LIQUIDITY INSIGHTS

The inflation question

Dr. David Kelly

J.P.Morgan
Asset Management

Dr. David Kelly, CFA
Managing Director
Chief Market Strategist
J.P. Morgan Funds

Dr. David Kelly is the Chief Market Strategist for J.P. Morgan Funds. With over 20 years of experience, David provides valuable insight and perspective on the markets to thousands of financial advisors and their clients.

Throughout his career, David has developed a unique ability to explain complex economic and market issues in a language that financial advisors can use to communicate to their clients. He is a keynote speaker at many national investment conferences. David is also a frequent guest on CNBC and other financial news outlets, and is widely quoted in the financial press.

Andrew D. Goldberg
Vice President
Market Strategist
J.P. Morgan Funds

Andrew D. Goldberg, Vice President, is a Market Strategist on the J.P. Morgan Funds U.S. Market Strategy Team. In this role, Andrew is responsible for delivering timely market and economic insight to financial advisors across the country. As a member of the strategy team from its inception, Andrew was instrumental in the development of the **Market Insights** program, J.P. Morgan's popular value-added offering to the financial advisor marketplace. Andrew also leads the team's research effort and oversees the production of the quarterly *Guide to the Markets*.

Foreword

Inflation fears have escalated in recent weeks due to strengthening prospects for economic recovery and continuing anxiety over government stimulus efforts. While concern about inflation represents a healthy instinct on the part of investors to protect against its corrosive forces, fears of soaring inflation seem overblown.

The current sharp recession has resulted in a huge increase in unemployment and unused industrial capacity both in the United States and around the world. Even if the recession begins to ebb, unemployment will likely rise for a time and only fall slowly thereafter. More generally, the U.S. economy will likely take years to absorb the excess capacity opened up during the current downturn. This reality, on its own, should ensure low U.S. inflation and actually a risk of deflation for a number of years to come.

However, for many investors, a forecast of low inflation is very hard to swallow. What about the extraordinary rise in the money supply seen recently or the current massive expansion in federal deficits? Won't higher oil prices or a fall in the U.S. dollar generate higher inflation?

We believe the answer is no, at least not for the next few years. However, with so much riding on the issue, it's worth outlining the reasons why low inflation, rather than high inflation, is likely to prevail well into the next decade.

The inflation question

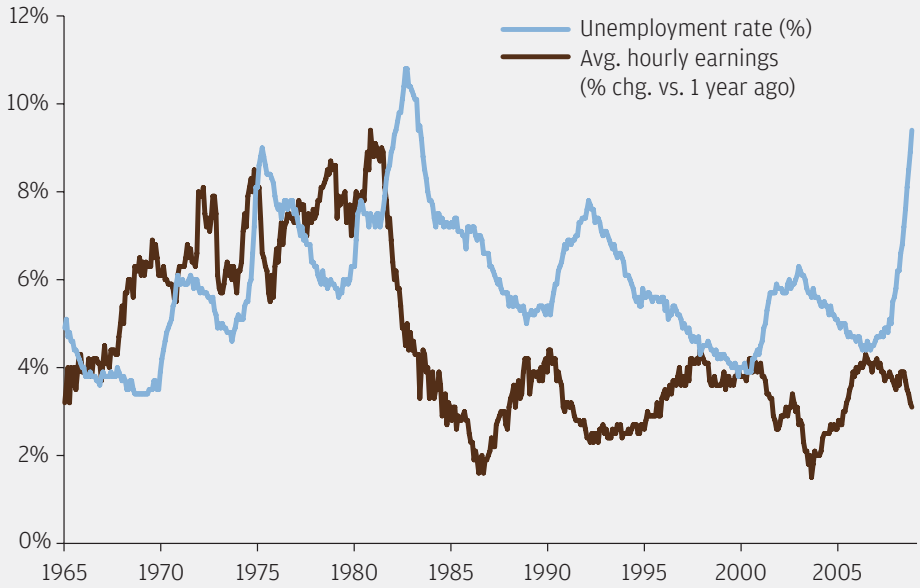
The importance of wages

The single most important factor determining U.S. inflation is employee compensation. Compensation accounts for about 65% of national income—a rise in compensation increases disposable income thus stoking demand in the economy. However, and more importantly from an inflation perspective, higher compensation boosts labor costs, forcing firms to raise their prices to maintain profit margins.

In recent months, compensation costs have been decelerating rather than accelerating. Average hourly earnings, which rose by 3.9% last year, have increased at an annual rate of just 1.8% in the first five months of this year. Total hourly compensation costs for civilian workers (which include benefits) have risen by 1.5% annualized over the past two quarters, roughly half the pace of the prior four.

Moreover, high unemployment is likely to keep wages in check for years to come. Unemployment always goes up more quickly than it comes down. Over the last nine recessions, unemployment has risen by roughly 2% per year on the way up and has fallen about 1% per year on the way down. This means that, even if unemployment peaks at 10% later this year and then begins a long march down to full employment (which many economists define as an unemployment rate of about 5%), we may not reach that level until some time in 2014.

CHART 1: High unemployment and high wage growth have not coexisted since the early 1980s



Source: BLS, U.S. DOL, J.P. Morgan Asset Management. Data as of 6/19/09.

It should be noted that high unemployment did not always result in wage restraint. In the 1970s, wage growth accelerated even as unemployment rose to high levels, as can be seen in Chart 1. However, that was an era of labor power when unions, despite high unemployment, sought and won compensation for their members for rising energy prices. Since 1979, trade union membership has slipped from 24% of wage and salary workers[1] to just 12% last year, which, combined with the competitive pressure of global competition in manufacturing and increased illegal immigration in the service sector, has undermined the ability of workers to get substantial pay increases in anything but the tightest of labor markets. Not good news for workers, of course, but very helpful in restraining inflation.

[1]Source: Current Population Survey, U.S. Census Bureau as quoted in Unionstats.com.

Money and inflation: the link that disappeared

While many of those worried about inflation would probably concede the lack of worker bargaining power, they remain very concerned about inflation because of the recent fast growth of the money supply with M2 rising by 9% over the past year.[2]

Milton Friedman, one of the most eminent and influential economists of the 20th century, was most famously quoted as saying that "inflation is always and everywhere a monetary phenomenon." In other words, a big increase in the money supply should result in a big increase in inflation.

This has been accepted as dogma for so long that many people don't consider why it should be so or whether these reasons still apply today. But the question is absolutely vital to the outlook for the economy and investing in the years ahead. So, without apology, I'd like to take a page or two to review the relationship between money and inflation.

The logic is pretty straightforward and is best illustrated with a simple equation known in economics as the equation of exchange:

$$M \times V = P \times Y$$

where,

M is the money stock

V is the velocity of money, or the number of times each dollar is spent

P is the price level, and

Y is the real output

According to this equation, if you increase the money supply and the velocity of money doesn't change, you're going to get an increase in prices, or an increase in real output, or both.

To see how this works, you can define Y to be real GDP and let P be the GDP deflator (a price index like CPI, but a bit broader to deal with all goods and services produced in the economy, not just those bought by consumers). P x Y is then just nominal GDP.

On the other side of the equation, economists often use M2 as a measure of the money stock. (M2 is the total value of cash, checking accounts, savings accounts, CDs under $100,000, retail money market funds and some other smaller items). Velocity isn't measured directly, but is calculated by dividing nominal GDP by M2.

[2]Note: Some analysts have noted a much bigger increase (108% over the past year) in the monetary base, which consists of currency plus bank reserves at the Federal Reserve. Currency and bank reserves at the Federal Reserve fulfill a special function in the monetary system since they are the only assets that can be used by banks to back an increase in deposits, which ultimately increases the money supply. In other words, an increase in the monetary base represents not so much an increase in the money supply, as an increase in the potential for the banking system to increase the money supply. However, almost all of these increased bank reserves are sitting idle at the Federal Reserve as precautionary excess reserves rather than being used to back deposits. As the financial crisis ebbs, the Federal Reserve intends to unwind some of the assets on its balance sheet, which should have the effect of mopping up these excess reserves before they are used by the banking system to back any excessive increase in the actual money supply.

If the velocity of money is fairly stable, then there should be a strong relationship between the growth of M2 and the growth of nominal GDP. In Chart 2, we can see this was the case in the 1960s and 1970s. However, since the mid-1980s, the relationship between M2 and nominal GDP has broken down completely. When the money supply has increased rapidly, velocity has slowed down and vice versa.

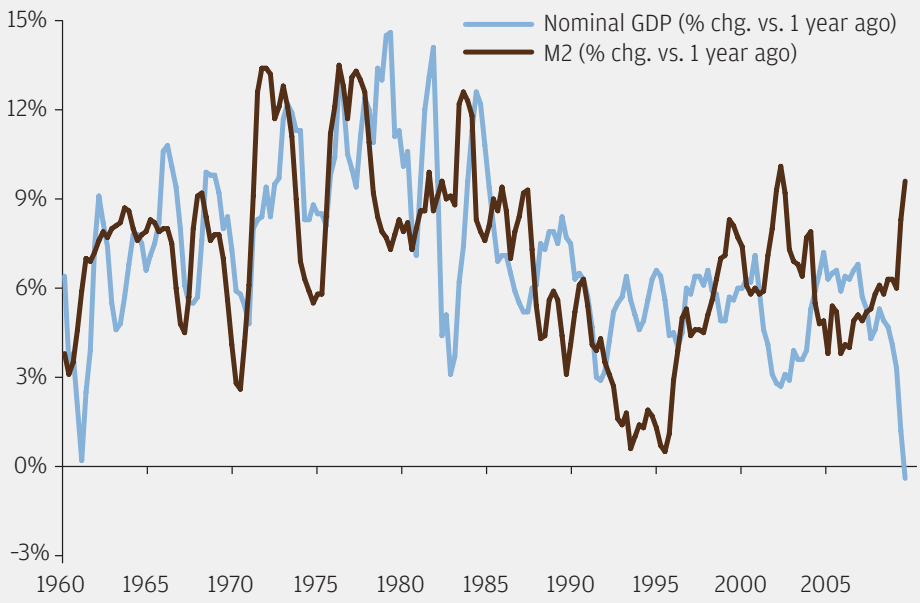
Not surprisingly, this also means that changes in the money supply have had no predictable impact on inflation. Chart 3 shows the relationship between M2 and inflation, as measured by the GDP deflator. This used to be a fairly weak, lagged relationship in the 1960s and 1970s, but in recent decades has disappeared completely. Changes in the money supply just don't appear to have a direct impact on either real output or inflation.

Why inflation *isn't* always and everywhere a monetary phenomenon

Policymakers and investors might just look at Chart 3, decide that the money supply isn't the force for economic good and evil they had assumed, and then move on. However, it still is worth asking, "Why not?" After all, for most of world history, an increase in the money supply has been associated with increases in both economic growth and inflation. So what's changed?

Historically, the reason that increases in the money supply were supposed to drive economic activity and inflation was rooted in the idea that people had a very strong opinion on how much money they wanted to have readily available in liquid form. In economics, this is called money demand.

CHART 2: The relationship between money growth and nominal GDP has broken down over the last 20 years



Source: Federal Reserve, BEA, J.P. Morgan Asset Management. Data as of 6/19/09.

Say you're a merchant running a business that generates $4,000 a year in sales. You estimate that to run a business of this size, you need to have roughly $1,000 in the till or in a checking account. If you have too little, you may run into cash-flow problems so you'll sell some asset or spend less until you are back up to $1,000. If you have too much, then you're foregoing interest income wastefully, and you'll invest the money or consume more to use up the surplus.

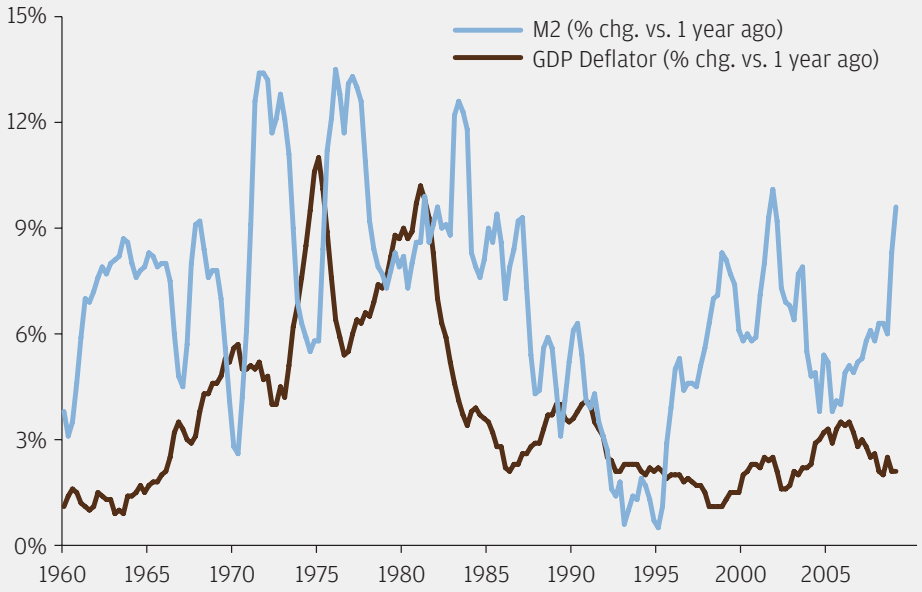
Either way, you'll try to keep a certain stock of money on hand, proportionate to your economic activity. If everyone behaves this way, then across the economy, V, or the velocity of money, is constant.

Suppose now the Federal Reserve decides to expand the money supply by printing crisp new dollar bills and uses them to

buy Treasury bills from the public. When they do this, whoever sold the Treasuries to the Fed will now have too much cash on hand, so they will spend it or invest it. When they do this, they can get back to the right amount of cash on hand. However, whoever received the cash from them will now have the same problem—too much cash on hand. If they buy something to reduce their cash holdings, then someone else has the same problem of too many dollar bills.

So how does the economy get back to balance? Pretty simple. As each person tries to spend down their excess cash, they are adding to demand in the economy, creating additional business and boosting prices. Pretty soon, the merchant who had a $4,000 a year business now has a $5,000 a year business and wants to have $1,250 on hand. Over time, the economy grows enough or sees a sufficient increase in prices to absorb all the extra cash.

CHART 3: The relationship between money growth and inflation has broken down over the last 20 years



Source: Federal Reserve, BEA, J.P. Morgan Asset Management. Data as of 6/19/09.

This is literally how increases in the money supply are expected to cause increases in economic output and prices.

However, it is a somewhat antiquated view that can't easily cope with the extreme liquidity of the age in which we live. Most people don't know, much less care, exactly how much is in their checking account at any one time. They do have an understanding of the total amount of financial resources available to them, but this is a very broad concept. If you want to buy something, you can whip out a credit card, open a credit account at a store, or for something big, sell some mutual funds. You might not be rich and might not be wise in spending the money, but the amount of M2 you have available is really beside the point. Nor, in a low-inflation environment, are you foregoing much interest by having money in, say, a savings account (part of M2) as opposed to a Treasury bill (not part of M2).

In today's economy, money balances are an afterthought to every other critical decision. You decide how much to work, how much to spend, how much to borrow and how much to invest. The amount of money you hold doesn't drive these decisions—it is driven by them. And so, if the Federal Reserve engineers an increase in the money supply, money demand responds easily and passively in the same direction. Effectively, this means that an increase in the supply of money leads to a fall in velocity and vice versa. That is why an increase in the money supply, in the midst of a deep recession, is very unlikely to spark a surge in inflation.

Deficits and inflation

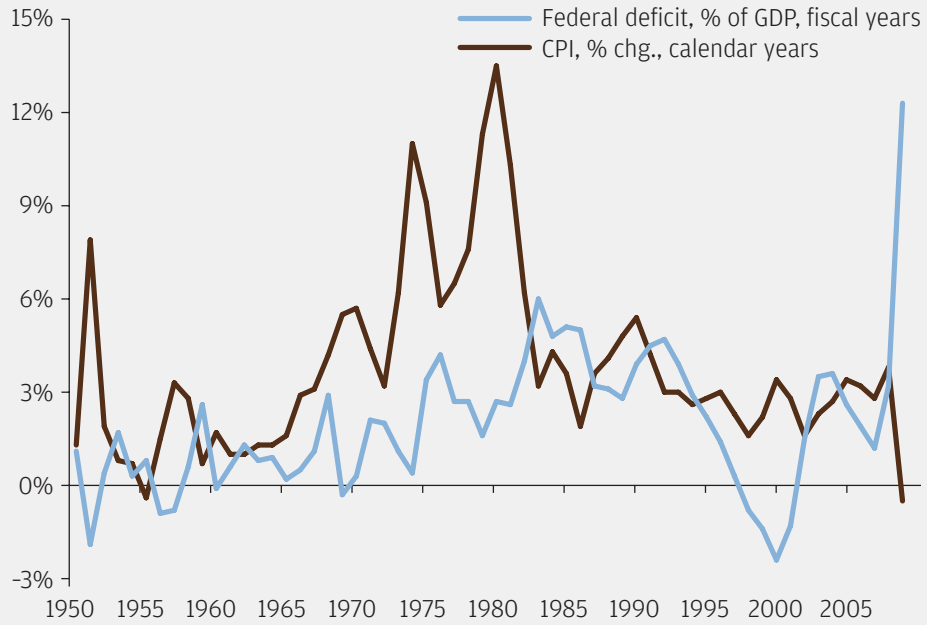
If not the money supply, how about the budget deficit? It is conventional wisdom that big budget deficits tend to lead to inflation, and no one can question that we have a big deficit right now. In fact, as shown in Chart 4, the Obama administration's forecast for the deficit this year is more than three times as big as the deficit last year and is, in fact, the largest, as a share of the economy, since the 1940s.

However, it's important to understand how deficits are supposed to be inflationary. Deficits *are* expansionary. A federal budget deficit, by definition, means that the government is adding more demand to the economy in the form of spending than it is taking out in the form of taxation. However, if the economy is operating with lots of unemployed resources, these deficits will tend to generate more real output rather than inflation. It is only when the economy is operating at full capacity that the economy finds it hard to meet extra demand with extra supply, and so prices go up instead.

This is what happened, to some extent, in the late 1960s when the economy was operating with an unemployment rate of below 4%, and the Johnson and Nixon administrations ran deficits both to pay for social programs at home and to fund spending on the Vietnam War. If the economy is working flat out, and you demand more of it, you don't get more output, you get inflation.

However, this is not the position as it prevails today or indeed over most of modern U.S. history. Budget deficits tend to be highest when the economy is in recession, and an economy in recession is not usually one prone to inflation. So, as is also shown in Chart 4, the relationship between deficits and inflation has actually been very weak over the years.

CHART 4: The relationship between deficits and inflation appears fairly weak



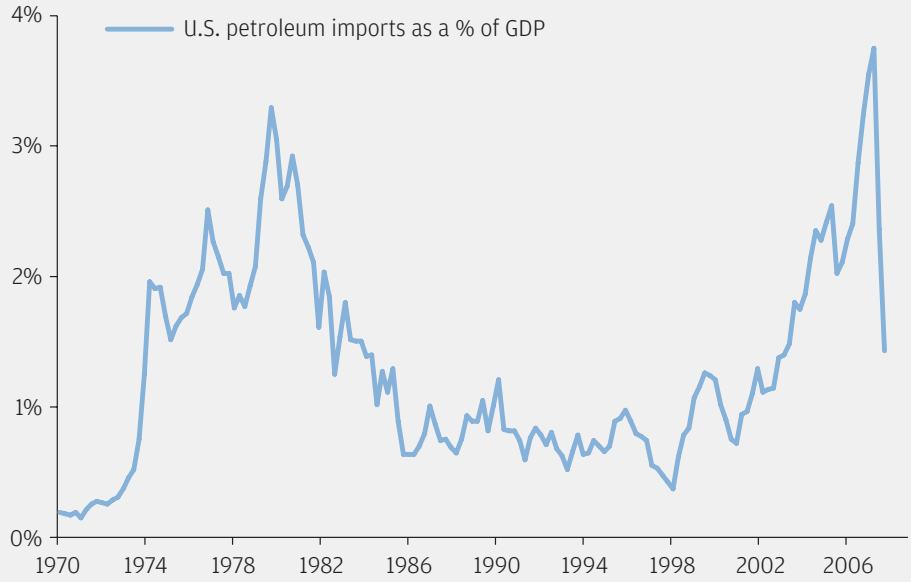
Source: OMB, BLS, BEA, J.P. Morgan Asset Management. Data as of 6/19/09.

This is not to say, however, that deficits have no consequences. The current massive deficits are generating a huge supply of Treasury debt and, once investor demand for a safe-haven asset in times of crisis wanes, Treasury interest rates can be expected to move up sharply from their current levels. But this is not so much an expectation of inflation as an expectation of more debt than capital markets can easily digest.

Oil and inflation

Some have suggested that inflation is likely to rise because of soaring oil prices and they focus on the 1970s when rising oil prices were accompanied by surging overall inflation. However, as mentioned earlier, much of the reason for that is higher gasoline prices led unions to demand higher wages, setting up a price-wage spiral. To see that this simply doesn't apply today, consider the spike in oil prices to a peak of over $145 last year. This surge pushed overall CPI inflation to 5.4% very briefly. However, the core inflation rate, which excludes food and energy, never rose above 2.6% year-over-year, while wage growth remained stable and then declined as the economy fell into recession.

CHART 5:
High oil prices act as a tax on the U.S. economy



Source: BEA, J.P. Morgan Asset Management. Data as of 6/19/09.

So why don't higher oil prices lead to higher general inflation? Many people argue that, energy costs affect everything, but the reality is that outside of the airline industry and a few other smaller sectors, energy costs are a much smaller part of total costs than wages—if oil goes up and wages don't, core inflation should stay pretty tranquil.

But there is another reason why higher oil prices don't seem to spark a general inflation, and that is higher oil prices act as a tax on the U.S. economy. The U.S. imports about two-thirds of the oil it consumes every day. This means that higher oil prices suck money out of the U.S. economy. If the price of a gallon of milk goes up, the American consumer is poorer but the American farmer is richer and the money stays in the country fueling economic activity. But if the price of a gallon of gasoline goes up, the American consumer is poorer and Mahmoud Ahmadinejad is richer. As the money leaves the country, it actually delivers a deflationary impulse to the economy. This can be seen in Chart 5, which shows the share of our GDP used to buy foreign oil. This soared to 3.7% of GDP in the third quarter of last year, a factor that contributed to turning a mild U.S. recession into a much larger one, now leaving us with decelerating rather than accelerating inflation.

The dollar and inflation

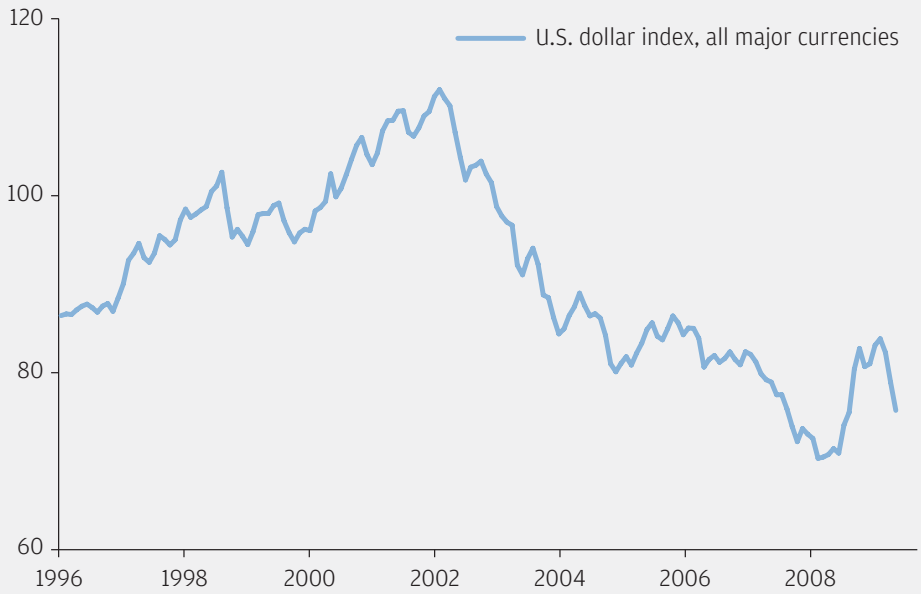
Finally, some have said that a plunging U.S. dollar will lead to inflation, as it pushes up the price of imports. But there are some problems with this view. First, as can be seen in Chart 6, the U.S. dollar hasn't plunged, this year or in any recent year. Rather, since 2002, the U.S. dollar has been, on average, falling in a rather orderly manner, mainly reflecting the impact of a big U.S. trade deficit. That trade deficit has now fallen sharply, from a current account deficit of 6.6% of GDP in the fourth quarter of 2005 to 2.9% of GDP in the first quarter of this year. This should limit further dollar declines, as should the very weak condition and expansionary fiscal and monetary policies of our trading partners. If the dollar is going to plunge, what's it supposed to plunge against? Finally, on the direction of the dollar, it is important to note that our trading partners, whatever they may say in public, have a very strong incentive to prevent a dollar collapse, as such a collapse might make their products uncompetitive in the all-important U.S. consumer market.

However, and more importantly, there is a limit to how much a falling dollar can lead to inflation. The main way in which a falling currency can contribute to rising inflation is by increasing import prices. Last year, U.S. imports equalled about 18% of our GDP, which, as can be seen in Chart 7, was one of the lowest percentages among major economies.

If the dollar were to fall by 10% overnight, with all other things being equal, the price of our imports would increase by 10% in dollar terms. However, since imports equal just 18% of GDP, a 10% increase in import prices should increase the overall U.S. price level by just 1.8% (10% x 18%).

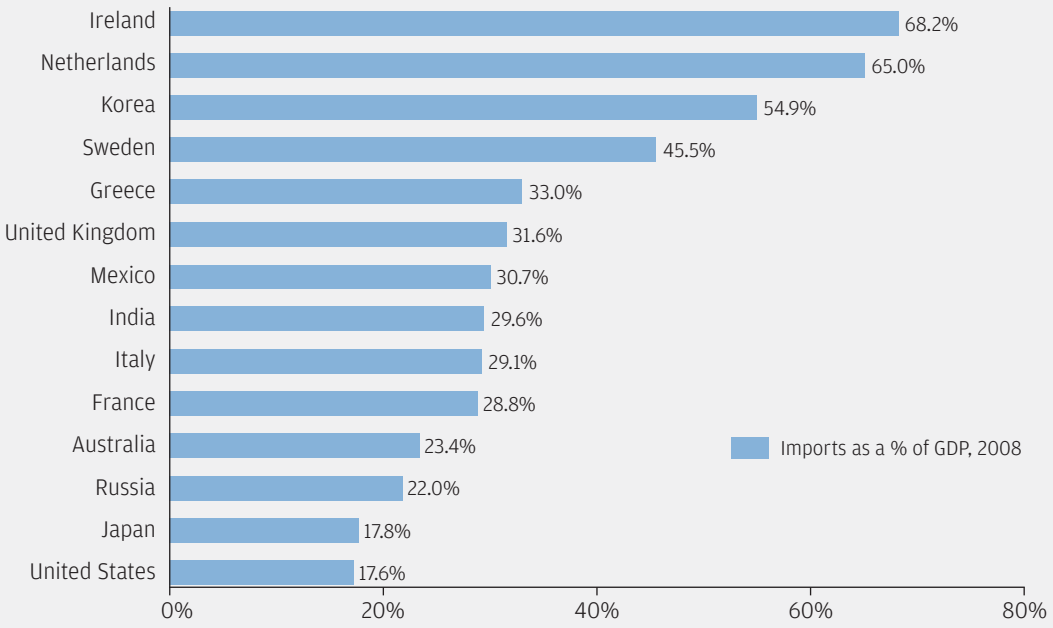
Moreover, even 1.8% is very likely an overestimate—if you are selling to Walmart, you may well take whatever Walmart is willing to pay and not try to jack up your prices to compensate for a lower level of the U.S. dollar.

CHART 6:
The dollar has fallen, but not that sharply



Source: Federal Reserve Board, J.P. Morgan Asset Management. Data as of 6/19/09.

CHART 7:
Imports are a smaller share of U.S. spending than for other countries



Source: OECD, IMF, J.P. Morgan Asset Management. Data as of 6/19/09.

Conclusion

Despite worries about money supply, deficits, oil prices and the dollar, the reality is that U.S. inflation is low and is likely to stay that way in the years ahead. This is not to encourage complacency. Changes in government policies, geopolitical events or even changes in the structure of the economy itself could make the economy more vulnerable to inflation, particularly as we embark on the road to recovery. But, for long-term investors, inflation is a possibility worth insuring against rather than a probability that should dominate investment strategy.

J.P. Morgan Asset Management

Investing means transforming information into insight and insight into financial success. That process requires the experience to recognize opportunities, the vision to respond with sound strategies and the attentiveness that helps deliver the right results for each client.

Contact J.P. Morgan Funds Distribution Services at 1-800-480-4111 for a fund prospectus. You can also visit us at www.jpmorganfunds.com. Investors should carefully consider the investment objectives and risks as well as charges and expenses of the mutual fund before investing. The prospectus contains this and other information about the mutual fund. Read the prospectus carefully before investing.

The information in this brochure is intended solely to report on various investment views held by J.P. Morgan Asset Management. Opinions, estimates, forecasts, and statements of financial market trends that are based on current market conditions constitute our judgment and are subject to change without notice. We believe the information provided here is reliable but should not be assumed to be accurate or complete. The views presented are subject to change. The views and strategies described may not be suitable for all investors. References to specific securities, asset classes and financial markets are for illustrative purposes only and are not intended to be, and should not be interpreted as, recommendations. This brochure is for informational purposes only and is not intended as an offer or solicitation with respect to the purchase or sale of any security. The information in this brochure is not intended to provide and should not be relied on for investment recommendations. Past performance is no guarantee of future results.

J.P. Morgan Asset Management is the marketing name for the asset management businesses of JPMorgan Chase & Co. Those businesses include, but are not limited to, J.P. Morgan Investment Management Inc., JPMorgan Investment Advisors Inc., Security Capital Research & Management Incorporated and J.P. Morgan Alternative Asset Management, Inc.

JPMorgan Distribution Services, Inc.

WP-LI-INFLATION

J.P.Morgan
Asset Management