

Market Analysis, Research & Education

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Inflation: A Threat or Not?

Answers to Five Key Questions

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The rate of inflation in an economy—increases in the prices for goods and services—is of particular importance to investors because it erodes portfolio purchasing power and historically has affected the returns to stocks and bonds. This article provides answers to the following questions about inflation that many investors may be contemplating in the current environment:

- ① *Is inflation accelerating?*
- ② *Why is higher inflation expected?*
- ③ *Why hasn't inflation occurred yet?*
- ④ *When will inflation return?*
- ⑤ *How high will inflation go?*

KEY TAKEAWAYS

- Though rapid money supply growth and huge fiscal deficits represent potential inflationary pressures on the horizon, there remains little inflation in the near-term outlook due to a weak U.S. economy, deleveraging, and banks' unwillingness to increase lending.
- The timing and magnitude of future inflationary pressures will depend on the Federal Reserve's exit strategy and other uncertain factors, but there is greater risk that inflation rates rise from low current levels in the coming years.
- High unemployment makes the risks of a near-term return to a 1970s-style, wage-push inflationary outbreak unlikely, with a commodities-induced, early-2008 scenario more plausible.
- Investors may hedge against potentially higher inflation by allocating capital to asset categories that historically have held up better during times of high or accelerating inflation.

① *Is inflation accelerating?*

Despite all the headlines, actual inflation in the broader economy has remained muted, in large part due to the lingering impact of the global financial crisis and economic recession. In June, the U.S. consumer price index (CPI) declined 1.2% (on a year-over-year basis), representing the biggest fall in prices since 1950.ⁱ Much of the decline is attributable to the steep drop in energy prices over the past year, which may reverse itself in the second half of 2009 if crude-oil prices remain near current levels. However, core CPI—which excludes food and energy—was less than 1.8% in June, demonstrating little inflationary pressure in general (see Exhibit 1, page 2).

Because there is typically a lag before inflationary pressures tend to show up in the final prices of goods and services, government measures such as the CPI generally offer little information about where inflation may be heading. Looking at a group of more forward-looking, market-based inflation indicators can sometimes provide better signals about the outlook for inflation and, as a group they demonstrate that investor inflation expectations have risen in 2009 (see Exhibit 1, page 2). Commodities such as gold and crude oil, which are real assets and tend to hold their value in an inflationary environment, have staged a broad-based rally from their lows in late 2008. Long-term Treasury bond yields have nearly doubled in 2009.ⁱⁱ The inflation rate over the next five years implied by the yield on Treasury Inflation-Protected Securities (TIPS) has climbed, showing a big increase from the five-year deflation predicted in late 2008.ⁱⁱⁱ

However, at these levels, the indicators do not appear to provide any support for the notion that the market expects a rapid shift to

EXHIBIT 1

More forward-looking, market-based inflation indicators showed rising inflation expectations in 2009...

	2008 low	July 2009
Gold Price	\$712	\$953
Crude Oil Price	\$34	\$64
Treasury Bond Yield (10-Year)	2.08%	3.61%
TIPS Implied 5-Year Inflation Rate	-2.23%	1.40%

...but current indicators demonstrated there remains little inflationary pressure in the U.S. economy.

	2008 high	Jun-2009
Consumer Price Index (CPI)	5.4%	-1.2%
Core CPI	2.6%	1.8%
Producer Price Index	9.8%	-4.3%
Core PCE deflator	2.4%	1.9%*

Gold price – London Gold Bullion PM Fix \$/Troy ounce; Crude-oil price – Light sweet crude oil (WTI, Cushing, OK) 1st expiring futures contract settlement. Source: Haver Analytics, FMRCo (MARE) as of 7/20/09.

See footnotes for inflation index definitions. Source: Haver Analytics, FMRCo (MARE) as of 6/30/09.

spiking inflation rates. The per-barrel price of crude oil is still 50% lower than at this point last year, 10-year Treasury bond yields remain near their lowest ever, and TIPS prices project only 1.4% inflation over the next five years.^{iv} So far, the upward movement in these inflation indicators signaled only that investors believe the threat of deflation has abated in 2009.

2 Why is higher inflation expected?

Historically, inflation threats often have been associated with over-heating economies, where rising demand pushes up prices. With little evidence of economic strength or cost-push inflation today, the concern now is that the monetarist economic view of the world sees inflation clouds on the horizon. The godfather of modern monetarist economic thought, Milton Friedman, once stated, "Inflation is always and everywhere a monetary phenomenon." What Friedman meant was that money—specifically changes in the supply and use of currency—was the primary driver for changes to price levels in an economy. Friedman informally defined inflation as "too much money chasing too few goods and services." As a result, an excessive increase in the amount or use of money relative to economic output is the textbook prescription for inflation.

Today, the response by U.S. policymakers to the financial and economic crisis in late 2008 has left an aftermath of circumstances that does appear to raise the medium-term risks of infla-

tion. Chief among them is the astronomical growth in the monetary base—one measurement of money supply—that the Federal Reserve (Fed) has propagated in its effort to prevent the collapse of the U.S. financial system. The U.S. monetary base has grown to roughly \$1.7 trillion, more than double the level at the same time last year. The Fed took these extraordinary measures—which include unconventional lending programs and outright purchases of mortgage and Treasury bonds—to counteract the massive deflationary pressures building as a result of the U.S. financial crisis and consumer deleveraging. However, this level of credit is far and away more money than the economy needs for transactional purposes in a more normal environment.

Compounding the problem is the massive borrowing by the U.S. government to finance its large and growing budget deficit. Historically in other countries, huge borrowing needs have led to the temptation for central banks to inflate away the deficit, by excessively growing the money supply ("printing money") to make servicing the debt easier through the creation of cheaper money. The Fed has no doubt added to these fears of potentially monetizing the deficit by buying long-term Treasury bonds as part of its quantitative easing initiative. While monetizing the federal debt is probably not the Fed's objective, history has demonstrated on numerous occasions—from Germany in the 1920s to Zimbabwe in 2008—that

massive government debt places tremendous political pressure on central banks to attempt to inflate their governments back to fiscal health.

3 Why hasn't inflation occurred yet?

Although a lot of money has technically been created, much of it so far is not being used. Economists refer to the term "velocity" of money to describe how quickly money changes hands as it is lent time and again throughout the financial system food chain. Inflation is a function not only of the amount of money, but also of its use, and a lack of velocity can offset an increase in money supply.

As shown in Exhibit 2 (below), the unprecedented expansion in the monetary base over the past year is largely comprised of a massive increase in banking reserves. Most of these reserves are "excess reserves" that represent extra money (above the required reserve ratio) that banks keep in deposit with the Fed. Bank reserves are often referred to as high-powered money because when they lend them out, they have a multiplying effect on the money supply. This can result in proliferating money expansion as the funds work their way throughout the economy by being lent out, spent, deposited, and lent out again. However, for now, much of the increase in bank reserves is sitting idle on deposit with the Fed, which means

the sharp drop in money velocity has blunted much of the dramatic rise in money supply.

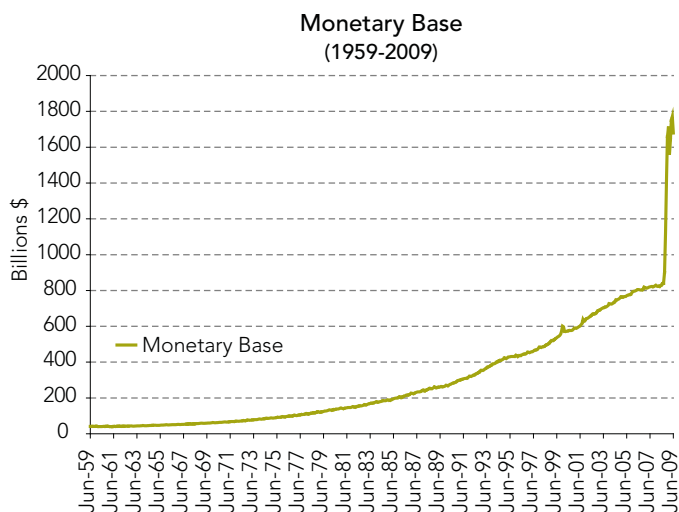
Money velocity has fallen because banks remain cautious about making new loans. In general, their capital positions remain weakened, growing loan defaults continue to devour more of their profits, and restoring their balance sheets to health remains a higher priority than new lending. The excess bank reserves thus represent both the potential for future inflation as well as the explanation for why rapid money growth has yet to create current inflation.

Meanwhile, there remains considerable downward pressure on prices still in place, due to growing slack in the economy (i.e. underutilized resources, such as labor) and continued deleveraging by consumers and financial firms with heavy debt loads. With the unemployment rate at its highest level in 26 years and consumers saving more and spending less, there is little upward pressure on wages or prices for consumer goods.^v

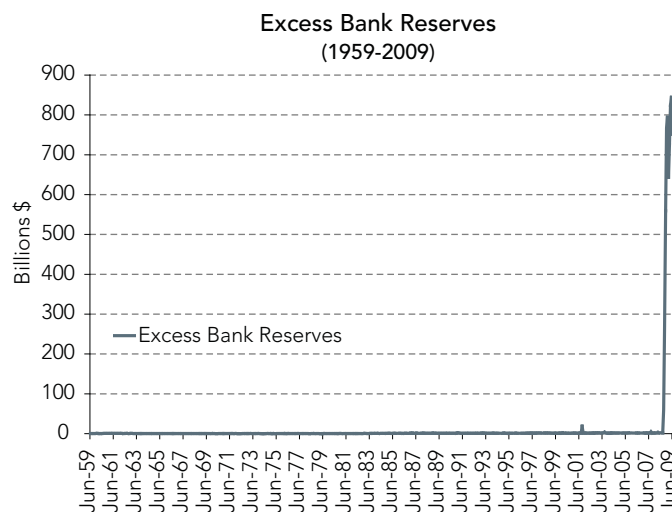
4 When will inflation return?

In general terms, inflation is likely to pick up when the velocity of money stabilizes and banks start to lend out the extra reserves they currently hold with the Fed. Presumably, this will occur as an economic recovery gains traction, which should allow

EXHIBIT 2: The massive expansion in the U.S. monetary base (left) during the past year is largely due to a unprecedented increase in banking reserves (right), which could boost inflationary pressures but so far has yet to do so because banks in general have been cautious about making new loans.



Adjusted Monetary Base, not seasonally adjusted (NSA).
Source: Federal Reserve Board, Haver Analytics as of 6/30/09.



Adjusted Excess Reserves of Depository Institutions, NSA.
Source: Federal Reserve Board, Haver Analytics as of 6/30/09.

banks to rebuild their balance sheets through rising profits and provide a more favorable outlook for the creditworthiness of potential borrowers.

Whether the pick-up in money velocity leads to significantly higher inflation depends on how quickly the Fed pulls the reins back on the extraordinary credit it is currently providing. In theory, the Fed can take actions to reduce the size of its balance sheet and move back to a more appropriate level of money. In practice, due to the unprecedented expansion in the Fed's balance sheet, this will be a challenge.

On the one hand, as Fed Chairman Ben Bernanke described in Congressional testimony on July 21, the Fed has the power to end the extraordinary lending programs and liquidity facilities it put into place during the crisis, mop up the excess reserves in the banking system, and sell off the long-term securities (mortgage and Treasuries) it has purchased. On the other hand, the timing will be extremely tricky. If the central bank withdraws the support too quickly, it could push the economy back into a double-dip recession, similar to what happened in 1937-38. There will likely be considerable political pressure to make sure an economic recovery is in full bloom before the Fed taps on the brakes, but such timing increases the risk of leaving too much money in the system for too long. Given the sheer size of the balance sheet reductions that need to be made, perfect timing may be nearly impossible to achieve.

5 How high will inflation go?

Much will depend not only on the Fed but also on the overall economic backdrop. Given the high level of slack (i.e. underutilized resources) likely to remain in the economy during the next two years, there also could be offsetting deflationary pressures lingering in the system. For example, the unemployment rate is expected to rise above 10% and not peak until sometime in 2010. Industrial capacity utilization rates are at their lowest level on record, which means a lot of unused capacity in the manufacturing sector. This slack must tighten considerably before upward pressure is placed on wages and other prices.

As a result of this downward pressure on wages, which remain the largest expense for corporations, it would appear a 1970s-style, double-digit

inflation outburst remains unlikely in the short to medium term. Average weekly earnings for U.S. workers rose more than 7% annually during the period from 1975-1981 in which consumer price inflation averaged more than 9% and peaked at 14% in 1980.^v It is hard to foresee wage gains of that magnitude reinforcing inflation pressures during the next couple of years.

A more plausible scenario may be for prices to rise more quickly in markets where there is less slack, particularly for goods in growing demand from developing economies, such as China and India. Indeed, global commodity prices, such as crude oil, have been driven this decade more by incremental demand from emerging economies than wage growth in the United States. In mid-2008, the U.S. consumer price inflation hit an 18-year high of 5.4%, driven mainly by commodity price spikes, and despite the fact the U.S. economy had already been in a recession for six months.^v

As a result, if the Fed is not quick enough to withdraw liquidity as money velocity picks up, prices somewhere are likely to rise. Rampant, broad-based inflation may not occur if the U.S. economy remains well below its potential rate of growth, but the presence of continued slack is unlikely to completely prevent inflation from rising. The pattern, however, may look more like 2008 than the 1970s.

Investment implications

Exactly how long it takes inflation pressures to build in the U.S. economy and how strong those pressures become remains to be seen. Those who take comfort in current low levels of inflation may underestimate the potential pressures building, while those who assume a violent outbreak of inflation is imminent and inevitable may be ignoring important countervailing trends that could keep inflation lower for longer than many investors currently expect. At any rate, from current low or negative levels of inflation, the greater risk is clearly that price levels will rise in the coming years. Investors may want to hedge against this risk by adding asset categories to their portfolios that have historically held up better during times of high or accelerating inflation (see the MARE article, *Real Return Strategy: Hedging Against the Risk of Higher Inflation*). ■

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Investment decisions should be based on an individual's own goals, time horizon, and tolerance for risk. Past performance is no guarantee of future results.

[i] The CPI -1.2% year-over-year decline in June 2009 was the lowest on record since February 1950. Source: Bureau of Labor Statistics, Haver Analytics, FMRCo (MARE) as of 6/30/09.

[ii] Source: Federal Reserve Board, Haver Analytics, FMRCo (MARE) as of 7/20/09.

[iii] The implied inflation rate—or TIPS breakeven rate—is the difference between the yield on a nominal Treasury bond and a comparable maturity TIPS bond. It provides a proxy for the market expectation for future inflation over the life of the (five-year) bonds.

[iv] Crude-oil price – Light sweet crude oil (WTI, Cushing, OK) 1st expiring futures contract settlement. Source: Haver Analytics, FMRCo (MARE) as of 7/20/09.

[v] Source: Bureau of Labor Statistics, Haver Analytics, FMRCo (MARE) as of 6/30/09.

The Consumer Price Index (CPI) is a measure of the average change over time in the prices paid by urban consumers for a market basket of consumer goods and services. Core CPI includes all items less food and energy.

The Producer Price Index for Finished Goods tracks the average change in prices over time of domestically produced and consumed commodities. The index is comprised of prices for both consumer goods and capital equipment, but excludes prices for services.

Core PCE deflator: Personal Consumption Expenditure price index that measures the average increase in prices for all U.S. personal consumption excluding food and energy.

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