# Everywhere A Monetary Phenomenon

*“Inflation is always and everywhere a monetary phenomenon.”* – Milton Friedman

We have been six or seven years into extraordinary policy measures designed to counter the effects of the financial crisis; the opening salvo was fired by the European Central Bank with its backstopping of BNP-Paribas in August 2007, but the real heavy artillery was not fired until the aftermath of the Lehman Brothers bankruptcy in September 2008.

As long as we are on military metaphors, let’s continue with the aphorism generals fight the last war. As an aside, this is not true; the real one-sided affairs occur when generals fighting with the latest and greatest technology and tactics encounter opponents fighting the last war. The Franco-German mismatch of 1940 was but one example of this. However, the side with the gee-whiz stuff sometimes finds a series of tactical wins ends with a strategic defeat; such was the case with U.S. interventions in both Vietnam and Afghanistan. It also can be the case with central banking.

**Balance Sheet Expansion**

It is very easy to look at the history of policymaking during the Great Depression and conclude everything was done wrong: Taxes were increased, resources were misallocated in giant public works projects, tariffs were raised, wages were held artificially high and, worst of all to every central banker since and as pointed out by Milton Friedman and Anna Schwartz in their *A Monetary History of The United States*, the Federal Reserve mistook low interest rates for easy credit and allowed the money supply to contract catastrophically and deflationary pressures to take hold.

Ben Bernanke must have felt he was put on this earth to avoid making that mistake again and thus marshaled all of the resources available and few created on the fly to expand the quantity of money as well as lower its price. The Federal Reserve and its sister central banks also ignored the lessons of a previous war, that fought against inflation in the late 1960s and throughout the 1970s, and deliberately sought to create a level of inflation, 2-2.5% depending on which measure was used, their predecessors might have considered irresponsible.

The net result of years of near-zero percent interest rates and breathtaking expansions of the Federal Reserve’s balance sheet was no deflation, inflation running below target, no Great Depression-like contraction in output and employment and growth rates so anemic most citizens scarcely felt the official end of the so-called Great Recession in June 2009. If there was an all-time award for so-so results for extraordinary efforts, one certainly would be deserved here.

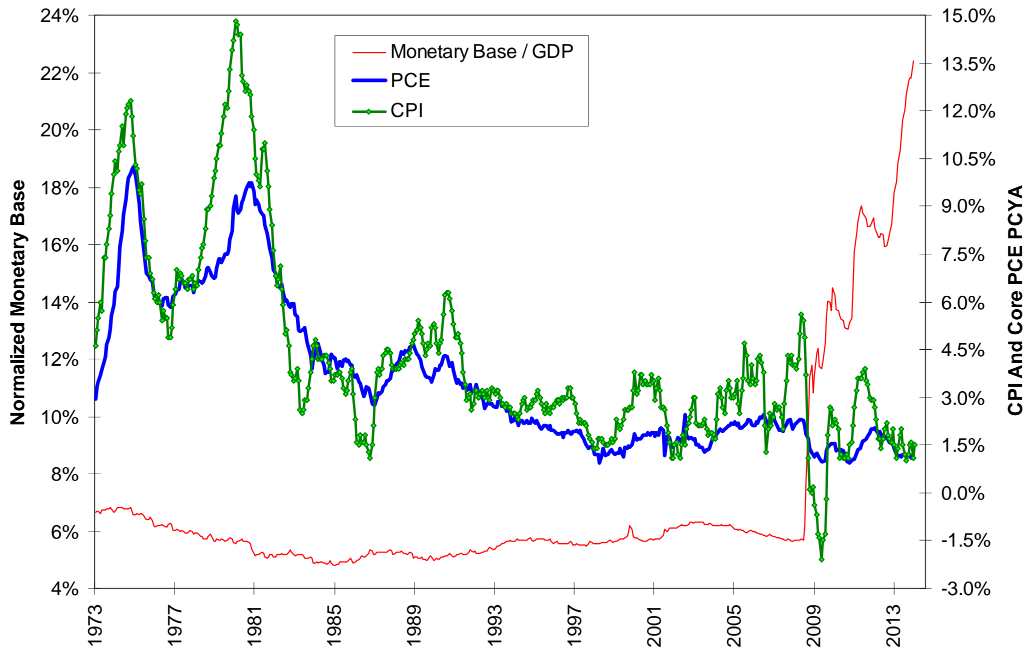
**De Facto Impunity**

The disconnection between the St. Louis Federal Reserve’s adjusted monetary base normalized to GDP and the year-over-year changes in reported consumer inflation was discussed in reference to federal debt service in April (see “What Hath The Printing Press Wrought?”) but it bears repeating here in another context. It has been so large it probably would not have been believed had someone suggested as late as 2008 it actually could happen.

The adjusted monetary base is defined as commercial banks’ reserves held on deposit with the Federal Reserve plus currency in circulation. As these funds can be converted quickly into commercial bank loans, they can expand the money supply in short order. When the Federal Reserve started paying interest on commercial banks’ excess reserves in October 2008, the base exploded higher in “hockey stick” fashion. The fear from October 2008 onwards has been those funds will come off the Federal Reserve’s account, expand the money supply and create runaway inflation. This has yet to happen as banks with impaired balance sheets and under increasing regulatory pressure from Dodd-Frank, Basel III, EMIR and other regulatory efforts have remained risk-averse. This hesitance helped explain why the Federal Reserve’s monetary “stimulus” did not do much for the real economy even as it contributed to multiple rounds of financial market rallies.

If we map the ratio of the monetary base to GDP against year-over-year changes in consumer prices as measured by both the consumer price index and the core personal consumption expenditure deflator over the past forty years, we are hard-pressed to find any relationship. This was true before the financial crisis and has remained true thereafter; still, the notion persists this monetary base is nothing more than a pool of inflationary gasoline waiting for someone to light a match.

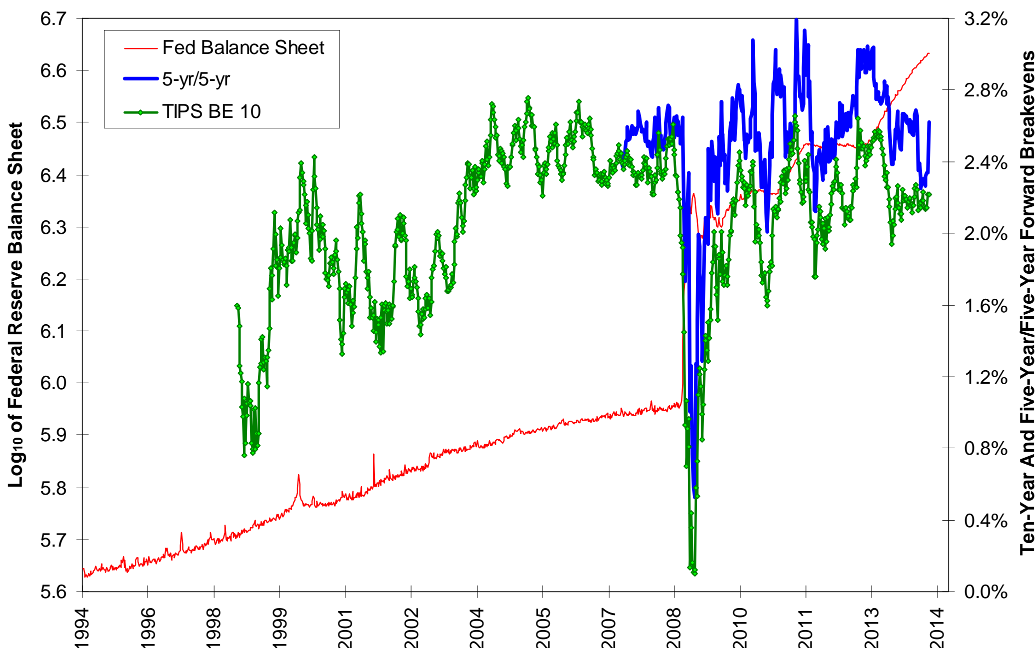
**Normalized Monetary Base And Reported Inflation**




Reported inflation is a backward-looking fact. Economic behavior is affected in real time by expectations. Very well; let's map the Federal Reserve's balance sheet, which includes Treasury and mortgage-backed securities it bought during its various rounds of quantitative easing, against both the ten-year TIPS and five-year/five-year forward breakeven rates of inflation. The ten-year breakeven rate is the nominal yield on ten-year Treasuries less the yield to maturity on a ten-year inflation-protected Treasury; the five-year/five-year forward is based on inflation expectations for five years starting five years from now. These differ somewhat over time in absolute magnitude but tend to follow parallel courses.

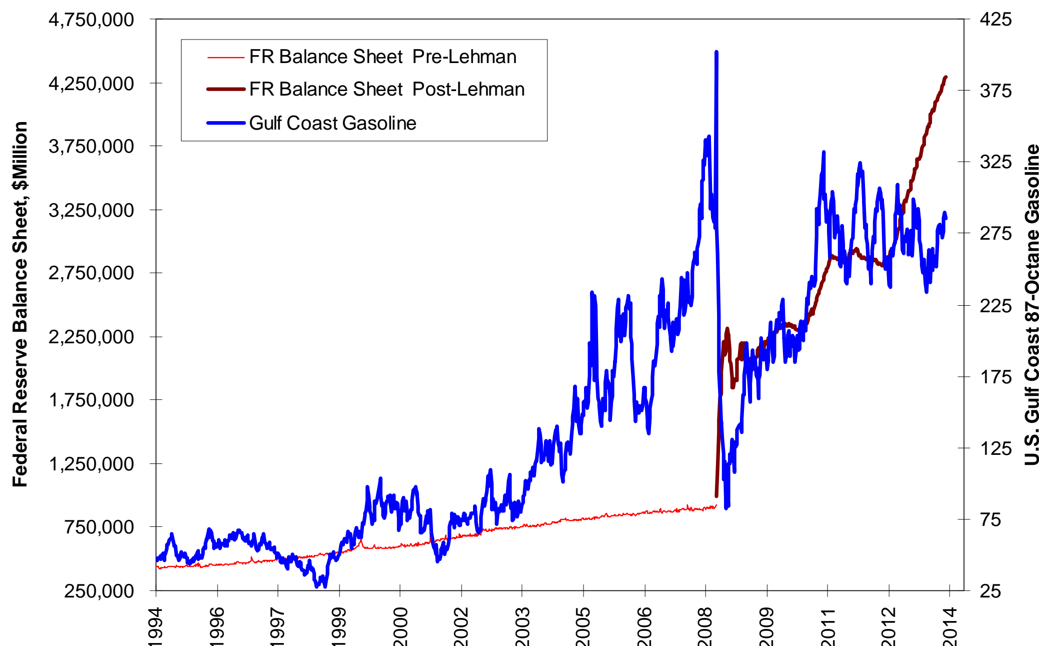
Once again, the effect of monetary expansion on inflation expectations is impossible to discern. Inflation expectations have been in a mean-reverting range since 2004 regardless of the Federal Reserve's balance sheet.

**Federal Reserve Balance Sheet And Inflation Expectations**



**Gasoline, Literal And Figurative**
The gasoline metaphor for excess money is useful. What about the influence of money on the price of gasoline? The argument, anathema to the author, often is made that the prices of physical commodities are pushed higher as the result of monetary debasement. The argument ignores both the supply and demand responses to price changes and to structural improvements in the efficiency of commodity usage.

Let's take a look at the Federal Reserve's balance sheet before and after the September 2008 bankruptcy of Lehman Brothers and the wholesale price of 87-octane gasoline at the U.S. Gulf Coast. Once again, the price of gasoline has been independent of changes in monetary conditions. The idea the Federal Reserve has rewarded investors with higher financial asset prices and penalized consumers with higher gasoline prices is, charitably, simply without merit.




**Money And Inflation**
Friedman's aphorism regarding money and inflation remains true, but it has been distorted by numerous factors. This is similar to a favorite analogy about the law of gravity: It is always operating, but it is easily defined. All you need to do is step out of the nearest window to demonstrate this to yourself.

One of the chief reasons a greater monetary base has not led to higher inflation is changes in money and banking regulations in the late 1970s and early 1980s, especially the elimination of Regulation Q interest rate ceilings on time deposits, broke the once-reliable control the Federal Reserve had on bank lending and the creation of credit. That control passed on to the so-called shadow banking system involving securitization of assets, the rise of notional lending in the swap market and greater access by small borrowers to the corporate bond market. Monetary velocity, the ratio of GDP to the money supply, has plunged since mid-1997, not so coincidentally the time when the Greenspan-led Federal Reserve took it upon itself to fight every financial market downturn with a flood of money.

The combination of impaired bank lending and artificially low short-term interest rates blocked the transmission of expansive monetary policies into the kind of rip-roaring inflation seen during the 1970s. The net result has been for the naturally disinflationary tendencies of a market economy to take hold and to defeat the intentions of the Federal Reserve to expand inflation.

What should you do as a trader, then, when some news emerges interpreted widely as encouraging monetary largesse and higher inflation? The answer is, "Ignore it." Inflation is a phenomenon of the money supply, not of the monetary base. The distinction is critical.