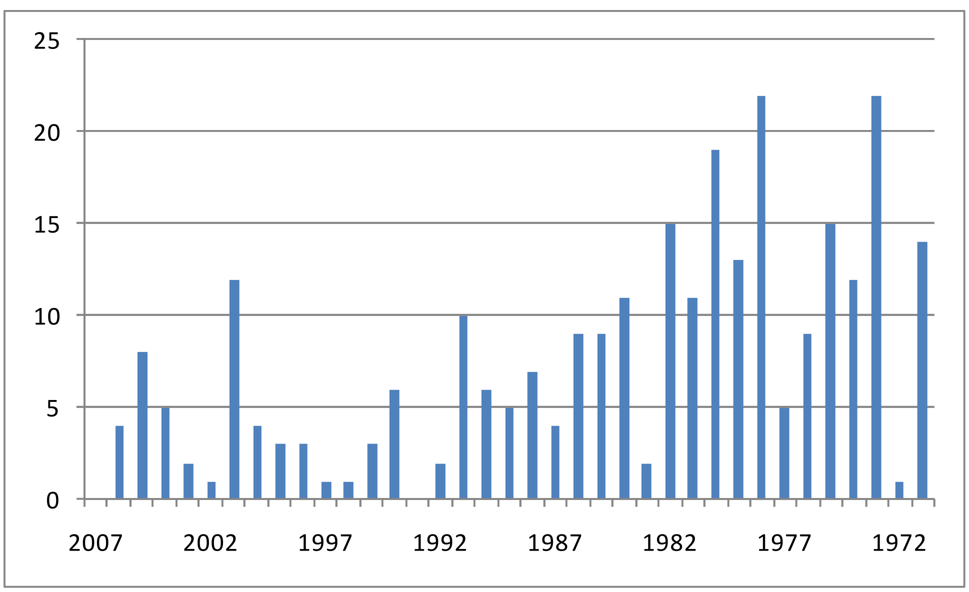
However, if one looks at the evidence it is clear that the current Federal Reverse is following more of a monetarist set of policies concentrating on money supply as opposed to interest rate changes, than is the stated policy. We believe the Federal Reserve is taking the work of Milton Friedman much more seriously than anyone is willing to acknowledge. Milton Friedman in the 1970's popularized the notion that changes in the price level and nominal income is a function of money supply. Friedman states that: "The conclusion is that substantial changes in prices or nominal income are almost invariably the result of change in the nominal supply of money" (Friedman, M *Theoretical Framework for Monetary Analysis 1971, p. 3).* Taking it one step further and making a point more acute for the markets Friedman concludes that: "the statistical evidence on the role of money in business cycles demonstrates beyond any reasonable doubt that the stock of money displays a systematic cyclical behavior. The rate of change in the money stock regularly reaches a peak before the reference peak and trough before the reference trough, though the lead is rather variable" (Friedman, M, Schwartz, *Review of Economics and Statistics,* vol 45, no. 1, part 2: supplement (February, 1963).

This review will show that the Fed's policy driver is money supply and not interest rate change as the primary driver, despite the fact that traditionally, historically, and theoretically this is not the recognized as the dominant tool of the Federal Reserve. We will argue that understanding money supply as the central tool of the Federal Reverse is absolutely critical in coming to understand the Federal Reserve, but more importantly for current purposes the U.S. equity markets.

Money and Federal Reserve Policy

If our contention is correct, that the Federal Reserve has chosen to use an alternative means for implementing its monetary policy one would expect that the number of changes in the federal funds rate would be greatly reduced and that other tools would be used in its stead. The New York Times, as noted, correctly observed that:" the current "pause" in rate increases is now one year old – **a record of sorts."** Table 1 plots the number of changes per year that the Federal Reserve has altered the interest rate target.

Chart I: Number of Changes in the Federal Funds Rate per Year 1971 to 2007



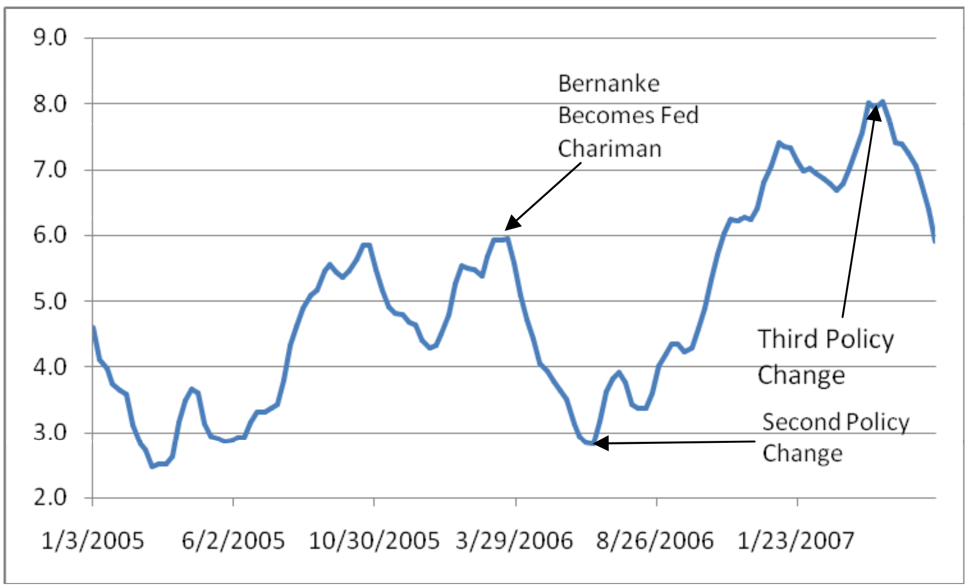
Source: Federal Reserve Board and Strategic International Securities

The table indicates that there were only two times since 1971 that the number of changes in a 12 month period was zero, the current period, 2006-2007 and in 1973. From 1971 to the present there has been an average of 7. 46 changes in the fed funds rate per year. Since Bernanke took over as head of the central bank there has been three increase all in the first months of his administration, possibly to keep stability in the markets which were expecting these increases, based on the policy of the Greenspan chairmanship.

Money Supply as the Central Tool of the Federal Reserve

If the Federal Reserve is not using the interest rate to monitor the economy they must be using money supply as we theorized in January of 2006. We argued that: “It is therefore possible that the economic growth driver for Bernanke will be money supply growth. From Chart II we find that since Bernanke had become chairman there were three distinct changes in the rate of growth in money supply. We calculated money supply as a four week moving average of M2 with a three month percentage change annualized.

Chart II: Change in Money Supply Growth January 2005 to June 2007



Source: Federal Reserve Board and Strategic International Securities

The Federal Reserve has two principle mandates: 1) to control inflation; and 2) to maintain a growing economy. Given these mandates, it is possible to see if these change in money supply actually corresponded to particular objectives of the Federal Reverse Board.

Inflation Targeting

In the January 2006 report we argued that Bernanke would “use inflation targeting for stabilization and maximization of growth” (Ibid). What we understand this to mean is that Bernanke will attempt to keep inflation within a particular range, while at the same time attempting to maximize economic growth. We concluded from this in January of 2006 that he would have to use money supply in the manner that we highlighted from the Friedman article. Following this logic we would expect that the Federal Reserve would expand money as much as possible until there are signs of inflation, at which point they would reduce the rate of change of money growth to slow the inflation rate and the economy as a consequence.

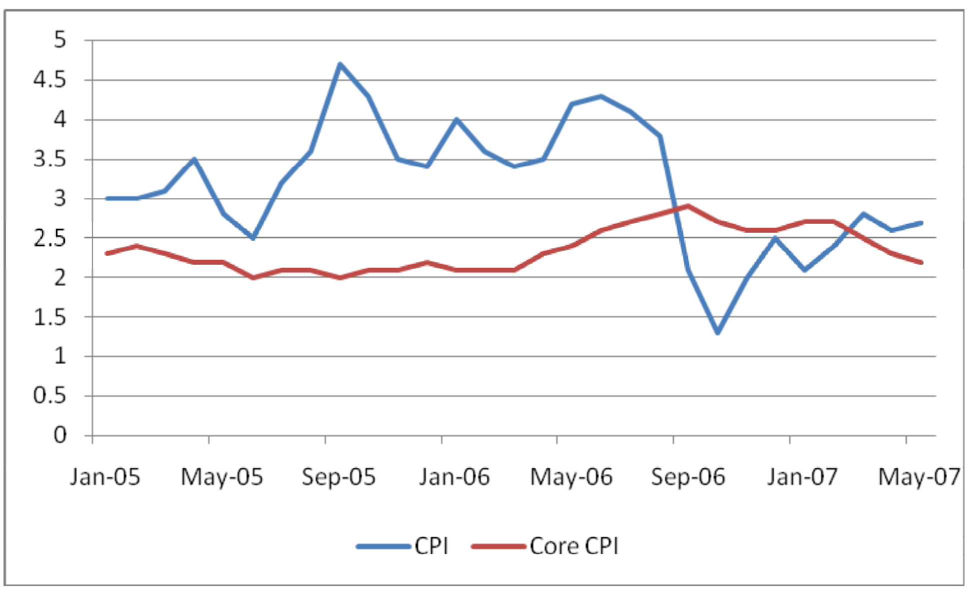
If this thesis is correct we would expect that the three changes in Federal Reserve control of money supply would coincided with an attempt to control inflation while at the same time attempting to keep monetary growth at its maximum for optimal economic growth. We have observed that there were three changes in the rate of growth of money supply. These were: (1) in March 2006 when money peaked at 5.9% growth annualized from increasing to decreasing to a low of 2.8% in June; (2) from June 2006 to April 2007 when money supply increased from an annual rate of increase of 2.8% to 8% annualized; and (3) the current decline from 8% in April of 2007 to the current 5.9% rate of growth.

Federal Reserve Policy Targets both CPI and Core CPI but focus is on CPI

Most market watchers argue that core CPI is the primary instrument that the Federal Reserve uses, but just like with interest rate policy we will show that it is CPI and not Core that the Fed has based its actions upon since, Bernanke took over at the Fed. Chart III plots both CPI and core CPI.

The chart indicates that CPI was quite high going into the Bernanke takeover of the Fed running at high 3's to low 4 per cent annualized getting as high as 4.3% in June of 2006. This was primarily due to the high gasoline prices because if we look at core it was stable running at 2.1% through much of late 2005 into April of 2006. This however was a period in which the Fed was decreasing money supply in the attempt to control commodity inflation. Just the opposite of what one would expect if the Fed was only looking at core CPI, but the correct move if they were looking at CPI.

Chart III: CPI and Core CPI from January 2005 to May 2007



Source: Department of Labor and Strategic International Securities

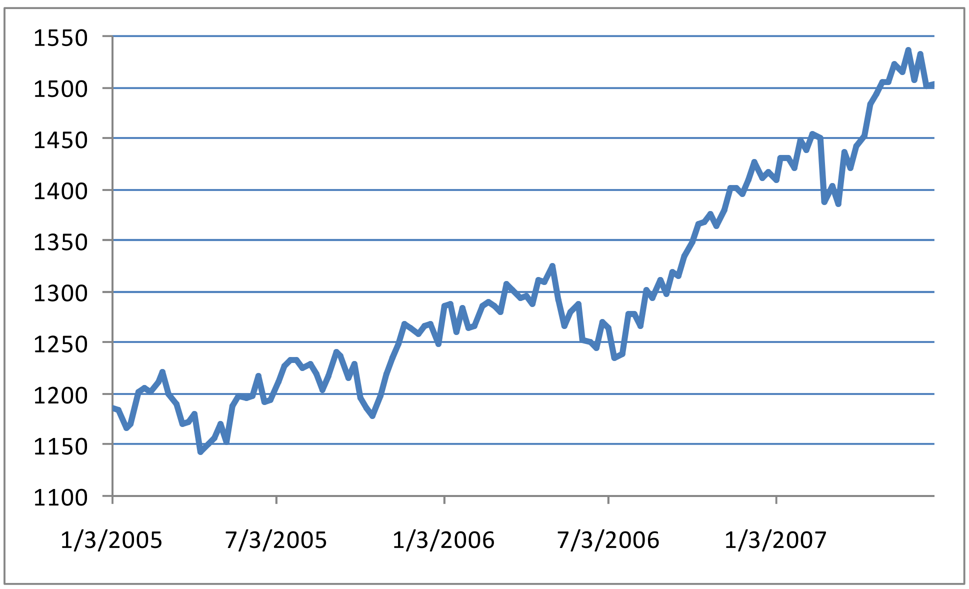
Core CPI began to increase in April of 2006 stabilizing in February of 2007 at a rate of 2.7% annualized. However the Fed began to radically increase money supply in June of 2006 just when the CPI hit its peak and was beginning to decline. The policies worked perfectly, the Fed reduced money supply and brought down commodity inflation which is represented in CPI and not core.

The third change in Fed money supply policy occurred in April of 2007 when CPI was again increasing because of food and energy but here again core CPI was beginning to decline. The Fed began to reduce money in the hope of retarding the growth of commodity inflation.

Market Implications

The market implications are really quite stark looking at the S&P 500 in Chart IV we find that there was a correction from April to August 2006 which exactly coincides with the decrease in the rate of growth of money supply, with about a two month lag, and a one month lag from the availability of the data on inflation. From August 2006 to April 2007 we found a major market upturn which again coincided with the expansion of money supply in what we have identified as money supply change number two.

Chart IV: Weekly S&P 500



Source: Reuters and Strategic International Securities

Then from April when the Fed began to lower money supply, the market again became choppy with the confusion about inflation and concerns about the Fed policy possibly increasing interest rates or a more aggressive slowing of the economy.

Conclusion

It is here were our analysis disagrees with the major of the street and believe that the street is not correctly reading the actions of the Federal Reserve Banks correctly, since Bernanke took over the Federal Reserve. We believe that the Fed will continue to grow money supply to the point of optimal growth and that the fed will bias toward slight inflation for growth, and in this process the markets will continue to perform well because growth in earning and the economy is the central driver for the markets.

Risk Consideration

In making the arguments that we have we essentially argued that the Federal Reserve is not being transparent with respect to its policies and that they are following theory as opposed to more established means of approach. These are large assumptions, and may be totally off base, but it appears that the evidence is supportive of this hypothesis. In the event that we are correct we would hope that the Fed would begin to clarify its use of money supply as a central tool and help explain this to the financial markets, in light of its desire to increase transparency.

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Price Chart:

A price chart, with changes of ratings and price targets in prior periods, is included above, for all securities covered in this report.

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