

# Reflections



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## On the Deflation Threat

*By Barry Bosworth*



Economics is not called the dismal science for nothing, and economists love to sound the alarm. Just as we were prepared to celebrate victory in a long war against inflation, we are being told that a new threat is imminent: deflation. Ominous comparisons are made to Japan, where an intractable economic stagnation is seen as the product of deflation. And we are reminded of wretched times, like the depression of the 1930s, which were marked by rapid declines in price level. How seriously should we take the threat?

It is important to distinguish the source of falling prices. Deflations induced by sharp contractions in aggregate demand have invariably had high costs, and monetary policy has often proved ineffective in bringing them to an end. However, episodes of gradual price declines that result from sustained growth in productivity and supply – the agricultural boom in the American Midwest in the late 19th century comes to mind – have been relatively benign.

Thus, the concern ought to be with recession, not with deflation per se. Note, too, there is an asymmetry in the costs of deflation versus inflation – one that offers good reasons for setting the goal for price stability in a way that allows for some inflation. Finally, if people really want to fret about

deflation, they should focus on falling asset prices – real estate, stocks and the like – not falling prices for goods and services.

#### **THE COSTS OF DEFLATION**

The economics of deflation parallel those of inflation. Inflation is a sustained rise in the average price level, and deflation is a sustained fall. Thus, if high inflation is

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bad and less inflation is good, it is somewhat surprising to be told that deflation is not even better. In part, the explanation is that in cases of both inflation and deflation the costs arise from the surprise factor. It is *unanticipated* changes in prices, regardless of whether the changes result in inflation or deflation, that distort the allocation of resources and result in arbitrary redistributions of income and wealth. Just as an unexpected inflation leads to gains for borrowers (who pay their debts in depreciated currency) and parallel losses to creditors, the reverse is true for episodes of unexpected deflation.

Those writing about economics and business tend to associate borrowing with virtuous entrepreneurial activity, which explains why economists are inclined to be tolerant of modest inflation. Deflation, their reasoning goes, imposes the greater cost because it punishes innovators (who are borrowers) and holds back progress. Economists also believe that it is a lot harder to drive down wages than to raise them. Hence, low but positive inflation tends to make it easier for the economy to adjust to shocks that reduce labor productivity and require a reduction in real wages to regain full employment.

The likely impact of deflation on financial markets adds to this pro-inflation bias. The effects of inflation, if it is anticipated, will be largely offset by an adjustment to interest rates. Both borrowers and lenders should be focused on the real rate of interest (that is, the nominal rate of interest less the rate of inflation), and expectations of higher inflation will lead to higher nominal rates.

Note that a combination of high inflation and high interest rates can still yield a moder-

ate real rate. By contrast, the nominal rate of interest cannot be negative – nobody will lend money at, say, a rate of minus 5 percent. Hence, the argument that what really counts is to avoid surprises does not quite hold for deflation; once the nominal rate of interest gets down to zero, deflation generates high real interest rates that depress investment and contribute to unemployment. Thus, in a world of low interest rates and deflation, monetary policy may well lose its capacity to stimulate output. In fact, under extreme conditions, a vicious cycle could develop: as a more rapid rate of deflation raises the real interest rate, investment falls and the rate of price reduction accelerates – in turn raising the real interest rate even more.

There's an important distinction to be made here. In itself, gradual deflation is not particularly costly. In the United States, the general price level drifted down by about 1 percent annually for more than 30 years after the Civil War. Yet, that period is generally viewed as a golden age of economic growth, with strong gains in income. In Britain, the price level drifted down throughout the 19th century – a century during which per capita income more than tripled. Similarly, consumer prices have been declining in China since the end of 1997 despite ongoing income growth in excess of 7 percent.

Yet, deflation has also been associated with severe economic crises. In the depression of the 1930s, output and the price level both fell by 25 percent in less than four years. And if we expand the definition of deflation to include declining asset prices, deflations are frequently linked to financial crises.

The historical record thus suggests that the costs of deflations are related to their causes. In this respect, it is particularly important to distinguish between demand- and supply-side shocks. Deflations that result from

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reductions in demand (and, subsequently, to declines in output, job losses and wasted capacity) are bad news, indeed. But the defining characteristic is the drop in aggregate demand; deflation is a byproduct.

Still, deflation in a depressed economy accentuates the decline in economic activity by punishing borrowers and threatening the solvency of banks; this in turn restricts their

more real threat than a decline in the overall price level. The bursting of the equity and real estate bubbles in Japan in the early 1990s severely damaged the country's financial system and led to much of the economy's current difficulties. Similarly, the collapse of the real-estate market in the Scandinavian economies at about the same time precipitated a harsh recession. Asset price deflation also

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lending. In an effort to reverse punishing declines in the demand for goods and services, governments have occasionally driven interest rates to zero and found monetary policy to be, at best, an incomplete solution. That was arguably the case with the depression of the 1930s, and it appears to be an important source of woe for Japan today.

By contrast, sustained declines in the price level that are the result of supply shocks have been associated with gains in real incomes. Examples include technological innovations, such as improvements in computer hardware and software that drive down the cost of information processing, and declining prices for oil and gas in countries that consume more energy than they produce. Note that such price declines translate into increased real output and do not lead to downward pressure on wages. They are also typically associated with increased investment opportunities and robust demand for credit.

### **ASSET PRICE DEFLATION**

In today's economy, the deflation of asset prices – stocks and real estate – is a much

worsened the severity of the Asian financial crisis of 1987-88.

A sharp decline of asset prices causes distress because the assets are frequently pledged as collateral for debts. Heavily leveraged debt, where a thin layer of net worth protects lenders, increases the risk that small changes in asset prices will trigger widespread bankruptcies. The need to sell assets in illiquid declining markets can fuel further asset losses.

America's experience with such problems in the 1930s led to many of the financial reforms that protect financial institutions against the effects of crises in asset markets. In particular, the United States relies on broad capital markets rather than banks to allocate credit. It is far less traumatic for, say, diversified mutual funds to lose value than for a bank that is part of the payments system to take a big hit from bad debts.

However, vulnerabilities remain high in other countries where investment is largely financed through bank lending and the legal procedures for restructuring impaired balance sheets are ineffective. The Asian economies that were hit by the 1987 collapse

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of asset values are still struggling to deal with two distinct aspects of the crisis: the need to reconstruct a banking system burdened with large amounts of nonperforming loans, and the problems of resolving the large numbers of bankrupt nonfinancial enterprises.

### **THE GOAL OF ZERO INFLATION**

Deflation plays an important role in the debate over whether central bankers should make zero inflation the goal of monetary policy. The failure of conventional accounting and tax systems to distinguish fully between real changes in income and wealth, and paper changes that are byproducts of changes in the price level, suggest that the notion of a fully anticipated, costless inflation is an illusion. For example, the federal tax code adjusts income tax brackets for inflation, but makes no distinction between real income from capital and returns that are linked to inflation. Thus, both inflation and deflation lead to economic distortions, and those distortions rise with the rate of inflation or deflation.

By no coincidence, most contemporary economists view price stability as a high priority. But what they mean by stable prices can be a bit fuzzy. Only a few argue in favor of a rigid target in which any unexpected rise in prices must be offset later by a period of deflation. More commonly, the goal of price stability translates into a target for the rate of inflation – and that target may not be zero price increases because it is widely believed that the official price indexes systematically exaggerate increases in the cost of living.

In addition, the current experience in Japan has given pause to inflation hawks. At zero inflation, it is not possible to engineer a negative real rate of interest. Yet, negative real rates on business loans may be required to stimulate investment sufficiently to lift an

economy out of a recession. In a no-inflation environment, we can expect interest rates of only 2-3 percent on low-risk government securities. That leaves very little room for monetary policy to respond to a recession threat with cheaper credit.

In this current recession, for example, the Federal Reserve has reduced interest rates by more than 4 percentage points in an effort to stabilize the economy in the face of a relatively modest decline in demand. Such a strong response was possible because the process began when the nominal interest rate was at 6 percent and inflation was about 3 percent. Similarly, during the 1990 recession the Fed reduced interest rates by about 4 percentage points – driving the real rate into negative territory – in its efforts to engineer a recovery.

With prices falling about 1 percent per year, the impossibility of pushing Japan's nominal interest rate below zero has left the central bank without the ability to provide stimulus. While critics argue that Japan should have done things differently in the early 1990s to avoid the current mess, the limited policy options today illustrate the risks in maintaining zero inflation in good times. Indeed, with the exception of the early 1980s, recoveries from past recessions in the United States have been associated with at least brief periods of negative real interest rates.

### **THE POLICY RESPONSE**

The war against inflation does seem to have been won; most countries now operate with rates of inflation far below those of the 1970s and early 1980s. And as more economies have flirted with deflation, commentators have begun to focus on the policy trap created by the combination of deflation and zero nominal interest rates. As suggested above, there is considerable agreement on how to avoid the trap: aim for a low, but positive, rate of

inflation (say 2 percent per year). There is less guidance as to what to do to escape the trap once it has snapped shut.

Paul Krugman and a few other economists have proposed that the Bank of Japan formally set a target of greater-than-zero inflation. A credible commitment to a positive inflation rate, the thinking goes, would induce the private sector to alter its expectations accordingly and permit real interest rates to fall below zero. The trouble is, lenders and borrowers are unlikely to view a government announcement of intent to generate modest inflation as credible – particularly after a long period of policy failures.

Alternatively, the Bank of Japan could change prices by selling yen for other currencies. The result would be depreciation and a stimulus to demand through a growing trade surplus. In addition, the depreciation would raise the price of imports and thereby change inflation expectations.

Japan's trade partners would probably be inclined to oppose such a policy because it would make their exports less competitive in the big Japanese market. However, the strength of their reaction would depend on the circumstances. If Japan is seen as being uniquely threatened by deflation and chronic recession, Japan's trade partners might well tolerate policies that initiate a process of reflation in an economy so important to the health of the global economy – even if it was against the short-term interests of their own exporters

Remember that governments do have the ability to inflate an economy even if the nominal interest rate is zero. The central bank can issue as much money as it chooses, and it can use those funds to create demand for goods and services. Think of a case in which a central bank simply drops money from airplanes.

However, no government would under-

take such an action because the more rational step is to use the funds to meet social needs or to cut taxes. To put it another way, in the extreme case, fiscal and monetary policy begin to blend together. Problems like those of Japan are solvable, but the government must be willing to commit to strong action.

It has been argued that the growth of public debt in Japan is evidence that fiscal stimulus could no longer work. Those who make the argument, however, fail to distinguish between increases in the public debt that are the result of the bailouts of failed financial institutions and those that are discretionary fiscal actions.

The bailout of savings and loan associations in the United States, in which the government did not allow financial institutions to default on their obligations to depositors, increased government debt without increasing the demand for Chryslers or Caterpillars. Similarly, much of the increase in Japanese government debt has been associated with transfers of capital to the banking system rather than increases in consumers' purchasing power.

The lesson from modern-day Japan is the same as the lesson from the Great Depression: when the going gets really rough, monetary policy is not enough. While we may want central banks to take the lead in stabilization policy, the ability to use fiscal policy must be maintained as a second line of defense. As long as we do not negotiate away our freedom to act on the fiscal side, I wouldn't worry very much about price deflation.

I am, on the other hand, concerned that public officials, blinded by their own ideological agendas, would be incapable of acting in a timely fashion. Washington's response to the current recession reminds us of the difficulty of getting a divided Congress to commit to even the simplest policy actions. **M**