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The inflation experienced in the United States in the 1970s in the wake of the Arab oil embargos proved to be both costly and memorable. Increases in consumer prices, which eventually reached double digits annually, reduced the purchasing power of families with fixed (or slowly adjusting) incomes. And they created uncertainty about future prices that made it hard for people and businesses to make sensible spending and investment decisions.

The cure was also painful. After the Federal Reserve slammed on the credit brakes, unemployment reached its highest level (10.8 percent in November 1982) since the Great Depression. It is not surprising, then, that monetary policy for the next few decades was primarily focused on preventing a repeat performance.

But the past couple of years have seen a notable shift in worries about where prices might be heading. Deflation—a general decline in prices—has been predominantly featured on the list of possible unwelcome developments for the U.S. economy. In the first three quarters of 2009, a casual search for the D-word in the titles of major news articles yielded 231 hits, compared with just 58 during the comparable period in 2007. And the unusual measures announced in November 2010 by the Federal Reserve—the so-called QE2, which is short for second round of quantitative easing—were motivated in part by the Fed’s desire to duck deflation.

Broad measures of consumer prices are still rising, albeit slowly. Why, then, the fuss? First, because inflation has been slowing and the risk of it slipping into negative territory and remaining there for more than a month or two seems higher than at any time since the crash in prices in the 1930s. Second, even a brief dip into deflation could leave policymakers with little practical means to stimulate the economy, stalling the economic recovery or even triggering a second dip into recession. Indeed, positive but exceptionally low inflation could further slow what has been a phlegmatic upturn.

READING THE TEA LEAVES

We know what the terms inflation and deflation mean. But actually measuring price changes and interpreting the numbers on a month-to-month or quarter-to-quarter basis can be a bit more complicated. Policymakers and Wall Street gurus generally focus on indexes based on a very broad basket of consumer goods. They are inclined, though, to exclude items that often experience big price swings from month to month because they
The graph on page 8 shows what happened to three price barometers that figure prominently in discussions of inflation and deflation. The core consumer price index and the core personal consumption expenditures (PCE) deflator both exclude the volatile food and energy categories. The “trimmed mean” consumer price index simply excludes the items with the smallest and largest price changes in any given month. Each method has its pluses and minuses for prognosticators. So the Fed and the White House are inclined to keep all of them in mind as they evaluate their options.

All three inflation measures, though, happen to tell the same story this time around: Inflation has fallen markedly over the past couple of years. As of October 2010, the 12-month change in the core consumer price index was just 0.6 percent – the lowest figure since the early 1960s. Inflation for the year based on the trimmed mean consumer price index was 0.8 percent. The core PCE measure of inflation was a slightly higher at 0.9 percent, but it was similarly feeble by historical standards.

**GOING NEGATIVE**

To understand the risk the U.S. economy will slip into deflation, one needs to consider what drives price trends. In Milton Friedman’s words, “inflation is always and everywhere a monetary phenomenon.” This view is widely accepted in a narrow sense: over periods of many years, the way in which the Fed manages the money supply is the primary determinant of inflation. The logic is simple. If output tracks its “potential” – defined as productive capacity given the amount of labor and capital available in the economy – Fed actions that increase the quantity of money available to spend on this output will induce prices to rise. By the same token, Fed actions that lead to less money in spenders’ hands induce prices to fall.

But over a shorter horizon (up to several years) the relationship between money and prices is messy. For one thing, recessions and booms may cause output to sink below (or temporarily exceed) its potential. When output is below potential, the economy has unused resources. And right now, of course, the slack in the American economy is very high. Though the recession ended in mid-2009, the recovery has proceeded quite slowly. As a result, the economy has regained only a modest share of the eight million jobs that were lost. (That figure, by the way, excludes the jobs that would have been created for a growing workforce, had the economy not experienced a slump.) Meanwhile, the vacancy rates in both office space and housing are unusually high, as is unused capacity in manufacturing.

When the economy has productive capacity to spare, businesses must compete harder for customers. So they have less ability to raise prices, and the general price level tends to climb at a slower rate. Likewise, workers are more inclined to accept smaller increases (or even decreases) in wages when jobs are scarce. And the longer the slack persists, the lower inflation becomes and the more likely price changes will dip into negative territory.

So in light of the near-consensus forecasts that the recovery will remain sluggish and uneven, it’s no surprise that deflation has entered policy discussions.

However, other factors are working against the downward pull on prices. Most notably, people’s expectations about inflation have been fairly stable in positive territory. Those expectations are an important determinant of actual inflation because businesses make decisions about how much to increase prices...
based in part on whether they think other businesses will follow. Inflation expectations also influence union wage negotiations because workers want their incomes to keep up with prices, which in turn influence the wages offered to nonunion workers. The resulting wage increases tend to feed through to price increases.

The chart on the next page shows two survey-based measures of long-term inflation expectations – one, the Federal Reserve Bank of Philadelphia’s Survey of Professional Forecasters, the other a Reuters/University of Michigan survey of consumer expectation. Both measures have declined over the past couple of years and are currently at the low end of their historical ranges. However, the downward drift amounts to just a few tenths of a percentage point, leaving expected annual inflation around 2 percent.

In monetary-policy-speak, expectations are apparently “anchored” at levels higher than current core inflation. Anchored inflation expectations are thought to be feeding back into current business and consumer decisions, keeping inflation higher than it would otherwise be at this stage of a tepid recovery.

Movements in other likely determinants of inflation over the next few years are also worth noting. First, the prices of commodities that businesses use as inputs – notably metals – have been rising. According to the Institute of Supply Management, the number of manufacturers that were charged higher prices by their suppliers has exceeded the number enjoying lower prices by a wide margin for more than a year. Moreover, the prices Americans pay for imported goods are generally rising because of changes in exchange rates: the value of the dollar against a broad basket of currencies fell roughly 15 percent between its recent peak in early 2009 and late 2010.

The evidence suggests that changes in commodity prices and exchange rates are only partially passed through to consumers. Still, both higher commodity prices and the weaker dollar are probably offsetting some of the downward pressure on prices linked to slack in the economy.

That said, most economists in the prediction business are projecting that core inflation will remain close to where it is today, or
perhaps rise a bit over the next couple of years. For example, according to Fed experts, as of early November the “central tendencies” of the core personal consumption expenditures inflation forecasts were 0.9 percent to 1.6 percent for 2011, and 1.0 percent to 1.6 percent for 2012.

It is reasonable to conclude, then, that deflation is probably not in the cards any time soon. However, all the real pros would tell you that inflation forecasting is a dicey enterprise, particularly in volatile times. For example, a 2007 Fed study of forecasts of inflation one year ahead were off by more than two percentage points of the actual rates 30 percent of the time.

It’s also worth noting that the experts have erred on the side of buoyancy in recent years – for the most part, they did not expect core inflation to decline as much it has. Indeed, analysts were forced to mark down their forecasts for 2010 core personal consumption expenditures inflation by half a percentage point (and core consumer price index inflation by three-quarters of a percentage point) between early 2009 and late 2010.

TO ERR WOULD NOT BE DIVINE

So, deflation over the next few years remains a possibility, and very low inflation is likely. Neither would be good news.

All else equal, anticipated deflation depresses demand because it creates an incentive for people to wait to do their spending. (We can already see that phenomenon at work in one very important asset market: think of all the Americans who are shopping for houses, but are reluctant to buy at today’s low prices because tomorrow’s could be even lower.)

If it’s not expected, a falling price level increases the burden on borrowers because their debts must be repaid in dollars that are worth more than they anticipated. Of course, the creditors on the receiving end of these more valuable dollars benefit. But, on balance, redistribution from borrowers to lenders tends to depress overall demand because the spending of borrowers is likely to be more sensitive to the surprise. They generally have fewer resources available to buffer the shock – which may be the reason they were borrowing in the first place.

The fallout from increasing the burden of
debt can be much worse if an economy is already struggling with excessive financial leverage and a fragile financial system— as the U.S. economy is today. Excessive lending during the credit boom of the last decade (particularly for housing) left many households and businesses with unmanageable debts even before the economy entered the recession.

To be sure, there has been considerable deleveraging on the part of households in the past several years. Still, with the unemployment rate now exceeding 9 percent and nearly one mortgage holder in four underwater (80 percent in Las Vegas!), few Americans have the means and inclination to shop til they drop. The mortgage-delinquency rate has barely receded from its peak in early 2010, and delinquencies on credit card debt and other types of consumer loans remain close to their recent highs. As the economy heads in the direction of deflation, the pressures on borrowers are intensified, creating the potential for systemwide stress.

In the extreme, deflation can lead to what the early 20th-century economist Irving Fisher termed a downward spiral of “debt-deflation.” The idea is that more-onerous debt burdens lead to more defaults, which hurt the banking system and cause a contraction in loans; that, in turn, depresses the economy and produces more deflation. And so on. Indeed, many experts attribute the severity of the Great Depression to debt-deflation feedback, as a decline in prices of about 25 percent in the United States between 1929 and 1933 was accompanied by a massive wave of debt defaults, bankruptcies and bank failures.

Concerns about deflation in part reflect the lack of a straightforward fix. Deflation—or even very low inflation—limits the Federal Reserve’s ability to spur the economy by making credit cheaper.

By way of background, the Federal Reserve has a mandate to promote both stable prices and maximum employment. And its key tool for managing these tasks is to change “real” interest rates—the nominal (stated) rates minus the expected rate of inflation. The idea is that since real rates correspond to the true cost of borrowing and the true return to saving, they are important determinants of both household and business spending. When there is slack in the economy, the Fed typically buys short-term Treasury securities in the open market in order to lower real interest rates and thus spur spending; when the economy is overheating and inflation pressures are building, the Fed reverses course by selling securities.

Traditionally, the Fed has influenced real interest rates through its indirect control over a benchmark short-term nominal interest rate known as the federal funds rate—the rate at which banks lend money to one another. When the Fed prods at the federal funds rate by buying or selling short-term Treasury securities, other nominal interest rates in the economy tend to move in tandem and real interest rates follow. However, the scope for using this unusual tool to fight a very weak economy is limited because, of course, the
nominal federal funds rate can’t be reduced below zero – a phenomenon known as the “zero-bound constraint.” If, for example, expected inflation is just 1 percent, then real interest rates cannot be driven below -1 percent. If the expected change in prices becomes negative – that is, if market participants expect deflation – then real interest rates must stay in positive territory. The fact that this limitation could be important even when inflation is merely very low explains why the Federal Reserve does not strive to achieve zero inflation, preferring a modestly positive inflation rate of 2 percent or a little below.

The experience of the past several years sheds light on the limited tools available to the Fed once the zero-bound constraint has been reached. The Fed aggressively drove down the nominal federal funds rate during the financial crisis, reducing it to nearly zero by late 2008. In the face of persisting weakness in the economy, it then announced a “quantitative easing” initiative to purchase longer-term securities. The goal was to provide additional stimulus by lowering long-term interest rates and easing credit terms more broadly. And, indeed, studies show that the first wave of quantitative easing – which ran from the beginning of 2009 through early 2010 and involved the purchase of $1.7 trillion in mortgage-backed securities and Treasury bonds – led to a meaningful drop in the private longer-term interest rates that influence firm and household spending on big-ticket items like houses and cars.

Against the backdrop of still-weak economic momentum and falling core inflation, the Fed announced a second wave of quantitative easing in November 2010 – this time through the purchase of $600 billion in Treasury bonds. At press time, it was too early to assay the impact of this added monetary stimulus. But many analysts believe it will lend modest support to the recovery and help stem the fall in the inflation rate.

That said, the Fed’s quantitative easing efforts have been the source of considerable controversy. Critics (at home and abroad) worry that the Fed’s balance sheet has grown so large that it may be difficult to unwind the program – that is, to sell back long-term securities to investors – once the recovery begins to gain steam. And this could spark excessive inflation directly, or indirectly by raising inflation expectations and depreciating the dollar. Such an outcome, in my view, unlikely, given that the Fed has developed a large array of ways in which to remove the stimulus. But the risk cannot be dismissed out of hand.

The more immediate worry is that deflation (or very low inflationary expectations) could paralyze monetary policy. In principle, there is no reason why QE2 couldn’t be followed by QE3. But yet-more quantitative easing would expand the Fed’s already large balance sheet further, raise the associated risks and draw more fire from the critics.

Moreover, if pursued indefinitely, quantitative easing will surely lose a lot of its oomph. At some point, even long-term nominal interest rates would reach zero, cutting off one of the most important channels through which the program is believed to affect economic activity. Quantitative easing might still be able to give spending a boost at that point – for example, by raising inflation expectations and driving real interest rates deeper into negative territory. But policymakers would be left in the uncomfortable position of understanding even less about how their new tool of monetary policy affects the economy.

Deflation is terra (almost) incognito. The possibility of a repeat of the 1930s, in which
As Goes Japan?

For Americans under the age of 80, deflation is an abstraction. Not so for the Japanese. Following the collapse of stock and real estate bubbles in the early 1990s, the Japanese economy entered a prolonged slump that was exacerbated by the frailty of the financial system. Though policymakers countered with a variety of monetary, fiscal and regulatory measures designed to stimulate spending and to clean up the banks’ balance sheets, the government’s response was insufficiently forceful (and applied with too little consistency) to bring the economy out of the doldrums.

Japan subsequently suffered what is now known as the lost decade, with nominal interest rates near zero, and stop-and-go economic growth averaging only 1.3 percent annually (a big step down from the 1970s and 1980s). More to the point here, the price indexes for goods and services fell by roughly 1 percent annually for the decade of the 1990s.

Japan’s experience with deflation has been puzzling. The economy did not see a debt-deflation spiral of the sort that so badly damaged the American economy during the 1930s, but rather a prolonged period of weak economic activity and modest price declines. Some analysts attribute the absence of a deflationary spiral to the stability of Japanese inflation expectations, which gave monetary policy some force even after nominal interest rates touched bottom.

The big question is whether the United States will suffer a similar fate. There are, alas, some uncomfortable parallels. In each economy, decline was triggered by the end of an asset bubble. In each, government stimulus and regulatory change were adequate to the task of stabilizing output, but inadequate to restore the economy to vigorous growth and low unemployment. In each, it proved difficult to induce banks and other financial intermediaries to provide credit to small and midsize enterprises. In each, structural weaknesses (budget deficits, interest-group gridlock and demographic shifts) have complicated recovery.

falling prices helped to transform a nasty stock market bust into a global depression, is close to nil. But with fiscal stimulus apparently off limits thanks to partisan political deadlock and interest rates hovering near zero, a more moderate Japanese-style deflation (see the box), is not unthinkable. Ironically, the best hope for escaping the zero-bound constraint lies in the fact that most people are still a lot more worried about inflation than the opposite. Persistent inflation expectations give monetary policy some extra muscle by making borrowing at low nominal interest rates more attractive. The trick will be to find the sweet spot between inflation and deflation – and to stay there.