Lessons from the Japanese Experience

FOCUS

- What were the underlying factors of the Japanese economic crisis of the 1990s? Were they similar to the 2008 U.S. crisis?
- How did policy makers in Japan respond to the crisis? Were their actions effective?
- What are the similarities and differences between the Japanese crisis of the 1990s and current conditions in the United States?
- What are the important lessons of the Japanese experience for the United States?

The causes of the Japanese asset bubble and American housing bubble are eerily similar.

—Anthony Randazzo, Michael Flynn, and Adam B. Summers

During the latter half of the 1980s, stock market and commercial real estate prices soared in Japan, much like housing prices soared in the United States during 2001–2005. Moreover, the Japanese asset price bubble turned to a bust in 1990–1991. Similarly, the housing price boom in the United States turned to a bust beginning in the second half of 2006. The plunging asset prices in Japan during the early 1990s generated a flood of loan defaults that created huge problems for the banking and financial sectors. The collapse of housing prices created the same result in the United States during 2008–2009. The Japanese financial problems generated uncertainty and a sharp downturn in the growth of real GDP during 1992–1993, and the economic growth of Japan has been sluggish ever since. The United States has already experienced a severe downturn in 2008–2009, but we do not know what lies ahead. Given the similarity of the Japanese experience during 1985–1993 with that of the United States during 2001–2009, it will be interesting to take a closer look at the Japanese experience and consider the lessons that can be drawn from it. This special topic will focus on that issue.

The Boom and Bust of Japanese Asset Prices: 1985–1992

The growth rate of the Japanese economy during 1960–1990 was striking. During that thirty-year period, the real GDP of Japan grew at an annual rate of 6.2 percent. Some of this remarkable growth was the result of what is sometimes called the “catch-up phenomenon,” the ability of lower income countries to grow rapidly because they can emulate the successful practices and technology of their higher income counterparts. By 1990, this growth had propelled Japan to a per capita income similar to that of the high-income countries of Western Europe and about 80 percent the level of the United States. Within a relatively short time frame, Japan had moved from a poor country recovering from the devastation of World War II to one of the world’s most prosperous nations.

By the latter half of the 1980s, the strong growth and rising incomes had created a wave of optimism about the future of the Japanese economy. This generated a strong demand for both commercial real estate and shares of business firms in Japan. The Bank of Japan reduced its discount rate from 5 percent in January 1986 to 2.5 percent in February 1987. This reduced the cost of buying and holding both real estate and business assets. Fueled by persistently strong growth, optimism, and easy credit, asset prices in Japan soared. By the late 1980s, Japanese investors anticipated that real estate and stock prices would continue to rise, just as many American homebuyers thought that housing prices would keep going up during the early part of the twenty-first century. Moreover, Japanese banks and other lenders also expected the rising prices to continue. Therefore, they were willing to extend loans to borrowers, including many who had very little equity in the purchased asset.

Japanese real estate and stock prices soared during the 1980s, just as housing prices soared in the United States during 2001–2005. But the bubble burst in 1990. Exhibit 1 illustrates the boom and bust in the Japanese stock market. These data are for the Nikkei 225, the Japanese equivalent of the Standard and Poor’s 500 index in the United States. Note how the Nikkei index soared from 13,024 in January 1986 to 38,916 at year-end 1989, an increase of nearly 200 percent over a four-year period.
But there was a dramatic change in 1990. By September of 1990, the Nikkei 225 had fallen to 20,984, down 46 percent from the beginning of the year. The index fluctuated in the 22,000–26,000 range during 1991, but it plunged once again to 15,010 in July 1992. Over the next eight years, it was mostly in the 13,000–20,000 range.

The boom–bust pattern of real estate prices was similar. When the prices of both stock and real estate assets collapsed, they took down not only the asset purchasers but also the highly leveraged banking and financial institutions that funded their loans. The asset bust soon spread to the rest of the economy and led to a sharp downturn in economic growth.

As EXHIBIT 2, part (a), shows, the growth rate of real GDP fell from the 5 percent range the Japanese had come to expect to 3.3 percent in 1991 and less than 1 percent during 1992–1993. Moreover, during the decade that followed, Japanese real growth averaged only 1 percent, far below the expectations of the late 1980s. Today, that downturn and the persistently weak growth are often referred to as Japan’s “lost decade.”

Exhibit 2, part (b), presents data on the Japanese unemployment rate. Historically, the unemployment rate in Japan has been low, and it continued at a relatively low rate even during the initial phase of the downturn. During the early 1990s, Japan’s rate of unemployment was only 2 percent. The rate trended upward during the decade, reaching 5 percent in 2001. But even this higher rate is well below the figures of most other high-income market economies.

Japan’s low unemployment rate reflects a less dynamic business environment and lower labor mobility. For example, the start-up and business failure rates in Japan have been about half those of the United States over the past several decades. Further, the
Japanese labor market is characterized by lifetime employment contracts, a promise by the employer to retain the employee until age 55. In order to make this system viable, the Japanese government has often propped up struggling businesses rather than allowing them to fail. This results in less shifting of employees among employers and a lower rate of unemployment. But it also slows the shift of resources from low to high productivity areas.

Japanese Policy Responses during the 1990s

As growth remained low in the aftermath of the collapse of asset prices, Japan searched for a way to jump-start its economy. We will now take a closer look at its conduct of fiscal and monetary policy during this era.
Fiscal Policy

During the 1990s, Japan adopted at least seven different stimulus packages designed to increase aggregate demand and enhance economic growth. Government spending on infrastructure—roads, bridges, and airports—was increased substantially. Taxes were cut in both 1994 and 1998, but both of these tax cuts were temporary, weakening their impact on aggregate demand. These fiscal policy changes were financed with budget deficits and increased borrowing.

**EXHIBIT 3** presents data on the Japanese fiscal record: both government spending and the budget deficit as a share of the economy. As part (a) shows, government expenditures comprised a little more than 30 percent of GDP during the late 1980s and early 1990s. By 1999–2002, government spending had risen to nearly 40 percent of GDP. Thus, government spending rose by approximately 7 percent of GDP during the 1990s.

The increased spending was financed with borrowing. As Exhibit 3, part (b), illustrates, the budget deficits rose throughout the 1990s. At the beginning of the decade, the Japanese government was running a budget surplus, but it soon dissipated, and budget
deficits in the range of 4–5 percent of GDP were present during 1994–1997. The deficits were still larger—between 6 percent and 8 percent of GDP—during 1999–2002. By way of comparison, the budget deficits of the United States were generally only 1 or 2 percent during the Great Depression (see Exhibit 6, Special Topic 6). Many economists, particularly Keynesians, argue that the Great Depression deficits were not very effective because they were too small. This argument is less applicable in the case of Japan, because the Japanese budget deficits were large.

Persistently large budget deficits will increase government debt as a share of the economy. As Exhibit 4 shows, this was indeed the case in Japan. Measured as a share of GDP, the net debt of the Japanese central government rose from 14 percent in 1992 to 60 percent in 2000 and 88 percent in 2008. Thus, the data indicate that fiscal policy was highly expansionary in Japan during the decade following the asset price meltdown. Government spending was increased substantially as a share of the economy, and virtually all of this increase was financed through debt.

As our analysis of fiscal policy explained, there are alternative views regarding the stimulus effects of fiscal policy. Keynesians argue that expansionary fiscal policy will stimulate aggregate demand and real output, particularly during a period of economic weakness. In contrast, other economists argue that the spending increases will generate secondary effects—higher interest rates, increased future taxes, and changes in the structure of demand—that will lead to offsetting reductions in private sector spending. The experience of Japan during the 1990s would appear to be more consistent with the latter view.

The initial evidence indicates that the fiscal policy response of the United States will follow the same pattern as that of Japan. Both the Bush and Obama administrations responded to the recession of 2008–2009 with fiscal stimulus programs. Federal expenditures increased sharply as a share of GDP, and the 2009 budget deficit soared to 10 percent of GDP. The federal deficit for 2010 is projected to be 8 percent of GDP. These deficits are far larger than any of recent decades. (For evidence on this point, see Exhibit 1 of Special Topic 8 on budget deficits and the national debt.)

**EXHIBIT 4**


*Measured as a share of GDP, the net debt of the Japanese central government was 14 percent in 1992, but it rose to 60 percent in 2000 and 88 percent in 2008.*
Monetary Policy

EXHIBIT 5 provides evidence on the direction of Japanese monetary policy during the past two decades. As part (a) shows, the broad M2 measure of the money supply increased at double-digit rates during the late 1980s. This monetary expansion pushed interest rates to low levels and, as we mentioned earlier, contributed to the rising asset prices of the late 1980s. However, monetary growth has been restrictive since 1990. The M2 money supply expanded at an average annual rate of only 2.5 percent during 1991–2002.2

Exhibit 5, part (b), provides data on the Japanese inflation rate. These figures also indicate that monetary policy was highly restrictive during the 1990s. The Japanese

---

2The growth rate of the M1 money supply was a little higher—7.8 percent during the 1990s. During the decade, many Japanese transferred funds from their bank savings accounts into government postal deposit accounts for safety reasons. The postal accounts are included in M1, but the bank savings deposits are not. Thus, these transfers inflated the growth rate of the M1 money supply. The postal deposits are used almost exclusively to purchase government bonds. Thus, they did not provide financial capital for the private sector.
inflation rate was exceedingly low throughout the decade. Moreover, the general level of prices actually fell during five of the eight years between 1995 and 2002.

Why was Japan’s monetary policy so restrictive during the 1990s at a time when fiscal policy makers were obviously trying to stimulate the economy? Historically, many have thought that low interest rates were indicative of an expansionary monetary policy, but this is not always true. Nominal interest rates are influenced by the expected rate of inflation. When people expect deflation—a decline in the general level of prices—nominal interest rates will be low. They might even approach zero. But far from indicating that monetary policy is expansionary, under these circumstances, the low interest rates are indicative of highly restrictive monetary policy and the expectation of future deflation. Japanese policy makers may have been misled into thinking that their low nominal interest rates were reflective of expansionary rather than highly restrictive monetary policy.

Monetary policy makers in the United States made this error during the 1930s. Many thought that the low interest rates of the Great Depression were reflective of an expansionary monetary policy. However, this was not the case, and the 33 percent reduction in the money supply between 1929 and 1933 vividly illustrates this point. The same thing may have happened in Japan during the 1990s.

### The Aging Population of Japan in the 1990s and the United States Today

The age composition of a nation’s population influences productivity and income. The labor force of high-income countries like Japan and the United States is highly educated and skilled. But, even well-educated younger workers lack experience. Therefore, their productivity and earnings tend to be below average during this phase of life. As workers acquire additional experience and move into the prime age categories, usually age 35–59, their productivity will increase and reach a peak. However, as they grow older and move into the retirement phase of life, productivity and earnings will again fall below average.

As the share of a nation’s population age sixty-five years and older expands, there are two major reasons why this will slow economic growth. First, productivity will slow...
because the rising share of the elderly will pull down the average productivity of the adult population. Second, a larger elderly population will mean more expenditures for retirement benefits and health care. In high-income countries, a substantial share of these expenditures is generally handled through government. Therefore, increased spending in these categories will mean higher taxes on current workers, which will also act as a drag on economic growth.

EXHIBIT 6 provides data on the share of the population age sixty-five years and older in Japan during 1990–2010 and the projections for the United States during 2010–2030. Note how the elderly population of Japan rose sharply from 12 percent of the total in 1990 to 17.3 percent in 2000 and 23.1 percent in 2010. Thus, the share of the Japanese population age 65 and over almost doubled during the two decades following 1990. During the next two decades, the elderly population of the United States will increase from 13 percent to 19.3 percent of the total, approximately a 50 percent increase. Thus, the pattern in the United States during the next two decades will be the same as that for Japan.
during 1990–2010, although the growth of the elderly population in the United States will be somewhat less rapid.

These demographic changes have adversely affected the growth of the Japanese economy since 1990, although it is difficult to quantify their precise importance. Predictably, they will also slow the growth of productivity and income in the United States in the years immediately ahead.

Lessons from the Japanese Experience

There are a number of similarities between conditions in Japan in the early 1990s and those of the United States today. In both cases, an asset price boom followed by a bust led to an unexpected reduction in wealth, a surge in bad loans, troubles in the banking and financial sector, and widespread pessimism about the future. The fiscal policy response of both has been similar: increased government spending, large budget deficits, and a surge in government debt as a share of the economy. The demographics are also similar: the elderly population increased substantially in Japan during the 1990s, and the same thing will happen in the United States in the decade ahead.

Does this mean that the United States is in for a “lost decade” much like Japan during the 1990s? Not necessarily. Clearly, there is one huge difference in the policy response between the two. Whereas the monetary policy of Japan was restrictive during the 1990s, that has not been the case in the United States. In fact, the Federal Reserve has injected a huge quantity of reserves into the banking system, and monetary policy in the United States has been far more expansionary than that of Japan during the 1990s. If monetary policy exerts a strong impact on the economy, this could mean that the U.S. experience in the decade ahead will be substantially different from that of Japan during the 1990s.

There are other differences that could also be important. The economy is more dynamic and labor markets more flexible in the United States than in Japan. This could hasten the adjustment process from the dislocations resulting from the crisis. On the other hand, the saving rate of Japan is considerably higher than in the United States. This could make it more difficult for the United States to finance a huge run-up in government debt than was true for Japan.

The Japanese experience should provide some caution for Americans in at least three important areas. First, the run-up in housing prices generated malinvestment and excess capacity. It will take time to correct these conditions. Asset prices did not rebound quickly in Japan during the 1990s, and neither are they likely to do so in the United States in the years immediately ahead. Second, fiscal stimulus is unlikely to generate a quick and sustainable recovery, even in a low interest rate environment. The Japanese budget deficits were large, but they still did not exert a strong impact on aggregate demand and real output. Third, although the more expansionary monetary policy of the United States may well promote a stronger recovery, there are also dangers that it will lead to future economic instability somewhat like that of the 1970s. The monetary policy lags are long and variable. Therefore, monetary policy makers are likely to either turn toward restriction too quickly and thereby throw the economy back into recession or stay with the expansionary policy too long and generate future inflation.

Economics is an imprecise science and, to a large degree, the “experiments” of economists are limited to those that emerge from real world change. The years immediately ahead will provide some experiments that will expand our knowledge of macroeconomics and the impact of alternative policies. This is an exciting time to study economics.
**KEY POINTS**

- In the late 1980s, real estate and stock prices in Japan soared, much like housing prices in the United States during 2001–2005. But like the housing boom in the United States, Japan’s stock and real estate price boom was followed by a bust in the early 1990s. This price collapse led to a surge in loan defaults, troubles in the banking sector, and a sharp slowdown in the growth of the Japanese economy in the early 1990s. The sluggishness persisted, and the 1990s are now known as Japan’s “lost decade.”

- Japan responded to the economic downturn with several “stimulus programs” that substantially increased spending on roads, bridges, and other infrastructure. Government spending rose from a little more than 30 percent of GDP in the early 1990s to nearly 40 percent of GDP in the latter part of the decade. This increased spending was financed through large budget deficits. Even though fiscal policy was highly expansionary, the Japanese economy continued to stagnate.

- In contrast with fiscal policy, the monetary policy of Japan was restrictive during the 1990s. The broad M2 money supply expanded at an annual rate of only 2.5 percent during 1991–2002. The general level of prices changed little during the 1990s, and deflation was present during five of the eight years between 1995 and 2002.

- The share of the population age 65 and over in Japan nearly doubled during 1990–2010. The United States will experience a similar change in the composition of the population during the next two decades. This will tend to reduce productivity and lead to higher taxes on current workers for the finance of retirement benefits and health care for the elderly. This slowed economic growth in Japan during the 1990s, and it is likely to do so in the United States in the decade ahead.

- There are many similarities between the Japanese economic crisis of 1990 and the 2008 crisis of the United States. Some of the policy responses are also quite similar. But there is one huge difference: whereas monetary policy was restrictive in Japan, it has been highly expansionary in the United States. If monetary policy exerts a strong impact on the economy, the U.S. experience in the decade ahead will differ from that of Japan during the 1990s.

- Even if the expansionary monetary policy does lead to a robust recovery in the United States, the long and variable monetary policy lags will make it difficult for the Fed to both promote recovery and then shift back to restraint in a manner that will lead to stability in the decade ahead. We are in the midst of a very interesting “experiment” in macroeconomics.

**CRITICAL ANALYSIS QUESTIONS**

1. How was the economic experience of Japan prior to and after 1990 similar to that of the United States prior to and after 2008?

2. Describe the fiscal policy of Japan during the 1990s. Did the Japanese fiscal policy help promote recovery? Why or why not?

3. How did the policy response in the United States following the sharp reductions in housing and stock prices in 2008 differ from that of Japan following the collapse of asset prices in 1990? How were the policy responses similar?

4. What happened to the share of the Japanese population age 65 and over during the 1990s? How did this change affect economic growth? What are the implications of this for the United States? Why?

5. What are the most important lessons Americans can learn from the Japanese experience of the 1990s?

6. What does the Japanese experience of the 1990s indicate with regard to the return of housing and stock prices to their pre-crisis levels? Why might the future pattern in the United States differ from that of Japan during the 1990s?

*Asterisk denotes questions for which answers are given in Appendix B.