



# IV

## Japan's Economic Crisis and Policy Options

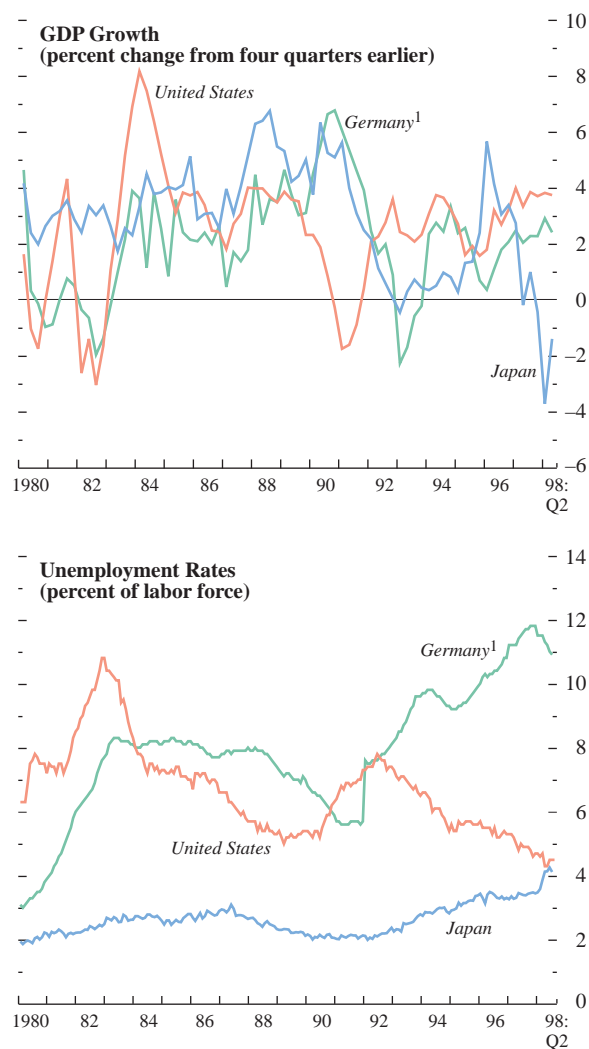
In the seven years following the collapse of the asset price bubble in 1990, the Japanese economy grew at an average rate of about 1½ percent a year. And with output contracting by annualized rates of 5¼ percent and 3¼ percent in the first and second quarters of 1998 respectively, the economy is now in recession. The economic cycle in Japan is thus desynchronized not only from that of the United States, where output has been growing at a solid pace since 1992, but also from those of the European countries, where, in most cases, growth has either been strong for some time or has recently gained strength (Figure 4.1), as well as from most of the rest of Asia, where growth was very strong until the onset of the present crisis. Japan's economic performance in the 1990s is particularly disappointing when viewed in the context of its own past performance—GDP growth in the 1980s averaged about 4 percent a year.

Japan's weak economic performance during this decade has so far not resulted in the high unemployment that has characterized many continental European labor markets. The unemployment rate inched up to only 3½ percent by end-1997, although it has increased significantly in recent months, reaching 4.1 percent in July 1998. The manifestation of the economic crisis in Japan has, rather, taken the form of a self-reinforcing mixture of very slow growth, severe banking sector problems, rising fiscal deficits and public debt, the failure of asset prices to recover from their collapse in the early 1990s, and a profound lack of confidence among both consumers and businesses. Mutually reinforcing adverse spillover effects have recently exacerbated the crisis in both Japan and the emerging market economies of Asia.

As discussed below, the evidence indicates that the protracted slowdown of growth in Japan during the 1990s can be linked to the effects of the collapse of the asset price and investment bubbles in the early years of the decade, the persistent difficulties of the banking system, and strong upsurges in the foreign exchange value of the yen in 1993 and 1995, which undermined incipient recoveries. But this still leaves open many questions about economic developments in Japan. A number of other advanced economies also experienced collapses in asset prices in the early 1990s, and in several of the Nordic countries a severe banking crisis followed the collapse in asset prices, as in Japan. But the aftermath of the asset price collapse in these countries

**Figure 4.1. Selected Major Industrial Countries: Output Growth and Unemployment**

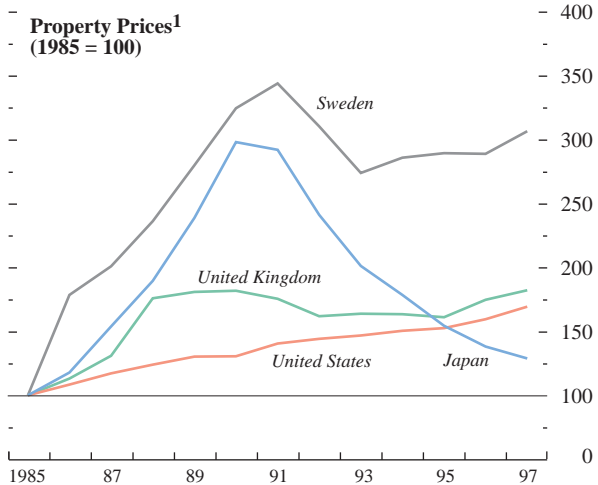
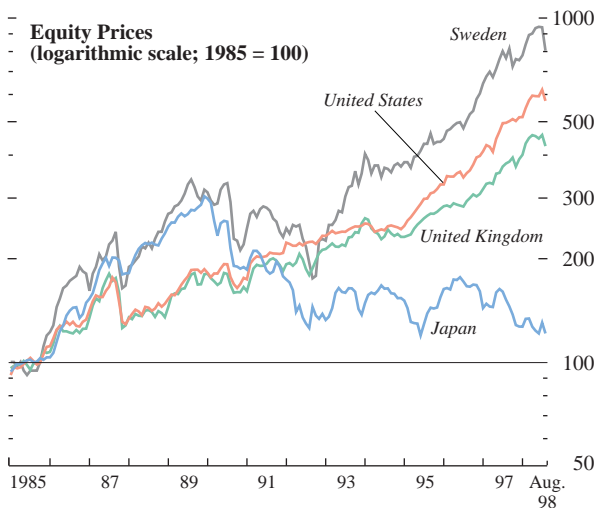
The economic cycle in Japan has been desynchronized from those of the United States and Germany.



<sup>1</sup>Data through 1991 apply to west Germany only.

**Figure 4.2. Selected Countries: Equity and Property Prices**

The boom-bust cycle in asset prices has been particularly pronounced in Japan.



<sup>1</sup>For Japan, average land prices in six largest cities; for Sweden, housing price index; for the United Kingdom, Halifax PLC all-houses price index; for the United States, average sale price of existing single-family homes.

was characterized by a deep recession that was followed by a robust recovery in output. Why has Japan been subject to a protracted slowing of growth, instead of experiencing the sharp decline and quick recovery observed elsewhere? Have the effects of the asset price collapse on domestic demand in Japan been different from those experienced by other countries during this period? Or has Japan's experience in the 1990s been a consequence of the failure of macroeconomic policies to respond adequately to its economic problems? Has the failure to solve the problems in the banking sector prolonged the economic difficulties? Are structural rigidities in the Japanese economy impeding economic revival? What policy options are currently available for overcoming the crisis? This chapter attempts to address these questions.

### The Boom-Bust Cycle in Asset Markets

A notable feature of economic developments in the latter half of the 1980s was the explosive increase in asset prices in many advanced economies (Figure 4.2). The roughly threefold increases in equity and land prices in Japan were much greater than those experienced, for instance, in the United States and the United Kingdom, but they closely matched the dramatic increases in Swedish asset prices in the same period.

Improved fundamentals clearly contributed to the increase in equity prices—for instance, corporate profits increased by almost 70 percent in Japan during 1985–90. Nevertheless, the rapid rise in the ratio of stock market capitalization to GDP to unprecedented levels in the latter half of the 1980s—as well as the significant increase in the price-earnings ratio during 1985–86 and its subsequent persistently high level (Figure 4.3) during a period when bond yields began to trend upwards—suggests that improved fundamentals cannot provide the entire explanation for the run-up in equity prices.<sup>1</sup>

The combination of financial liberalization and inadequate prudential regulations seems to have played an important role in the sharp increase in asset prices. Beginning in the first half of the 1980s, controls on capital movements were gradually dismantled, interest rates on deposits were deregulated, and new financial instruments emerged. As a result, large Japanese corporations were able to lessen their dependence on banks and to draw increasingly on international capital markets and domestic securities markets. Deprived

<sup>1</sup>Price-earnings ratios in Japan are to some extent overstated because of relatively high cross-share holdings, combined with non-consolidation of accounts under Japanese accounting rules, as well as low dividend payout ratios. For a more detailed discussion of these issues, see Thomas Krueger, "Recent Developments in Equity Prices in Japan," in Guy Meredith and others, *Japan: Selected Issues*, Staff Country Report 97/90 (Washington: IMF, October 1997), pp. 111–39.

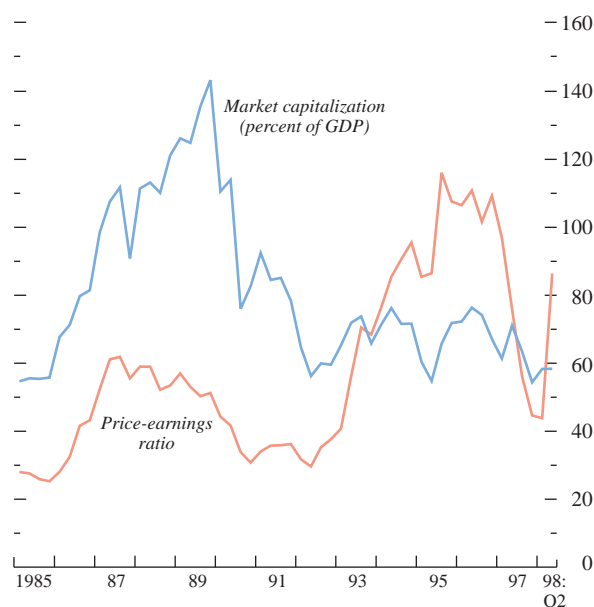
to some extent of their traditional client base, facing competition from the nonbank financial sector, and operating under inadequate prudential regulations, banks expanded their lending to smaller firms that did not have the same degree of access to capital markets, and also to the property sector. The increased lending to the property market fueled the boom in the prices of both commercial and residential property. Increased property prices boosted the collateral value of small and medium-sized enterprises, and with bank lending heavily influenced by collateral values, the unwarranted exuberance about the prospects for capital gains in both the equity and property markets became temporarily self-fulfilling.<sup>2</sup> The Japanese experience in this regard is broadly similar to the experience of the Nordic countries in the second half of the 1980s, with the main difference being that firms rather than consumers were the primary driving force behind the asset price bubble in Japan.<sup>3</sup>

The stance of monetary policy in the second half of the 1980s also had a role in fueling asset price inflation. The Bank of Japan's official discount rate was halved in several steps to 2½ percent between the end of 1985 and early 1987 and was then maintained unchanged for two years, despite the robust growth of activity. The accommodative stance of monetary policy during this period was based in part on the perceived need to contribute to the policies being coordinated internationally to promote the stabilization of the dollar's exchange value, especially following the Louvre Accord of February 1987. The continuing low level of general price inflation in the second half of the 1980s may have also weakened the case for monetary tightening.

Toward the end of the 1980s, however, it became apparent that the boom in asset prices had clearly outstripped the increases that might be warranted by changes in fundamentals. As noted earlier, the ratio of stock market capitalization to GDP had reached unprecedented levels by 1989, and the price-earnings ratio stood at extremely high levels. The decline in dividend yields to under ½ of 1 percent by end-1989, when bond yields in Japan stood at about 7 percent, was yet another indication of a substantial market

**Figure 4.3. Japan: Stock Market Indicators**

Both the market capitalization ratio and the price-earnings ratio indicate signs of overvaluation in the stock market in the late 1980s.



Sources: Morgan Stanley Capital International; and WEFA, Inc.

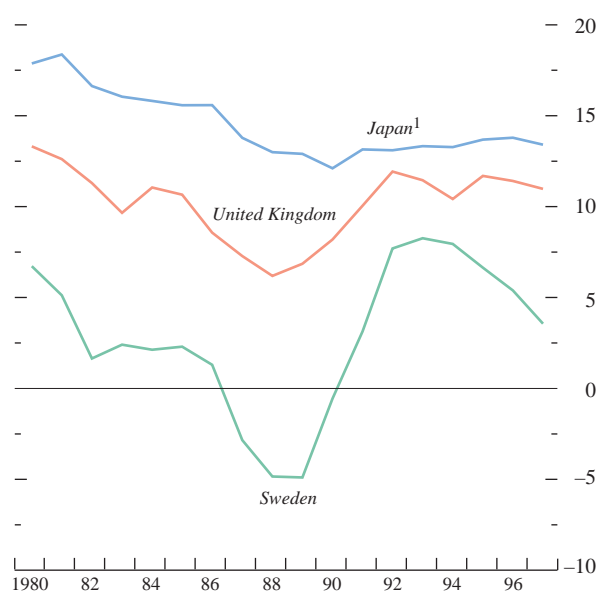
<sup>2</sup>For a more detailed discussion of the impact of financial liberalization on asset markets in Japan, see Juha Kähkönen, "Movements in Asset Prices Since the Mid-1980s," pp. 51–62, and Alexander W. Hoffmaister and Gary J. Schinasi, "Asset Prices, Financial Liberalization, and Inflation in Japan," pp. 63–77 in Ulrich Baumgartner and Guy Meredith, eds., *Saving Behavior and the Asset Price "Bubble" in Japan: Analytical Studies*, Occasional Paper 124 (Washington: IMF, April 1995).

<sup>3</sup>For a discussion of the impact of financial liberalization on asset markets in the Nordic countries, see Desmond Lachman and others, *Challenges to the Swedish Welfare State*, Occasional Paper 130 (Washington: IMF, September 1995); and Burkhard Drees and Ceyla Pazarbaşıoğlu, *The Nordic Banking Crises: Pitfalls in Financial Liberalization?* Occasional Paper 161 (Washington: IMF, April 1998).

**Figure 4.4. Selected Countries:  
Personal Saving Ratio**

(Percent of disposable income)

The personal saving ratio in Japan has been more stable than in Sweden and the United Kingdom.



<sup>1</sup>For Japan, 1997 data are IMF staff estimates.

overvaluation. Responding to the overheating of the real economy and to the bubble in asset prices, monetary policy was tightened sharply beginning in May 1989, with the official discount rate being raised in several steps to 6 percent by August 1990—a cumulative increase of 3½ percentage points in just over a year. Equity prices began to fall in early 1990, and by the time they bottomed out in mid-1992, the Nikkei index had declined by over 60 percent from its peak at end-1989. Despite sporadic recoveries in the interim, equity prices have recently slumped back to the lowest levels for 12 years amid considerable price volatility. Land prices began declining only in early 1991, but the slide in prices since then has continued unabated, with the average price of land in the six largest Japanese cities at the end of 1997 being about 40 percent of the peak values in 1990.

### Consequences for the Real Economy

The bubble years were characterized by rapid growth of domestic demand. Spurred to some extent by wealth effects—the ratio of net worth to the disposable income of the household sector increased from about 5½ in 1985 to about 8½ in 1989—private consumption grew relatively rapidly during the second half of the 1980s. But there was a much more marked rise in the growth of investment—gross private fixed investment grew on average at about 10 percent a year in the latter half of the 1980s—as the boom in asset prices lowered capital costs for large firms that were able to tap into financial markets, and small and medium-sized firms increased their borrowing from banks, using the rising value of land as collateral. A significant part of this investment was in commercial property.

The collapse of the asset price bubble in 1990 was followed by a sharp contraction of domestic demand. The decline in investment proved to be particularly severe—gross private fixed investment contracted on average by over 2 percent a year in the first half of the 1990s. While there was a sharp pickup in 1996, private investment fell again in 1997, and the decline carried over into the first half of 1998. In contrast, private consumption in Japan was much less affected by the fluctuations in asset prices. This is somewhat surprising when seen in the context of the large swings in private consumption observed in both Sweden and the United Kingdom. This is reflected in part in the relative stability of the private saving ratio in Japan when compared with that of Sweden and the United Kingdom (Figure 4.4).

Thus, wealth effects in Japan may have been somewhat weaker than elsewhere. This has been attributed, among other things, to the possibility that property-owning households may not have regarded their entire unrealized capital gains in the second half of the 1980s

as permanent increases in their real wealth. Furthermore, households that did not own property in this period may have felt compelled to increase their saving in order to be able to afford housing that was already expensive by international standards, and was becoming increasingly so.<sup>4</sup> Muted wealth effects may also be explained by the relatively low holdings of equities in households' financial portfolios in Japan compared with other advanced economies, and by the limited role played by Japanese banks in extending consumer loans. Finally, that the bursting of the asset price bubble in Japan was accompanied neither by a sharp increase in unemployment, nor by any serious doubts about the sustainability of social welfare programs, meant that households may not have been strongly motivated to increase precautionary saving.

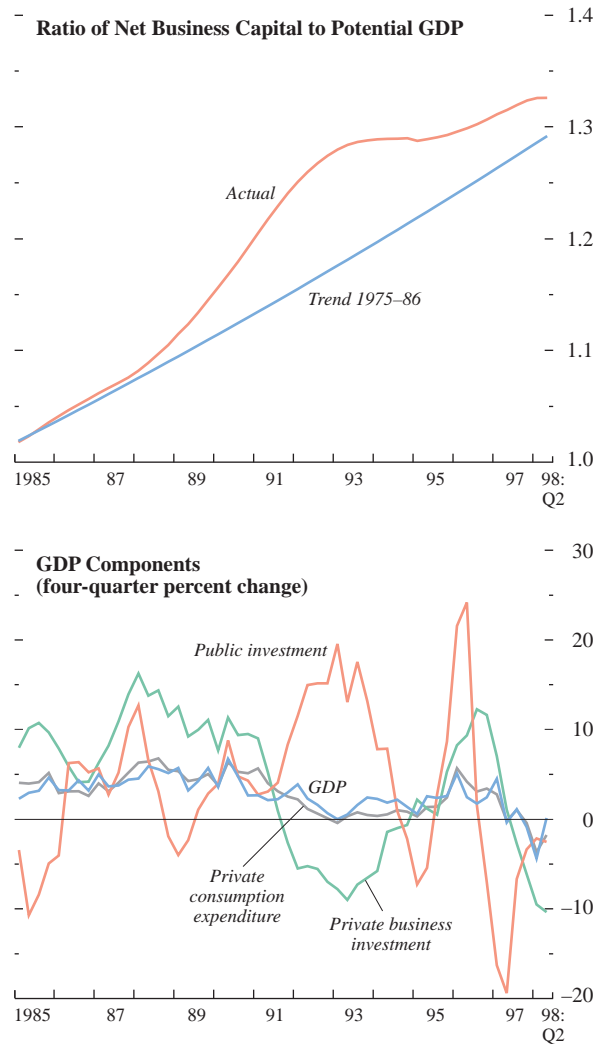
In any event, the absence of a large decline in private consumption in the aftermath of the asset price collapse in Japan helps to explain why Japan did not experience a severe contraction of activity of the magnitude that Sweden and the United Kingdom experienced. More recently, however, private consumption expenditure has declined sharply in the last quarter of 1997 and in the first half of 1998, reflecting the adverse effects on confidence of the aggravation of the banking problems, and the recent sharp upward spike in unemployment.

The protracted weakness of activity in the 1990s can be explained to a large extent by trends in investment. As noted, investment grew rapidly in the latter half of the 1980s—the ratio of gross private fixed investment to GDP, for instance, increased by almost 5 percentage points during this period to reach 25 percent in 1990. The capital-output ratio increased markedly in relation to its upward trend (Figure 4.5), as many low-return and high-risk projects were undertaken. This suggests that investment spending during the second half of the 1980s was excessive, spurred by the combined effects of the boom in asset prices and the lax lending policies of banks—not dissimilar from the recent Korean experience. When asset prices collapsed in the early 1990s, investment was cut back abruptly, as firms were saddled with the investment overhang from the late 1980s, and returns to capital dropped (see Figure 4.5). Investment by small and medium-sized enterprises has been particularly adversely affected by the squeeze on credit given their greater dependence on bank financing.

In contrast to the decline in private investment, public investment has increased relatively rapidly in the

**Figure 4.5. Japan: Business Capital-to-Output Ratio and GDP Components**

Movements in the ratio of net business capital to potential GDP provide one indicator of overinvestment in the second half of the 1980s.



<sup>4</sup>For a fuller discussion of the impact of land price movements on consumption, see Takatoshi Ito, *The Japanese Economy* (Cambridge, Massachusetts: MIT Press, 1992). For a more general discussion of the relationship between land price movements and wealth effects, see Orazio P. Attanasio and Guglielmo Weber, "The U.K. Consumption Boom of the Late 1980s: Aggregate Implications of Microeconomic Evidence," *Economic Journal*, Vol. 104 (November 1994), pp. 1269–1302.

**Table 4.1. Japan: Growth Decomposition***(Contributions to GDP growth; percent a year)*

	1980–90	1991–97
<b>Actual</b>		
GDP	3.9	1.7
Employment	0.8	0.4
Hours	-0.2	-0.7
Capital	1.9	1.4
Productivity	1.4	0.6
<b>Potential</b>		
GDP	3.6	2.7
Trend employment	0.7	0.7
Trend hours	-0.2	-0.5
Capital	1.9	1.4
Trend productivity	1.2	1.2

Source: IMF staff estimates.

1990s through repeated attempts to revive the stalling economy (see below). However, the returns to public investment have declined.<sup>5</sup> The weak returns have been attributed to limited control by the central authorities over project implementation, weak incentives for local governments to achieve cost-effectiveness, and the tendency at times to use public investment for distributional objectives.<sup>6</sup>

The marked slowing down of private investment in the 1990s has contributed to lower potential output growth, which is estimated to have fallen to around 2 percent in 1998, well below the 2.7 percent average from 1991–97. To analyze this issue, the IMF staff uses a production function approach, which models the growth of potential output as a function of the growth of the private capital stock, the trend growth in labor supply, and the trend growth of total factor productivity (TFP).<sup>7</sup> As can be seen from Table 4.1, the decline in the growth of the private capital stock accounts for almost half of the slowdown in the trend growth of output in Japan in the 1990s. Trend growth of employment has been stable, but there has been a marked trend decline in hours worked, in part as a result of the introduction of a 40-hour work week. While the decline in trend hours worked may be desirable from a welfare point of view in the Japanese context, it nonetheless accounts for the rest of the slowdown in potential growth. Looking ahead, trend growth in Japan is likely to be negatively affected by demo-

graphic changes, which will reduce the proportion of the population of working age. To offset these negative factors, deregulation and other structural reforms are needed to enhance productivity growth.

## Role of Macroeconomic Policies

What roles did monetary and fiscal policies play during the 1990s? Was the monetary easing that took place in the first half of the 1990s important for counteracting the contractionary impulses that were set in motion by the asset price collapse? How has fiscal policy affected the performance of the economy, and how effective has fiscal policy been in the face of a credit crunch? While these questions can no doubt be answered more easily with the advantage of hindsight, the analysis in this section also considers the appropriateness of monetary and fiscal policies following the collapse of the asset price bubble on the basis of the information available in that period. These questions are essentially counterfactual: they require an assessment of how the Japanese economy would have performed if no policy actions had been taken or if monetary, fiscal, and structural policies had been different from those actually selected.

In the period from mid-1991 to mid-1996, both monetary and fiscal policies did respond forcefully, repeatedly, and cumulatively very substantially to the strong forces tending to depress the Japanese economy, including the fallout from the collapse of the asset price and investment bubbles and the effects of the strong appreciation of the yen. Were it not for these macroeconomic policy responses, the Japanese economy would surely have suffered a deep and prolonged recession in the first half of this decade. That annual real GDP growth was kept positive and averaged nearly 1 percent from 1992 through 1995, in the face of strong depressive forces, is testimony to the usefulness—not to the weakness—of macroeconomic policies. When the downward correction of the yen beginning in the late spring of 1995 was reinforced by further easing of monetary policy and by substantial new fiscal stimulus, the recovery of the Japanese economy to nearly 4 percent real growth in 1996 again showed the effectiveness of policy action. The less successful experiences of a number of other countries facing qualitatively similar situations, but with less latitude or willingness to use countervailing macroeconomic policies, reinforces this conclusion. With this understanding, the critical counterfactual question for the 1992–96 period is whether policy could usefully have done more to put the Japanese economy on the path of sustained recovery. The key questions for the most recent period are whether and what policy errors contributed to the renewed and steep downturn of the Japanese economy, and what now can be done to reverse the situation.

<sup>5</sup>See Japan, Economic Planning Agency, *Economic Survey of Japan: 1995/96* (Tokyo, 1997).

<sup>6</sup>For a more detailed discussion of these issues, see Tamim Bayoumi, Christopher Towe, and Ichiro Oishi, “Fiscal Policy Issues,” in IMF, *Japan—Selected Issues*, Staff Country Report (Washington, July 1998).

<sup>7</sup>For a discussion of the technical issues pertaining to the measurement of potential output, see Tamim Bayoumi and Christopher Towe, “Macroeconomic Developments and Prospects,” in IMF, *Japan—Selected Issues*, Staff Country Report (Washington, July 1998).

## Monetary Policy

The process of monetary easing began in mid-1991, when equity prices had been falling steeply for more than a year, and after property prices had begun their sharp decline. The official discount rate (ODR) was lowered gradually from 6 percent in mid-1991 to 4½ percent by early-1992. As the economy fell into recession in the second quarter of 1992, the process of easing continued, with the ODR being reduced in several steps to 1¾ percent by the end of 1993. Activity continued to stagnate, however, and as the depth of the economic crisis became apparent, the ODR was further reduced to ½ of 1 percent by September 1995 and has since then remained at that level. In early September 1998, however, the Bank of Japan lowered its operating target for the overnight call rate to ¼ of 1 percent from its recent average of about 0.45 percent in response to the continued contraction of economic activity and a moderate strengthening of the yen. The decline in long-term interest rates has broadly paralleled that in short-term rates, falling by mid-September 1998 to about 0.7 percent, the lowest long-term interest rates in recorded history (Figure 4.6).

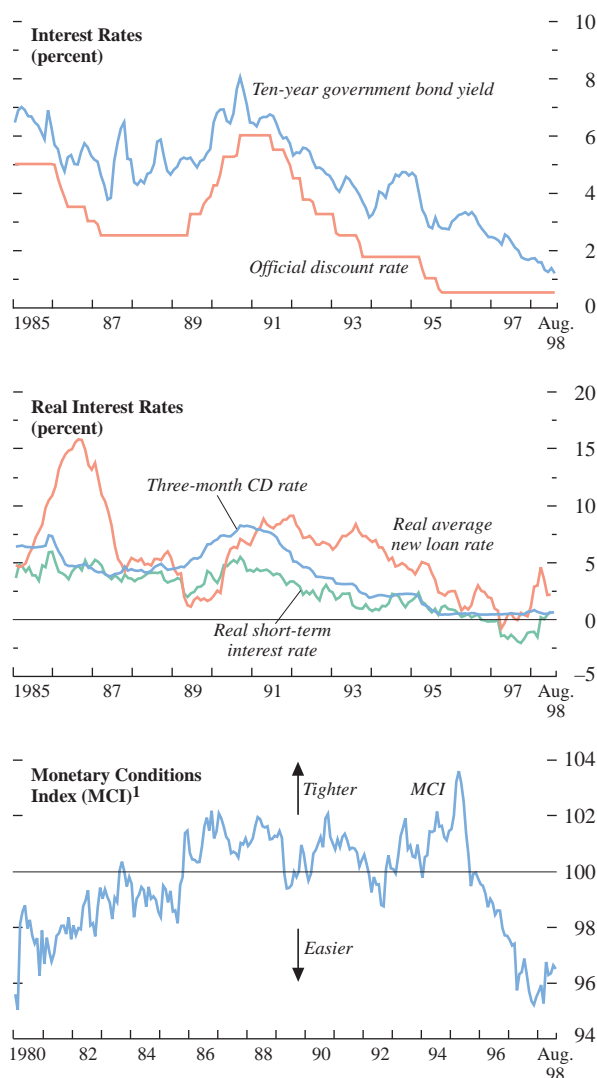
Despite the actions taken by the authorities to lower short-term interest rates, the effective easing of monetary conditions in the first half of the 1990s was much less pronounced than appears from the interest rate reductions. This was in part due to the decline in inflation, which implied that the declines in real interest rates were smaller than those in nominal interest rates (see Figure 4.6). Also, there was a widening of bank intermediation spreads, reflecting the mounting problems of bad loans in the banking sector, so that the declines in average loan rates were less than the declines in official and money market interest rates.

More important, in 1993 and again in 1995, the effect on aggregate demand of the easing of interest rates was more than offset by the effects of strong upsurges in the foreign exchange value of the yen. This is apparent in the behavior of the monetary conditions index, which attempts to measure overall changes in monetary conditions by weighting movements in interest rates and in exchange rates according to their estimated effects on aggregate demand.<sup>8</sup> The upward movements in the monetary conditions index in 1993 and 1995 signify a tightening of overall monetary conditions, the effects of which, in each instance, were to slow the recovery of the Japanese economy. The Bank

<sup>8</sup>The monetary conditions index estimated by IMF staff assumes that a 10 percent drop in the real effective value of the yen has approximately the same effect on demand as a 1 percentage point decline in short-term real interest rates. For a more detailed discussion, see Gabrielle Lipworth and Guy Meredith, "Background Paper: A Reexamination of Indicators of Monetary and Financial Conditions," in Bijan B. Aghevli, Tamim Bayoumi, and Guy Meredith, eds., *Structural Change in Japan: Macroeconomic Impact and Policy Challenges* (Washington: IMF, 1998).

**Figure 4.6. Japan: Interest Rates and Indicators of Monetary Conditions**

Monetary conditions were relatively tight in the first half of the 1990s despite the significant reductions in nominal interest rates.



<sup>1</sup>Data are as in Chapter II, Figure 2.7.

of Japan responded to these appreciations of the yen with further reductions of official interest rates, but the responses were slower and somewhat smaller than many in the international community were urging at the time. Arguably, earlier and more vigorous monetary policy responses would have forestalled some of the unwarranted appreciation of the yen or brought about its earlier reversal, thereby inducing a desirable downward movement in the monetary conditions index from both of its components. In addition, less yen appreciation would have meant less deflationary impetus to the Japanese economy, with the result that more of the reduction in nominal interest rates would have shown up in real interest rates. In the end, waiting until the Japanese economy was experiencing mild deflation before reducing official interest rates almost to the theoretical limit made it impossible to get real interest rates down to zero (or even lower), as had usefully been done by the U.S. Federal Reserve in less difficult circumstances in 1992–93.

With the Japanese economy currently in recession, short-term interest rates having been lowered virtually to rock bottom, and inflation close to zero or even slightly negative, is there any further scope for monetary policy to provide support for the economy? This question essentially involves assessments of whether, in an environment that appears to be characterized by a liquidity trap—that is, a state where individuals become indifferent between holding money and other financial assets because of the very low interest rates and weak financial system—monetary policy should be used to lower real interest rates by raising expected future inflation. This has been a subject of debate recently.<sup>9</sup> Box 4.1 (see page 118) examines the issues involved in this debate by providing illustrative simulations on the IMF's multicountry macroeconomic model, MULTIMOD. The simulations indicate that, as a theoretical matter, reducing real interest rates in Japan by raising expectations of future price increases while holding the nominal interest rate unchanged would tend to boost activity, both by stimulating domestic demand and through the positive effects on external demand of the induced decline in the real exchange rate. With respect to the applicability of this theory, however, there is considerable doubt about whether the announcement of a policy that will only begin to affect policy instruments six years in the future can have important effects in the near term because expectations of future policy begin to affect peoples' behavior today. Also, as a practical matter, it is perhaps to be doubted whether the best way to stimulate demand in an economy suffering from weak consumer confidence is to announce an inflation policy likely to be interpreted by nervous Japanese savers as a further as-

sault on their already meager rates of return. In this context, an early resolution of the problems in the banking system is more likely to enhance confidence and boost domestic demand than a strategy of expanding the monetary base. Furthermore, while the further decline in the exchange value of the yen brought about by a strategy of boosting inflation expectations should provide a positive stimulus to activity in Japan, other things remaining constant—as shown in the MULTIMOD simulations—it also risks simultaneously accentuating the crisis elsewhere in Asia. And given Japan's close economic links with the rest of Asia, the adverse spillovers to Japan from any further instability in the region could easily overwhelm the positive direct effects on activity of further yen depreciation.

Another approach that has been suggested for providing stimulus to the economy is to unblock the credit channel, not only through measures to resolve the bad-loan problems of the banking system, but also through market operations of the kind conducted by the Bank of Japan earlier this year, when it bought large amounts of bills, commercial paper, and Japanese government bonds from banks on a repo basis. This increased the ability of banks to extend credit to clients, both by expanding their liquidity and by lowering the risk-weighted value of their assets and so easing capital constraints. However, commercial paper repo operations involve a degree of credit risk for the central bank, and liquidity injections put downward pressure on the exchange rate. A more promising way of unblocking the credit channel is to solve the problems in the banking sector and thereby ease the credit crunch. These issues are discussed in more detail below.

### Fiscal Policy

Starting with an overall fiscal surplus of 3 percent of GDP and a ratio of net government debt to GDP of under 10 percent in 1991 (40 percent excluding social security assets), the Japanese authorities had latitude both to allow the automatic stabilizers to operate and to ease fiscal policy in a discretionary way as the economy absorbed the negative effects of the collapse of the asset price and investment bubbles and other disturbances. Reflecting both of these factors, by 1996 the overall fiscal balance had deteriorated by over 7 percent of GDP. Discretionary measures, embodied primarily in six stimulus packages (Table 4.2), accounted for the downward shift in the structural budget balance from a surplus of 1½ percent of GDP in 1991 to a deficit of nearly 3½ percent of GDP in 1996. In fact, even as fiscal policy began to be reversed in the second half of 1996 with a significant slowdown of public investment, the support for the level of economic activity from discretionary fiscal policy probably reached 5 percent of GDP for calendar year 1996. As previously emphasized, this impressive fiscal support helped to convert a recession into a slowdown in

<sup>9</sup>See Paul Krugman, "Japan's Trap," May 1998 (available via the Internet: <http://web.mit.edu/krugman/www/japtrap.html>).



**Table 4.2. Japan: Summary of Major Economic Stimulus Packages<sup>1</sup>***(Trillions of yen unless otherwise noted)*

Date Proposed	1992	1993		1994	1995	1998
	August	April	September	February	September	April
Total package (Percent of GDP)	10.7 (2.3)	13.2 (2.8)	6.2 (1.3)	15.3 (3.2)	14.2 (3.0)	16.7 (3.3)
Tax reductions (Percent of GDP)	— (—)	0.2 (—)	— (—)	5.9 (1.2)	— (—)	4.6 <sup>2</sup> (0.8)
Public investment <sup>3</sup> (Percent of GDP)	6.2 (1.3)	7.6 (1.6)	2.0 (0.4)	4.5 (0.9)	6.3 (1.3)	7.7 (1.5)
Land purchases (Percent of GDP)	1.6 (0.5)	1.2 (0.3)	0.3 (0.1)	2.0 <sup>4</sup> (0.4)	3.2 <sup>5</sup> (0.7)	1.6 (0.3)
Increased lending by Housing Loan Corporation (Percent of GDP)	0.8 (0.2)	1.8 (0.4)	2.9 (0.6)	1.2 (0.3)	0.5 (0.1)	— (—)
Increased lending by government- affiliated financial institutions (Percent of GDP)	2.1 (0.5)	2.4 (0.5)	1.0 (0.2)	1.5 (0.3)	2.6 (0.5)	2.0 (0.4)
Other (Percent of GDP)	— (—)	— (—)	— (—)	0.2 (—)	2.6 (0.5)	0.8 (0.2)

Sources: Japanese authorities; and IMF staff estimates.

<sup>1</sup>In addition, there was a ¥2.7 trillion Kobe earthquake package in April 1995, and a ¥4.2 trillion package in February 1996 to offset the effects of the proposed increase in consumption taxes.<sup>2</sup>Includes ¥0.3 trillion in welfare benefits.<sup>3</sup>Includes disaster relief, unidentified land component of public investment, and Fiscal Investment and Loan Program lending to public corporations for public works.<sup>4</sup>Includes ¥0.5 trillion of land purchases to be conducted over a five-year period.<sup>5</sup>Includes ¥0.5 trillion of land purchases by a government-affiliated urban development organization.

1992–95, and helped to initiate a more vigorous recovery in 1996.

It might be argued, and was argued by some at the time, that even more vigorous use of fiscal policy would have engendered an earlier, stronger, and better sustained recovery of the Japanese economy. To some degree, this argument is almost surely correct, especially with respect to more timely response to the adverse shocks associated with sharp appreciations of the yen—where an earlier coordinated reaction of both monetary and fiscal policy would have been helpful. However, it is essential to recognize the important and legitimate concern of the Japanese authorities with the longer-term implications of a substantial weakening of the government's fiscal position, especially in view of the future burdens associated with rapid aging of the population early in the next century. Although the fiscal starting position in 1991 was relatively comfortable, after pumping in substantial fiscal stimulus the process would at some point need to begin to be reversed.

A start was made in the second half of 1996, and between 1996 and 1997 the structural deficit was reduced by 1½ percent of GDP (Figure 4.7). But the swing toward consolidation from mid-1996 to mid-1997 was even sharper than this, given the withdrawal of public spending by 2 percent of GDP. Moreover, so-

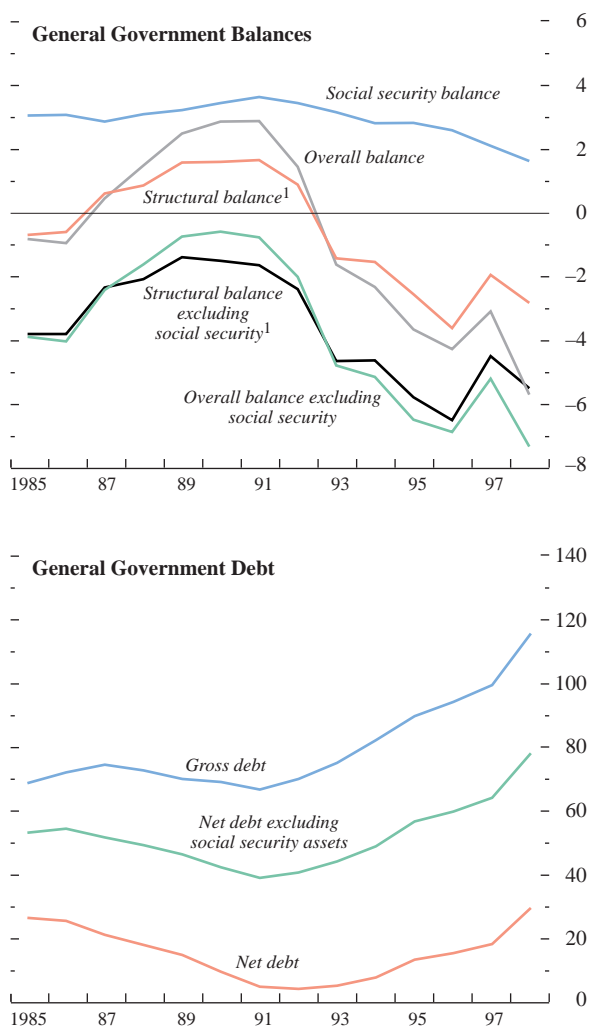
cial security contributions were raised in October 1996, a temporary income tax cut amounting to about ¼ of 1 percent of GDP was withdrawn in January 1997, and a 2 percentage point increase in the consumption tax rate (to 5 percent), yielding about ¾ of 1 percent of GDP, was introduced on April 1. All told, between mid-1996 and mid-1997, the withdrawal of fiscal support amounted to nearly 3 percent of GDP.

The economic impact of the shift in fiscal policy was somewhat delayed—not only by the usual lags, but also by the artificial stimulus to consumption spending and housing investment in late 1996 and early 1997 in anticipation of the tax hike on April 1. In the second quarter, consumption spending declined sharply, with modest recovery in the third quarter. By the fourth quarter, and continuing into 1998, the deepening crisis elsewhere in Asia began to affect Japanese exports and to further undermine consumer and business confidence. Worse yet, the failures of Hokkaido Takushoku Bank and Yamaichi Securities weighed on already worried households and led to increased saving and deposit withdrawals that necessitated substantial liquidity injections by the Bank of Japan. The result has been a deepening recession in Japan, led by falling consumption and business investment.

In hindsight, the large-scale tightening of Japanese fiscal policy in 1996–97 was clearly excessively am-

**Figure 4.7. Japan: Fiscal Indicators***(Percent of GDP)*

Public finances have deteriorated significantly in the 1990s in Japan.

<sup>1</sup>Structural balances are calculated as percent of potential GDP.

bitious. Looking at the issue ex ante, it must be recognized that some of the things that went wrong in 1997–98, especially the depth and scale of the Asian crisis outside Japan, could not reasonably have been anticipated at the time that key fiscal policy decisions were made in the second half of 1996. Nevertheless, and notwithstanding the broad (but not universal) international support for the tightening of Japanese fiscal policy, it may reasonably be asked whether the large degree of tightening actually undertaken was a prudent decision. Sound macroeconomic policy needs to be made with appropriate regard to risks and vulnerabilities and with understanding of the scope for remedial action if something unexpected goes wrong. At the time key policy decisions were made, Japan had experienced only about a year of solid recovery after four years of near stagnation. With that year of recovery boosted by substantial fiscal stimulus, there was reason to question whether economic expansion had yet been put on a strong, self-sustaining basis, capable of withstanding a large sudden withdrawal of fiscal support. The need for fiscal consolidation over the medium and longer term was undisputed, and there were good reasons to start, at a gradual pace, as soon as possible. But there was no urgent reason to attempt roughly half of the consolidation needed over five or six years within a single year. Unlike some countries where large premia on long-term interest rates suggest lack of confidence in longer-term fiscal probity (see the May 1996 *World Economic Outlook*), Japan had nothing particular to gain from extremely rapid, rather than more gradual, fiscal consolidation. Even if not fully recognized by the authorities, the long-standing and unaddressed problems in the financial system clearly implied important vulnerabilities if something went wrong with the recovery. The specific event of the Asian crisis was essentially unpredictable, but general external risks to the Japanese economy, many of which have not materialized, were certainly present. In Japan, with monetary policy already eased to very near the theoretical limit, this tool was not available for effective remedial action if something did go wrong. And the option of re-reversing the stance of fiscal policy to again provide support for activity was unattractive politically and involved the problem of having to persuade people of the virtues of fiscal easing when they had so recently been urged to see the vital necessity of substantial fiscal consolidation.

Perhaps because of this last problem, it may have taken longer than otherwise to reach the necessary political consensus to shift back to a policy of fiscal support. That shift began some time after the Japanese economy started to slide into recession, with the announcement in December 1997 of ¥2 trillion of temporary income tax cuts and an acceleration of already planned public investment in fiscal year 1998. In April, the previously proposed regular FY1998 budget was passed, which provided for a significant further

fiscal consolidation in accordance with the Fiscal Structural Reform Act of December 1997. Within days, this was followed by the announcement of a more than ¥16 trillion fiscal package to stimulate domestic demand—the net effect of which would be essentially to reverse the consolidation in the regular FY1997 and FY1998 budgets. When the legislation was passed in June, the Fiscal Structural Reform Act was also modified; the goal of reducing the general government deficit to 3 percent of GDP was put back from 2003 to 2005, signaling the flexibility to allow fiscal policy to support activity as might be needed for a long period, although the spending ceilings were left in place.

After the defeat of the Liberal Democratic Party in upper-house elections on July 12, Prime Minister Hashimoto and his government resigned. The new government, led by Prime Minister Obuchi, has announced the intention to implement additional spending of more than ¥10 trillion (2 percent of GDP) and tax cuts of more than ¥6 trillion (about 1¼ percent of GDP). Full details of the package are not yet available, but it is expected to include some measures that would not have a direct impact on economic activity, such as land acquisition. Tax cuts are expected to involve reductions in the corporate tax rate (from about 46 percent to 40 percent) and in marginal personal income tax rates (including a reduction in the top rate from 65 to 50 percent). In addition, the new government plans a further revision of the Fiscal Structural Reform Law, which is likely to suspend many of the constraints on major expenditure items. Thus, there has been a definite shift in fiscal policy toward providing support for a fragile economy. Although full details are not yet available, the IMF staff has assumed in preparing its projections that present policies would imply some further increase in the level of fiscal support in 1999. In pursuing this new policy, it will be essential to maintain adequate flexibility. If the economy fails to respond as expected to programmed fiscal stimulus during the second half of 1998, the authorities should be prepared to take appropriate further action. The critical need at this stage is for Japan to rekindle the process of economic recovery.

Concerning the specifics of fiscal policy, there are several trade-offs involving different policy measures. One is that the measures that can provide the maximum cyclical stimulus—spending increases—are not necessarily those that are most appropriate from the point of view of the longer-term health of the economy. Another is that the current need for fiscal stimulus has to be traded against the requirements for longer-term fiscal consolidation in anticipation of the pressures that will arise from population aging, particularly given that the surpluses in the social security accounts have recently been declining.

Simulations with MULTIMOD indicate that the fiscal multipliers for direct government spending are in

the range of 1.0–1.2, whereas the multiplier for taxes or transfers is about 0.5.<sup>10</sup> As noted earlier, the effectiveness of fiscal policy has been muted by a number of other factors. Asset price deflation and exchange rate appreciation operated against fiscal expansion in the early 1990s. These factors waned in 1996 when the effects of the exchange rate depreciation and low interest rates proved complementary to the fiscal expansion and allowed the economy to expand rapidly. More recently, the effects of the fiscal stimulus have been partially offset by the credit crunch and the weakness of confidence engendered by the aggravation of the banking crisis. Nevertheless, taken at face value, the fiscal multipliers suggest that increases in public expenditure are likely to be more effective than tax cuts in providing immediate support for domestic demand. However, arguing in favor of permanent cuts in tax rates are the benefits they are likely to provide in terms of longer-term efficiency gains and the contribution they are likely to make to a revival of confidence. In fact, they are likely to strike a better balance between the immediate need to provide support for domestic demand and the requirements for longer-term growth. A broadening of the tax base that is phased in gradually as the economy recovers should allay concerns about fiscal sustainability. Also arguing in favor of permanent tax cuts is the fact that both corporate taxes and the maximum marginal tax rates on personal incomes are significantly higher in Japan than in most other industrial countries.

Finally, while this shift in the stance of fiscal policy will slow down the pace of fiscal consolidation in the near term, so too will any further weakening of activity that might arise from an absence of fiscal stimulus. In this regard, before the announcement of the stimulus package by the new government, the staff had projected that, assuming that the general government deficit (excluding social security) is reduced to 3 percent of GDP by fiscal year 2005 in line with the Fiscal Structural Reform Act, net general government debt (excluding social security assets) would rise to almost 95 percent of GDP by the end of this period. Implementing the new government's package could add 5 percent of GDP to the net general government debt by fiscal year 2005, assuming a gradual withdrawal of stimulus over the next few years. However, given the very low rates of interest prevailing on Japanese debt instruments, and given that net interest payments constitute only about 1½ percent of GDP, there is little risk of "crowding-out" or of substantially adverse debt dynamics arising from the additional fiscal stimulus package.

<sup>10</sup>Estimates of fiscal multipliers vary across different models, and the estimates derived by the OECD and Japan's Economic Planning Agency are slightly higher than those of MULTIMOD (1.2–1.3 for spending, 0.5–0.8 for taxes).

### Box 4.1. Japan's Liquidity Trap

The very low level of nominal short-term interest rates in Japan places an important constraint on the extent to which monetary policy can be used to stimulate economic activity. In general, no amount of monetary easing can drive interest rates on risk-free assets significantly below zero, given that the (zero) return on holding cash would dominate that on assets yielding a negative nominal return. As nominal interest rates reach zero, then, investors would choose to hold all of their financial wealth in cash rather than in interest-bearing assets, implying that the supply of loanable funds would also fall to zero. Keynes termed this constraint on monetary policy the "liquidity trap."<sup>1</sup>

Given that interest rates in Japanese money markets are already below ½ of 1 percent, there is little scope for the monetary authorities to further reduce short-term interest rates. What other policies could the monetary authorities pursue to stimulate activity? One option would be to attempt to influence inflation expectations, possibly through statements by the authorities regarding their longer-term objective for inflation. To the extent that such statements are regarded as credible by the private sector, higher inflation expectations would reduce expected *real* interest rates for any given level of nominal rates. Lower real interest rates, in turn, would boost activity through standard macroeconomic channels—expectations of higher product prices would make investment more attractive for firms, while consumers would be induced to substitute current for future consumption.

This box illustrates the possible effects of credible steps to influence inflation expectations through simulations of a Japan-specific version of the IMF's multicountry simulation model, MULTIMOD.<sup>2</sup> MULTIMOD incorporates forward-looking behavior in financial and goods markets, implying that expectations of future values of the endogenous variables can affect prices and activity in the current period. Expectations of future inflation influence current activity directly through their effect on expected long-term real interest rates and thus domes-

tic demand. Given a high degree of international capital mobility, changes in the real return on domestic assets also affect the real exchange rate, and thus influence activity through changes in real net exports.

Inflation expectations are determined by the model's prediction for future inflation, which in turn depends on factors such as the projected level of activity and the authorities' assumed objective for inflation. The latter is important, since it determines the monetary policy response to inflationary pressures.<sup>3</sup> In particular, the higher is the authorities' objective for inflation, the less they resist upward pressure on inflation until it reaches the assumed target level, and the higher is the projected path for actual inflation. To illustrate the role played by inflation expectations in the model, two simulations were performed. In the first scenario, the monetary authorities are assumed to aim at stabilizing inflation at zero. In the second, in contrast, they credibly commit to achieving a positive longer-term inflation rate of 1½ percent a year, implying that they only resist inflationary pressures after inflation reaches this threshold.

The results of the two simulations are shown (*see figure*) for the period 1998–2010. In both cases, nominal short-term interest rates are constrained by the floor of zero. Long-term *real* interest rates, however, are substantially higher in the scenario with a zero inflation target than in that with a 1½ percent target. This reflects differences in the projected inflation path. In the first scenario, inflation initially "undershoots" the authorities' assumed longer-term target of zero, given the large initial output gap and the lack of scope for the authorities to lower nominal interest rates to boost activity. Output eventually recovers in the later years of the scenario, and inflation correspondingly increases such that the target of zero is realized, on average, over the period as a whole. But the strong initial deflationary pressures cause the real interest rate to rise in the initial years of the simulation, which in turn causes the real exchange rate to appreciate. Both of these factors compress aggregate demand and reinforce the amplitude of the decline in output.

In the second scenario, when the authorities' objective for inflation is 1½ percent, inflation also initially undershoots the longer-term target. But deflationary forces are less strong than in the first scenario, reflecting expectations that the authorities will achieve a higher inflation

<sup>1</sup>Cases in which the liquidity trap has imposed a practical constraint on monetary policy are relatively rare, with the United States in the 1930s and Switzerland in the late 1970s being two of the few notable examples.

<sup>2</sup>The model is similar to the one used to assess the implications of alternative exchange rate assumptions for Japan in the October 1997 *World Economic Outlook* (Box 2, "Alternative Exchange Rate Assumptions for Japan," pp. 8–9). Paul Krugman presents a more stylized treatment of this issue in "Japan's Trap," May 1998 (available via the Internet: <http://web.mit.edu/krugman/www/japtrap.html>).

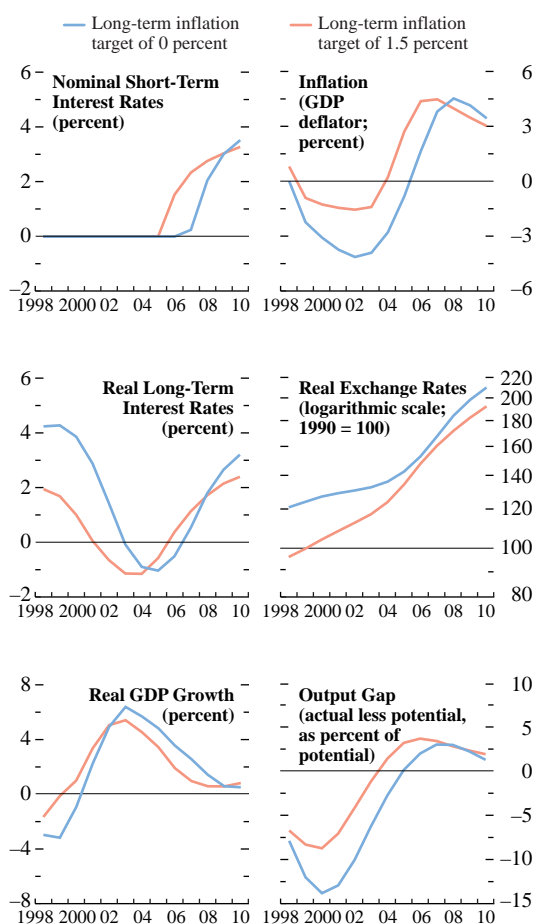
<sup>3</sup>The monetary policy rule used in this model is similar to that proposed for the United States by John Taylor, "Discretion Versus Policy Rules in Practice," *Carnegie-Rochester Series on Public Policy*, Vol. 39 (December 1993), pp. 195–220.

## Role of Structural Policies

Structural impediments to the recovery of demand and the working of market mechanisms in the Japanese economy are also important in helping to explain the prolonged slowdown of growth in the 1990s. The role of banking sector difficulties in

dampening the effectiveness of macroeconomic policies has already been noted. Labor market arrangements, product market regulations, and other features of the working of economic institutions and their interrelationships, such as the relationship between banks and corporations, have also affected economic performance.

### Japan: Alternative Liquidity Trap Scenarios, 1998–2010



Source: IMF staff calculations.

target over the longer term. As a result, both the real long-term interest rate and the real exchange rate are lower than in the first scenario. The boost provided to aggregate

demand moderates the initial decline in output and leads to a faster recovery thereafter.

The contrasting results of these two scenarios underscore the important role that inflation expectations can play in influencing real interest rates and thus aggregate demand in the face of a liquidity trap. They also suggest how a “deflationary spiral” could emerge: if a protracted cyclical downturn ultimately led to expectations of deflation, real interest rates would rise, further depressing output and inflation expectations in a self-reinforcing manner.<sup>4</sup> Indeed, such a situation appears to have characterized the U.S. economy in the early 1930s. Of course, the current recession in Japan has been much less severe than the depression in the United States at that time. Furthermore, there are few current signs in Japan that deflationary expectations have gained the upper hand, as evidenced by the relative stability of broad measures of prices and wages, and continuing growth in monetary aggregates. So the risk of a deflationary spiral in Japan appears hypothetical at the current juncture.

At a practical level, there are several caveats to implementing such a policy. First, it is not clear what actions the authorities could take to credibly influence inflation expectations, especially given that Japan has not pursued a regime of explicit inflation targeting up to this point, and there is little scope for lowering nominal short-term interest rates to directly signal a more accommodative stance. This analysis also does not incorporate the impact of a shift in Japanese monetary policy on the rest of Asia, since developments in trading partners are assumed to be unaffected by Japanese policies. In practice, a sharp weakening in the yen could put downward pressure on other Asian currencies and require tighter monetary policy in those countries, offsetting the beneficial effects for Japan. There is also a risk that household confidence could be undermined by central bank operations to expand base money in order to influence inflation expectations, leading to a contraction in private consumption that is not incorporated in the second scenario. Finally, the response of business investment to lower real interest rates could be relatively muted, given existing strains in the financial sector. In light of these caveats, the analysis using model simulations should be regarded as illustrative, not as a characterization of the trade-offs currently facing Japanese policymakers.

<sup>4</sup>Model simulations in which the inflation target of the monetary authorities is not fully credible, and expectations of the target instead depend on the observed behavior of inflation, are capable of generating this type of deflationary spiral.

### The Banking Crisis

There are several dimensions to the banking crisis in Japan. The weaknesses stemming from the bad-loan problems have been the focal point of public discourse about the banking crisis. Other manifestations of the weaknesses in the banking sector are the exposure of

banks’ capital bases to market risk, and the slow process of loan-loss recognition and disposal.

The collapse in November 1997 of Hokkaido Takushoku Bank, a major “city” bank, and Yamaichi Securities, one of the largest securities houses, highlighted the depth of the financial crisis in Japan and triggered sharp increases in bank certificate of deposit

rates and in the “Japan premium,” forcing the Bank of Japan to inject liquidity into the interbank market. While the failure of these two institutions served to focus attention on the urgent need to resolve the problems in the banking sector, the crisis itself had been simmering without any effective solutions since the early part of the decade.

As noted earlier, the difficulties in the banking sector were sparked by the collapse of the asset price bubble. Since banks own directly a significant portion of the total value of listed equities, the direct impact on banks’ balance sheets was more severe in Japan than, for example, in the Nordic countries. More important, the decline in property prices sharply reduced the quality of banks’ loan portfolios, and the prolonged weakness in activity following the asset price collapse exacerbated the magnitude of the problem loans. A distinctive aspect of the banking crisis in Japan has been that opaque accounting practices have masked the true size of problem loans for many years, and official statements regarding problem loans have lacked credibility in markets. From the accounting year ending March 1998, however, banks have started disclosure based on a new standard designed to match the SEC (Securities and Exchange Commission) standard in the United States with respect to the disclosure of nonperforming loans. The self-assessment of asset quality by the banks, on the basis of more transparent accounting rules than adopted in the past, showed “sub-standard” and “doubtful” loans of about ¥71 trillion (about 14 percent of GDP), net of specific loan-loss reserves at end-March 1998. The equivalent figure for all deposit-taking institutions is ¥88 trillion. However, these estimates were not fully subject to supervisory scrutiny, and probably do not fully reflect the effects of the Asian crisis on the banking sector in Japan; market estimates of problem loans are higher. The lack of transparency in even recognizing the scale of the problems in the banking sector has undermined confidence among businesses and the public at large, with deleterious effects on domestic demand, and stands in marked contrast to the experience of the Nordic countries, where there was an explicit recognition by the authorities that transparency was a precondition to the solution of the banking crisis.<sup>11</sup>

Recent research has tended to emphasize the special role played by banks in the monetary transmission mechanism in advanced economies, since funds raised through capital markets are an imperfect substitute for bank credit because of informational asymmetries.<sup>12</sup>

<sup>11</sup>See, Stefan Ingves and Göran Lind, “Loan Loss Recoveries and Debt Resolution Agencies: The Swedish Experience,” in Charles Enoch and John H. Green, eds., *Banking Soundness and Monetary Policy: Issues and Experiences in the Global Economy* (Washington: IMF, 1997), pp. 421–42.

<sup>12</sup>For a more detailed analysis of the credit channel, see Ben Bernanke and Mark Gertler, “Inside the Black Box: The Credit Channel of Monetary Policy Transmission,” *Journal of Economic*

Such informational asymmetries are likely to be particularly pronounced in Japan because of the high transaction costs of raising capital in Japanese markets. Consequently, changes in the lending practices of banks can have effects on economic activity that are independent of the effects operating through changes in interest rates. The credit channel is likely to be particularly prominent in Japan, given the important role played by banks in financial intermediation. Consequently, disruptions to the banking sector, which are always detrimental to an economy, are likely to be particularly troublesome in Japan.

The growth of bank lending, which has been weakening since the early 1990s, has turned negative in recent months (Figure 4.8). Although the deterioration in the macroeconomic environment has contributed to the deceleration of bank credit, there is evidence that a declining availability of credit—a credit crunch—has also been important in constraining lending, aggregate demand, and economic activity. Banks had in the past dealt with credit losses by realizing accumulated hidden reserves. But, more recently, they have been forced to pay greater attention to credit quality because of the influence of declining equity values on bank capital, and in anticipation of the more competitive financial environment that is expected to be fostered by the “big bang” reforms. The “prompt corrective action” introduced in April 1998 has also added to the pressures on banks to strengthen their capital positions, and they have responded to a large extent by cutting back on lending in order to meet capital adequacy requirements.<sup>13</sup>

The Japanese authorities have recently taken a series of measures to resolve the banking crisis. These include providing an additional ¥17 trillion in funding to the Deposit Insurance Corporation to protect depositors when insolvent banks are closed. A further ¥13 trillion has been made available for recapitalizing undercapitalized but solvent banks of systemic importance. In early July 1998 the authorities announced a bridge bank facility to take over the operations of failed institutions. Under this scheme, a public bridge

*Perspectives*, Vol. 9 (Fall 1995), pp. 27–48. See also Allan D. Brunner and Steven B. Kamin, “Bank Lending and Economic Activity in Japan: Did ‘Financial Factors’ Contribute to the Recent Downturn?” *International Finance Discussion Papers*, No. 513 (Washington: Board of Governors of the Federal Reserve System, June 1995); and Tamim Bayoumi, “Monetary Policy Issues,” in IMF, *Japan—Selected Issues*, Staff Country Report (Washington, July 22, 1998); and Mark Gertler and Simon Gilchrist, “Monetary Policy, Business Cycles, and the Behavior of Small Manufacturing Firms,” *Quarterly Journal of Economics*, Vol. 109 (May 1994), pp. 309–39.

<sup>13</sup>The “prompt corrective action” framework includes (1) a graduated response matrix requiring banks to take remedial action when regulatory capital falls below prespecified levels; (2) a more systematic self-assessment of loan quality, subject to approval by external auditors; and (3) an independent Financial Supervisory Agency, established in June 1998, and strengthened disclosure standards for nonperforming loans.

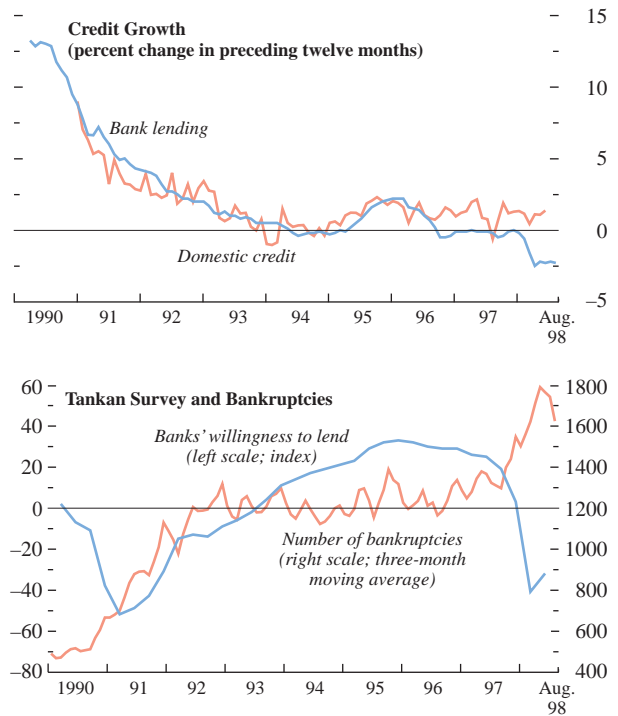
bank would be set up to carry on the operations of the failed institution, including extending new loans to sound borrowers while a private bank was sought to take over its operations. Additional instruments under discussion include the temporary nationalization of a troubled bank, in a situation where the banks' failure could destabilize the financial system, and the setting up of a Japanese version of the U.S. Resolution Trust Corporation with broad powers to buy bad debt, including from solvent and nationalized banks. At the time of writing, however, the full details of the plan have not yet been finalized.

In addition, the authorities have recently announced a number of measures to help the workout of real estate loans: the easing of regulations covering asset-backed securities and special-purpose corporations for holding securitized assets, the use of public money to buy and consolidate odd plots of land and changes in zoning regulations for certain areas, and the creation of arbitration panels to mediate the resolution of bad loans. In May 1998 a plan was announced to establish an arbitration panel that will clarify and consolidate the liens on real estate collateral and mediate the terms of agreements between debtors and creditors. In June 1998, legislation aimed at stimulating the securitization of assets, in particular bad loans, was approved by the Diet.

The recent measures proposed by the authorities provide a useful starting point for the resolution of the problems of the banking sector. However, an effective and lasting solution requires more aggressive and decisive actions on a number of fronts. The "prompt corrective action" framework will have to be applied more systematically to the smaller banks, and those that are judged insolvent should be closed. There also has to be quicker action in fully recognizing and cleaning up the bad loans of the bigger banks, and recapitalizing those that fall short of meeting capital adequacy requirements. In this regard, the recapitalization measures that have been adopted so far have been small—only ¥1.8 trillion has been spent on capital injections—and the conditionality attached to such spending has been limited. Any future injections should carry strict conditionality, including to require bank shareholders to take appropriate responsibility for loan losses. The Financial Supervisory Authority has to be provided with sufficient financial and human resources and independence to be able to fulfill its supervisory mandate effectively. For the bridge bank facility to be effective, clear procedures will have to be laid out to ensure that bad assets are identified, assets are subject to proper valuation, and new loans are provided only on prudent commercial criteria. Private sector buyers for the bridge banks will also need to be identified quickly. The proposed bridge bank scheme is a mechanism for dealing with failed institutions only. However, it is just as important to advance the restructuring of those major banks that are undercapitalized but that may be solvent.

**Figure 4.8. Japan: Credit Growth, Tankan Survey, and Bankruptcies**

The availability of credit has tightened recently.



### Other Structural Issues

Japan's economic performance in the years ahead will depend significantly on developments in the nontradables sector. Past initiatives in deregulating some segments in the nontradables sector have borne fruit—most notably in the form of increased investments and reduced prices in the retail, energy, and telecommunications sectors. Nevertheless, a number of restrictions and market distortions remain in agriculture, transportation, distribution, and construction that have contributed to a lack of competition and low productivity in these sectors.<sup>14</sup> The reforms introduced in these sectors have too often been of a minor technical nature, and they have failed to address key quantity and price restrictions. Further steps toward deregulating the nontradables sector will have to be combined with efforts to increase transparency and reduce nontariff barriers to trade.

In this regard, Japan has not experienced declines in the share of manufacturing employment of the magnitude that have occurred in other advanced economies in the past two decades as part of the normal process of economic development. The slower pace of deindustrialization in Japan can be explained by special factors such as the ability to generate rising manufacturing trade surpluses and the effects of relative price movements that have tended to augment domestic demand for manufactures.<sup>15</sup> Labor market arrangements

in Japan, such as lifetime employment practices, may also have played a role in slowing down the pace of structural change although Japanese manufacturing employment has fallen by over 3 percent in 1998. Looking ahead, as the pace of growth picks up, and as the process of deindustrialization in Japan proceeds more in line with the path taken in other advanced economies, there will need to be changes in labor market arrangements to serve the needs of an increasingly services-based economy.

There has been a close nexus in Japan among banks, corporations, and the government. In particular, the relationship between banks and corporations may have helped to foster Japan's rapid economic catch-up.<sup>16</sup> Bank-oriented financial control minimized pressures toward "short-termism" in corporate decision making. It also provided support to sustain other features of the Japanese economic system, such as lifetime employment practices. However, financial liberalization in the 1980s implied a significant loosening of the relationship between banks and the corporate sector. As discussed earlier, the larger corporations, in particular, increasingly tapped both the domestic and international financial markets for funds. The banking crisis in the 1990s has further eroded the capacity of banks to carry out their monitoring functions. Meanwhile, alternative systems of corporate governance, such as enhancing shareholders' rights to carry out effective monitoring of the corporate sector, have not fully replaced the role played in the past by bank monitoring. In this context, the full and effective implementation of the "big bang" financial reforms should set the stage for more stringent market-oriented discipline on corporate behavior.

<sup>14</sup>See, for instance, OECD, *Japan—Economic Survey, 1997* (Paris, December 1997).

<sup>15</sup>For a more detailed discussion of these issues, see Robert Rowthorn and Ramana Ramaswamy, "Deindustrialization: Causes and Implications," in *Staff Studies for the World Economic Outlook* (Washington: IMF, December 1997), pp. 61–77; and Robert Rowthorn and Ramana Ramaswamy, "Growth, Trade, and Deindustrialization," Working Paper 98/60 (Washington: IMF, April 1998). See also Eswar Prasad, "Sectoral Shifts and Structural Change in the Japanese Economy: Evidence and Interpretation," *Japan and the World Economy*, Vol. 9 (No. 3, 1997), pp. 293–313.

<sup>16</sup>See Nicholas Crafts, "East Asian Growth Before and After the Crisis," background study for the *World Economic Outlook*, (Washington: IMF, Research Department, August 1998).