Inflation in US: Where Has It Gone?

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Too Much Money, or Not Enough?

In the past 6 years the Federal Reserve’s monetary base exploded growing by an extraordinary 361%, or 60% per annum on average. Monetarists of old would have been horrified had they stared at chart 1.

The Fed’s Monetary Base Expanded 3.6 Times in 6 Years

Even closet monetarists on the present Federal Reserve monetary policy committee can’t help getting the jitters. To make matters worse the central banks of the world’s two other developed economies have similarly expanded their balance sheets all in the hope of improving their economies’ growth rates and increasing the rates of inflation in their respective areas from their present unacceptable low levels.

Meanwhile, the assets of the other biggest developed economies’ central banks expanded in a similar manner (see chart 2) provoking worries over inflation throughout the developed world. It hasn’t happened. Instead, all of these central banks are now refocusing their policy from improving their economies’ respective growth rates to trying to prevent deflation from occurring.

Developed Economy Central Banks All Expanded There Balance Sheets
Too Much Money No Longer Creates Inflation

Economists for many years had linked rising inflation with excess monetary growth. In recent years, however, rapid monetary growth has not pushed the rate of change in prices of goods and services higher, instead the rate of change in prices of goods and services according to the broadest measures of inflation in all of the developed country economies has decelerated and not accelerated.

It is true that some of the excess monetary growth in the developed world has leaked out of the developed world into developing and emerging markets, hence raising prices there. Excess money creation has also contributed to the precipitous appreciation of financial prices in the US.

PPI less Food and Energy %y/y range is 0.0 to 0.8 since 2010

Inflation in the US is Disappearing

Inflation in the US is nowhere to be seen. Judging from the most basic price measures, such as the PPI ex food and energy, price increases at the finished goods level have been rising are rising at rates less than 1% per annum for the past 3 years, as shown in chart 3.

Imported goods prices less food and energy %ya almost zero since 2012

Changes in imported goods’ prices less food and energy have been barely positive since mid-2012 (see chart 4). Both of these early stage price indicators have excluded the effects from the sharp drop in oil prices this year.

The recent very sharp appreciation of the dollar against nearly all of its major trading counterparts (China being the major exception) will lower the prices of imported goods to the US in dollar terms, and simultaneously raise the price of US exports abroad. This gain in the terms of trade will exacerbate the difficulties that the Fed faces in trying to raise the rate of
inflation in the US and increase overall economic activity.

**Plunging Crude Oil Prices Exacerbates the Deflation Risk**

Crude oil prices have fallen 28% in the past three and one half months, as excess supplies of oil and other energy products is overwhelming the moribund rise in world demand for energy. If sustained, the significant fall in oil prices will reduce the cost of many products, including food, fertilizers, petro chemicals, transportation and others.

As a result, the core price indexes will begin to reflect these lower costs in forthcoming months and decelerate further, exacerbating the problems for the central banks. A sustained further reduction in oil prices could easily thrust many of the developed world’s price indexes into deflation.

**Broad Inflation Indexes Have Fallen Below Fed’s Target**

More importantly an inspection of the broadest price indexes, the CPI and the personal consumption deflator, has slowly and steadily decelerated through the past few years. Year on year these indices have grown at rates below 2%, the Fed’s desired rate, since the beginning of 2012, an interval when US GDP growth increased at a consistent 2%. See chart 6.

**Inflation Expectations Remain Subdued**

Another observation on inflation comes from various surveys on inflation. The two most widely-noticed inflation surveys are presented in the monthly consumer confidence surveys. The latest reading from the University of Michigan survey released last week showed that consumers see inflation averaging 2.6% a year in 5 to 10 years from now, down
from 2.8% predicted last month and the lowest reading since March 2009.

The Federal Reserve Bank of Atlanta created a monthly survey of businessmen’s inflation expectations for inflation one year ahead. It has hovered around 2% for the past three years with very marginal variation.

The FOMC will place increased focus on surveys of inflation expectations because if there is a serious downward shift in future inflation expectations, it could lead to less spending and reduced overall economic activity. It is the deflation trap Japan fell into in the past two decades.

**Investor Inflation Expectations Are Extremely Low**

Finally, inflation expectations of investors can be inferred from the Treasury’s TIPS security program. These inflation-protected securities provide a direct measure of investors’ inflation expectations. After fluctuating slightly above 2%, investor inflation expectations have recently fallen below 2%.

This measure of the outlook for annual inflation over the five-year period that begins five years from now, derived from yields on Treasury Inflation-Protected Securities, has fallen to 2.15 percent from 2.69 percent on Dec. 31. The decline reflects a drop in the price investors is willing to pay for protection against an unexpected jump in future inflation.

**Labor Costs Are Mildly Positive**

A glance at chart 8 reveals that several different measures of labor costs have been steadily decelerating throughout the past decade, albeit both measures of compensation at the non-farm business level and at the employment cost index level have suddenly increased at the start this year from very low rates of increase.
Another popular measure of labor costs is hourly earnings of production and non-supervisory employees, which is reported along with the monthly employment details. It too has increased slightly faster in the past two years from its trough (1.3%) and is now increasing at an annual rate of just 2.2%.

This moderation in inflation has also coincided with a substantial increase in employment and a considerable drop in the unemployment rate. Consequently, if inflation should pick up, it would begin to show up in labor costs now that the surplus of excess labor has been almost depleted.

Conclusion: Deflation is A Real Risk, But Unlikely in the US

Since wages are increasing slightly faster than the broad US inflation indexes, this indicates that real wages are positive and rising slightly from two years ago. Higher real income will give consumers’ more confidence as well as income to purchase a larger quantity of goods and services. Together with the dramatic and sudden drop in crude oil prices slightly higher growth in real wages suggests that US GDP growth should continue growing at its recent average speed or slightly faster.

No Inflation in the Foreseeable Future Either

Consequently, deflation is a real risk in many parts of the developed world, as growth in final demand is slipping away. Japan and the EU are particularly vulnerable since Japan has slid back into recession and the EU is hovering on the brink of recession. Recent market commentary suggests that the rest of East Asia may not be spared either. However, deflation is unlikely to occur in the US as solid real growth will keep deflation at bay. The monetarists can rest easy as acceleration in inflation is even less likely to appear in the near future.

For more information, please contact camri@nus.edu.sg
KEY INDICATORS TABLE (AS OF 21 November 2014)

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<th>INDEX</th>
<th>LEVEL (LC)</th>
<th>%1MO (LC)</th>
<th>%1MO (USD)</th>
<th>%1YR (LC)</th>
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<td>6.53%</td>
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<td>Oil</td>
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<td>-25.20</td>
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Source: Bloomberg

GLOSSARY OF KEY TERMS (Source: Bloomberg, with tickers in parenthesis. In US$ where applicable)

**S&P500**: capitalization-weighted index of the prices of 500 US large-cap stocks (SPX)

**FTSE**: capitalization-weighted index of the prices of the 100 largest LSE-listed stocks (UKX)

**NIKKEI**: capitalization-weighted index of the largest 225 stocks of the Tokyo Stock Exchange (NIK)

**HANG SENG**: capitalization-weighted index of companies from the Hong Kong Stock Exchange (HSI)

**STI**: cap-weighted index of the top 30 companies listed on the Singapore Exchange (FSSTI)

**EUR**: USD/EUR exchange rate: 1 EUR = xx USD (EUR)

**YEN**: YEN/USD exchange rate: 1 USD = xx YEN (JPY)

**CMCI**: Constant Maturity Commodity Index (CMCIPI)

**Oil**: West Texas Intermediate prices, $ per barrel (CLK1)

**3MO LIBOR**: interbank lending rate for 3-month US dollar loans (US0003M)

**10YR UST**: 10-year US Treasury yield (IYC8 – Sovereigns)

**10YR BUND**: 10-year German government bond yield (IYC8 – Sovereigns)

**10YR SPG**: 10-year Spanish government bond yield, proxy for EU funding problems (IYC8 – Sovereigns)

**10YR SGS**: 10-year Singapore government bond yield (IYC8 – Sovereigns)

**US ISM**: US business survey of more than 300 manufacturing firms by the Institute of Supply Management that monitors employment, production inventories, new orders, etc. (NAPMPMI)

**EU PMI**: Purchasing Managers’ index for the 17-country EU region (PMITMEZ)

**JP TANKAN**: Bank of Japan business survey on the outlook of Japanese capital expenditures, employment and the overall economy, quarterly index (JNTGALLI)

**CHINA IP**: China’s Industrial Production index, with 1-month lag (CHVAIOY)

**LC**: Local Currency

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