

The Japanese Economy:

What We Know, Think We Know, and Don't Know

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For the past decade, the Japanese economy has performed poorly, much to the surprise of economists who had spent their careers trying to explain why the economy persistently out-performed other industrial nations from the 1950s through the 1980s. Many of the causes of the economy's problems are now well understood, but areas of considerable disagreement and controversy remain. These disputes matter, since policies to return the economy to a healthy growth path depend on the diagnosis of the causes and severity of the problem. This paper is intended to kick off the discussion at the Trezise symposium by exploring what we know, what we think we know, and what we don't really know about the problems of the economy.

The Root Cause

The problems of the past decade are the direct consequence of the speculative bubble in the stock market and real estate market. As indicated in figure one, the Nikkei Average of stock market prices tripled in value from the 1985 to its peak at the end of 1989. Real estate values in the six largest urban areas of Japan also tripled in value from 1985 to a peak in 1991. Since the peak, both the stock market and the urban real estate markets have lost all of the gains since 1985. By the end of 2001, the stock market was actually trading below its 1985 close.

In any society, a rise and collapse of asset values of this magnitude would lead to serious economic problems. In the household sector, however, the impact appears to have been muted. Since households do not hold much stock (only about 14 percent of total household financial assets), the wealth effect on consumption spending was minimal. Similarly, turnover in housing is low, so that only about 12 percent of households acquired a dwelling in the three years surrounding the peak in the real estate

market. For those who did, slowly rising incomes over the course of the decade implied that they were able to meet their mortgage payments, so that the loss was only a paper one to be realized if they chose to sell—which few do. For those who keep their property and bequeath it to the next generation, the fall was actually a boon, lowering the inheritance tax that the next generation needed to pay. These features of the housing market may help explain why the broad public has accepted the enormous drop in property values so passively.

For Japan, therefore, the main transmission mechanism between the asset bubble collapse and the real economy has been the corporate sector. For firms in real estate development, the loss is obvious. Property acquired at a high value would no longer generate revenue sufficient to cover loan costs (and may not have even at the peak of the real estate market) as rental prices fell along with real estate. For firms outside real estate, the problem may be similar. Even some manufacturing firms were sucked into both the stock market and real estate markets in the late 1980s, lured by what was then called “zaitech” (financial technology; a Japanese term for financial portfolio management). Among non-real estate firms that have gone bankrupt in recent years, stories of incautious forays into the stock and real estate markets seem common. But even for those firms that were not sucked into this speculative game, real estate has been the common form of collateral for all bank loans. This implies that any firm facing a hard time for other reasons that cannot meet its bank loans will leave its bank in control of collateral that is no longer worth as much as the value of the loan.

In addition, there was also a real effect of the “bubble” years. Japanese firms in all sectors of the economy believed that the high real economic growth rates that

prevailed (an average of almost 5 percent from 1987 to 1991, as shown in Figure 2) would continue indefinitely. Believing that, they invested in plant and equipment (and personnel hired with an informal “lifetime” employment guarantee) accordingly. When growth dropped precipitously, they were left with serious over investment. Figure 3 indicates what happened to plant and equipment investment as a share of GDP. After rising to a high level of 20 percent at the end of the bubble years, this ratio has fallen to a 14-15 percent range (when prices are measured in nominal terms—measured in real terms, the fall is somewhat smaller from 19 percent to 16 percent). Even 15 percent may be high, as this is the level of corporate fixed investment in the United States during the peak of the growth years in the 1990s. One consequence of excess investment has been a drop in corporate return on assets (ROA), from around four percent in the 1980s to only two percent in the 1990s—an extraordinarily low level.

Policy Blunders and Structural Issues

Compounding the impact of the asset bubble and its collapse was a series of economic policy blunders. There were quite a few of these:

- Excessively loose monetary policy (and administrative guidance to the banks) was instrumental in creating the asset bubble;
- Excessively tight monetary policy caused the bubble to collapse quicker and faster than necessary;
- Slow lowering of interest rates in the 1992-1995 delayed economic recovery
- Slow fiscal policy response until 1994 also delayed recovery;
- The large reversal of fiscal policy in 1997, raising taxes by the equivalent of about 2 percentage points of GDP, snuffed out an economic recovery;
- The increase in interest rates by the Bank of Japan in the summer of 2000 also undermined the next recovery;
- Throughout this period, the government has had difficulty coming to grips with the need to clean up the non-performing loan problem, thereby enabling it to grow to its current proportions.

That is, the bubble itself was a result of government macroeconomic policy decisions, and the nature of its collapse was also due to deliberate policy decisions. Had the government then responded more quickly or more consistently once the bubble burst, then Japan would quite likely be back in a more robust growth pattern today.

Those are the rough facts concerning the problems of the past decade. However, there is much that we do not know, and much concerning which economists have failed to agree. The principal issue here is the extent to which the Japanese experience is simply one national example of a common world-wide phenomenon *versus* particular Japanese circumstances.

We know that a number of other countries have experienced asset bubbles of one sort or another in the past two decades and have experienced serious non-performing loan problems in the banking sector as a result. The American savings and loan problem of the 1980s is one example, as are the serious banking collapses that afflicted the Scandinavian countries in the late 1980s and early 1990s. In this view, therefore, Japan has been an unremarkable example of a broader phenomenon. Speculative bubbles can occur in any society (due to the unknowable nature of the future, combined with periodic bursts of what appears in retrospect to have been excessive optimism). These other episodes occurred in an environment in which all nations were deregulating financial markets, leading banks to engage in riskier behavior. If this analysis is correct, the main necessity is to clean up the aftermath of the bubble (i.e. deal with non-performing loans), and the economy will return to normal growth.

On the other hand, Japan's experience may be rather different from other countries. The real estate bubble that sank the savings and loan industry in the United

States was heavily influenced by the rise in the price of oil (raising incomes and demand for housing in the American Southwest). The same was true in Norway. When the price of oil fell, so too did real estate prices. This rooted the non-performing loan problem in what was arguably a more real phenomenon—the market price of oil—rather than a purely speculative game. If that is the case, then we need to look more deeply into the Japanese economic system to find the causes for the bubble, its collapse, and the policy mistakes of the past decade. One can argue, for example, that the lack of transparency in the Japanese system (at least relative to the United States) is a principal culprit.

Obviously the Japanese system worked well from 1950 until the mid-1970s, producing an average economic growth level of almost 10 percent that lifted Japan out of the devastation of the war and placed it in the ranks of the most advanced industrial nations. But high growth makes any system look good. The principal problem with a lack of transparency in a low-growth system is that no one wants to reveal bad news. Yet, in a slow growth environment, revelation of bad news, leading to disinvestment in losing firms and industries, is critical to maintaining an efficient allocation of capital. Thus, in the wake of the collapse of the bubble, firms concealed their losses, banks protected their borrowers (if they knew they were in trouble), and the government protected them all fearing that bad news was not good for consumers. In this view, therefore, returning the economy to a robust growth path is not possible unless and until substantial systemic reform occurs.

An additional way in which the Japanese experience might have been different appears occasionally in the Japanese media. In this view, the problems facing Japan are all the fault of external circumstances. The bubble grew out of the over valuation of the

dollar in the first half of the 1980s (due to Reagan administration policy) and its subsequent collapse of the yen—creating the circumstances to which Japanese monetary policy had to respond in the second half of the 1980s. Various policy mistakes in the 1990s are also attributed to pressure from the United States, including the increase in wasteful public works spending as part of fiscal stimulus. And the recession of 1998 is often seen as the result of the 1997 financial crisis elsewhere in Asia, rather than as a result of the tax increase in Japan. Some of these external developments may well have had some impact on developments, but I hope that this conference can agree that they do not adequately explain the decade of malaise in Japan. All nations face shifting external economic impulses, and many of them manage to devise domestic policy responses that enable growth to continue. Japan did not; Japan's problems were home grown.

Seriousness of the Non-Performing Loan Problem

The next issue is that of the seriousness of the non-performing loan problem facing the economy. The consensus among economists is that the problem is quite serious, and that the possibility of major financial collapse is not trivial. Only the Japanese government espouses a relatively optimistic view. Nevertheless, there are still large degrees of uncertainty in this picture among economists.

First, the extent of asset price fluctuations is not certain. The movement in the stock market is obvious, though some prefer to use an index other than the Nikkei Average, especially since that average shifted its composition of included companies in 2000 in a manner that may have exaggerated the declines in 2001 (by including more high-tech firms that were subsequently affected by the collapse in the high-tech bubble). But the main data problem concerns real estate. Not only is the real estate market quite

thin, but the quality of the data collected is rather questionable. During the bubble, many observers thought that official data underestimated the increase in real estate prices, and now the same may be true on the downside. According to the data in figure one, urban real estate tripled in value and then declined by two thirds. But the increase and drop may have been larger. We do know that collateral securing loans that has been seized and sold has been purchased at prices averaging only 3 to 5 percent of the face value of the original loans. Perhaps an adverse selection process is involved here (only the very worst loans have been liquidated), but this anecdotal evidence is certainly sufficient to introduce an added sense of uncertainty and worry into thinking about the extent of the asset losses that have occurred and their impact on borrowers and banks.

The second uncertainty is the size of the non-performing loans that have resulted from the drop in asset prices. The Japanese government officially estimates that “problem” loans, as of September 2001, amounted to ¥36.8 trillion (\$280 at current exchange rates). Not a single economist outside the Japanese that I know believes these numbers. Estimates in the financial community are generally in the range of ¥100 trillion to ¥250 trillion. Obviously any “problem” loan figure is spongy because a company may be making payments on its loans while still heading toward eventual bankruptcy. But this problem is hugely compounded in Japan because of lax accounting and collusion between banks and their borrowers to hide the true financial situation. A number of companies going bankrupt in the past several years never reported losses, and their banks had never listed the loans as problematic. Only after bankruptcy has the public learned that serious problems existed for years and that the banks knew the situation while continuing to extend credit.

This dispute over the size of the problem mainly pits the Japanese government against all the outside observers, though certainly the estimates of the problem vary widely among outsiders. The dispute matters. The current Japanese government plan for cleaning up non-performing loans addresses only ¥20 trillion (\$155 billion) of loans held by large banks. No economists believe this is adequate, and if the real problem approaches the private sector estimates, then the banking sector does not have sufficient capital to resolve the problem on its own.

In the Japanese government view, banks will be able to write off their bad loans without public assistance. All they need is a firm nudge from the government to do so, which the Koizumi government claims to be supplying (through “stringent” bank inspections by the Financial Services Agency, and administrative guidance on cleaning up bad loans through either debt-equity swaps or termination with seizure of collateral). But if the problem is much larger, as most economists suspect, banks will go bankrupt if they must write off their bad loans. Some combination of bank failures and government capital infusions to the remaining banks is unavoidable in this case. Perhaps even temporary nationalization of the entire banking sector (as in the Norwegian case) will be necessary as part of this solution. The worst possible outcome would be continuation of the Japanese government plan leading to an uncontrolled collapse of the banking sector. This is the possible outcome that outside observers fear, but which the Japanese government adamantly denies as a possibility.

Real Economic Performance

Actual economic performance over the past decade has averaged 1.1 percent growth (1992 to 2001), as shown in figure 2. But this decade of slow growth has been

uneven, punctuated by three periods of recession—1993, 1998, and 2001—as shown with somewhat greater visibility in figure 3. Calendar year 1993 actually showed slightly positive growth, but did include two consecutive negative quarters. In both 1996 and 2000, there was considerable optimism in Japan that a sustained upturn in economic growth was beginning, only to have those expectations snuffed out.

From these simple facts concerning economic growth over the past decade, one can clearly discard the popular phrase in the American press concerning Japan's "decade-long recession." What Japan has experienced has been a decade of very low growth. While this growth performance has been disappointing, and clearly below the potential growth rate, the average performance has been positive rather than negative. That fact alone may help explain why the political process has not generated more dramatic policy responses to fix the various ills of the economy.

What we don't know from these data is what the future economic growth performance will be. The current recession, now with three consecutive negative quarters, has lasted longer than the previous two. Private-sector forecasts have generally assumed that the recession will continue through 2002 before a weak recovery takes hold. The somewhat unanticipated upturn in the U.S. economy (with its positive impact on Japanese exports) may move this weak recovery forward somewhat. However, the consensus appears to remain one of a relatively lengthy, shallow recession followed by a weak recovery. Few see a robust recovery that moves Japan beyond the malaise of the past decade—a discouraging prospect since the under-performance of the past decade implies an output gap that should enable high growth for a period of time.

Furthermore, with the non-performing loan problem unresolved and growing larger in the context of recession and deflation, the probability of a more catastrophic future of financial collapse and sharp reduction in GDP has become larger. Economists appear to be divided among those who see reform and recovery (mainly the Japanese government), those expecting a “muddle through” scenario of continued weak but positive performance, and those expecting a catastrophic collapse (presumably resulting in more radical reform that eventually leads to recovery). Sorting out these various scenarios is one objective of this symposium.

I lean somewhat toward the “muddle through” scenario, at least for the next year or two, but only because this has been the record of the past decade. That is, if the government has been able to avoid catastrophe for a decade, it may continue to take just enough policy action to still avoid it. On the other hand, a decade of muddling through has led to a non-performing loan problem that has grown worse. The pessimists believe that time is rapidly running out on the viability of the muddle through scenario.

Deflation

Affecting the assessment of various scenarios for the real economy is the impact of deflation—the fall in the general price level. As shown in figure 5, the GDP deflator has been negative since mid-1998, with the price decline (each quarter’s price level compared to the same quarter a year earlier) running at minus one percent to minus two percent. Measured by the consumer price index, shown in figure 6, deflation has been somewhat milder, running at less than one percent in each of the past three years.

Deflation is certainly a fact. What economists remain in some disagreement about is “good” deflation *versus* “bad” deflation, and the overall impact of deflation.

Some of the price declines in the economy have resulted from either a lessening of import barriers (enabling cheaper foreign products to finally penetrate the market), domestic deregulation, other changes producing greater domestic competition, and technical change. Clothing prices have fallen with rising imports from China. Domestic airfares have fallen with deregulation. And computer prices and telecommunications prices have fallen with technical change. All observers agree that these *relative* price changes have been good for the economy.

Nevertheless, macroeconomists argue that the price declines across goods and services are broader than these changes would suggest. After all, what is occurring is a decline in the overall price indices—the GDP deflator, the consumer price index, or the wholesale price index. Furthermore, regardless of the cause, general price deflation has a deleterious impact on the economy because it increases the real debt burden on all debtors (since the debts are fixed in nominal terms while the revenue streams that borrowers use to repay their debts are shrinking because of price declines). Arguably, this problem is less important if all economic players know that prices will decline. Therefore, the real problem is unanticipated price declines.

This situation does appear to apply to Japan—corporate debtors probably did not anticipate price declines, and are stuck with paying fixed debts out of revenues based on falling prices for their output. However, three important caveats are in order:

First, the magnitude of the decline is fairly mild. Compared to other episodes of deflation in the past, a one-to-two percent annual decline in prices is small. For example, in the three years from 1929 to 1932, consumer prices in the United States dropped by 25 percent, or about 8 percent a year. A low level of deflation certainly increases the real

debt burden on borrowers, but not by very much. At the margin, this still matters, as some borrowers will find that they can no longer service their debts. But the deflation does not appear (at least not yet) sufficient to make the non-performing loan problem considerably worse.

Second, the impact of deflation applies mainly to corporate borrowers. Until at least 2000, family incomes were not falling, as noted earlier. Therefore, households with home mortgages were not trying to pay their mortgages out of declining incomes. In the past year, income does appear to have declined marginally, but this may be more of a cyclical problem related to the current recession.

Third, the argument in Japan is often muddled by serious misunderstanding of the term “deflation.” What appears (at least to this observer) is a casual presumption that deflation refers to the fall in the stock market and real estate prices. Since those prices had been artificially inflated (relative to all other prices) in the 1980s, that price drop was necessary. Thus, the drop in the *relative* price of equities and real estate should not be confused with the overall price decline in the economy. Any increase in these asset prices should come as a consequence of restored economic growth, not any artificial government plan (as prices revert to their market level once the government intervention is removed). Sadly, however, this confusion seems common in Japan.

Therefore, the extent to which deflation is a major problem remains in some dispute among economists. This matters since recent policy discussion in Japan has emphasized the importance of ending deflation through a more expansionary monetary policy. How the government can cope with deflation is also a matter of some dispute. The principal policy lever to influence prices is monetary policy. With short-term

interest rates close to zero, can the Bank of Japan do more to ease monetary policy?

Many economists now advocate a quantitative approach, anchored in an inflation target.

That is, the Bank of Japan should adopt a low but positive consumer price or GDP deflator target (say, three percent) and pump up the money supply until it is achieved.

The Bank of Japan and some outside economists argue that this approach will not work (for reasons that I will leave to discussion at the symposium).

Fiscal Policy

Over the course of the 1990s, the deficit of the government widened, partly due to involuntary reductions in tax revenues and partly due to deliberate fiscal policy decisions. From a surplus of 3 percent of GDP in 1989, the overall government sector has had a deficit of approximately 7 percent of GDP for the past several years. As a consequence of this string of sizable deficits, the outstanding debt of the government sector is now approaching 140 percent of GDP—the highest level among all OECD countries.

Clearly fiscal stimulus has not pushed the economy back to a sustained economic growth path, although presumably economic performance in the past decade would have been worse without this stimulus. Fiscal policy has also involved disputes over composition, especially as many in Japan seem to equate the term “fiscal stimulus” with wasteful public works spending.

But the major controversy at the present time is whether the size of the outstanding government debt has become a danger to the economy. Is Japan now facing a potential collapse of the government bond market, sending interest rates up dramatically as investors lose confidence in the government? This has been a divisive discussion among economists. On the one hand, the size of the debt is large by

international standards and continues to rise at about seven percentage points of GDP a year. Presumably at some level between the current 140 percent and infinity, bond markets will balk at further debt issues. When the market balks, the price of government bonds will fall and interest rates rise. Higher interest rates on such a large amount of debt will put into doubt the government's ability to meet its obligations.

On the other hand, virtually all of this debt is held domestically. Japanese investors currently have few other safe options for their money, and have been willing to absorb the annual deficits at low interest rates (with the current long-term government bond rate at only 1.4 percent). If the economy were to recover strongly, then there would be a "crowding out" phenomenon, but recovery would allow the government to reduce its deficit. Meanwhile, the Bank of Japan can monetize larger amounts of the debt to ensure that interest rates remain low (and perhaps should be doing this anyway as part of the anti-deflation policy discussed above).

Perhaps the one area of agreement is that continued fiscal stimulus without serious effort to deal with the non-performing loan problems or undertake serious structural or systemic reform of the economy. The role of fiscal policy should be to provide a cushion against the temporary downward effect of a vigorous policy on non-performing loans (which would force more companies into declaring bankruptcy and cause higher unemployment).

Conclusion

Where does all this leave us? As for what we know, Japan has experienced a full decade of very low economic growth, punctuated by three recessions and now by a low level of deflation. In addition, the economy harbors a large amount of non-performing

loans in the financial sector. The root cause of these problems lies in the asset price bubble of the late 1980s, and various policy mistakes subsequent to its collapse at the beginning of the 1990s. Those are the basic “facts” on which economists can agree.

Beyond these facts, there are plenty of issues on which either we are unsure of the situation, or on which considerable disagreement exists among economists. Among the salient issues that deserve discussion at this symposium are:

- How serious is the decline in real estate prices? Is the decline worse than the official statistics indicate?
- How large is the resulting non-performing loan problem? Should we believe the Financial Services Agency? And combined with the first issue, how large is the “hole”—the difference between the face value of the loans and the value of the real estate collateral that the banks or taxpayers will have to fill?
- Is solving the non-performing loan problem (with loose fiscal and monetary policy in the interim) a sufficient policy to restore the economy to a robust growth path? Or are the problems of the economy so rooted in particular features of the existing economic system that strong systemic reform is necessary to truly fix the economy?
- Among all the other problems, how serious is deflation, and can inflation targeting solve the problem?
- In any scenario for solving the problems, is there room for loose fiscal policy to continue for several more years, or is a fiscal debt “bomb” about to explode?

These are all large and difficult questions, but they deserve our attention.

Figure 1
Stock and Land Price Indices

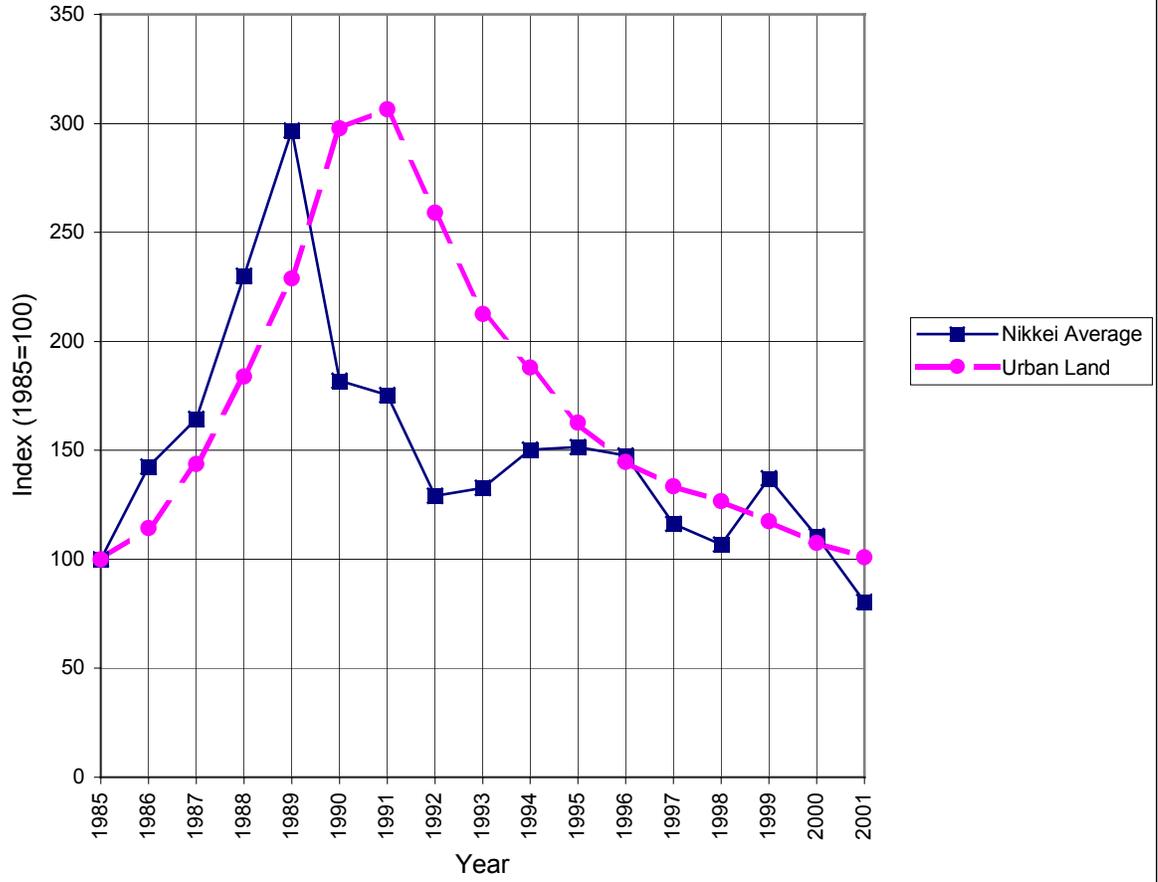


Figure 2
Real GDP Growth

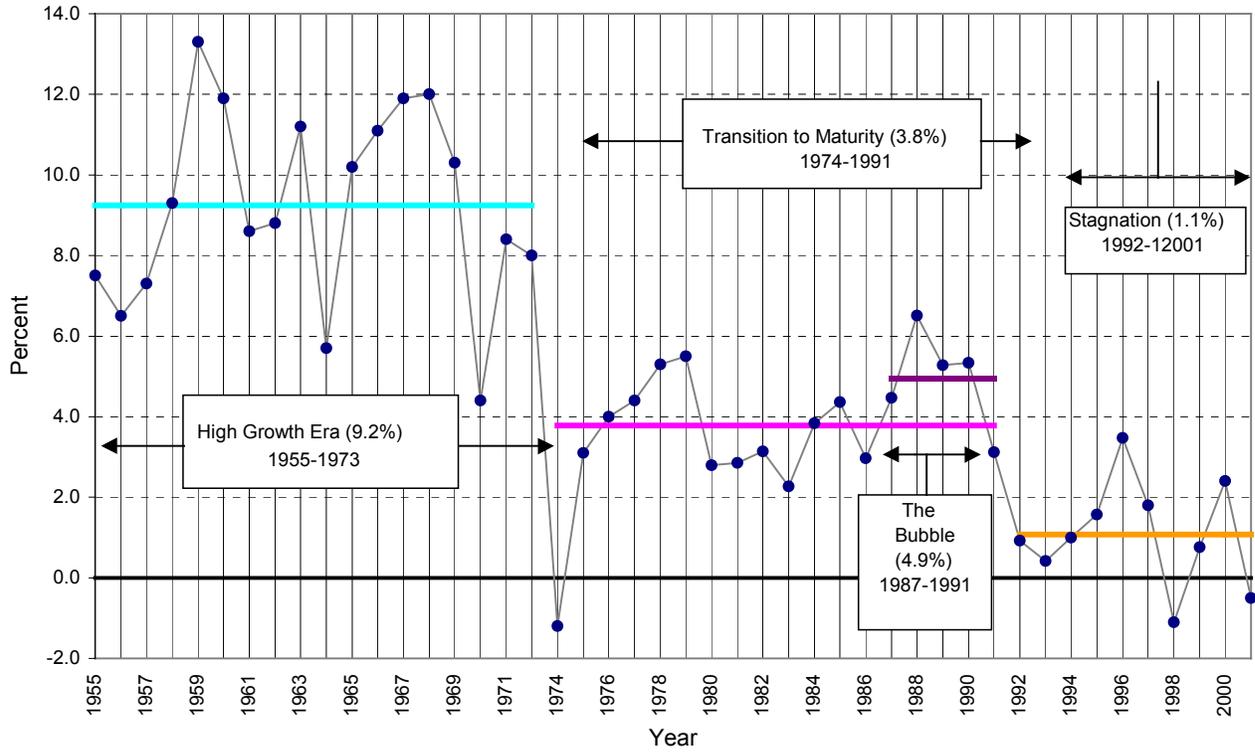


Figure 3:
Plant and Equipment Investment as a Share of GDP

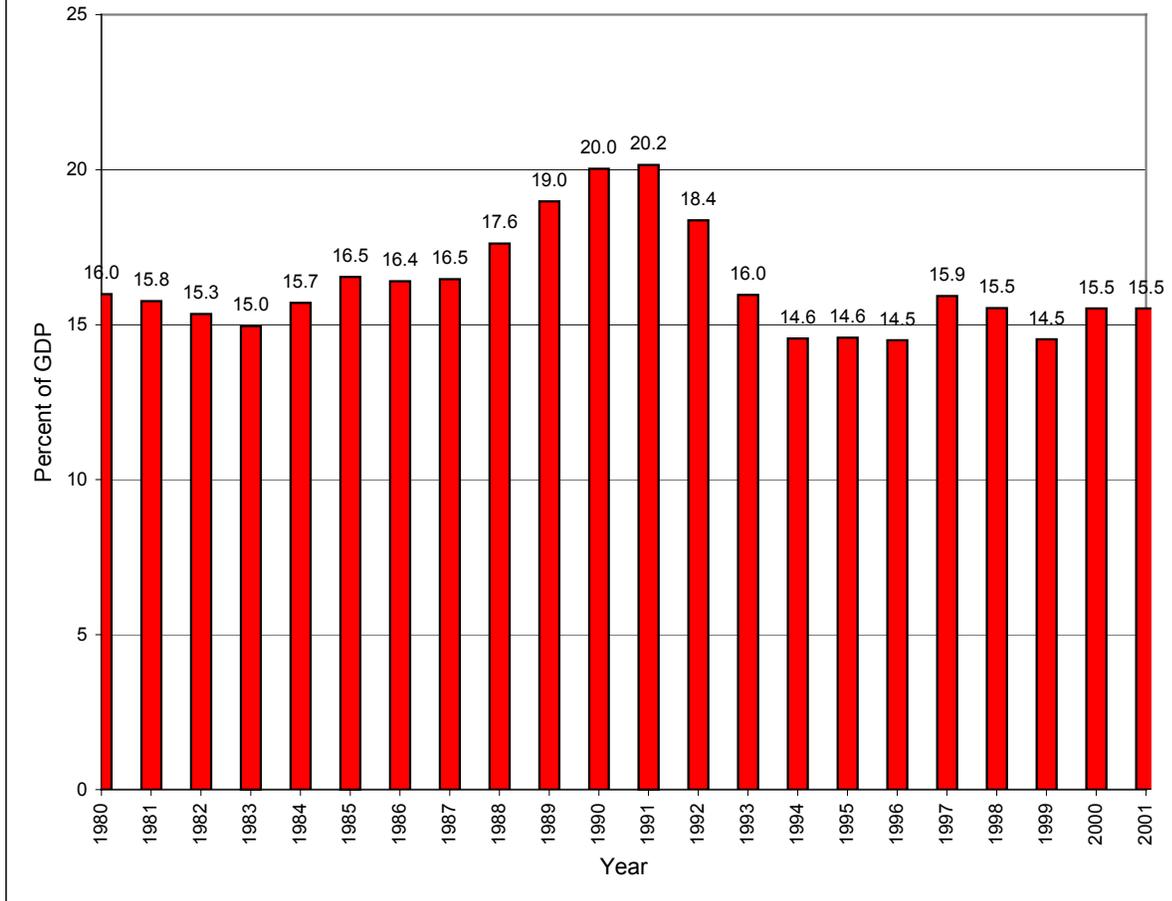


Figure 4:
Real GDP Growth in the 1990s

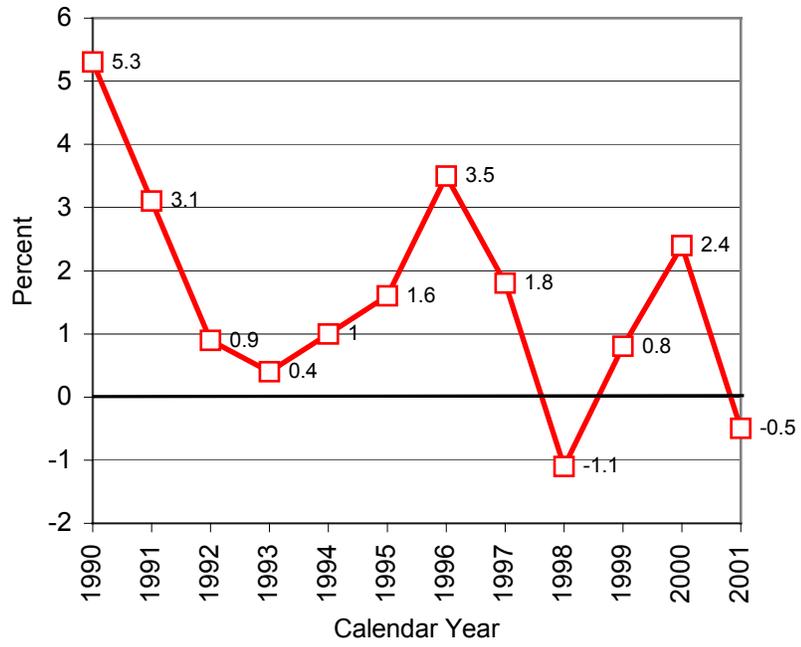


Figure 5:
GDP Deflator

