Deflation and Japan's Economy

By Itoh Motoshige

Deflation, an Economic Malady

Since the end of the 1990s, Japan's economy has been mired in severe deflation. No other industrialized country has undergone a similar experience since the Great Depression of the 1930s. As will be argued in this paper, the common remedies of economic policies are without effect in deflationary conditions. It is for this reason that Japan's experience has attracted the interest of many economists. Further, as the rate of price increase tends to be falling in most of the world's leading economies, debate is focusing on the danger of sliding into the deflation that threatens several countries. In the sense of prevention of deflation, there is much that Japan's experience can contribute.

Deflation signifies a phenomenon of continually declining prices. In Japan,

prices have continued to fall: not only commodity prices, but real estate and share prices as well. Price declines in the latter group are referred to as asset deflation. To the general public, falling prices may appear desirable. And a fair number of informed voices in Japan have suggested that slippage in prices noted for being high in international comparison may be something to be welcomed. The more prices fall, the better consumers will fare, goes their argument.

Obviously this perception is misplaced. Deflation signifies not falling prices alone but also contracting nominal wages and corporate earnings. For holders of substantial debt like Japanese corporations and the public sector, real debt rises to the extent that prices fall. The rising debt of Japan's government and the increasing delinquency of bank loans are phenomena deeply interrelated with deflation.

Under deflationary conditions, corporations and consumers no longer act as active purchasers of goods and services. If consumers expect prices to continue falling, they will postpone purchases. In the same vein, corporations will be discouraged from active investment if they expect selling prices and operating revenues to fall. As demand dwindles, economic activity slows, causing further price declines. Expectation of lower prices retards demand, inducing further falling prices: this is how deflationary spirals are set in motion.

As to the question of what causes deflation, there is no single cause. It is appropriate to think of a combination of factors leading to deflation. In this context, I would like to comment on the notion that the principal cause of

Japan's deflation is goods produced at low prices and exported in large volumes by emerging economies such as China.

Prices of individual goods result from the twin factors of supply and demand. If demand falls, or supply increases, prices will decline. In the same sense, it is appropriate to think of general price levels as determined by the magnitudes of overall demand and supply at the macro level. In economics this perspective is referred to as aggregate demand and supply. At issue is the question about which force is truly dominant in terms of causing prices in Japan to decline, supply or



Figure 1 Profusion of a deflationary mindset



demand. The view that price declines stem from large volumes of low-priced products imported from China identifies supply factors as the force responsible for deflation. I will not argue that this view is wrong, but it clearly presents problems. For instance, if growing supply is responsible for price declines, supply volumes should grow in step with falling prices. This condition is different from Japan's current situation, where falling prices are attended by growing unemployment and slowing growth. I will not completely deny the effect of supply factors, but I cannot help thinking that demand factors are also a stronger force.

Demand Factors in Deflation

If demand continues to retreat, prices fall further. This raises the question of what factors can conceivably be working in the background causing demand to fall back, leading to deflation. It is appropriate to assume a combination of contributing factors.

The first factor is credit contraction in the middle of banks' efforts since the collapse of the bubble economy to dispose of non-performing loans (NPLs). After the disintegration of the bubble, domestic bank lending fell to less than ¥400 trillion in 2003 from ¥500 trillion at the beginning of the 1990s. Behind this contraction in bank lending of over ¥100 trillion are corporate bankruptcies, bank-initiated funding cuts and active repayment of corporate borrowing, among other factors. From a macro-

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tive, a steep fall in demand has ensued from this behavior. Clearly, the NPL problem is the principal reason for Japan's continuing economic underperformance more than 10 years after the bubble, whose collapse also weakened demand through falling real estate and share prices.

The second factor weakening demand and thereby triggering deflation is the structural demographic aspect of the aging society. Japan has been witnessing a rapid decline in the birth rate combined with a growing percentage of elderly people, and the baby boomer generation are now in their mid 50s. According to the life-cycle hypothesis of economic science, the propensity to save is considered to be higher in general among people in their 50s facing retirement compared with that of younger generations or elderly households. With its population concentrating on this generation, Japan is faced with a structural weakening of demand caused by demographics.

The third factor negatively impacting demand is deflation itself. As has been explained already, progressing deflation causes deflationary expectations to take root among the public. Anticipation of deflation further reduces demand, again aggravating deflation.

Considering the complex factors working in the background of deflation, it becomes clear that a simple demand stimulation policy will hardly suffice to escape it. Even with support from temporary demand stimulus through fiscal measures (tax cuts and increased public investment) to compensate for demand stymied by the collapse of the bubble and a deepening deflation mentality, achieving sustained demand growth will be difficult. In fact, efforts by the Japanese government to generate economic growth through aggressive fiscal policy measures after the collapse of the bubble only worsened the debt levels of the government without achieving a sustained expansion in demand.

Monetary Policy as the Focus of Attention

In this situation, monetary policy has increasingly taken center stage. The Bank of Japan (BOJ) lowered its policy benchmark rate to close to zero (i.e., the call-rate or inter-bank short-term rate), thus adopting a so-called zero-interest policy. Not only did the BOJ lower interest to nearly zero, it announced its commitment to maintain zero interest until deflation is defeated. A time horizon was thus specified for interest policy in order to communicate stable rates that were not to be raised easily so as to instill market confidence in the zero interest policy.

According to economic theory, longterm rates are determined by expected levels of short-term interest rates in the future plus a premium to compensate for uncertainty. With expectations that short-term rates will remain near zero for some time, long-term rates too will fall to extremely low levels. In other words, the yield curve of interest rates flattens.

The yield on the 10-year government bond, a representative indicator of longterm rates, fell below 0.5% at one point (February 2003). Current longterm interest rates (as of November 2003) have climbed back to around 1.5%, thanks to the mild economic recovery that has been unfolding since. Even so, compared with other countries, long-term interest rates remain extremely low.

Deflation has been resilient despite short and long-term interest rates descending to levels as low as these. This observation had the effect of raising doubts about the efficacy of further monetary policy measures in the fight against deflation. John Maynard Keynes called this condition a "liquidity trap," given that, at times of extremely low interest rates, currency and treasury bonds (government debt) are nearly perfect substitutes, with increases in currency likely to be simply absorbed in the public's portfolios or to become additional reserves of banks. Keynes concluded that in the circumstances as described, monetary policy was nearly without effect.

Japan, too, is caught in a liquidity trap. As Keynes suggested,

the standard policy prescription in circumstances like these calls for active use of fiscal measures without relying on monetary policy. However, in the case of Japan, with its very high levels of government debt, additional public spending was highly problematic. Consequently, this issue prompted a debate about whether or not additional monetary easing could dispel deflation.

Deflationary expectations of the public hold the key to this question. Many economists have noted that, if government policies successfully lead the public to be susceptible to inflationary expectations, this could be effectively used in fighting deflation. In an environment where nominal interest rates will not fall below zero, real interest rates will remain locked in at high levels and retard demand so long as popular deflationary



Kawada Kenji (left), President of Resona Holdings, and Nomura Masaaki, President of Resona Bank, apologize at a press conference after the decision to inject public funds was announced

expectations persist. Assuming that the general public can be persuaded to adopt inflationary expectations, a decline in real interest rates would ensue, with hope for demand expansion and an end to deflation.

Inflation targeting, a monetary policy tool, holds the answer to the question of whether inflationary expectations can be instilled through monetary policy. Inflation targeting refers to the establishment of a targeted range for price inflation, with an array of methods used for reaching it. Conceivable measures are stepped-up "quantitative easing" to expand base money, or extending central bank purchasing operations to stock indexes and foreign-denominated debt, and other instruments.

Monetary policy as bold as this is rarely implemented and is therefore like-

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ly to be considered inappropriate, but the BOJ has been implementing it in small steps. In fact, the stance of persisting with a zero-interest policy until the end of deflation constitutes a weak form of inflation targeting, on which the BOJ has been holding cautious views. Additional strong growth in base money comes from the BOJ's sustained outright purchase operations of government bonds.

The Short-Term Outlook

With February 2003 as the watershed, Japan's economy is moving out of its worst episode. This is also reflected in the Nikkei average, which has recovered from the \$7,000-level to above \$10,000. Although deflation remains in place, its pressures appear to be gradually weakening in tandem with economic recovery, thanks partly to the rising stock market and the measure of headroom it affords the banking sector.

A huge capital injection of public funds in Resona Bank played an important role in this

economic recovery. Criticized in some quarters as a "bank bailout," it had the effect of spreading confidence in the market that the major banks will not default. Additionally, the Japanese economy, like others in Asian countries, has been enjoying a moderate upward trend on the back of a rapid recovery in the U.S. economy.

Can we conclude from the foregoing that Japan's economy has fully escaped deflationary conditions? Unfortunately, an upbeat outlook alone is not enough of a basis for a conclusive pronouncement.

To be sure, this latest economic recovery provides reasons to be hopeful. It is the third economic expansion since the collapse of the bubble, and it has features that differ from the previous two. Firstly, the recovery process set in after a fall in the prices of stocks and real estate to exceedingly low levels. With the Nikkei stock index between \$10,000and \$11,000 (November 2003), stocks are by no means expensive. However, compared with the extremely low reference point, the rise to current levels has had beneficial effects on the economy. For the banking sector, with its continued substantial equity portfolios, the rise in share prices promises valuation gains, and investor sentiment too is returning to the stock market.

The situation is similar for real estate prices, whose decline to what is conceivably bottom range has generated a keen buying stance among property investors. Although Tokyo has been in a largescale real estate development rush, yields on invested funds, through securitization or other instruments, are at high levels. Since substantial risks remain for real estate investors, some aspects defy evaluation using short-range investment yields as a benchmark, but this does not alter the fact that yields of current magnitudes have become obtainable first and foremost because of the steep declines in real estate prices.

Another important characteristic of this latest recovery is a strong rebound in corporate earnings, especially those of large corporations. Beleaguered by deflation and excess debt, firms have implemented far-reaching restructuring. Although these efforts quickened deflation's steps in some respects, companies were effectively rewarded with superior earnings structures.

As deflation deepened, some analysts were emphasizing its adjustment function for economies, asserting, for example, that "price adjustment through deflation was unavoidable given that prices in Japan were generally high in international comparison," or that "corporate restructuring and disposal of NPLs needed to proceed amid the process of deflation, so that artificial attempts at economic stimulus and monetary easing only served to delay the pace of structural adjustment." These theories have been proven misplaced in light of the needlessly prolonged suffering of Japan's economy under the impact of deflation. Having said this, deflation's adjustment effects on the economy have indeed become apparent since. Nonetheless, it appears fallacious to emphasize its function as a promoter of structural adjustment.

Has Japan's economy succeeded in achieving a complete escape from deflation? Regrettably, current conditions do not allow one to make an optimistic case. Prices, and especially the GDP deflator, remain in decline. At the same time, NPLs continue to plague regional financial institutions and some of the major banks.

Fortunately, Japan's economy has been showing signs of recovery supported by economic strength in the United States and China, even though more than a little doubt exists as to whether this trend will remain intact. Long-term interest rates have started to rise again on the back of the economic healing process, but a sudden surge could easily extinguish the nascent recovery. Another important point is not to let economic recovery delay banks' disposal of NPLs. Japan's economic condition continues to require sustained care, with a cautiously optimistic policy stance.

Lessons to be Drawn from Japan's Deflation Experience

I would like to use the remainder of this paper for a short discussion of what lessons can be drawn from Japan's deflation experience.

1. Deflation requires bold countermeasures implemented at an early stage. Once an economy has fallen into deflationary conditions, an accelerating deflationary spiral is set in motion, which follows a sequence of deflation, then decline in demand, followed by the spread of a deflationary mindset. Changing the deflationary mindset is difficult once it has taken hold among the public. Unfortunately, Japan's monetary policy countermeasures came too late. Ensuing conditions cornered the BOJ into adopting bold monetary easing policies, which until that point had been the subject of the BOJ's wavering rumination. In August 2000, the BOJ provided an exemplary case of inappropriate deflation fighting when it ended its zerointerest policy by raising its headline interest rate. Given that deflation up until that time was an unknown without precedent, misguided responses may have been unavoidable to a certain extent. The United States, out of concern over deflation and perhaps informed by lessons drawn from Japan's experience, responded to the economic slowdown in 2001 with economic stimulus measures of outstanding boldness and speed. The difference in speed between Japan and the United States in cutting interest rates and taking other countermeasures is indeed eye-catching.

2. Faced with deflationary conditions, the BOJ has adopted monetary policies it previously considered unconventional, one after another. At the same time, inflation targeting became a topic much discussed by the public. The first direct post-war encounter with deflation has extended the frontiers of monetary policy and contributed to a better understanding. In this sense, the intensity of the monetary policy debate in relation to inflation targeting is especially significant. In Japan's increasingly mature economy, the question of what monetary policy should be adopted will require renewed consideration.

3. Industrialized economies remain at risk of falling into deflation. As already mentioned, the underlying causes of Japan's deflation were the weakening effects on demand of the steep decline in the national birth rate combined with the high average age of the population. Similar developments can be observed in Europe. Although Japan remains the only major economy to have encountered deflation, it is important to keep in mind that many other industrialized countries are at risk of enduring the same experience.

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