

ASSET PRICE INFLATION AND ECONOMIC POLICIES*

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Abstract

The Japanese economy experienced a remarkable economic growth during the latter half of the 1980s. Almost simultaneously, stock price and land prices showed extraordinary increases. The main purpose of this paper is to examine the nature of this asset price inflation and to analyze the relationship between that and real economic activities.

This paper argues that the increase in asset prices during this period was caused mainly by speculative bubbles. Macroeconomic policies and flow of fund during this period had important effects on the growth of the bubble. In particular, monetary relaxation which was thought as necessary to prevent further appreciation of the Yen can be regarded as one of the most important factors which triggered the bubble.

This paper casts doubts to the popular argument that the growth and collapse of the bubble were the main factors which caused fluctuations in the real economy.

I. *Asset Price Inflation in the 1980s*

I-1. Increase in Stock and Land Prices

The Japanese economy recorded spectacular growth in the latter part of the 1980s. Overcoming the recession brought on by the sharp appreciation of the yen, it started to expand in December 1986 and went on to record the second-longest boom since World War II.

Economic growth during this period was accompanied by an extraordinary leap in asset prices. The Nikkei average of 225 issues on the Tokyo Stock Exchange, the most commonly cited indicator of stock prices, practically doubled from 8,800 in 1983 to 16,401 in 1986 (annual averages). The surge, which took the index to a peak of 26,646 on October 14, 1987, was temporarily halted by the "Black Monday" crash that hit the U.S. stock market at that point. But the slump in Japan was short-lived. By April 1988 the market had climbed past the previous October's record high, and prices continued to climb right

* I am grateful to Ms. Masami Seto for her assistance in translation.

up to the closing session of 1989, when the Nikkei average hit 38,915. Stock prices were by this time more than four times the level they had been in 1983.

The 1980s also saw an extraordinary surge in land prices. In 1986 land prices shot up throughout the metropolis, and the sharp rise continued in 1987. In fact, Tokyo land approximately tripled in price during these two years. The following years saw prices in the Tokyo area more or less level off, but meanwhile they had started rising in other regions of the country. Land in the Osaka area appreciated sharply in 1988 and 1989, and though it started a bit later, the Nagoya area experienced a similar rise. The escalation subsequently spread to resort areas and to major regional cities.

Under normal circumstances, stock and land prices rise in line with growth in the economy and with declines in interest rates.

If the price of assets like stocks and land is based on economic fundamentals, then it should equal recurring net income divided by the interest rate. Let us assume here that such recurring income (such as stock dividends) is equivalent to a fixed percentage of GDP. In that case, the total value of assets should be equal to a fixed (or perhaps slowly changing) percentage of the value of GDP divided by the interest rate.

The actual figures for this percentage are shown in the second two columns of Table 1. In the first half of 1980s, the figures were fairly steady for both stocks and land (though the stock figures show something of a rising trend and the land figures a falling trend). In other words, during this period both stock and land prices moved in keeping with the economic fundamentals. In the latter part of the decade, however, the figures for both stocks and land deviated greatly from the trend. This may be seen as evidence of the formation of a speculative bubble in the asset market.

TABLE 1. TRENDS IN GDP AND STOCK AND LAND ASSETS

FY	GDP (¥ Trillion)	Interest rate (%)	Asset value		Ratio to GDP × Interest rate	
			Stock (¥ Trillion)	Land	Stock	Land
1981	261	8.34	81	128	2.572	4.089
1982	273	8.24	91	135	2.747	4.082
1983	286	7.71	107	139	2.885	3.760
1984	305	7.17	138	149	3.232	3.494
1985	324	6.09	169	176	3.177	3.308
1986	338	5.14	230	280	3.498	4.260
1987	354	4.90	301	449	4.166	6.217
1988	377	4.96	394	529	5.184	6.961
1989	403	5.63	527	521	7.362	7.272
1990	434	6.91	478	517	7.611	8.235
1991	457	5.49	373	504	4.475	6.058
1992	465	5.54	297	428	3.400	4.900

- Notes: 1. Interest rate is yield on long-term national bond.
 2. Stock value is the total market value of stocks listed in the Tokyo Stock Exchange (the first section). Land value is total residential land value in Tokyo (the National Account Statistics data).

I-2. Causes of the Speculative Surge

The direct causes of the surge in asset prices were land speculation and the changes in the flow of funds that gave rise to this speculation. First let us consider the latter.

CHANGES IN CORPORATE FUND-RAISING METHODS

Table 2 shows trends in the raising and the use of funds by nonfinancial corporations during the period from 1980 through 1990. One remarkable feature of the latter part of the 1980s is the sharp rise in the volume of funds raised through the issuance of stocks and bonds. Thanks to the booming stock market, major corporations found it very cheap to raise money in this way. Even without directly issuing new stocks, they could sell convertible bonds or bonds with warrants, which investors bought at low interest rates in the hopes of realizing capital gains. In the three years from 1987 to 1989, corporations raised over ¥58 trillion in this manner.

The funds that were raised were not all channeled into plant and equipment investment; quite a large proportion was used for what was called *zai-tech*, or financial engineering, including deposits in banks and trust accounts and the purchase of other financial assets offering high yields. In this way corporations increased both their liabilities and their assets.

The tendency to rely more on equity and equity-linked financing was particularly pronounced among major manufacturers. For incorporated businesses as a whole, borrowing from financial institutions accounted for roughly 80% of the outstanding volume of funds raised as of the end of fiscal 1984 (March 1985), and this level was not substantially different six years later. In the manufacturing sector, however, the share of borrowing fell from 70% to less than 56% over this same period. And among the largest manufacturing corporations (capitalized at over ¥1 billion), the proportion of loans fell even more sharply,

TABLE 2. FUNDS RAISED AND USED BY NONFINANCIAL CORPORATIONS

	Funds raised			Use of funds raised	
	Borrowing from banks	Equity and bond issues	Other	Net increase in financial assets	Others
1980	13,602.0	4,332.1	7,049.5	12,343.6	12,640.0
1981	16,497.9	6,210.2	10,106.3	20,966.9	11,847.5
1982	17,380.3	6,063.9	8,240.2	15,657.9	16,026.5
1983	18,085.0	4,750.1	6,117.2	16,016.7	12,935.6
1984	20,672.8	7,074.3	13,700.6	27,135.2	14,312.5
1985	25,157.7	7,787.8	3,546.0	23,553.2	12,938.3
1986	26,611.7	9,135.9	6,339.9	17,126.1	12,281.6
1987	25,868.2	12,632.8	42,971.0	59,045.8	22,426.2
1988	29,989.2	19,414.7	27,063.4	53,412.0	23,055.3
1989	37,484.5	15,638.8	31,872.5	39,729.5	47,266.3
1990	39,484.5	15,638.8	31,872.5	39,729.5	47,266.3
Total	185,088.6	90,891.9	129,692.5	257,790.7	147,982.2

Source: Economic Planning Agency, *Kokumin keizai keisan nenpo* (Annual Report on National Accounts), 1992.

from 69% to 34%. There was also a net decrease in the volume of borrowing. Meanwhile there was a large increase in the amount of funds raised from the capital market, which actually exceeded the net amount of funds raised during the period (since corporations reduced their borrowing from banks).

By contrast, businesses other than large manufacturing corporations basically remained dependent on borrowing. More than ¥181 trillion was procured in this way during this six-year period, of which 70% consisted of borrowing by small and medium corporations. Approximately 26% of the total amount (¥48 trillion) was borrowed by the real estate industry.

THE RISE IN BORROWING BY THE REAL ESTATE INDUSTRY

Due to the tendency of large corporations, especially in the manufacturing sector, to borrow less, banks and other financial institutions faced difficulties in finding takers for their funds. They therefore started shifting their lending from large corporations and the manufacturing sector, the traditional targets of their loans, to smaller companies and the real estate industry. Also, an increasing number of loans were channeled through nonbank intermediaries instead of being made directly. This is how the funds for land speculation were supplied.

If we look at changes in the balance of outstanding loans for different industries, we find a steady decline for manufacturing in the years from 1986 to 1989, reflecting the decreased reliance on banks by large manufacturing corporations. For real estate, by contrast, we find a remarkable increase. In 1984 outstanding loans to the real estate industry amounted to ¥16.5 trillion, only 27% of the figure for the manufacturing sector, but by the end of 1991 the balance had risen to ¥40 trillion, approximately 74% of the size of the loans to the manufacturing industry. In April 1990, regulations were implemented to restrict the total volume of lending to the real estate industry, but even after this the balance went on increasing. Furthermore, financial institutions were also continuing to supply real estate companies funds indirectly through nonbank finance companies, which were not subject to the same restraints. If this indirect financing is included, approximately ¥44 trillion was lent to real estate companies in the fiscal 1985-90 period.

There was also a striking increase in lending to smaller companies. At the end of 1984, the balance of outstanding loans to small and medium-sized companies totaled 1.5 times that of loans to large companies, but by 1990 the multiple had risen to 3.5.

The unprecedented land speculation of the latter part of the 1980s was thus supported by an enormous volume of lending by financial institutions to the real estate industry. Behind this lending was the *zai-tech* activity of businesses raising low-cost capital and using much of the proceeds to make bank deposits and buy other financial assets. This flow of funds was problematical. The basic problem was the emergence of an environment that made this sort of financial sleight of hand enormously profitable.

To take a broader view, we can say the problem ultimately lay in the macroeconomic policies of the time, such as an excessively loose monetary policy and an overly zealous drive to reduce the budget deficit. The former policy was pursued not solely on the basis of domestic considerations but also in an attempt to respond to the demands created by Japan's rise to a position of greater power in the world economy.

LAND FEVER

According to the National Account Statistics (Kokumin keizai keisan) compiled by the Economic Planning Agency, the household sector has consistently been a net seller of land; the main net purchases have been nonfinancial corporations and the public sector. Total net sales by the household sector over the five-year period from fiscal 1985 to 1990 amounted to approximately ¥64 trillion. Net purchases by nonfinancial corporations had ranged from several hundred million to a trillion yen annually until the mid-1980s, but the pace then picked up dramatically; total purchases for the fiscal 1985–90 period came to about ¥40 trillion.

Some of this land was acquired for production purposes, but if we consider the level of purchases up through to the early 1980s, it is difficult to believe that the need for production sites could have risen so suddenly during the latter part of the decade. Most of the increase, we must conclude, represented purchases made for speculative purposes.

Since the EPA data do not break down land purchases in any greater detail than this, let us next refer to the Corporate Statistics compiled by the Ministry of Finance, which allow us to examine industry-by-industry figures for land ownership (The figures in the Ministry of Finance's *Corporate Statistics* for the value of land owned are significantly lower than the figures from the EPA's national accounts. While the latter value land at current prices, the former are based on acquisition prices. The figures for the value of land purchased, by contrast, are higher in the *Corporate Statistics*). In the case of the real estate industry, the situation is complicated by the fact that land is included not only in companies' fixed assets, but also in their inventories. It is not possible to determine just how much of the latter actually consists of land, but in what follows I have assumed the share to be one half. On this basis, the value of land owned by corporations in all industries was approximately ¥51 trillion at the end of 1984 and rose to around ¥119 trillion by the end of 1990. Hence the net purchases of land in this period came to about ¥68 trillion. Of this amount, large companies accounted for just under 30% and smaller firms for something over 70%.

By sector, the real estate industry was by far the largest purchaser of land in this period, with total net acquisitions of approximately ¥28 trillion, or 38% of the total. The peak year for purchases was fiscal 1987, during which real estate companies' holdings of land shot up by ¥15.5 trillion. The balance of the industry's holdings at the end of fiscal 1990 came to ¥38 trillion, approximately four times the level of six years earlier. Small and medium-sized real estate companies accounted for 76% of the industry's holdings of land as fixed assets and for over 80% of the holdings in inventory. The manufacturing sector, meanwhile, acquired land on a relatively minor scale during this period.

To sum up the real estate industry's borrowing and investment performance in the fiscal 1984–90 period, it received loans of approximately ¥44 trillion (including amounts borrowed through nonbank organizations); purchases of land during this six-year period came to about ¥28.5 trillion, while other investment totaled around ¥19 trillion, including ¥10.7 trillion for buildings and other fixed assets and ¥8.6 trillion for net purchases of securities.

II. *Macroeconomic Policy and Asset Price Inflation*

Japan's macroeconomic policy during the latter 1980s can be characterized by "easy money, tight budget" position. This can be regarded as a main cause of the asset price inflation during this period.

Unprecedented easy money policy has made the stock price and land price to soar. Excessive reduction in budget deficit has also contributed to this process. In this section, the relationship between these policies and the bubble is analyzed.

II-1. Monetary policy

One of the major factor behind the leap in asset prices was monetary relaxation. The official discount rate, which had been 5% since October 1983, was lowered in a series of steps starting in January 1986, and in February 1987 it became 2.5%, the lowest level ever.

This loosening of monetary policy was seen as necessary to cope with the sudden appreciation of the yen in the wake of the Plaza agreement of September 1985. Japan was also under strong pressure from the U.S. to lower its interest rates. In September 1987, the United States began to tighten monetary policy in September, and the Bank of Japan looked set to follow suit. But the move towards monetary restraint was put on hold because of the "black Monday" stock market crash in October, and the record low 2.5% rate remained in place until May 1989.

It was thought that if Japan raised its interest rates there would be a reduction in the outflow of capital, which would cause difficulties in capital-importing countries like the United States and possibly trigger another stock market crash. Another factor was the value of the yen, which continued to rise even after Black Monday, going from around ¥140 to the dollar in October 1987 to around ¥120 to the dollar the following autumn. These external considerations delayed monetary tightening and allowed asset prices to spiral even higher.

Another policy that indirectly contributed to the asset price spiral was financial liberalization, which made possible the *zai-tech* maneuvering that became popular among business corporations in the latter part of the 1980s.

Deregulation meant increased rate of return of financial assets, and this increased the incentive for businesses to undertake *zai-tech*. For example, in 1986 the interest rate on free interest rate deposits stood at about 6%, while the cost of equity financing was only 2% or so. So corporations were able to realize large profits by raising money on the capital market and then simply putting it in the bank.

For financial institutions, the liberalization of interest rates was a factor that raised the cost of procuring funds. Despite this, however, they did not generally respond by raising their interest rates on loans. Instead, they tended to target their lending increasingly at riskier borrowers. This, along with the tendency among large corporations to borrow less from banks, led to an increase in loans to the real estate industry.

II-2. Fiscal policy

After the oil shocks of the 1970s, Japan found itself running large annual budget deficits, and fiscal reconstruction became the supreme objective for the policy makers of the Finance Ministry in the 1980s. At first the target was to end the government's reliance on deficit-financing bond issues by fiscal 1984. Because of the large revenue shortfalls of 1981 and 1982, however, the target had to be put off to 1990.

Let us look at the actual changes in government revenues and expenditures during the 1980s. The latter half of the decade brought steady growth in tax revenue. Corporate taxes showed a particularly high rate of increase, rising 20.8% in fiscal 1987 and 12.0% in fiscal 1988. The surge in asset prices was probably one of the main factors behind this increase. According to the government's 1989 economic white paper, normal economic activities accounted for only about 5 percentage points of the increase in each of the two years; most of the 1987 increase is seen as attributable to asset-related factors, such as higher property income and capital gains, and to profits resulting from inventory reevaluation. Reflecting this sharp increase in revenues, general-account taxes and stamp revenue rose from 14.5% of national income in 1985 to 17.5% in 1990. During this period, in other words, tax revenues increased at a significantly higher rate than the long-term trend.

On the expenditure side, however, there was no substantial increase in during this period. In fact, the 1980s saw a sharp fall in the proportion of GDP accounted for by public investment. This was because, in its attempt to put public finances right, the government clamped down hard on spending, particularly on public works. In all the initial budgets from fiscal 1982 through 1988, public-works-related expenditures were held below the previous year's level. Reflecting this stringency, these expenditures, which had accounted for 15.6% of the general account in fiscal 1980, fell to 9.4% share as of fiscal 1991. The total general account, meanwhile, fell as a percentage of national income during the first half of the 1980s and then stabilized at a more or less fixed level in the second half of the decade.

This belt tightening produced a significant reduction in the fiscal deficit. The general government balance (including local government balances) was in deficit up to fiscal 1986, but it went into the black the following year, and in both 1988 and 1989 it registered a large surplus in excess of 2% of GNP. Since the deficit stood at 4.5% significant improvement, it was 3 percentage points better even than 1986 level.

The balance of the national debt stood at a record 42.7% of GDP in fiscal 1986, but this percentage fell continuously in subsequent years, reaching 38.1% of GDP at the end of fiscal 1990. This was the first time that the national debt as a percentage of GDP had fallen since government started issuing bonds in fiscal 1965.

Many people believe that the government used the increased revenues produced by the speculative boom of the late 1980s to fund generous spending programs under a series of large supplementary budgets. But this view is not really correct. The increased revenue were used mainly to cut back on the issue of deficit-financing bonds. This meant that there were fewer such bonds available for financial institutions to invest in, forcing them to place more of their funds in loans (even as major corporations were borrowing less), and thereby indirectly fueling speculative activity.

On the other hand, asset price inflation has contributed to a reduction in the budget deficit through an increase in tax revenues.

II-3. Assessing the Macroeconomic Policy of the 1980s

To sum up the above discussion, we can argue that a bias in economic mechanisms gave rise to the “bubble” economy of the late 1980s. This can be described as follows.

First, improvements in productivity gave rise to a stronger yen. In principle, the people should have reaped the rewards of their hard work as a stronger yen acted to lower the prices of imported goods. What actually happened, however, was that the profits produced by the appreciation of the yen were not passed on to the consumer but absorbed by producers and distributors. This increased corporate profits, and businesses rushed to channel these funds into zai-tech investment activities. The rise in corporate profits also pushed up stock prices, making it easier for companies to raise funds cheaply by issuing equity or equity-linked bonds. And these funds were channeled into land speculation via financial institutions. Meanwhile, credit was relaxed to prevent further appreciation of the yen, and this allowed stock and land prices to rise even further.

A second factor was that overemphasis on fiscal rehabilitation caused a cut in the volume of government bonds being issued, which aggravated the portfolio-management difficulties of financial institutions. If supply of government bonds had gone on increasing during this period, banks and other institutions would not have had to compete so intensively to make loans. If, for example the national debt had continued to be the same percentage of GDP from 1986 on, it would have been about ¥20 trillion more at the end of fiscal 1990 than it actually was. And ¥20 trillion is approximately the amount by which loans to the real estate industry increased during the second half of the 1980s. This is no more coincidence. If there had been no reduction in government bond issues, there is a strong possibility that the abnormal increase in the volume of loans to the real estate industry would not have occurred.

So what would have happened if there had been a higher level of public investment in social capital financed by increased government bond issues? This extra public borrowing would have pushed up domestic interest rates, leading to a stronger yen and a smaller current account surplus. Overseas investment would therefore have remained at a lower level. In other words, there would have been a reduction in the level of Japan's foreign assets and a corresponding increase in investment in domestic social capital.

What actually happened was that domestic savings were directed not into improvement of domestic infrastructure but into the acquisition of assets abroad. The Japanese, with their low level of social capital, may be compared to a family living in a dilapidated house who have worked hard and scrimped to save money and have then used it not to redo their own home but to lend to others.

On the monetary side, meanwhile what would have happened if the authorities had not loosened the reins so? Here too, the effect would have been to strengthen the yen, reduce the current account surplus, and cut the level of overseas investment. Domestically, it would have decreased the level of lending by financial institutions, thereby preventing the abnormal increase in land purchases by the real estate industry. In other words, there is a strong possibility that, under different macroeconomic policies, the asset-price inflation

of the 1980s would not have happened.

III. *Collapse of the Bubble*

Fall in Stock and Land Prices

At the beginning of 1990 Japanese stock prices started to fall. After recording an all-time high of 38,915 yen at the end of 1989, the Nikkei average turned down sharply, dropping to about 28,000 yen in April 1990. In August, following the Iraq's invasion of Kuwait, the downward trend picked up speed again. The total market value of the shares listed on the Tokyo Stock Exchange fell from ¥850 trillion in December 1989 to ¥365 trillion in December 1990. Stock prices stabilized somewhat in 1991 but started to fall again in 1992.

Land prices also started to fall in the second half of 1990, and they dropped sharply in 1991. According to the National Land Agency's 1992 appraisals, the rate of decline in residential land prices over the year from July 1991 to July 1992 was 14.7% in Tolyo, 23.8% in Osaka Prefecture, and 33.2% in the city of Kyoto. Given the fact that land prices had risen every year since World War II with the sole exception of 1975, when the country was reeling from the first oil shock, the precipitous fall in 1991 may fairly be described as an utterly new experience for the Japanese economy.

The continued plunge in asset prices was particularly unusual in that it occurred against a background of monetary relaxation. This showed that the bubble of the 1980s had burst.

The Burden of Bad Debts

Most of the land acquired by the real estate industry in the second half of the 1980s was purchased for speculative purpose. When land prices fell, it became impossible to resell it as planned, and in many cases firms could not keep up their interest payments on the funds they had borrowed to make their purchases. This left banks with nonperforming loans on their portfolios.

According to figures released by the Ministry of Finance in October 1992, the total volume of bad debts incurred by city banks, long-term credit banks, and trust banks was approximately ¥12 trillion, including some ¥4 trillion of loans on which lenders had been unable to obtain security or guarantees. But these figures only record the loans that are already nonperforming. If we include all potentially bad loans, the total is probably significantly larger than this.

Will the financial institutions be able to absorb this level of bad debt? The potential losses are substantial. Even if they used half of their net profits each year, it would take the banks several years to redeem losses. Clearing up the bad debt problem is evidently going to impose a considerable burden on the Japanese economy.

IV. *Policies toward the Land Price Inflation*

As the adverse effects of asset price inflation became clear, the counter measures to combat this problem were implemented. Among them, since the effects of the land price spiral were especially serious, various land policies and land price policies were undertaken. This section reviews these policies.

Theoretically, there are several ways to control asset prices: 1) direct restriction on transactions; 2) financial measures; 3) through land taxation. In practice, policies were taken through such steps. Specifically, a system of "land price surveillance area" was introduced along with recommendations of the Ad hoc Committee for Land Problem as a first step. Secondly, Total Quantity Restriction on real estate-related finance took effect and the official discount rate was pulled up. Thirdly, land price tax was introduced, and reforms of land related tax system such as inheritance tax reform, agricultural land tax reform were conducted.

This section addresses the background and the content of these policies, and examines whether those were effective in eliminating the bubble.

IV-1. Direct Restriction on Land Transaction

Introduction of the Land Price Surveillance System

The first measure taken to prevent the surge in land price was "the Land Transaction Surveillance Area System" introduced in 1987 by the National Land Law revisions.

National Land Law (officially the National Land Use Planning Act) was enacted in December 1974 in order to cope with the surge in land prices after the Oil Shock. Two systems existed to cope with land transactions. First, "Regulated Area (Kisei-Kuiki)" stipulated land transactions to require permits from the prefectural governor. Second, "Surveillance Area System" required notification (application, report) of transaction of land larger than a specified size even outside the "Regulated Area". When land is specified as "Surveillance Area," the individuals or firms taking part in the transaction of land larger than a certain area (in "urbanization promotion areas," land larger than 2,000 square meters) must notify the prefectural governor (the mayor in ordinance-designated cities) of planned selling/purchase prices beforehand. The governor is able to warn against "transaction of unreasonably high land prices for correction" as well as require ex post facto report on the prices of other transactions.

Tokyo enacted "Municipal Ordinance Concerning Improvement of Land Transactions" in December 1986 ahead of National Land Law Revisions. Tokyo designated five downtown wards as surveillance areas. Afterwards, Tokyo strengthened its restrictions and designated metropolitan wards and its 13 municipalities as surveillance areas in July of 1987. From August 1987, in surveillance areas, small transactions of land larger than 300 square meters and less than 2,000 square meters became subject to notification. From October, surveillance areas were expanded to include almost all areas of Tokyo.

This system was adopted by neighboring Kanagawa Prefecture, Chiba Prefecture, and

Saitama Prefecture in 1987. Among the ordinance-designated cities, Yokohama, Kawasaki, and Sapporo followed. Many more local cities introduced the system afterwards.

Was the Surveillance Area System Effective?

Was the surveillance area system truly effective?

“White Paper on National Land Use” evaluates that it was effective. And in newspapers, editorials urge the adoption and enforcement of the system, assuming that the surveillance area system was effective.

However, the true effects is questionable. First of all, the surveillance area systems were introduced in most cities after the peak of land prices. In other words, even if the surveillance areas were not introduced, land prices would have subsided naturally. Moreover, in Kinki prefectures, land prices rose even in surveillance areas. This illustrates that the system does not have the power to stop the surge in land prices.

In addition, even if the system were to have effects, they are only superficial effects. Land prices are determined by land demands and land supply. Without dealing with such demand and supply, the land problem cannot be dealt with. Hence, direct restrictions on land prices are only emergency measures.

Another theoretical problem lies in the difficulty in determining “the level of proper land price.” Even by using various economic indexes on macroeconomic land price levels, it is difficult to determine the fundamental price. It is impossible to determine the price of each and every land by sampling benchmark-points? In its actual dealings, the surveillance area system refers to prices of actual transactions and sets guideline of suggested prices by adding arbitrary considerations. Government interference in individual transactions without any firm standards is a basic violation of the free economic principle.

The fact that such measures were evaluated as major land policy shows the weakness of Japanese land policy.

Ad Hoc Committee for Land Problem (Tochi-Rincho)

In August, 1987, (then) Prime Minister Nakasone brought the matter of land policy to the Ad Hoc Council for Administration Reform (“Gyokakushin”). Within the Ad Hoc Council, Committee to Evaluate Land Policy (Head of Committee=Chairman Bunpei Ohtsuki) was set up. The committee was called Ad Hoc Committee for Land Problem, or “Tochi Rincho.”

The committee submitted an interim report on the policies to suppress land prices mainly in the center of Tokyo to the Council in October, 1987. The contents of the report consisted of the following:

In order to eliminate speculative land transactions,

- 1) To strengthen the enforcement of surveillance areas under the National Land Use Planning Act, and simultaneously, to prepare designation of Restriction Areas where land transactions must be under a permit system of the same Act;
- 2) To strengthen guidance of real estate agents and financial institutions;
- 3) To stop the sale of nationally owned public land such as the land of former national railways until the perverse land price spiral calms down;

Based upon the interim report, the Council made final adjustments and handed an interim report to Prime Minister Nakasone.

Note that the content consists of direct restrictions. There is no attempt to perceive the surge in land price as an economic phenomenon and to eliminate its causes.

Moreover, the content of the report was mainly based on actions already taken. There was no attempt to introduce a structural land policy in order to deal with the abnormal situation. The report of the Land Ad Hoc Committee (Tochi Rincho) had no effect on land price spiral that continued afterwards in areas other than Tokyo.

IV-2. Financial Restraint and Total Quantity Restrictions

Financial Tightening and Stock Price Plunge

The exchange rate that headed toward strong yen since the Plaza Accord reached the pinnacle after 1987 and had stabilized throughout 1988 in the small range between 125 yen and the lower half of 130'sn. In 1989, the yen weakened and reached 140 yen in May. Thus, the restriction to deal with financial tightening through the exchange rate was eliminated. On the other hand, domestically, not only was the stock prices and land prices surging, but the issue of tight labor condition was getting serious, causing fear of overheating of the business conditions. A rise in oil prices was another factor.

With this background, financial policy turned to restraint from May of 1989. Looking at the trend of official discount rates, the rate changed from 2.5% previously, to 3.25% due to the first pull-up in May 1989, and subsequently, it was pulled up step by step over a period of 15 months, to 6% after the fifth pull-up in August 1990. Long-term interest rates also rose during this period.

It should be noted that in the tightening process, land prices was acknowledged as a goal of financial policy. The paper "The Background and the Effects of the Recent Trend of Land Price Increases in Our Country" reported in the April 1990 issue of Bank of Japan Monthly Research Report clearly admitted that monetary relaxation was a cause of the land price surge. And, it clearly stated that the two interest increases in 1990 intended "stability of the financial market" as its policy objectives. Such policy implications were not seen previously.

The stock price plunge in 1990 were caused by this financial tightening.

Total Quantity Restrictions and Land Price Plunge

During the period of general financial relaxation until 1988, there were requests for self-control guidance of financing funds that caused speculative land transactions on five occasions. Yet, in 1990, the total quantity restriction to the real estate industry was introduced. "Total quantity restrictions" refer to the restriction suppressing the balance of loans financial institutions finance for the real-estate industry below a certain level. More specifically, quarterly loan balance for the real-estate industry was to be kept below the growth rate of total balance of loans. Institutions subject to the restriction were national banks, credit unions, credit associations, life insurance companies, and indemnity life insurance companies. Such restrictions were undertaken the first time in seventeen years since land prices soared in 1973 due to the "boom to remodel the Japanese archipelago." As a result, the growth of balance of loans slowed.

Incidentally, total quantity restriction is an attempt to directly control financing of

financial institutions focusing on a certain type of industry, the real-estate industry; thus, it is a type of direct restrictive policies. Problems may exist since it was conducted under administrative guidance.

However, it is a control on a macroeconomic variable of "total amount of financing"; it is not an interference in individual transactions. Moreover, it aimed to neutralize real estate financing by keeping the growth of loans to the real estate industry within the total growth. In that sense, the harmful effects of interference are not that large. Although the surveillance area system and total quantity restriction are both restrictive measures and temporary and exceptional measures, we need to be aware that big differences exist between them.

What is more, total quantity restriction is a remarkably powerful policy to control land transaction financing that supports the skyrocketing land prices. It basically differs from surveillance area system that fails to cope with the causes of land price rise and only attempts to maneuver superficial land price indices. In fact, through the introduction of total quantity restriction, major changes occurred in land transactions and the trends of land price. While the general financial tightening was a cause of the slump in stock prices, the total quantity restriction was a factor causing the decline in land prices.

V. *Reform of Land Taxation*

V-1. Case by Case Therapy Like Measures

Taxation measures were also taken to deal with the steep rise in land prices. First, a system of separate taxation on super-short-term capital gains tax from transfers of land, etc. were established in 1987. In addition, in 1988, the special tax treatment of long-term capital gains from the replacement of residential properties was abolished in principle, and new restrictive measures which do not allow exemption of borrowing related to corporate land holdings were introduced.

"Special tax treatment for replacement of property" refers to the system where those selling residential properties that they have owned and lived in for over a decade and buying new residential properties for their own use are not taxed (to be more precise, taxation is postponed) on the long-term capital gains from the sale of the former properties. In cases where the buying price is lower than the selling price, the amount of the difference after subtracting necessary expenses are taxed. The aim of the special measure is to encourage moves to larger houses, but it was abolished due to criticisms that it was a major cause of land price jumps in the outskirts of cities.

Still, these measures are similar to those taken during times of soaring land price as well. Especially, the system of taxation on capital gains have changed constantly, such as enforcing taxation when land price rise attracts headlines, and relaxing it in other times. However, huge doubts remain when considering whether or not enforcement of taxation on capital gain from transfers was effective in solving the land issue.

Towards True Reform

Through these measures, short-term ad hoc measures were taken, but the majority of the Tax Council held a negative view against using taxation as a measure of land policy. However, as public opinions on the land issue were aroused and as the U.S.-Japan Structural Impediments Initiative Talks became a turning point, this basic attitude underwent great change.

Japan-U.S. Structural Impediments Initiative Talks (SII) is especially worth mentioning. This was a talk to alleviate the economic structures of both countries, and it started in September 1989. Its initial goal was to improve the trade imbalance, but the U.S. side pointed out a wide variety of issues concerning Japan's economic structure and economic policy including the land problem. As for the land problem, the U.S. side criticized the surveillance area system and argued that taxation should be basis of land policy. It especially stated specific policies that the advantages of land as assets should be eliminated by pulling up the burden of land holding tax. In the talks, the United States made a great contribution in changing the land policy of the Japanese government.

In the end of 1989, "Basic Land Act" was enacted. Here, the philosophy to "conduct adequate taxation measures concerning land" (chapter 2; Article 15) was made clear. Basic Land Act only pointed the direction of the policy in abstract terms. However, the actions of the government afterwards actually followed this direction.

The activities of the Governmental Tax Council should be focused on. It created Land Taxation Small Committee in April, 1990 to start deliberations, and completed "the Basic Aims of Land Taxation Reforms" in June. In its report, it changed the previous attitude of the Council by stating, "land taxation is an essential policy to solve the land problem." And, in October of that year, it submitted a final report, and recommended the introduction of a land holding tax.

Such policy originated from the general perception that low land holding tax burden is a crucial factor of the land problem in Japan. Due to the low burden rate of land holding tax, no economic penalties work for land holdings waiting for land price increase. If the effective burden rates were to be higher, it would be impossible to hold land just to wait for land price increase, and there would be an incentive to effectively use land.

Among the reforms actually carried out, the introduction of the land value tax and the reinforcement of taxation of agricultural land were especially important. The goal of the land value tax is to reduce speculative holding of land by pulling up the land holding costs, and urging effective use of land. In addition, taxation of agricultural land aimed to urge the change of agricultural land in urbanization promotion areas into residential usage. Moreover, the taxation on capital gains from land transfer was strengthened. In what follows, the contents of the reforms are outlined. Its economic effects are also assessed.

V-2. Land Value Tax

Introduction of the Land Value Tax

Land Value Tax was introduced in April 1992 as a new national tax to tax large scale

land. Assessment of land value in inheritance tax was based on the distance facing streets referred as the "rosenka." The tax rate is 0.3% (0.2% only for the first year).

There are a number of exemptions. First, residential land used by the owners is not taxed. (However, when there are two or more units residential land, only one unit is exempt from taxation. Also, when the land exceeds 1,000 square meters, the exceeding space is taxed.) Second, the land used for rental housing is exempt from taxation. Third, land valued less than 30,000 yen per square meter under the inheritance tax assessment is exempt.

Besides these exemptions, a wide variety of land is tax-exempt due to "its public nature." Included in this category are the following: agricultural (farming) land; pastures (grazing land); forests; land for hospitals; land for nursing homes; land for drug store; nursery schools; kindergartens; vocational schools; land of railways; land of port authority; land for warehouses.

Basic deduction is based on either the price standards or the area standards, whichever the larger. The price standards are set at 1.5 billion yen for individuals and medium and small-sized firms, and at 1 billion for other corporations. The area standard is the amount that results from multiplying 30,000 yen per square meter on to land space exceeding assessment of 30,000 yen per square meter.

The main issue here is the existence of tax-exemption and deduction using a unit price of 30,000 yen. Due to this measure, no matter how large the land may be, as long as its assessment is under 30,000 yen per square meter, no land value tax is imposed. And, even if the assessment exceeds 30,000 yen, there is no land value tax on the part under 30,000 yen. This measure is especially advantageous for large corporations owning huge land for factories in the provinces. In fact, the 30,000 yen standard almost equals the average land value of inheritance tax assessment excluding Tokyo and Osaka areas. Thus, in cases involving ownership of land in the provinces with average land value, no land value tax is imposed. This step was deliberated by the Liberal Democratic Party Tax Council along with the aforementioned tax exemption due to its "public nature," and its amount was pulled up during the final phase. Hence, the character of the land value tax became totally different from that envisioned by the Governmental Tax Council.

The Effects of the Land Value Tax

Theoretically, taxation on land holdings affect land value through the following three channels.

The first effect is the declined in land value only for the discounted present value by holding tax. The second effect is that accompanying promotion of effective land use. In cases of low land holding tax, it may be more advantageous to hold land without using it (effectively) and to wait for the land value to rise. But, if the burden of land holding tax were to be increased, the situation would reverse, promoting effective use of land. Through this measure, effective supply of land would increase, lowering the return from land use usage, consequently, lowering the fundamental land value. The third is the effect accompanying the destruction of the bubble.

In reality, however, the land value tax may affect land holdings only slightly due to the large extent of tax exemptions, and to the low effective tax rate on land that is being taxed due to large deductions.

Let me explain the latter point using a hypothetical case. We assume a smaller firm

owning a land of 10,000 square meters in the Kanto region. The average land price in the Kanto region is 500,000 yen per square meter, so the total value of the land would be 5 billion yen. Calculating "rosenka" as half of current price, its assessment value would be 2.5 billion yen. Subtracting small-sized firm's deduction of 1.4 billion yen, 1 billion yen would be subject to taxation. The tax rate is 0.3%, so the tax would be three million yen. By the way, this tax is allowed as loss under corporation tax and business tax. Hence, tax burden is reduced for the amount multiplied by the effective tax rate of corporation tax and business tax. Thus, real burden is 1.5 million. Therefore, the effective tax rate of current price is only 0.03%. This only has the effect of setting back the effective tax rate of fixed property tax to the level of several years earlier. It would be difficult to have an effect on land holding attitudes under such changes.

Even if the firm were to have no cash income whatsoever, it would be able to pay by selling a part of its land. Let's suppose that it sold one-two hundredth of its land, 50 square meters of land. Its income would be 25 million yen. Ignoring the taxation on capital gains, and assuming an interest rate of 6%, it would be possible to earn interest income of 1.5 million yen by saving it in the bank. Thus, it would be possible to pay land value tax forever. Therefore, land value tax has the effect of changing only one-two hundredth of idle land into residential land.

V-3. Reform Inheritance Tax and Tax on Farm Land

Reform of Inheritance Taxation

The distortion of inheritance tax has also been pointed out as a cause of the land problem. A major issue was the fact that assessment (rosenka) value was lower than current market price. Rosenka was set at 70 percent of the governmental publicly announced assessed value of land, but the assessed value of land is roughly 70 percent of current market prices. Hence, the assessment value is half of current market prices. In the case of small residential plots, assessment value is halved further.

This is why it is advantageous to hold assets in the form of land, when there is a possibility that inheritance tax may be imposed. Moreover, when land is bought by making a loan, the amount of loan is assessed as is while land is assessed at a lower value, it is even possible to take positive measures to reduce inheritable assets. Consequently, inheritance tax has created artificial bias toward making land as an advantageous asset.

Perceiving this, the Tax Council recommended the raise in assessment Value of Rosenka. As a result, from 1992, Rosenka became 80 percent of the governmental publicly announced assessed value of land. It can be evaluated as a reform in the proper direction. Yet, on the other hand, it strengthened the reduction measure of small-sized residential land, so the advantages of land have not been eradicated.

Furthermore, measures were taken to prevent tax avoidance. Specifically, measures include restriction on the number of adopted children, and a measure to assess business properties not by inheritance tax assessment, but by acquisition price when the inherited has acquired business properties within three years before inheritance starts.

Furthermore, special deductions concerning residential properties have to be abolished as well.

However, another equality issue exists. Comparing those not needing replacement (those living in housing that they are initially happy with) and those needing replacement (those being transferred, etc. or those trying to live in better housing utilizing their savings), it would be the disadvantage of the latter without the special case clause of replacement.

A way to solve all these problems is to define residential real estate for owners' use and a certain range of financial assets as "assets qualifying under taxation," and to create a system of not taxing transaction between them (and taxing them when selling them). Under the system, inequity between those needing to replace land and those not needing replacement is corrected. Furthermore, interest income, capital gains on securities, capital gains on real estate are taxed similarly when they are pulled out from the qualified allotment. Hence, the inequity between home owners and those renting housing is also corrected. The effects of freezing can also be prevented.

Under such a system, special deductions and reduced tax rates on residential real estate for owners' use are to be abolished. (Under the current system, measures such as special deduction of 30 million yen and reduced tax rates of 10 percent for income tax and 4 percent for residence tax for capital gains under 60 million yen exist.)

In general, it is often said that "allowing special case clause for replacement on top of special deductions is to the advantage of the rich." However, in fact, it is the opposite. In other words, if the above mentioned measures for replacement were to take place, special deductions or reduced taxed rates for residential properties are unnecessary. Therefore, intrinsically, these measures should be abolished. In reality, under special deductions, the part under 30 million yen of capital gains of residential properties are not taxed permanently. And, through repeated transfers over an interval, special deductions will be applied repeatedly. From the perspective of "inequity between the 'have's and the 'have-not's of housing," I must say that the system has many more problems.

Under taxation in the United States, capital gains taxation on replacement of residential real estate for his own use is permitted to be postponed as many times as preferred. And, for once in a lifetime, an exemption is allowed. Under the system, it is easier to change

Enforcement of Taxation on Agricultural Land and its Effects

The aim of taxation on agricultural land was to promote changes of agricultural land within urbanization promotion areas into residential properties.

Agricultural land within urbanization promotion areas was to be taxed the same as residential properties as always, but in reality, most agricultural land was tax-exempt as long-term agricultural land. Moreover, when the heir continues farming, inheritance tax on the part exceeding the tax of agricultural investment price were allowed to be delayed. When the heir continued farming for twenty years, they were exempt from paying inheritance tax.

These measures were abolished in 1991, and the following steps were taken concerning agricultural land in urbanization promotion areas of designated towns of the three largest metropolitan areas. By the end of 1992, "agricultural land to be conserved" and "agricultural land to be changed into residential land" are to be categorized. Fixed property tax of the former is to be taxed as agricultural land, but the latter is to be taxed as residential

land, starting in 1992. Here, "agricultural land to conserve" is to be designated as "Agricultural Land" so that it can not be changed into residential area for good. Special case of delay in payment of inheritance tax only for those farming in the "Agricultural Land" (preservation districts) is allowed (The tax-exemption system for those farming twenty years was abolished).

How effective were these measures? It is important to note that the effective measure was not the fixed property tax, but the inheritance tax. Fixed property tax had little influence even when residential land tax were to be levied since the burden rate of residential land itself is low. For example, in the case of Tokyo, the effective tax rate of fixed property tax is only 0.06%. Accordingly, even if it was taxed as residential taxation, the increase in the burden rate would only be 0.06%. With such a small change, it is impossible to have a big effect on land holding attitudes.

Contrary to fixed property tax, inheritance taxed have the potential to have a substantial effect when the special case of inheritance taxes are abolished, due to its high burden rate. Yet, the problem is that its effects occur only gradually. In the slowest cases, it may take one cycle of inheritance, or the period that one change of generations takes place. However, even in the past, agricultural land in urbanization promotion areas were being reduced at an annual rate of 3%. In other words, changes into residential areas were occurring at the pace that all the land will be changed into residential land in thirty years. Hence, considering green agricultural land being designated permanently as preservation, the pace of change into residential land will slow down as a whole.

V-4. Capital Gains Taxes

Taxation on Capital Gains that Need Relaxation

Along with the holding tax, the taxation on capital gains is crucial in land taxation reform. Many discussions took place concerning the former, but enforcement of taxation on the latter was taken without adequate discussion. However, I would like to point out a major problem with this direction.

The biggest problem is the "freezing effect" or "lock-in effect." Under taxation on capital gains, as long as land is held onto, it is not taxed, whatever capital gains are generated. Thus, it suppresses selling of land. This impedes smooth land transaction, and becomes a barrier to effective land use.

Theoretical grounds supporting enforcement of capital gains taxation are that capital gains are "nonlabor income"; thus, those should be taxed more heavily than earned income. The argument assumes that the seller suffers the total tax burden. Nevertheless, in fact, taxes are added on to the price and it is likely that the buyer is burdened with it. Accordingly, from the perspective of equity, enforcement of taxation on capital gains is questionable.

Likewise, it is often said that enforcement of taxation on capital gains is necessary in order to suppress land speculation by reducing the asset value of land. However, considering that those tax increases will be passed on to the buyer, this argument also weakens theoretically. Since taxation on land holding has been traditionally extremely low in Japan, steps to offset the asset value of land through taxation had to depend on taxation on capital

gains. Notwithstanding, now that the land value tax has been introduced, we should expect that this will be the solution. On the other hand, it is preferable to reduce taxation on capital gains.

Special Case Clauses for Replacement

Restoration of special case clause concerning replacement of residential properties is being discussed concerning taxation on capital gains. As I have mentioned earlier, the system was abolished, being seen as the main cause of land price spiral expanding from business districts in cities to suburban residential areas.

In general, the restoration of the system is the wish of the real estate industry. And many see it as harmful from the perspective of preventing the surge in land prices. In addition, the measure is often viewed as "a measure to favor the wealthy." Yet, we need to calmly consider its economic effect and its evaluation from the point of equity.

First, it is questionable whether or not it was the "main cause of skyrocketing land price." It is possible that those selling land in the cities would have replaced their land even if the system had not existed. It is claimed that some had to hurry their purchases due to the one-year time limit of replacement; thus, buying at high prices. Still, even if that were true, a countermeasure against it would be to extent the "within one-year" time limit, so that more cautious buying would be possible.

On the other hand, there is a possibility that liquidity of real estate may be impeded unless this system exists. In the current system, no tax would be imposed as long as one holds on to real estate even if large capital gains were to take place. And, when land is sold, taxes on capital gains are levied on the transfer. Thus, under taxation without the special case clause for replacement, selling is suppressed, and smooth land transactions are impeded. Henceforth, "the effect of freezing land transfer" occurs.

Of course, the issue of equality is important. Comparing those holding assets in the form of residences and those accumulating financial assets (by renting housing), the former is more advantageous under the system of special deductions concerning residential properties and special case clause of replacement since interest of financial assets are taxed. To achieve equality here, the special case clause for replacement needs to be abolished. accommodation according to the life stage. And it is also possible to sell one's own house and to support life after retirement with its fund. In Japan, it is also hoped that a system of supporting life after retirement by changing the stocks into the flows, but the current system of transfer taxation on capital gains is a major obstacle.

V-5. Property Tax

Lastly, the issue of fixed property tax is addressed.

The objects subject to land value taxation is limited since residential land for own use or land under a certain price is tax-exempt. In contrast, fixed property taxes are levied on all land above exemption point. Thus, considering the aim of increasing the tax burden of holding land in general, reinforcement of fixed property taxes is more preferable. And, it is also preferable for land holding taxes to be used for financing fund for local government from the viewpoint of independence of local government.

Yet, in reality, the rate of fixed property taxes in Japan is extremely low. Standard-rate

of fixed property taxes is 1.4%, but since the assessment is remarkably low compared to current price, effective tax rate (tax burden rate on current price) becomes exceedingly low. In the case of Tokyo, as I have stated earlier, the burden rate of current price is estimated to be around 0.06% including Metropolitan Planning Taxes. This is low compared to the standards of other countries. In 1987, an anti-tax movement called "the revolt of the taxpayers" occurred in California, but the fact was that fixed property tax rate in California in those days was quite high, averaging 3% of market price. Even now, fixed property tax rates in the U.S. is notably high, being burden rates of roughly 1 to 2% of market price in many cities.

The report of the Tax Council also urged the need for increasing the burden of fixed property taxes. However, the problem is its feasibility of enforcement. Strengthening of fixed property taxes, ultimately, must be conducted by local governments. But, the actual situation differs greatly. Needless to say, this is due to the political unpopularity of strengthening fixed property taxes. It may only be natural, considering the actual local politics, that the governors or mayors having to go through elections by residents not only shows willingness to enforce fixed property taxes but to actively try to reduce their burden.

Moreover, strengthening fixed property taxes discloses contradictions and problems of the current system. Most crucially, the relationship of current price and assessed value differs greatly according to regions. In downtown Tokyo, assessed value is only a few percent of publicly-announced assessed value of land, but in some regions, assessed value exceeds publicly-announced assessed value of land. And, it is claimed that imbalance exist in assessment within the same town/city, and there are even cases that the assessments of the districts where locally influential figures (big shots) live are kept low. Such issues do not stand out in the present system with its low fixed property tax, but if the burden is pulled up, those issues cannot be ignored.

Yet, such distortions have occurred through practices of many years. Its correction would be exceedingly difficult. Consequently, streamlining (the improvement of) fixed property taxes is a highly complicated issue. Specific proposals to materialize it in the actual environment of local politics need to be propounded along with its necessity.

As mentioned above, reform of land taxation has yet to be completed. Increase of the effective tax rate of land value tax, strengthening of the taxation on agricultural land, and most of all, streamlining fixed property taxes are necessary. Furthermore, in order to eliminate the effects of freezing, taxation on capital gains must be eased. These issues are left to be solved in the future. The current land tax system cannot be acknowledged as a stable tax system leading to the 21st century.

VI. *Changes in Asset Price and Real Economy*

In general, as asset is accumulated, there is a possibility that changes in asset price greatly affect economic activities. Some view the economic expansion in the latter half of the 1980s as being caused by increases in asset price such as stock prices or land prices. In short, it is the view that "the boom was caused by the bubble." And some believe that decline in asset prices cause acceleration of the slow down of the real economy, consequently causing structural recession.

Are these views accurate? Its conclusion have significant implications for future economic policy. This section focuses on the issue.

VI-1. Increase in Asset Price and Business Boom

Japanese economy overcoming the recession due to the strong yen entered its expansion phase in December 1986, continued expansion for roughly four years, and recorded the second largest business expansion after the war excluding "Iwato Expansion" (June 1958–December 1961, 42 months). (The longest period of economic upturn after the war was "Izanagi Expansion" that lasted 57 months from October 1965 to July 1970.)

Housing investments first illustrated big growth, from 1986 to 1987. The number of new houses built hovered around 1.2 million houses annually before 1984, but levels exceeding 1.6 million houses continued from 1987 to 1990.

Subsequently, investment in plant and equipment increased. Over three years from 1988 to 1990, two-digit growth continued. Such high growth rates matched those of the Rapid Growth Period. The ratio of investment in plant and equipment to GDP reached an extremely high level exceeding 20 percent during 1989–1990.

Production of durable consumer goods also increased. For automobiles, the number of domestic scales was around 3 million annually in the past. Yet, by 1990, its level exceeded 5 million cars annually.

As a result of economic expansion, the labor demand-supply gap tightened. Effective ratio of job vacancies exceeded 1 in 1988, and reached a remarkably high value of 1.4 in 1990. Full unemployment rate declined to nearly 2 percent. In the construction industry, labor shortage became a notably serious issue.

Wealth Effect on Consumption

Wealth effect on consumption has traditionally been pointed out as the major effect of asset price on economic activity. According to the life cycle model which is the standard theory explaining consumption behavior, people plan so that their consumption does not vary greatly over a certain period of time. Hence, consumption not only depends on current income, but also on assets. Accordingly, whenever household asset holdings increase, it is expected that consumption will also increase.

However, in order to see how strongly this effect works, we need to analyze data. The 1989 Economic White Paper conducted empirical analysis on them. According to it, elasticity value (the ratio of growth in real consumption to the growth rate of financial assets) of financial assets including securities with respect to real consumption was estimated at 0.16. In other words, when these balance of assets increase by 10 percent, consumption increases by 1.6 percent. Similar analysis was conducted in the 1990 Economic White Paper obtaining the result that the wealth effect on consumption is significant.

On the other hand, looking at the trend of financial assets held by households, in the first half of the 1980s, the average annual growth rate was around 10 percent. This grew to 13 percent in 1986. Thus, using the value of elasticity estimated in the White Paper, it pulled up the growth rate of real consumption by 0.5 percent. The actual average annual growth rate of real private final consumption during 1985–1990 was 4.1 percent. Hence it is possible to think that over 10 percent of it was due to the wealth effect. This can be

evaluated as a large effect.¹

Do increases in land prices have wealth effects on consumption? White Papers of 1989 and 1990 state that land (or assets including land) also have wealth effects. However, theoretically, most land are for residences, so it would not be possible to sell them and to set them aside for consumption even if asset values increase. In other words, wealth effects towards consumption should be quite low for land. In fact, despite the large disparity in regional increases in land assets, large regional differences in increases in consumption were not seen. This depicts that wealth effects of land did not exist. The 1991 White Paper shows negative results concerning wealth effects of land.

Increases in Land Price and Housing Construction

The number of housing starts illustrates remarkable growth from 1986. The decline in interest rates is its main cause. Yet, we need to be aware that the trend of owner occupied housing and that of rented housing differ substantially. Namely, while the number of rented housing construction grew strikingly from 22 percent in 1986 to 33 percent in 1987, the growth of owner occupied housing grew an average of 8.6 percent during those two years. If the decline in interest were the only factor, such a difference would not have occurred.

This is due to construction of rented housing by households owning extra land as a measure against inheritance taxes (When rented housing exist on holding land, land assessment for inheritance tax purposes becomes lower). Therefore, increases in land prices affect construction of rented housing due to a special case of intermediation of a factor of inheritance tax.

Equity Financing and Investment in Plant and Equipment

In general, as stock prices rise, cost of funds for issuance of securities fall, thereby increasing the firm's investment in plant and equipment. This is known as "Tobin's q theory."² As mentioned in section 1, investment in plant and equipment by private firms showed a two-digit growth for three consecutive years from 1988 to 1990. In the background lies the favorable conditions for attainment of funds. In reality, supported by the opportune stock market, firms obtained enormous amount of funds from the capital market through equity financing.

Nevertheless, whether or not what is described in Tobin's q theory actually occurred in Japan in the late 1980s remains questionable. In fact, the trend of the stock market conditions and that of the investment in plant and equipment do not correspond time-wise. First, equity financing expanded from 1986, 1987 simultaneous with the increase in stock prices. On the other hand, investment in plant and equipment grew notably from 1988. Thus, liquidity ratio of the firm grew in 1986, 1987, and this was allotted for financial investments.

¹ According to the estimations by the 1990 Economic White Paper the extent of the increase in the real asset balance contributing to the rise in private final consumption spending was heightened, pushing up individual consumption from 1987. In 1988 and 1989, increase in real disposable income also caused increase in consumption, and it notably strengthened the tendency towards consumption of luxury goods.

² "Tobin's q" refers to the market valuation of firms' value in the stock market divided by current assessment of fixed capital stocks (equipment and plants) of the firm. When q is larger than 1, the assessment of the firm surpasses the amount in the case when fixed capital held are regained; the thus, firms would have the incentive to expand plant and equipment.

There were other factors influencing investment in plant and equipment such as future expected returns or standards of capital stocks. Cost of funds is not the only factor. Even when cost of funds decline, if future expected returns remain low, investment in plant and equipment do not increase. This was the situation of the years 1986 and 1987.

Secondly, long-term interest that firms take into account when planning investments in plant and equipment is not the cost of equity financing, but the market interest rate (return of financial assets) that is its opportunity cost. This was pointed out in the Economic White Paper (Chapter 1 Section 4, Chapter 2 Section 3) of 1989. If this is correct, when the cost of equity financing declines with the market interest rate not changing, firms will not increase investment in plant and equipment, but increase financial investments. During the years 1986 through 1987, financial deregulation took place, but the returns of financial assets exceeded the cost of procuring funds; thus, firms did not invest in plant and equipment but invested in financial assets. This adequately explains the behavior of firms in the second half of the 1980s.

In addition, a view that "increase in land prices raised the collateral value of land, causing increases in borrowings and thereby increasing investment" exists concerning the relationship of asset price and investment in plant and equipment. Indeed, from the perspective of individual firms, there may have been cases where "borrowings became easier due to increase in land price, enabling investment." However, we need to be aware of the following two issues.

First, increase in collateral values does not imply lower cost of funds for the firm. Considering the whole economy, increase in land value does not imply increases in total quantity of resources that are possibly allotted to investment. Resources of labor, utilized in investment by firms borrowing on land collaterals, would have been otherwise used in other sectors of the economy. Hence, increases in land value only caused a change in resources to firms holding land and replacing the object conducting investment. This implies that investment of some sectors have been suppressed due to the surge in land prices. Notably, investment of new firms without land have been impeded by the rise in land prices. "Unrealized investment" tend to be ignored since it cannot be observed as actual data. And, since only the increase in investment of land owning firms is noticed, we are under the illusion that increase in land price have enlarged the total amount of investment.

Second, availability of funds in the sense of quantity is an issue in its relation with collaterals. But, in the late the 1980s, there was no restriction in this sense. In fact, banks were frantically attempting to find firms to lend. Thus, the effect of changes seen above is not that large.

Fiscal Reconstruction that Worked to Restrain the Economy

In the second half of the 1980s, tax revenue showed a smooth growth. Corporation tax, especially, depicted an extremely high growth rate of 20.8 percent in 1987 and 12.0 percent in 1988. Of course, the increase in asset price was not the only cause. Yet, its effect was quite large. According to the 1989 Economic White Paper, the growth rate

³ "General government" is a concept used in the National Account statistics; it includes the national non-profit special accounts, social security fund, local governments' general accounts, and its non-profit special accounts.

of corporation tax due to increase in profit was approximately 5 percent each year, and most of the growth in 1987 were due to asset factors (property income or capital gains) and stock valuation gains.

In contrast, fiscal expenditure did not illustrate any notable growth during the time. Thus, the budget deficit was curtailed. The difference in savings-investment of the general government in National Economic Accounts was in the red until 1986, but from 1987, it turned into a surplus.³ By the years 1988 and 1989, the ratio of the surplus in 1990 to the GDP exceeded 2 percent. Since the ratio of the deficit to the GDP was 4.5 percent in 1979 when the deficit was at its peak, a great improvement occurred. Comparing it with 1986 (when the ratio of the deficit to the GDP was 0.3 percent), a reduction close to 4 percent took place.

Incidentally, reduction of fiscal deficit work to restrain the economy. This is called the built-in-stabilizing mechanism of fiscal policy. Thus, in this respect, increase in asset price worked to control the economy.

The Basic Cause of the Boom was Not the Bubble

As seen from above, increase in asset price have caused increases in consumption or investment in plant and equipment. There is no doubt it is one of the causes of the economic expansion during the late 1980s. Still, we need to be cautious about several points.

First, it was the stock price that cause increases in consumption or investment. Increase in land price had no effect on the rise in investment in plant and equipment or consumption. If effect of land rise price were to have any effects, it only shifted the pattern of investment. Moreover, land price increase may have had a positive effect on the construction of rental housing around 1987, but, it was only due to distortion brought about by the inheritance tax. Hence, there is nothing in land price rise that can be evaluated affirmatively. Secondly, for investment in plant and equipment, equity financing due to stock price increase was not the only cause of increase. Thirdly, increase in asset price worked in the direction to restrain the economy through the built-in-stabilizing mechanism of fiscal policy.

Therefore, although the increase in asset price had a positive effect on the economy, it cannot be considered the only factor of the business expansion. At least, it cannot be said that the large-scale expansion would not have occurred without the rise in asset price.

On the other hand, we must be aware that the bubble had negative effects.

First, it can be considered that the jump in land price impeded investment activities accompanying buying of land. Investment in housing would have increased had land price been more stable. Furthermore, it is possible that the soar in land price impeded improvements of social capital.

More generally, the bubble had the effect of distorting the allocation of resources in the economy. As I have stated earlier, rise in land price has shifted the pattern of investment towards those by corporations owning land. Therefore, if the bubble had not existed, the restructuring of the heavy industries would have progressed earlier, and new industries would have grown. The restructuring of the Japanese economy stagnated due to the birth of the bubble.

VI-2. Collapse of the Bubble and the Real Economy

The Japanese entered an economic recession period in the middle of 1991. Opinions of economists have never differed so greatly as they have concerning the nature and future prospects of the recession.

The main issue of debate was the effect of the decline in asset price. Some view the recession as an adjustment of excessive growth in the second half of the 1980s, seeing it as cyclical. Conversely, some emphasize the effects of the decline in asset price. From this perspective, the recession was not only a cyclical one, but it accompanied more fundamental changes in structure. And, others view the recession as a recession surpassing the yen appreciation "yendaka" recession, perhaps the greatest recession after the World War II.

This issue is of utmost importance in predicting future trend of the Japanese economy.

Adjustment of the Excessive Level

As stated previously, a remarkable boom in investment in plant and equipment occurred in the 1980s. Consequently, the level of capital stock became excessive. "Stock adjustment" is needed to shift it back to the equilibrium level.

Until 1983, the (real) ratio of private investment in plant and equipment to the GDP was at a level lower than 16 percent. But, from 1985, it surpassed 16 percent. And during 1989 to 1990 where the boom in investment in plant and equipment occurred, it reached an exceptionally high level. In 1990, it reached a high level of 2.7 percent.

As a result, capital-output ratio ascended. The ratio depicts a trend increase, but from 1989, it greatly exceeds the trend line. In 1991, its ratio to the GDP is 10 percent higher than the trend value. Thus, excessive stocks exist. In order to adjust it, investment in plant and equipment must be restrained.

Suffice it to say, not all of investment in plant and equipment that occurred in the second half of the 1980s lead directly to increase in productivity. It includes investments for saving labor that are not directly related to improvement of productivity. The Economic White Paper of 1992 estimates that roughly 30 percent contributes to strengthening of productive ability. Yet, even when taking that into account, there is no doubt that capital stock to the scale of the economy is quite excessive.

A similar mechanism occurred for housing, as well. Housing investment maintained a level over 1.6 million houses for four years from 1987 to 1990. But subsequently, in 1991, the number of new housing starts decreased. This is due to the effect of interest increase and the adjustment of housing stock that had become excessive.

Similar mechanism work for durable consumer goods that households hold. For example, until the beginning of the 1980s, the number of (domestic) annual sales of automobiles hovered around 3 million. But it surpassed 4 million from 1989 to 1991, and it surpassed 5 million cars in 1990. This implies that households hold an amount of excessive stock that doubles the number of normal annual car sales. Henceforth, at the extreme, it would not be abnormal for the sales to drop to zero over two years in order for it to adjust. Needless to say, such an extreme adjustment will not occur in reality. Still, it would not be surprising if sales were to drop for long periods in the future.

Incidentally, inventory accumulates due to late adjustment of production even when

demand declines. This is perceived at a certain time period, and production drops below the decrease in demand in order to reduce inventory. This is the mechanism called "inventory cycle." In the recession this time, inventory adjustment started towards the end of 1991. In the 14th half term of 1992, the index of mining and manufacturing industries declined 6.2 percent compared to the same term the previous year.

Despite such large production adjustments being made, the employment situation is not that alarming.

The reason is the high level of economic activity despite the stock adjustments. Although housing dropped in 1991, its annual number of 1.37 million housing is much higher than the level of early 1980s. The same can be said for automobiles. Despite the number of automobile sales drop in 1992, its level will not be lower than that of early 1980s.

In other words, instead of saying that the current situation is bad, it should be perceived that the activity level of the second half of the 1980s was abnormally high. In the latter half of the 1980s, we "used up" future demand for production facilities, housing, durable consumer goods of households, etc. They are all "stocks"; when too much investment takes place, subsequent investment declines. Thus, the direction of change in economic activity is a large fall, despite the high level of economic activity. However, this process is necessary to adjust the excessive levels. Great adjustments must be made because the past levels were too high.

Effects of the Decline in Asset Price

Contrary to the above mentioned views, some believe that the recession will cause an extremely serious situation when the drop in asset price such as stock price or land price accelerate the recession, and that the recession is not due to a simple cycle.

Theoretically, the fall in asset price affect the real economy in various ways. Economic theory has traditionally pointed out the following: 1) the fall in stock price cause consumption to slump through the (reverse) wealth effect; 2) equity financing became difficult due to the fall in stock prices, reducing investment. This is the exact opposite of the aforementioned case when asset price increases.

Besides those issues, the following have been pointed out. 3) Banks restrain loans under the BIS (Bank for International Settlements) capital-adequacy standards, causing credit crunch. 4) Due to redemption of convertible bonds or bonds with stock purchase warrants, firms run out of funds. If firms procure funds through straight bonds or long term borrowings, firms are faced with the burden of interests.

In what follows, I will analyze whether these effects truly exist.

Wealth Effect on Consumption

First, (reverse) wealth effect on individual consumption has been pointed out. This is the same mechanism as the case of increase in asset price, where the decline in asset value such as stocks reduce consumption.

Indeed, the drop in stock prices does affect sales of luxury items such as luxury cars, paintings, jewelry. However, of these, cars are the only items directly affecting consumption spending in its original meaning, or production activity. Paintings are transactions of already existing stocks, so even if its demand were to decline, it will not affect production activity.

What about the effect a general consumption? In the latter half of 1990, growth of consumption slowed, declining 0.3 percent during the October–December term compared to the same term the previous year. Warm winter and the increase in oil price affected it. Yet, the opposite? wealth effect due to the large drop in stock prices during 1990 cannot be denied. Growth of consumption also slowed in 1992. This can be interpreted as the effect of the fall in stock prices during 1992.

The Economic White Paper of 1992 stated that the capital loss of the household sector due to the fall in stock prices during 1990 reached 77 trillion yen. It also stated that it may have lowered the real individual consumption of 1991 by 1 percent. The drop in stock prices during 1992 was roughly of the same extent, so its influence is also similar. The growth of real private final consumption in 1991 was 2.8 percent; thus, we can evaluate it as a large growth.

Yet, the growth is not that large considering that a major change, involving the halving of stock price, occurred. The reason is the low ratio of stocks occupying household assets. According to Savings Survey, the ratio of stocks and investment trust occupies only 12.5 percent of individual financial assets. Hence, even if amount of stock asset were to halve, total household asset falls by only 6 percent. Moreover, in the case of Japan, holdings of stocks indirectly through pension funds are rare. In the United States or European countries, when stock prices fall, household assets or pension funds also fall, becoming a major economic issue. This is a big difference between Japan and the U.S.-European countries. In other words, in the case of Japan, stock prices may change greatly due to its small influence on real economy.

Even if changes in stock prices were to have asset effects, changes in land price do not have such effects due to the following reason. Since most land are residential properties, change in land price do not fit into general consumption. I have mentioned this already in relation to the (positive) wealth effect.

Effects on Cost of Funds

Secondly, harmful effects on investment in plant and equipment are often pointed out. In other words, some declare that investment in plant and equipment stagnates, when stock price or land price drop, since equity financing from the stock market or borrowings using land as collateral becomes inaccessible.

First, let us examine the effect of the fall in stock price. As stated earlier, the decrease in stock prices have suppressive effects on investments in plant and equipment, theoretically through the decline in Tobin's q . Iwata (1992) analyzes that a 13 percent fall in stock prices cause investments in plant and equipment to reduce by 2.5 percent.⁴ Since the actual drop in stock prices of 1990 and 1992 were roughly 40 percent and 30 percent, respectively, it may affect investments in plant and equipment greatly. Nevertheless, we need to be cautious about the following issues.

First, despite the large fall in stock prices in 1990 and the virtual halt of funds from the stock market, investments in plant and equipment illustrated an exceedingly high real growth rate of 12.1 percent compared to the previous year. The following are its possible causes. As mentioned previously, manifold factors exist in prescribing investments in

⁴ Kazumasa, Iwata, Gendaikinyuron, Nihon Hyoronsha, 1992.

plant and equipment such as future expected returns or level of capital stocks; cost of funds is not its only factor. Hence, while it is true that falls in stock prices have suppressive effects on investments in plant and equipment, the actual trend of investments in plant and equipment are not determined solely by it. In 1990, the effect of the fall of stock prices was cancelled out and investments in plant and equipment continued increasing due to high expected future growth, strong demands such as streamlining, saving of labor, research development, new products, advance into new business. (Some explain that investments in plant and equipment continued its increase because equity financing until then had kept liquidity abundant. This view is based on the belief that the amount of funds available to firms prescribe investments in plant and equipment. However, funds affect investments in plant and equipment only when funds are being rationed. I find it hard to believe that Japan was in such a condition from the latter half of the 1980s to the 1990.)

Since 1991, growth in investments in plant and equipment slowed due to lower expected future returns and perception of excessive investment by firms. (Actually, stock prices barely fell in 1991, when the growth of investments in plant and equipment fell.)

Second, although it is true that cost of funds increased, it does not mean that current cost is remarkably high; low costs during 1987–1989 were abnormal. Notably, if the cost that firms take into account is market interest rate, the situation in 1991 have lower interest than that of the first half of the 1980s.

As for the drop in values of land collaterals, it does not imply increases in cost funds for firms. Thus, even when land price falls, it is impossible that investments in plant and equipment fall further because of it. Identical to the case of land price increase, changes in the trend of land price will only shift the pattern of investment. It will not affect total amount of capital in the whole economy.

Credit Crunch?

Quantity-wise restriction towards funds raising of firms is claimed to be one of the effects of the stock price drop. It claims that “credit crunch” occurs when unrealized gains of negotiable securities that financial institutions hold, it would not be possible to satisfy the capital-adequacy ratio standards of BIS (International Settlement Bank), causing banks to restrain loans.⁵

This argument has become popularized. And, this is considered the largest problem of the asset price drop. In his book, Fukugo Fukyo, Yoshikazu Miyazaki stated that it

⁵ The BIS (Bank of International Settlements Accounts) capital-adequacy standard refers to the restriction of maintaining the capital adequacy ratio (the ratio of its capital to amount of assets) of financial institutions above a certain level in order to promote healthy management of banks doing international business. With the end of March 1993 as its deadline, this is to be raised above 8 percent.

Capital-adequacy ratios subject to it include capital-adequacy ratio in a narrow sense (the first category), complementary capital-adequacy (the second category) such as 45 percent of unrealized gains of securities. It was supposed to be advantageous for Japanese banks that have much unrealized gains. However, since the stocks' unrealized costs decreased due to falls in stock prices, its attainment is getting difficult. When average stock prices fall below 17,000 yen, it is said that all business of city banks will not make 8 percent unless major steps are undertaken. The capital-adequacy ratio of 90 selected domestic banks averaged 8.7 percent at the end of September 1992.

The penalties for banks not being able to attain the BIS standards are not stipulated, but in addition to receiving restrictions on new international business, the international credit of the bank would also be undermined.

was the main cause of the current economic recession, and that it was also the cause of the fundamental difference between it and the recessions prevalent until then.⁶

However, it is truly questionable whether such phenomenon is occurring. We especially must not ignore demand-side factors. As stated earlier, the situation of investments in plant and equipment is such that its growth rate must slow down a great deal due to stock adjustment. Under such conditions, demand for funds falls; thus, even in the absence of the BIS restriction, loans will not grow.

In many discussions, this point is not analyzed. Mr. Miyazaki's book fails to explain why it can be judged as credit crunch (or why decrease in loans are not due to demand side causes).

The following two indicators will help in deciding whether credit crunch actually exist due to BIS standards.⁷ The first is the difference in the trend of loans by financial institutions. Major banks that do business abroad are restricted under the BIS restrictions, but small to medium-sized financial institutions are not subject to such restrictions and are unaffected. Therefore, if "credit" under the BIS restrictions were being "crunched," loans of major banks would decrease, and loans of small to medium sized financial institutions would increase in order to deal with the excess demand for funds.

The second indicator is the trend of interest rates. If "credit crunch" were occurring, interest rates would soar. Or, as the funds procurement interest rates of financial institutions fall, loan interest rate will not fall.

Thus, let us look at the actual movements of these indices.⁸ First, the trend of loan amount by financial institutions are shown in Table 3; big differences between city banks, regional banks, secondary regional banks are not seen. Loans have all haltered.

Next, Figure 1 takes the (3 month) Cash Deposit rates as procurement interest rates and average agreed loan interest of short term new lendings as the lending rates; those trends were compared during the process of the latest financial deregulation and that of the previous (1980–1981) financial deregulation. It is clear from this that loan interest rates went down smoothly during the latest financial deregulation compared to the previous one. Table 4 illustrates comprehensive average agreed interest loan interest including long-term

⁶ Yoshikazu Miyazaki, *Fukugo Fukyo*, Chuo Koron-sha, 1992. In the book, surprisingly, why "fukugo (composite) fukyo (recession)" is "composite" is not explained persuasively. The author clearly mentions the recession due to "credit crunch," but this is an one way effect from the financial side to the real economy side, and the "jittaimen" and the financial side do not have effects on each other. (In the "Preface," it defines "composite" in that way.) Hence, the name "composite" is not adequate. As Mr. Miyazaki himself clearly admits (p. 22), if a recession were being born due to "credit crunching," then it should be called "financial recession" to be more accurate.

⁷ The most typical case of "credit crunch" is the case when interest rates are artificially fixed at low rates, and when it cannot fulfil the demand-supply adjustment mechanism. When demand for funds increase under such conditions, excess demand is born. In the U.S. until the 1970s, a restriction called Regulation Q existed for savings interest rates of S&L, and an upper limit was set. Thus, when interest rates increased, savings for S&L were difficult to collect. (This is a phenomenon called disintermediation.) Therefore, S&L ran out of funds for mortgage loans (housing loans), and home buyers were not able to receive housing loans. This is "credit crunch." Such situations occurred in the periods 1966–67, 1969–70, and 1973–75. In current Japan, interest rates are not fixed, so "credit crunching" based on disintermediation will not occur.

⁸ The debate below is based on the following literature. Bank of Japan, "An Analysis of Our Country's Financial Economy and its Prospects—Materials for Judging Conditions," 1992 Summer, Bank of Japan Monthly Report, August 1992. Bank of Japan, "Recent Trends of Money Supply—Its Analysis and Evaluations," Bank of Japan Reports, September 1992.

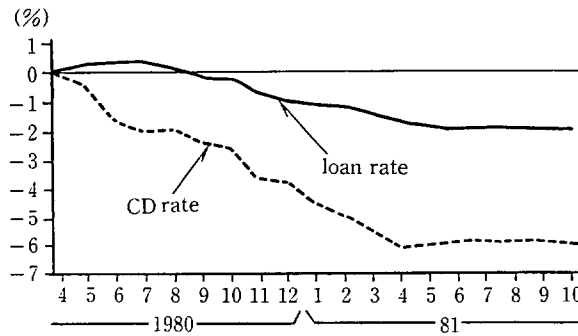
TABLE 3. TREND OF FINANCIAL INSTITUTIONS LOAN

	1991		1992	
	July-Sept.	Oct.-Dec.	Jan.-Mar.	Apr.-Jun.
City Banks	7.1	6.1	5.0	4.0
Long-Term Credit Banks	3.5	1.8	1.2	0.6
Trust Banks	2.2	2.0	1.3	0.1
Regional Banks	4.2	4.6	5.1	4.5
Regional Banks II	5.2	4.3	4.0	3.4

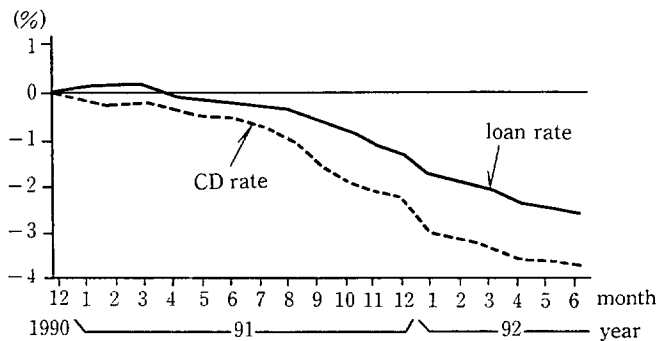
Source: Bank of Japan, "An Analysis of Our Country's Financial Economy and Its Prospects-Materials to Judge Conditions (Summer 1992)", Bank of Japan Monthly Reports, August 1992.

FIGURE 1. DECREASE IN LOAN INTEREST RATES (NATIONAL BANKS)

(1) The Latest Phase



(2) The Previous Phase



- Notes: 1. Setting the interest level of Market Interest Rates (CD Rates) at its peak level as zero, and calculating its fall.
- 2. The base of previous Deregulation Side does not include regional banks II.

Source: Bank of Japan "The Trend of Recent Money-Supply—Its Analysis and Evaluations," Bank of Japan Monthly Reports, September 1992.

TABLE 4. TRENDS IN AVERAGE AGREED INTEREST RATES OF LOANS
(Total, Stock-Based)

<The Latest>				
	City Banks	Regional Banks	Regional Banks II	Credit Association
	7.895 (Dec. 1990)	7.775 (Feb. 1991)	8.078 (July 1991)	7.959 (July, Aug. 1991)
Peak	6.127	6.238	6.881	6.980
<Ratio>	<-1.768>	<-1.537>	<-1.197>	<-0.979>
Degree of City Banks Decrease	—	86.9	67.7	55.4
<The Previous>				
Peak	9.058 (July 1980)	8.829 (Aug. 1980)	8.987 (Aug. 1980)	9.109 (Oct. 1980)
Peak	7.432	7.638	8.143	8.678
<Ratio>	<-1.626>	<-1.191>	<-0.844>	<-0.431>
Degree of City Banks	—	73.2	51.9	26.5

Source: Bank of Japan, "An Analysis of Our Country's Financial Economy and Its Prospects—Materials to Judge Conditions (Summer 1992)," Bank of Japan Monthly Reports, August 1992.

smoothly fell compared to the previous case. These demonstrate that the stoppage of growth of loans are mainly due to demand factors.⁹

As for the future, when demand for funds increase, stock prices would have recovered; the restrain of BIS restrictions would be cleared. Even if banks need to compress its assets, major firms will be able to raise its funds directly from the capital market. In the first place, Japan is a chronic excess-saving country. If supply of funds were to be a problem in such an economy, it is incomprehensive.

Some claim that as redemption of bonds with stock purchase warrants concentrates in 1993, firms will suffer from lack of funds: consequently causing more bad effects on investment. However, most of the redeemed funds return back to the capital market. Thus, they can be re-procured. The issue is not serious.

Credit Rationing

Due to a different reason from BIS restrictions, supply of funds may be restricted quantitatively. That is in the case when the possibility of lenders going bankrupt gets higher. In this case, in order to cover the risk of bankruptcy, it may seem that interests rates should be increased. Yet, lenders are not able to determine the exact probability of lenders' bankruptcy; hence, interest rates need to be pulled up uniformly. Then, only borrowers investing with high risks (thus, borrowers with high bankruptcy probability) will be left, since good borrowers (borrowers who invest conservatively) stop borrowing. Consequently,

⁹ Mr. Yoshikawa also states that "credit crunch" has not occurred for the same reasons. Yoshikawa, "After-effects of the Bubble are Exaggerated," Nihon Keizai Shimbun, "Keizai Kyoshitsu," June 9, 1992. Yoshikawa, "Money Supply and the Japanese Economy," Nihon Keizai Shimbun, "Keizai Kyoshitsu," September 1992.

the risks of banks expand. Therefore, banks restrict the amount of loan under a certain amount. This is called credit rationing. Credit rationing is born even when interest rate is falling. In general, the bankruptcy probability gets higher; there is a tendency for credit rationing to get tighter.¹⁰

Is such a situation the case of current Japan? First, it is true that financing evaluations are getting tighter compared to previously. Especially, standards of real estate-related evaluation seems to be getting more strict. However, instead of credit rationing-like situation occurring due to current tight restrictions, evaluations during the past several years were loose. In the latter half of the 1980s, banks fell into a period of difficulty due to lack of funds, and they had to frantically find firms to finance. Hence, even small to medium-sized firms were able to receive financing hardly without evaluations. It is said that there were no problems as long as they owned land. Such an abnormal situation had returned to normal, so it is not proper to call it "halt in loans."

In fact, from the firms' perspective, the lending attitude of banks are moving toward the direction towards deregulation, reflecting financial deregulation. Although credit rationings should be tighter for smaller-sized firms, in general, small to medium-sized firms are replying instead that "it is getting easier."¹¹

Therefore, "halt in loans" in terms of credit rationing is not occurring.

Positive Influences

From the above arguments, the claim that "bubble collapse accelerates the economic recession" is not persuasive. Falls in asset price affect the real economy through its wealth effects on consumption, but its effect, in general, is limited.

In reality, in 1990, the real economy was growing at a high rate. The number of automobile sales surpassed a record 5 million, and investments in plant and equipment showed a two-digit growth. If the decline in asset price greatly affects the real economy, such a thing would not have occurred.

In contrast, we must not forget that the collapse of the bubble may promote healthy growth of the economy. When firms return to its occupation from financial engineering-zaitech, fundamental conditions to maintain long term growth are set. Allocation of human resources can also be adjusted. As long as the Age of the Bubble continues, allocation of resources in the Japanese economy would be distorted greatly.

The drop in land prices have more direct effects. In the latter half of the 1980s, housing construction grew, but it consisted mainly of rental housing, and thorough a special route of an effect of inheritance. Owner-occupied housing did not grow that much, and afterwards, the number of owner-occupied housing dropped. If the land price does not return to the normal standard, housing investment will not recover. Although I stated that stock adjustment has ended due to the recovery of housing investment from the spring of 1993, we cannot ignore the effects of the land price fall. And, if land price do not fall, investments in plant and equipment accompanying land purchase will not recover. Hence, healthy economic growth is made possible only with the collapse of the bubble.

¹⁰ This explanation is based on Dornbusch, R. and Fischer, S., *Macroeconomics*, 5th ed., McGraw-Hill, 1990 (Chapter 9).

¹¹ Bank of Japan, "Recent Trends of Money-Supply—Its Analysis and Evaluations," Bank of Japan Monthly Report, September 1992.

Furthermore, the bubble must be collapsed for improvements of social capital. Although the delay in organization of urban social capital have been often pointed out, the high land prices were impediments until now. By collapsing the bubble, we can expect promotion of improvements of social capital, for the first time.

Finally, I shall discuss "mentality of managers" and "mentality of consumers." "Mentality of managers" cannot be ignored since investments in plant and equipment are greatly affected by future prospects. Mentality of consumers are essential concerning consumer spending. In general, it is claimed that the decline in asset price cause such mentalities to wither. However, factors of the current Japanese economy are unclear due to obscurity of the settlement process of the bubble. In other words, the problem lies in the incomplete adjustments of asset price. In this respect, prospects for a healthy economic growth need to be made clear by collapsing the bubble.

VI-3. Changes in Asset Price and Foreign Investment

Increase of "Japan Money"

In the 1980s, the current balance accumulated a large surplus, and Japanese foreign investment grew remarkably. The surplus of current balance started expanding in the mid-1980s, reaching 85.8 billion dollars, or 4.2 percent of the GDP, in 1986. (Table 5 In 1986, it became 94.1 billion dollars, or 4.5 percent of the GDP). The deficit of long-term capital balance attained a level surpassing 130 billion dollars annually during three years from 1986 to 1987. Japanese long-term capital outflow exceeded 190 billion dollars in 1989.

The outflow of long-term capital surpassing the current balance surplus during the period has drawn considerable attention. From a long-term perspective, surplus in current balance finances long-term capital outflow; thus, they should be identical. The reason the former surpassed the latter in the second half of the 1980s is the financial intermediary

TABLE 5. TREND OF FOREIGN BALANCE (in \$ Million)

Calendar Year	Current Balance	Ratio to GNP (%)	Long-Term Capital Balance		
			Balance	Japanese Capital	Foreign Capital
1980	-10,746	(-1.1)	2,324	-10,817	13,141
1981	4,770	(0.4)	-9,672	-22,809	13,137
1982	6,850	(0.7)	-14,969	-27,418	12,449
1983	20,799	(1.8)	-17,700	-32,459	14,759
1984	35,003	(2.8)	-49,651	-56,775	7,124
1985	49,169	(3.6)	-64,542	-81,815	17,273
1986	85,845	(4.2)	-131,461	-132,095	634
1987	87,015	(3.6)	-136,532	-132,830	-3,702
1988	79,631	(2.7)	-130,930	-149,883	18,953
1989	57,157	(2.0)	-89,246	-192,118	102,872
1990	35,761	(1.2)	-43,586	-120,766	77,180
1991	90,222	(2.6)	39,756	-100,601	140,357

Note: Annual year only for 1991.

Source: Ministry of Finance, Fiscal Financial Statistics Monthly Reports.

TABLE 6. TREND OF FOREIGN INVESTMENT AND NET FOREIGN ASSET
(in \$ Million)

Calendar Year	Direct Investment	Securities Investment	Net Asset Balance
1980	2,385	3,753	11,534
1981	4,894	8,777	10,918
1982	4,540	9,743	24,682
1983	3,612	16,024	37,259
1984	5,965	30,795	74,346
1985	6,452	59,773	129,821
1986	14,480	101,977	180,351
1987	19,519	87,757	240,744
1988	34,210	86,949	291,746
1989	44,130	113,178	293,210
1990	48,024	39,681	328,059
1991	24,017	61,168	383,072

Note: Direct Investment and Securities Investment of 1991 are those of annual years.

Sources: Ministry of Finance, "Fiscal Financial Statistics Monthly Reports."

mechanism Japanese financial institutions played in the return of short-term funds raised abroad changed into long-term funds, in addition to returning current balance surplus abroad satisfactorily.

Investments from Japan were called "Japan money," and played a major role in the world financial markets instead of oil money. As shown in Table 5, roughly 60 percent of it took the form of securities investment by institutional investors such as life insurance companies, indemnity (nonlife) insurance companies, and trust banks. At the Houston Summit, the enormous Japan money was one of the topics for discussion.

As a result of such foreign investments, net balance of foreign assets reached 180.4 billion dollars in 1986, and overtaking United Kingdom to become the world's greatest creditor nation. (Table 6) In the end of 1989, it surpassed 290 billion dollars, and became the world's greatest creditor nation for five consecutive years (it was outstripped by Germany in 1990, but it has returned to the number one position, subsequently).

Was Japan Money due to the Bubble?

What effects did changes in asset price have on external balance of Japanese economy?

The following argument was claimed concerning the issue. First, it was claimed that due to the increase in domestic asset (land or securities) value, foreign investment increased in order to recover the domestic and foreign asset balance in portfolios. Second, it was argued that (as is the case of domestic investments), collateral value of land increased due to the rise in land prices, enabling borrowings from financial institutions using them as collateral and spending them on foreign investment.

The second argument is wrong for the same reasons as that of domestic investments. The rise in land collateral value only cause shifts in the object of investments to land holders; it does not affect total foreign investment of Japan as a whole. The first view is also unpersuasive. If portfolios of domestic and foreign assets were in equilibrium conditions, such things may have occurred. Nevertheless, current Japan is in the process of increasing its domestic and foreign assets on a long-term. (The ratio of Japan's net foreign assets

to the GNP is around 11 percent; it is still quite low compared to those of other countries; 22 percent in United Kingdom, and 21 percent in Germany.)

Indeed, these hypotheses do not explain the actual trends, because the surplus of current balance fell while land price or stock price increased after 1988. In absolute terms, the current balance surplus peaked in 1987. Its ratio to GDP dropped from 4.5 percent in 1986 to 1.1 percent in 1990. Its main reason was due to increase in domestic investment. And, increase in consumption due to asset effect would have reduced savings.

Along with it, long-term capital balance decreased. Thus, increase in asset price in the latter half of 1980s did not raise foreign investment, but decreased it.

If effects of asset price increase were to have existed, first, foreign investment surpassing current balance surplus were being invested; outflow of Japanese capital would have continued increasing until 1989 despite the decrease in current balance surplus after 1988. As mentioned earlier, this is the result of short-term fund-raising, and long-term use by Japanese banks. Specifically, Japanese banks took in funds through Euro markets, and passing them on to real-estate finance abroad. In the background of such activities by banks lies the competition of the 1980s. Therefore, for this instance only, we cannot deny the contribution of the special situation of the late 1980s on the increase of Japan money.

Did Japan Sink?

A view that "the pulling out of foreign assets by Japanese financial investors facing difficulty with funds due to the bubble collapse will disrupt international capital markets" exists. Indeed, as depicted in Table 5, in 1991, an unprecedented case of long-term capital balance turning into a surplus (excess inflow) despite the increase in the current balance surplus occurred. Yet, its main cause lies in the increase of investment in Japanese stocks by foreign institutional investors and in the sudden increase in the inflow of funds to Japan. On the other hand, Japanese banks returned short-term funds through the Euro market. Thus, supply of funds in such forms continued. In short, the cause of the extraordinary results in 1991 was due to the reversal of the forms of special fund-raising and use in the latter half of the 1980s.

As stated previously, long-term capital supply surpassing current balance surplus through short-term fund-raising was a special case in the second half of the 1980s; it may not occur in the future. Nevertheless, even in such cases, capital supply from Japan will not disappear. From a long-term perspective, capital outflow able to deal with current balance surplus will definitely be brought about in the future.

However, the surplus of current balance is expected to increase compared to the latter half of the 1980s. (It is expected that the surplus of 1992 will surpass 100 billion dollars.) This is because the gap in savings and investment due to reduced domestic investment will expand. And, the outflow of long-term capital will increase, along with it. There is a strong possibility that this effect will surpass the decrease in the aforementioned financial intermediary mechanism. If that is so, future long-term capital supply will increase more than it did in the latter half of the 1980s.

Whether Japan continues to be a capital export country on the long-term depends on how the balance of domestic savings and investment changes in the future. Since savings rate is expected to decrease due to the future aging of the population, the difference in do-

mestic savings and investment, or the surplus of current balance, will gradually decrease. Yet, at least for this century, Japan's position as a capital exporting country will not change.

Taking out the decline in asset price and the sudden increase in long-term capital deficit and relating them together, and thinking that "Japan has sunk" is a myopic view.

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