The American Great Depression and the Japanese Heisei-Era Depression Compared—From an Institutional Approach

Tokutaro Shibata*

This paper investigates the institutional causes of the Japanese Depression in the 1990s in comparison to those of the America Great Depression in the 1930s. The Japanese Depression has two similarities to the American Depression. (1) Both depressions followed the bubble economy. (2) The decades of the 1930s and 1990s were historical transition periods. The institutional causes of the bubble economy in Japan were following: (1) instability of the international monetary system, (2) transformation of the financial system from "regulation and relief" to "deregulation and relief," (3) transformation of the industrial relations, (4) the Japanese domestic institutions such as the cross-shareholding system, the tax system, "the land standard," and the underdeveloped welfare system. These institutional factors are currently obstructing economic recovery.

Keywords: Japanese depression, Great Depression, Bubble economy, Deregulation, Cross-shareholding system, The land standard

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I. Introduction

The Japanese economic situation, which has experienced a long depression from the early 1990s to the present, can be compared to the American Great Depression. The current Japanese depression

*Professor, Graduate School of Economics & Faculty of Economics, University of Tokyo, Hongo, Bunkyo-ku, Tokyo 113-0033, Japan, (Tel) +81-3-5841-5613, (Fax) +81-3-5841-5521, (E-mail) shibata@ e.u-tokyo.ac.jp.
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has two similarities to the American Depression, though Japan has never suffered from such a great contraction in this depression as the American people experienced between 1929 and 1933. First, both depressions occurred after the breakdown of a bubble economy. Secondly, the decades of the 1930s and 1990s were historical transition periods. As the US economic system could not survive the 1930s without drastic transformation, the Japanese economic system is facing strong pressure to change from abroad.

The purpose of this paper is to compare two depressions in order to discover the answer to the difficult question "How should we reform our economic system?" I will make this comparison from an institutional approach, which I will explain in this first section.

A. Institutional Approach

An institutional approach assumes that stable institutional structures are required for favorable capital accumulation.[1] Because of several unstable factors in the market economy, we need institutions that stabilize a capitalist economy. The first unstable factor is the peculiarity of the labor force market. Capital cannot produce labor forces, though it can make most of the commodities. Therefore, an abundant supply of labor force is indispensable for continuous capital accumulation. In addition, capitalists have to draw and control workers will to work because labor force has its own volition. Accordingly, the institutions that keep labor supply and control workers volition are required for stable capital accumulation. For example, factory acts were created to keep good conditions for workers and they enhanced productivity in England in the middle of 19*th* century.

A second unstable factor is the instability of money. There are many currencies in the world, and then exchange rates are not always stable. This instability makes capital accumulation fragile. A stable international monetary system is required for favorable world economic development. The International Gold Standard and the pound sterling system stabilized world economies in the 19*th* century. A third unstable factor is the instability of finance. On one hand, credit systems and financial markets were developed to inspire capital accumulation. On the other hand, however, the

[1]This approach is in debt to the SSA approach (Gordon, Edwards, and Reich 1982) and the Institutional Economics (Commons 1934).

financial system is one of the main causes of economic crises. For example, in order to protect the credit system from financial instability, a central banking system was developed as the Lender of Last Resort in England in the 19*th* century.

As mentioned above, when stable institutions support capital accumulation, favorable economic development is accomplished. However, old institutions cannot continue to support capital accumulation forever. Innovations transform economic structures and development of firm organizations also change market structures. New economic structures need new institutions, but institutions cannot change easily. Therefore, new economic structures contradict old institutions during historical transition periods. Both the American Great Depression and the Japanese Heisei-era Depression occurred during this transition time.

In the second section, I will analyze the causes of the American Great Depression from this institutional approach and evolution of the institutional structures after the Great Depression in the United States. In the third section, I will investigate the evolution of the institutional structures in postwar Japan and the institutional causes of the Japanese Heisei-era Depression.

II. Great Depression and Modern Capitalism (Shibata 1997)

A. Institutional Causes of the Great Depression

There were several institutional causes of the American Great Depression. First, the superiority of the management over labor unions caused the unequal distribution of income, which was a fundamental cause of the Great Depression. On one hand, the increase in profit margins stimulated the stock market boom. On the other hand, the unequal distribution of income depressed the demand for consumer durable goods and terminated the bubble economy.

Secondly, the instability of the reconstructed international gold standard was also a crucial factor of the Great Depression. While Britain lost its place as the strongest financial power after World War I, the US did not replace Britain as the international financial center though the US became the strongest financial power. As the US had an unstable financial system inside the country, it could

not continue foreign investment that was indispensable to preserving the international gold standard in the 1920s. The stock market boom, the stock market crash, and the onset of the Great Depression in the US led to a world depression and the breakdown of the international gold standard. Then, the onset of world depression and the breakdown of the international gold standard led to worsening of the depression in the United States. In particular, the gold outflow from the US in the fall of 1931 prevented the US economy from recovery, because the Federal Reserve adopted a tight monetary policy to protect the gold standard. We may say that the adherence to old institutions led to the deterioration of the weakened economy in the United States.

Thirdly, the most crucial factor of the Great Depression was the institutional instability and fragility of the American financial system in the 1920s. The concentration of excess funds on the New York Stock Exchange through the correspondent banking system was not changed fundamentally despite the establishment of the Federal Reserve System. The Federal Reserve could not control the inflow of funds to the stock market. The establishment of a lender of last resort did not restrain credit expansion to the stock market but supported the speculation. There was an increase in debts. While non-financial firms reduced the debt equity ratio in the 1920s, real estate mortgage debtors, finance firms such as investment trusts and holding companies, stock investors, and foreigners increased their debts enormously in the 1920s. On one hand, the credit expansion and the stock market boom promoted consumption and investment and supported the last boom of the 1920s. On the other hand, the stock market crash led to debt deflation. While the Federal Reserve could prevent the stock market crash from extending to the banking crisis, it could not prevent the crash from reaching to the debt deflation. Debt deflation caused the decline in consumption, resulting a reduction in investment.[2] Debt deflation also led to the banking crisis, which obstructed recovery from the depression.[3]

[2]For a discussion of debt deflation, see Minsky (1986).

[3]In addition, the inelasticity of oligopolistic prices was the factor that accelerated the Great Depression. The decline in the effective demand in the fall of 1929 led not to a fall in the price level but to a reduction in production and capacity utilization, which led to a decline in investment and consumption. Thus, the inelasticity of oligopolistic prices was the

In this way, these three factors were main institutional causes of the Great Depression in the United States. Several reforms were attempted to deal with these institutional problems in the New Deal period. I will analyze these reforms and their consequences in the next section.

B. New Deal Reforms

First, the financial reforms succeeded in the creation of a new financial system. The Federal Reserve System received the power to control and regulate speculation in the stock market. The FDIC was established to prevent runs on banks. This new financial system of "regulation and relief" was one of the factors that supported "the golden age of capitalism" after World War II.

Secondly, the new international monetary and financial system was not created in the New Deal era. This was one of the reasons why the US economy did not recover sufficiently from the Great Depression. For example, the Federal Reserve adopted a gold sterilization policy and raised the reserve requirements of member banks to restrain the inflation that was expected with the imported short-term foreign funds in 1936. This tight monetary policy was the obstacle to an increase in the Federal budget deficit. The tight monetary and fiscal policy was one of the causes of the severe recession of 1937-8.

Thirdly, the counter-cyclical function of the Federal budget began to work in the second half of the 1930s, because the scale of the Federal budget was increased in the New Deal period. In particular, the effect of the rapid decline in effective demand was mitigated by an increase in the Federal budget deficit in 1938. However, this function was not matured in comparison with that after World War II.

Finally, class relations were transformed drastically owing to the rise in class struggles, social movements, and the support of the Federal government in this period. The superiority of the capitalist class over the labor class was over. The share of labor income recovered in this period. In addition, legislation for social reform and the protection of small business and farms was introduced and passed into law. However, the cooperation and compromise among

obstacle to the market mechanism.

the labor unions, big management, and the Federal government were not realized. For example, firms faced a profit squeeze and a decline in the effective demand, as the wage rate steeply rose and the Federal budget deficit sharply declined in 1937. As a result, firms decreased investment and the severe recession occurred in 1937-8.

In sum, the New Deal reforms succeeded in making some parts of a new stable system that was the basis of "the golden age of capitalism." However, these reforms could not create a sufficient recovery from the Great Depression, because these reforms were not completed and social cooperation and coordination was not realized in the New Deal period.

C. Golden Age of Modern Capitalism

After World War II, new social and institutional stability was created. First, the large scale issues of US securities during World War II led to the decrease in the debt asset ratio of the private sector, which increased the stability of the American financial system that the New Deal reforms created (Minsky 1986). Secondly, the international managed monetary system was created. In addition, the US began to supply public funds to foreign countries as military spending and foreign assistance, which resulted from the beginning of the cold war. In other words, Pax Americana was created. Thirdly, the counter-cyclical function of the Federal budget grew, because the scale of the Federal budget increased enormously during World War II.

Fourthly, the Federal government succeeded in forcing the cooperation and coordination of the labor unions and big business as the US economy was organized for the war during World War II (Jacoby 1985). After the World War II, the system of compromise between the labor unions and the big business was established (Gordon, Edwards, and Reich 1982). Firms could absorb the rise in labor cost by the growth of the productivity or by a rise in products prices. The rise in the labor income increased the effective demand. In addition, the development of social welfare also increased effective demand.

In short, these four institutional structures supported "the golden age of modern capitalism."

D. New Transition Era

However, these four institutional structures came to an end at the beginning of the 1970s. Since then, the institutional structures have been unstable. First, accelerated inflation created the problem of financial disintermediation. This development made the New Deal financial system unstable. As a result, the financial system of "regulation and relief" was transformed to that of "deregulation and relief" through the financial reforms. This system of "deregulation and relief" made the problems of moral hazard and increased the financial instability and fragility in the 1980s both in the US and in the world.

Secondly, Pax Americana has been declining. The fixed exchange rate system collapsed at the beginning of the 1970s. Since then, the floating exchange rate system has been one of the factors of the international financial instability. The most destabilizing factor was that the US has become a debtor country. For example, the Japanese easy money policy to support the dollar exchange rate accelerated speculation in Japan after 1987.

Thirdly, the increase in the Federal budget deficit did not promote economic growth but made the stagflation in the 1970s. It made the US a debtor country. As a result, the counter-cyclical function of the Federal budget has been declining since the end of 1970s. Fourthly, the system of compromise between the labor unions and the big business came to an end in the 1980s. Firms had not been able to absorb the rise in the labor cost by the increase in productivity or by raising the products prices since the end of the 1960s, because of the increase in international competition and the stagnation of productivity growth. As a result, the compromise system was transformed to the superiority of management over labor in the 1980s.

In sum, the new transition era began in the 1970s. In this era, old institutional structures collapsed. However, their replacements have not yet been created.

III. Evolution of the Japanese Institutional Structures

In this section, I will analyze the institutional factors of the rapid growth and the bubble economy in Japan.

A. Institutional Causes of the Japanese Rapid Growth (Shibata 1998)

From the beginning of the 1950s to the early 1970s, the Japanese economy experienced dramatic growth. Several institutional structures sustained this rapid growth.

First, the stable international environment accelerated Japan's economic growth. Pax Americana, and in particular the IMF dollar system, encouraged and sustained rapid growth in Japan. In contrast to the interwar period, the United States fulfilled its responsibilities as the key currency country by distributing dollar funds on a massive scale under the Marshall Plan to assist in the recovery of Europe after World War II. While an Asian Marshall Plan never materialized, the United States intervened in the Korean War, resulting in a large distribution of dollar funds as a "special procurement" and in other forms in Asia, including Japan. The enormous level of "special procurement" income raised the ceiling of the Japanese balance of payments and helped the recovery of its economy.

In addition, the IMF dollar system supported the high rate of growth in the world economy, which was beneficial for rapid growth in Japan. Even though the Japanese economy's dependence on international trade was lower after World War II than before, its dependence on the world economy was still high. The expansion in world trade was the chief factor in the growth of Japan's exports during this period. Because all foreign currency earned from exports was spent on imports to expand production and achieve high growth, the increase in exports made rapid growth possible. Another benefit in the international environment was the availability of cheap and stable supplies of raw materials and energy needed for heavy and chemical industrialization (*e.g.*, Nakamura (1995, pp. 45, 64, 68)).

Secondly, the stable financial system maintained rapid growth. In those days, the corporate sector showed a huge shortage of funds, which was made up by the surplus in the household sector. City banks attracted deposits from the individual sector and supplied funds to keiretsu firms through loans. This "indirect finance" was a main route of the supplies of funds during the rapid growth period. As the banks were bold in supplying funds through "over loan," which means the high loan deposit ratio, they had to depend upon

the fund supply of the central bank. Under these conditions, the Bank of Japan could control not only the financial system, but the Japanese economy through its monetary policy. During periods of economic growth, the Bank of Japan supplied funds through loans and open market operations, which encouraged rapid growth. On the other hand, when economic booms led to balance of payments' deficits, which decreased the foreign exchange reserves, tight monetary policies were effective in restricting fund supplies, suppressing domestic demand, and wiping out those deficits (Nakamura 1995, pp. 139-41).

Thirdly, the Japanese-style corporate system, including the stable and flexible industrial relations, maintained rapid growth. In the large firms, male workers were members of the company labor unions and generally worked for the same company until a fixed retirement age under the seniority system. They received relatively high pay, including fringe benefits, and were promised comparatively equal advancement. After the defeat of the anti-rationalization strikes in the 1950s, the main concerns of the company labor unions were job security, wage, and shorter working hours. On one hand, the higher wages achieved by the company labor unions expanded the domestic consumption markets, which encouraged rapid growth (Nakamura 1995, pp. 30-32, 155-6). On the other hand, the large firms could raise the organizational capability and labor productivity by including male blue-collar workers in business activities (Lazonick 1992; and Hashimoto 1996, p. 6). In addition, there were a considerable number of temporary workers and day laborers with limited periods of employment in both large and small firms. They could reduce numbers of temporary workers and day laborers easily in response to business fluctuations (Nakamura 1995, p. 158).

Fourthly, the government and its related institutions played an important role in rapid growth, while the efforts of the private sector, in particular industry, mainly produced economic growth. The policy system for the protection and fostering of industry, including administrative guidance, encouraged private investment. Additionally, the increase in fiscal spending in prosperous periods encouraged economic growth, as the fiscal policies of this period reversed the principle of counter-cyclical management. Moreover, the lending of national funds accumulated through the various national institutions (postal savings, the welfare and national

pension funds, and post office life insurance premiums) to the basic industries, small businesses, and households fostered the expansion of business investment and residential construction (*e.g.*, Nakamura (1995, pp. 87-91, 125-35)).

These four institutional structures, which were partly created intentionally and partly emerged spontaneously, supported and encouraged economic growth in the 1950s and the 1960s in Japan.

B. Institutional Causes of the Japanese Economic Growth in the 1970s and the 1980s (Shibata 1998)

In the beginning of the 1970s, steady economic growth in developed countries ceased. First, international institutions became unstable because of the decline in Pax Americana. The fixed exchange rate system collapsed, and the price of crude oil was raised drastically. The floating exchange rate system was one of the main factors of the international economic and financial instabilities. The rise in the crude oil price created a serious condition for oil-importing countries. Second, many developed countries had to face the serious problem that we had never experienced before – "stagflation." Japan, however, succeeded in keeping a better economic performance than any other developed country during the second half of the 1970s and through the first half of the 1980s. Why could Japan get over the "Nixon shock" and two "oil crises?" Why could Japan deal successfully with "stagflation?"

The most important institutional factor causing the Japanese economic success in this period was the flexibility of the Japanese corporate system. After the first oil crisis, the Japanese economy faced a serious trilemma: inflation, balance of payments' deficits, and stagnation. The Japanese government was forced to adopt restrictive monetary and fiscal policies to restrain inflation for two years. These anti-inflation policies were accompanied by great sacrifices. The firms' profits fell drastically due to a decrease in demand and an increase in costs.

Japanese firms reduced the numbers of employees and reduced labor costs. First of all, they dismissed their temporary female workers and their part-time workers, who were mainly housewives. As most of them did not remain in the labor market but returned to the home, they were not counted as "completely unemployed." In addition, Japanese firms avoided large reductions in their work

forces by dismissing specific workers in order to maintain their traditionally good labor-management relations. They tried to use every imaginable device to reduce employment without dismissal—from leaving positions of retiring employees unfilled to reshuffling personnel; transfering employees to other companies; and calling for voluntary resignation.

They also made efforts to economize on labor-related expenses. They switched from male to female employees, in particular, low-wage part-time workers. In addition, management gained the cooperation of company labor unions in order to hold down annual wage increases to a level only slightly more than the rate of increase in the consumer price index. In sum, Japanese industrial firms were able to reduce employment, trim their total wage costs without a surge in the unemployment rate, and avoid social conflict. As a result, the Japanese government did not have to adopt growth-promoting policy until 1977, when the expectation of inflation ceased.

The second reason for the Japanese success in economic growth in the 1970s and the 1980s was the expansion in exports. The increase in net exports expanded the real GDP by around 1-2 percent during the period between 1974 and 1977. The U.S. government adopted growth-promoting monetary and fiscal policies and provided the stimulus for a world economic recovery as a locomotive of world economic growth. The expansion in exports supported economic growth again in the first half of the 1980s. The increase in net exports helped the Japanese economy recover from the slump of 1980-2 (BOJ 1997).

C. Causes of the Bubble Economy in Japan (Shibata & Kaneko 1999)

a) Instability of the International Monetary System

The international monetary system has been unstable since the beginning of the 1970s, when the fixed foreign exchange system collapsed because of the decline in Pax Americana. There has been no mechanism that forced the United States to reduce its deficit in the balance of international payments in the floating exchange system. The United States has benefited by having the dollar as a key currency. As a result, the dollar exchange rate against the mark and the yen had been declining since the 1970s. The

automatic self-correcting mechanism of the floating foreign exchange rate system on the international balance of payments did not work as some economists had anticipated. While the exchange rates of strong currencies rose, those of weak currencies declined in the late 1970s. The fluctuations of the foreign exchange rates sometimes overshot in this period.

The Reagan administration adopted Reaganomics, the pillars of which are tax cuts and restriction of the inflation rate at the beginning of the 1980s. However, as it failed to cut the federal government expenditure, the tax reduction greatly increased the federal deficits. The combination of deficit increase with the anti-inflation policy led to the interest rate rise. High interest rates absorbed a lot of capital from abroad and made the dollar exchange rate higher. The strong dollar caused the decline in American industries competitive power and increased the trade and current balance deficits. Consequently, the twin deficits in federal public finance and the current balance of payments were tremendously augmented.

A huge amount of capital import financing the twin-deficits converted the American international investment position from the largest creditor to the largest debtor. The increase in the debtor position of the key currency country made the international monetary system fragile. The expansion in the debtor position of the United States deteriorated its international balance of payments. Some economists warned that it was difficult for the United States to continue to sustain the twin-deficits by the capital import (Krugman 1985). Other economists worried about an international financial crisis, which might occur by a capital flight from the United States.[4] On one hand, the financial deregulation and globalization encouraged capital import to the United States and supported the strong dollar in the first half of the 1980s. On the other hand, they stimulated the mobility of hot money and made the international monetary system fragile.

In order to take precautions against the international financial crisis and to depress protectionism in the United States, the international financial agreement to decrease the dollar exchange rates against the yen and the mark was made in the New York Plaza Hotel in the fall of 1985. The dollar exchange rates dropped

[4]For further details of the "Hard Landing Scenario," see Marris (1985).

abruptly after this agreement. However, the deficit in the U.S. current balance of payments continued to expand until 1987. The factors of this expansion are following. (1) The Japanese exporting industries tried to minimize the dollar price increase by the rationalization. (2) The American oligopolistic industries raised the price of their products. (3) The American exports to the Latin American countries, which suffered from the debt crises, did not grow. (4) The Japanese dollar surplus and the American deficit in the current balance increased temporarily because of the reverse J curb effect.

As the decline in the dollar exchange rates could not decrease the American current balance deficit, there was a strong fear that the dollar drop might lead to an international financial crisis. Therefore, international financial cooperation was decided to support the dollar exchange rates in the Louvre Summit in the spring of 1987. However, this agreement was imperfect. The Federal Bank in West Germany would not adopt an easy money policy to support the dollar because its priority was to restrain inflation. After this international disagreement was reported in the summer of 1987, the prices of stocks and bonds and the dollar exchange rates dropped in New York on October 20, which was called the Black Monday. The Fed supplied liquidity to the market to support the price levels of stocks and bonds as the lender of last resort. In order to support the dollar international financial cooperation resulted.

The most cooperative country was Japan. The Japanese monetary authorities had three incentives to support the dollar exchange rate against the yen. (1) It was important for the Japanese exporting industries to prevent the decline in the dollar rate to keep their price competitiveness. (2) An easy money policy to support the dollar was consistent with the countermeasure to the recession made by the yen rise. (3) The stable dollar was essential for the international monetary system.

The Bank of Japan reduced its bank rate to 2.5% on February 23 in 1987 and kept it until the end of May in 1989. Because the Japanese monetary authorities purchased the dollar in order to support it, the Japanese gold and foreign exchange reserves increased rapidly from $26.5 billion at the end of 1985 to $100.4 billion at the end of April in 1989 (BOJ 1998).[5] As a result, the growth rate of the Japanese monetary base rose in 1986 and kept

high until 1989. The growth rate of the money supply in Japan was also elevated in the late 1980s.

In sum, the international financial cooperation to support the weak dollar created the oversupply of international liquidity in the world, especially in Japan, in the late 1980s. This situation was similar to that in the late 1920s.

b) Transformation of the Financial Institutional Structure

In the Japanese rapid growth period, a huge surplus of savings in the household sector was absorbed by the non-financial corporate sector, which invested enormous funds in plant and equipment. The banking sector attracted deposits from the individual sector and supplied funds to keiretsu firms through loans. The ceiling for interest on deposits was set by the Emergency Interest Rate Adjustment Law. This regulated indirect finance was a main route of the supplies of funds during this period. After the oil crisis, however, this stable financial structure was transformed into unstable one. The shortage of savings in the non-financial corporate sector shrank because of the decline in fixed business investment. Instead of the corporate sector, the public sector absorbed lots of savings from the household sector in the late 1970s. After 1978 the Japanese government began to expand fiscal expenditure to restrain the yen from rising under the pressure of the United States, which asked the Japanese government to support the world economy as a locomotive engine (Table 1, Shibata 1998).

The Japanese government had to increase government bond issues to finance the fiscal expenditure in the late 1970s. This expansion in government bond issues had a great impact on the Japanese financial structure. Until that time, the bulk of government bond issues had been underwritten by a syndicate of many city and regional banks and reabsorbed a year later in a buying operation by the Bank of Japan in order to guard against any fall in government bond prices. With the very large government

[5]Gold and foreign exchange reserves of some other developed countries also increased in this period. They increased from $13.6 billion at the end of 1985 to $45.0 billion at the end of 1988 in the U.K. and from $3.3 billion to $16.2 billion in Canada in the same period. They also expanded from $48.0 billion at the end of 1985 to $83.5 billion at the end of 1987 in the West Germany (BOJ 1993, p. 158).

TABLE 1

SAVINGS-INVESTMENT BALANCE BY SECTOR IN JAPAN

(Ratio to GDP, %)

Sector	1970 -72	1973 -75	1976 -78	1979 -81	1982 -84	1985 -87	1988 -90
Non-finance corporation	-8.7	-11.3	-4.9	-5.7	-4.1	-4.3	-7.5
Financial institutions	0.8	0.8	0.2	0.2	-0.1	-1.0	-1.6
General government	0.8	-0.8	-4.0	-4.1	-2.7	-0.1	2.8
NPO	0.2	0.3	0.2	0.2	0.2	0.1	0.2
Household sector	8.8	10.8	9.6	13.3	8.6	8.9	8.5
Overseas sector	-1.9	0.4	-1.3	0.5	-2.0	-3.8	-1.8
Statistical error	-0.1	-0.2	0.2	0.1	0.1	-0.1	-0.6

Source: Economic Planning Agency. *Kokumin Keizai Keisan Nenpo (National Economic Accounts Annual Report)*. Current Issues.

bond issues of the time, however, it was no longer possible to implement such control, and government bonds started to circulate on the bond markets. Bond price formation was deregulated, and soon government bond yields were set at the level of long-term interest rates. This eventually created the condition for the marketing of new financial products like medium-term government bond funds and bond investment trusts. In order to compete with these new products the Japanese banks developed several kinds of products such as certificates of deposit (CD), maturity-designated deposits and money-market certificate (MMC). In this way, they increased their dependence on the unregulated fund raising markets (Nakamura 1995).

The shortage of savings in the public sector, however, contracted in order to reduce the deficit in the public finance in the 1980s. Instead, a surplus of savings in the household sector was directed to the overseas sector. High interest rates in the United States and deregulation of Japanese international financial transactions encouraged the Japanese financial institutions to invest in American securities. During the first half of the 1980s foreign currency deposits and impact loans were deregulated, a yen-based BA market and a Euro-yen lending market were established, investment in overseas securities was deregulated, and foreign-currency-denominated and Euro-yen bonds were authorized (Nakamura 1995). As a result, a huge amount of the Japanese capital export

went to the United States in the 1980s[6] and Japan became the largest creditor in the world. However, as the dollar exchange rate dropped after 1985, the Japanese institutional investors suffered from heavy capital losses in securities investment. The Japanese securities investment in the United States shrank after 1987, because of the increase of the risk premium.

In addition, the Japanese banks increased short-term borrowing in foreign currencies from abroad to extend Impact Loans to non-bank firms in Japan. The Japanese firms not only invested in foreign securities, but also expanded domestic investment. They also increased issue of the Euro-dollar bonds with warrants in the late 1980s when the cost of equity-related bond issues were inexpensive because of high stock prices in Japan (Shibata 1993). Accordingly, the shortage of savings in the overseas sector declined after 1987. Instead, the non-bank corporate sector expanded the shortage of savings again in the late 1980s (Table 1). However, the stable financial structure in the rapid growth period did not reappear.

First, banks increased their dependence on the unregulated fund raising markets (Table 2). This increase caused the rise in the fund raising cost. Then banks had to operate these funds with higher rates. Secondly, large non-financial enterprises diversified their fund raising routes. They could raise lots of funds by issuing securities, especially stocks, convertible bonds, bonds with warrants attached, and yen-denominated foreign bonds in the late 1980s (Table 3). Accordingly banks had to find new borrowers. On one hand, they reduced the shares of loans to manufacturing industries and large firms. On the other hand, they expanded the shares of loans to real estate, finance and insurance industries, and small enterprises. The share of housing loans was also expanded.

In this period, the non-financial corporate sector expanded financial liabilities rapidly because of the increase in borrowings from banks and bond issues. On the other hand, financial assets of this sector expanded faster than its liabilities because of the increase in values of stocks and investment trusts. As a result, the

[6]Japan's foreign securities investments increased after 1984, particularly in 1986, when the restrictions on the Japanese financial institutions investments in foreign bonds were relaxed to stem the rapid rise of the yen exchange rate against the dollar (Shibata 1993).

TABLE 2

OUTSTANDING IN SHORT-TERM MONEY MARKETS

(End of the Year, Trillion Yen, %)

						Ratio				
	1975	1980	1986	1990	1997	1975	1980	1986	1990	1997
Interbank markets	6.7	9.8	23.7	41.1	49.6	78.8	58.7	42.2	24.4	23.9
Call market	2.3	4.1	10.2	24.0	39.3	27.1	24.6	18.1	14.3	18.9
(Uncollateralized)	(-)	(-)	(1.6)	(12.3)	(30.6)	(-)	(-)	(2.8)	(7.3)	(14.8)
Bills market	4.4	5.7	13.5	17.1	10.3	51.8	34.1	24.0	10.2	5.0
Open market	1.8	6.9	32.5	127.2	157.8	21.2	41.3	57.8	75.6	76.1
Bond repo market	1.8	4.5	7.1	6.6	10.0	21.2	26.9	12.6	3.9	4.8
CD	-	2.4	9.9	18.9	38.6	-	14.4	17.6	11.2	18.6
CP	-	-	-	15.8	12.0	-	-	-	9.4	5.8
JOM	-	-	15.5	85.9	97.2	-	-	27.6	51.0	46.9
Total	8.5	16.7	56.2	168.3	207.4	100.0	100.0	100.0	100.0	100.0

Note: JOM means Japan Offshore Market.
Source: BOJ (1998).

financial position of this sector improved. The financial position of the personal sector also improved in this period. While its borrowings expanded enormously, its assets, especially values of stocks and investment trusts increased more than its liabilities did. In addition, tangible assets, in particular, land values increased quickly until the end of the 1980s. Therefore it seems reasonable to suppose that the bulk of bank loans went for speculation on stocks and lands in the late 1980s.

In short, financial deregulation and internationalization made the Japanese financial structure fragile. During the first half of this decade, Japans capital export to the United States supported the strong dollar. After 1987, however, Japans money returned home and went to the highly speculative markets. Personal and business sectors accumulated financial liabilities, depending upon the appreciation of assets. Expansion of bank loans was historically unusual.[7] After the economic bubble burst and prices of stocks

TABLE 3

FUND RAISING BY CORPORATE BUSINESS SECTOR

(Year Average, Trillion Yen, %)

	Total	Borrov -ing	From Private F.I.	From Public F.I.	Secu- rities	Indus- trial Bonds	Stocks	Exter- nal Bonds	CP	For- eign Credit
64-69	5.9	5.0	4.4	0.5	0.7	0.2	0.5	0.0	0.0	0.2
70-75	15.8	13.6	12.4	1.2	1.7	0.7	1.0	0.0	0.0	0.5
76-80	15.1	12.5	10.8	1.7	2.1	0.7	1.2	0.2	0.0	0.4
81-83	22.3	19.3	17.2	2.1	3.4	0.7	1.9	0.8	0.0	-0.4
84-86	29.5	24.0	23.1	1.0	5.3	1.0	2.2	2.1	0.0	0.2
87-89	56.6	35.3	31.2	4.1	14.2	1.8	6.5	5.9	4.4	2.8
90-92	44.1	32.8	25.2	7.6	9.4	3.7	2.1	3.7	-0.3	2.2
93-96	8.6	3.6	0.0	3.7	3.3	4.4	1.1	-2.2	-0.4	2.1
64-69	100.0	84.8	75.7	9.1	12.3	3.8	8.3	0.3	0.0	2.8
70-75	100.0	86.1	78.3	7.8	11.0	4.2	6.5	0.3	0.0	2.9
76-80	100.0	83.0	71.6	11.3	14.2	4.7	7.9	1.6	0.0	2.8
81-83	100.0	86.5	76.9	9.6	15.2	3.0	8.5	3.7	0.0	-1.7
84-86	100.0	81.4	78.1	3.3	18.0	3.5	7.3	7.2	0.0	0.6
87-89	100.0	62.4	55.2	7.3	25.0	3.2	11.5	10.3	7.7	4.9
90-92	100.0	74.3	57.1	17.2	21.3	8.3	4.7	8.3	-0.7	5.0
93-96	100.0	42.2	-0.3	42.5	37.8	51.0	12.5	-25.7	-4.5	24.5

Note: F.I. Means Financial Institutions.
Source: BOJ (1998).

and lands dropped drastically, the financial position of these two sectors deteriorated seriously and banks had to accumulate bad assets.

c) Transformation of Industrial Relations

Nikkeiren, the Japan Federation of Employers Association, advocated "the principle of labor productivity standard," which meant that wage increases were to be controlled within the rise of labor productivity. As large labor unions like IMF.JC accepted this principle, nominal wages rose in accordance with nominal

[7]The ratio of bank loans to the GNP expanded rapidly from 0.52 at the end of 1982 to 0.96 at the end of 1989 in Japan (BOJ 1993). In contrast, the same ratio increased slightly from 0.36 at the end of 1923 to 0.42 at the end of 1928 in the United States (BMS 1943; and HS 1975).

productivity in manufacturing industries since then. On one hand, the introduction of this principle was an important factor which prevented stagflation from proceeding. On the other hand, however, this principle was a remote cause of land speculation.

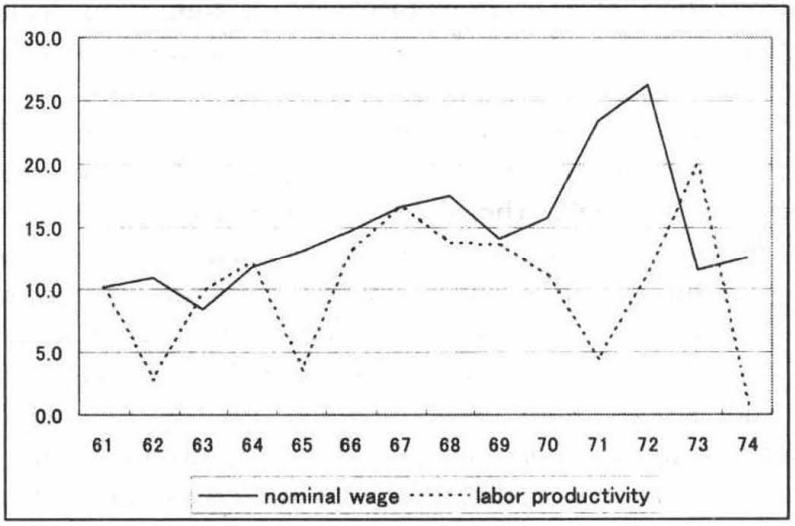
First, latent capital gains of lands are not included in the production of added value, though services on the land transactions are included in GDP. Therefore, the increases in latent gains of lands are not reflected in the wage increases. For example, while the book value of lands owned by the corporate sector was 110.5 trillion-yen in 1988, the value of latent gains was 342 trillion-yen, which was almost equivalent to the GDP. If latent capital gains of lands and stocks had been included in the denominator, the distribution rate of labor income might have dropped, although this rate did not change really after the oil crisis. Secondly, even if current profit rates of corporations had been used as a standard of wage increases, the same problem would have occurred. Because latent capital gains of lands were not included in profits and interests of borrowings for buying lands were deducted from profits, nominal profits became compressed. Therefore borrowing to buy lands restrained wage increases (Kaneko 1991).[8]

As mentioned above, the Japanese bubble economy in the late 1980s had several similar characteristics to the American bubble economy in the late 1920s. Instability of the international monetary system was a salient cause of both bubble economies. The American easing of monetary policy to support the fragile pound in 1927 accelerated stock speculation in the United States. The Japanese easy-money policy to sustain the weak dollar in the late 1980s stimulated speculation on lands and stocks. Accordingly mistakes of monetary policy were not important factors in both bubble economies.[9]

Secondly, fragility of financial structure was also a remarkable factor in both bubble economies. Because non-financial firms reduced the debt equity ratio in accordance with the decline in

[8]The growth rate of nominal wage exceeded the growth rate of labor productivity in the rapid growth period (Figure 1a). In contrast, the former exceeded the latter in the second half of the 1980s (Figure 1b).

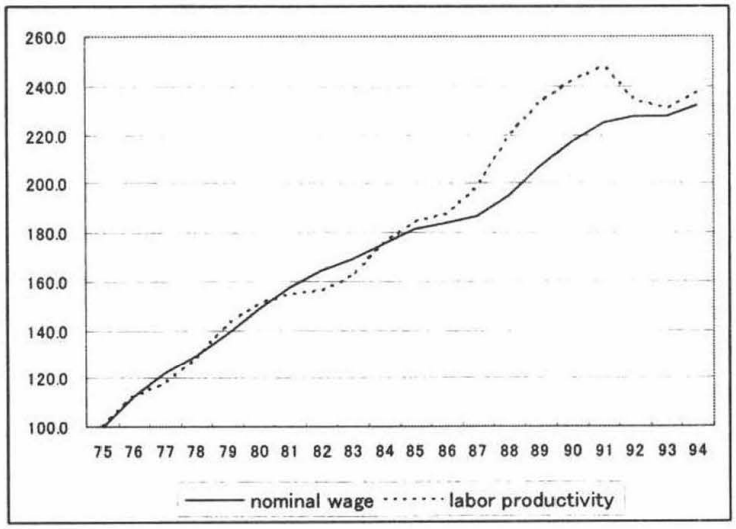
[9]For Example, Horiuchi (1998) criticized the Japanese policy mix of easy-money policy and tight fiscal policy. He overlooked that Japanese authorities had to adopt this policy mix in order to support the dollar exchange rate against the yen from 1987 to 1989.



Note: Manufacturing industries.
Source: BOJ (1998).

FIGURE 1A

THE GROWTH RATE OF NOMINAL WAGE AND LABOR PRODUCTIVITY (ANNUAL RATE)



Note: Manufacturing industries.
Source: BOJ (1998).

FIGURE 1B

INDEXES OF NOMINAL WAGE AND LABOR PRODUCTIVITY (1975 AVERAGE=100)

their fixed investment, the American banks lost influential borrowers. Then, their assets were shifted from commercial loans to more speculative assets, such as real estate mortgage loans, security collateral loans, and securities investments in the late 1920s. In the late 1980s the Japanese banks also shifted their assets to speculative ones, as they lost good borrowers.

Thirdly, unequal distribution of wealth occurred in both bubble economies. In the late 1920s, as the increase rate of labor productivity exceeded that of wages, the share of profits in added values increased in the United States. As a result, dividend payments expanded and stock prices appreciated. In contrast, in the 1980s the distribution rate of labor income did not decline and the distribution rate of profits did not increase in Japan. However, the latent capital gains of stocks and lands owned by corporate firms expanded and the unequal distribution of assets was developed in the late 1980s.

Although there were three similarities in both bubble economies, there were also several differences between the two bubble economies. First, the United States had a special privilege to finance its balance of payments deficits by paying its domestic currency after the 1970s. As a result, it accumulated twin deficits in the 1980s and created the excessive supply of liquidity in the world. In contrast, the UK did not have same kind of privilege, because it adopted the gold standard in the 1920s. Therefore, the speculation overheated more excessively in the 1980s than in the 1920s in the world.

Secondly, the trend of deregulation and globalization in the financial markets made the financial system fragile and speculative after the 1970s. The financial system of "regulation and relief," which was created in the New Deal era, was transformed to that of "deregulation and relief" through the financial reforms. In fact, the system of "deregulation and relief" prevented the financial crisis from occurring. On the other hand, however, this system caused the problem of moral hazard and accelerated speculation in the 1980s both in the United States and in the world. By contrast, there existed the financial system of "deregulation and limited relief" in the United States during the second decade of this century.

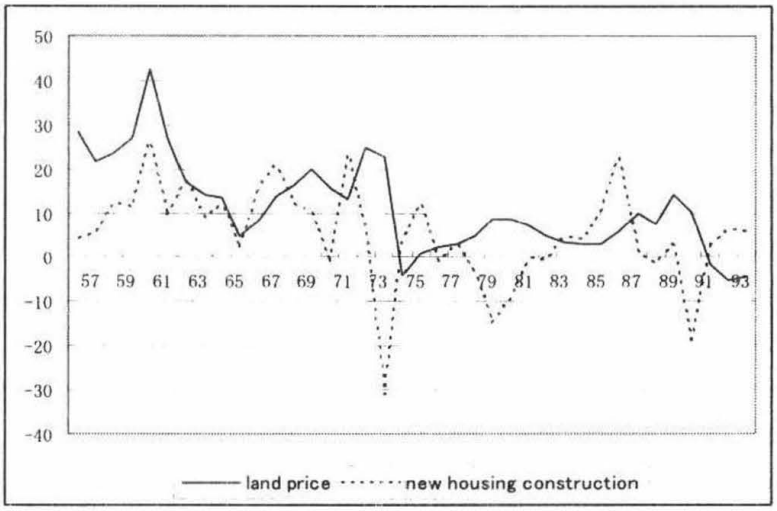
Thirdly, the expansion of the Japanese banking loans in the 1980s was much larger than that of the American banking loans in

the 1920s and the 1980s. In addition, speculations were developed in the different markets between in the United States and in Japan. In the United States, speculations were developed in stock and commercial real estate markets in the 1920s and the 1980s. By contrast, in Japan, speculations were developed in land markets in the 1980s. Why did the Japanese banks expand their loans rapidly in the 1980s? Why was land speculation overheated in this period? Let us examine other domestic institutional causes of the Japanese bubble economy in the following section.

d) Other Domestic Institutional Causes of the Japanese Bubble Economy

As a beginning, we will examine several features of land markets in the rapid growth period. First, the growth rate of real GNP followed the growth rate of real land prices with a short delay until the 1960s. Secondly, the growth rate of real land prices and real anticipated interest rates fluctuated in the same pattern from the 1960s to the oil shock. Thirdly, the prices of housing land almost correlated positively with new housing constructions (Figure 2). Judging from the above there existed the following cycle in the rapid growth period. (1) Firms invested in plant and equipment and created the economic growth under the conditions of an easy-money policy. (2) Income growth increased the demand for personally owned houses. (3) This rise in the demand for houses increased the GNP and boosted land prices up.

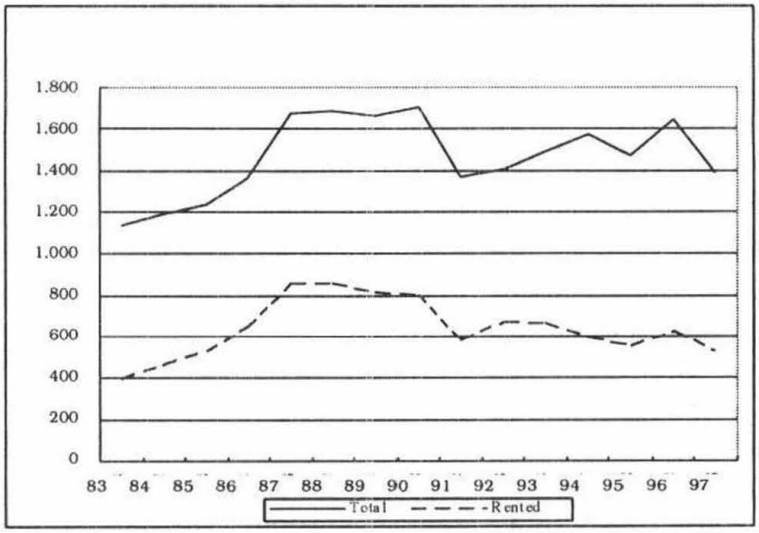
This cycle was transformed in the early 1970s. (1) The growth rate of real land price correlated negatively with the growth rate of real GNP until 1985. (2) The growth rate of real land prices also correlated negatively with the anticipated real interest rate until 1985. (3) New housing construction correlated negatively with the land prices after 1970. (4) The construction of houses for rent led to the rise in housing construction after 1986 (Figure 3). As mentioned above, we may say that the demand for personally owned houses was not a main cause of the rise in land prices after the 1970s. Then, what was the main cause of the rise in land prices? Judging from the fact that the corporate firms purchase of lands positively correlated with the growth rate of land prices, it seems reasonable to suppose that corporate firms purchases of lands led to the rise in land prices, which influenced housing



Source: BOJ (1998).

FIGURE 2

LAND PRICE AND NEW HOUSING CONSTRUCTION (ANNUAL CHANGE RATE)



Source: Ministry of Construction.

FIGURE 3

NEW DWELLING CONSTRUCTION STARTED (1,000 UNITS)

construction after the 1970s. Corporate firms reduced investment in plant and equipment, and expanded purchases of lands after the oil shock. Considering this, then, let us examine the institutional factors, which encouraged corporate firms to expand the purchases of lands.

The first institutional factor was the Japanese cross-shareholding system. The Japanese firms created this system in order to stand against the trend of foreign mergers and acquisitions, and resulted in shutting out the influence of foreign shareholders. Accordingly the incentive for the Japanese firms to increase the ratio of short-term profit to investment and dividend payments to shareholders was reduced. Growth of firms assets itself was the primary objective. As a result, the firms compressed the short-term profits to expand their assets. Investment in land assets was the best way for this purpose, because of belief in continuous rise of land values.

The tax system was the second institutional factor. As the interest payments of borrowing for land purchases could be accounted as losses, firms could compress profits and save in corporation tax payments. In addition, latent capital gains were not taxed, as the prime cost was used in the accounting. As a result, the firms could strengthen their fund raising power on the bases of these latent capital gains. After December 1988, the interest payments of borrowing were not accounted as losses for four years after the purchases of unused lands. The restriction of land mortgage loans was also strengthened. However, the firms continued to purchase lands to construct corporate welfare facilities because the fringe benefits were not taxed.

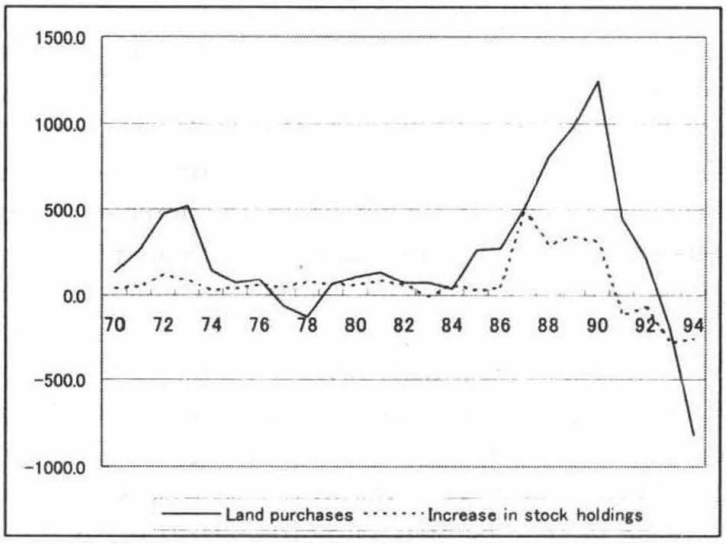
Furthermore, when firms sold lands to other firms with repurchase agreement after two or three years, sales revenue was treated as borrowing. Many firms used this way to be exempted from capital gains tax on land transfer and inheritance tax. As a result, deficit corporate enterprises increased rapidly in the 1980s (Kaneko 1991; and Kaneko and Mori 1993). Not only corporate firms but also individuals used these ways to save in inheritance tax payments. Although stocks were evaluated on the basis of market values, lands were evaluated on the basis of appraised values, which were about 70 per cent of market values. In addition, small-sized lands (smaller than 200 square meters) were evaluated as a half of appraised values. Accordingly, it was profitable to

purchase small-sized lands in order to save in inheritance tax payments.

Thirdly, there existed the system that latent capital gains of lands push stock prices up. The stock prices of firms were raised by the increase in latent capital gains of lands that they owned. This mechanism made the cross-shareholding system advantageous. Fourthly, there existed the system that an increase in latent capital gains of stocks expanded banks ability of credit creation. When the BIS capital adequacy guidelines were adapted in Japan, the Japanese authorities decided that the percentages of latent capital gains of stocks held by banks were to be included in their own capital. We can call this system the land standard instead of the gold standard . As a result, the following speculative cycle was developed in the late 1980s. 〈Rise in land prices→increase in stock prices→increase in banks own capital→expansion of land mortgage loans→rise in land prices〉.

The fifth institutional factor of the bubble economy was the Japanese welfare system that included weak land and housing policies. Because of the underdeveloped social security system, in particular, the insufficient pension system, the Japanese wanted to own their land as a safe and profitable asset. As the restrictions of land use in city planning were unsatisfactory in Japan, prices of lands for housing rose in the cities. In addition, the Japanese housing policies encouraged people to own their houses. Construction of public houses and public subsidies to house rent were unsatisfactory. After the 1970s the policy encouraging people to purchase their houses was strengthened. The Public Corporation increased construction of apartment houses for sale in lots. The Housing Finance Corporation expanded housing loans. These policies accelerated land prices and caused the Land Myth that land prices never declined.

Under these domestic institutions mentioned above, small non-manufacturing enterprises expanded their borrowing in order to purchase lands. In particular, small firms, which had less than a hundred million yen of capital in the service industries, including commodity lease and finance industries, aggressively increased land purchases. Not only corporate enterprises but also individuals increased their demand of real estate assets by the end of the 1980s (Figure 4). They increased investment in one-room apartment houses for rent in order to save in their tax payments in this



Source: Economic Planning Agency. *Annual Report on National Accounts*. 1982, 1996.

FIGURE 4

LAND PURCHASES AND NET INCREASE IN STOCK HOLDINGS BY NON-FINANCIAL CORPORATE BUSINESS SECTOR (TRILLION YEN)

period.[10]

The Japanese domestic institutions mentioned above supported the strength of the Japanese economy after the oil shock. First, the cross-shareholding system could suppress the pressure of shareholders to ask for an increase in short term profits. As a result, corporate firms could make long term investment plans. Secondly, corporate firms used latent capital gains of stocks and lands as a shock absorber. For example, they could mitigate the decline in their profits by realizing latent capital gains during the oil shock and the high-yen recession. Thirdly, they could mitigate the deterioration of their financial position by the increase in latent capital gains even if their earnings declined.

These Japanese domestic institutions helped the Japanese economy to recover from the high-yen recession and created boom economy by the end of the 1980s. After the bubble burst, however,

[10]The numbers of new housing construction increased in the late 1980s (Figure 3). The rate of increase in construction of houses for rent, in particular, smaller than 30 square meters, was very high (EPA 1993).

they became the sources of the vicious circle. We will examine the mechanism of overheating and breakdown of the bubble economy.

D. Overheating and Breakdown of the Bubble Economy

As we have seen, the institutional causes of the Japanese bubble economy in the late 1980s were following. (1) Instability of the international monetary system, (2) transformation of financial institutions from "regulation and relief" to "deregulation and relief," (3) transformation of industrial relations and unequal distribution of wealth, (4) the Japanese domestic institutions such as the cross-shareholding system, the tax system to stimulating borrowing for land speculation, "the land standard," and the underdeveloped welfare system. The first three causes are similar to those of the Great Depression to some extent. On the other hand, however, the trend of deregulation and globalization played an important part in the first two causes. In addition, the fourth cause was peculiar to Japan and the source of the extraordinary speculation in lands.

The increase in latent capital gains made the financial positions of household, corporate, and banking sectors much more favorable and accelerated the expansion of real economy. Households increased their liabilities in order to expand residential investment and consumption of durable goods.[11] Non-financial corporate firms also accumulated their liabilities to expand their investment in assets including lands and stocks. The appreciation of their assets made their financial position favorable. Small enterprises, particularly small non-manufacturing firms including real estate companies, increased liabilities to purchase lands and stocks. In addition, corporate firms expanded capacity-increasing investment in plant and equipment in the second half of this decade because of a rise in effective demand. Banks expanded their loans, as the increase in latent capital gains of stocks enlarged their credit creation power.

In this way, overheating of the bubble economy accelerated the expansion of the real economy and the accumulation of capital stocks. Conversely, the expansion of the real economy supported

[11]Household propensity to consume rose from 83.9% in 1986 to 85.9 in 1990 (BOJ 1993, p. 38). In addition, the annual growth rate of consumer installment credit outstanding at commercial banks increased from 27.0% in 1985 to 81.3% in 1988 (BOJ 1990, p. 73).

the rise in prices of stocks and lands. This short-term beneficial cycle was developed. On the other hand, however, unequal distribution of assets was expanded. This inequality made the people who had no land assets frustrated and increased social conflict. Under these conditions, a series of tight money policies were adopted to restrict loans for land speculation and then the prices of lands and stocks began to decline.

Asset deflation caused debt deflation and the following vicious circle was developed. 〈Decline of land prices→depreciation of firms' tangible assets→decline of stock prices→depreciation of banks' capital (increase in banks bad assets)→decline in bank loans→ decline in effective demand→deterioration of recession→decline in asset prices→deterioration of firms' and households' financial positions→decline in effective demand〉. As the speculation in stocks and lands stimulated the expansion of investment and consumption and accelerated the accumulation of capital stocks by the end of 1980s, the burst of the bubble economy made the volume of the capital stocks excessive. The necessity to adjust capital stocks and balance sheets of firms and households was an important factor that worsened the ongoing recession.

Not only banks and debtor firms but also the financial authorities acted to conceal bad assets. As a result, a financial crisis did not occur. However, the disposal of bad assets was prolonged. For example, the debtor firms made paper companies and shifted debts to them. Banks and the financial authorities gave a tacit approval to manipulate their balance sheets. The increase in foreign fear of concealed bad assets caused a decline in prices of bank stocks and increased the "Japan premium" in the Euro-dollar markets. The deterioration of fund raising conditions for the Japanese banks caused a huge supply of the yen funds by the Bank of Japan, which were converted to the dollar funds. As a result, the yen exchange rate against the dollar depreciated after 1995. This depreciation of the yen was one of the factors that precipitated the financial crises in the Asian countries, which increased bad assets in the Japanese banks.

IV. Conclusion

The institutional causes of the bubble economy in Japan in the

late 1980s follow: (1) instability of the international monetary system, (2) transformation of the financial system from "regulation and relief" to "deregulation and relief," (3) transformation of industrial relations and unequal distribution of wealth, (4) the Japanese domestic institutions such as the cross-shareholding system, the tax system to stimulate borrowing for land speculation, "the land standard," and the underdeveloped welfare system.

These institutional factors are currently obstructing economic recovery in this Heisei era depression. (1) Financial crises in the Asian countries had a negative impact on the Japanese economy. (2) On one hand, the financial system of "deregulation and relief" prevented the financial crisis. On the other hand, this system prolonged the disposal of bad assets and prevented the Japanese economy from recovering. (3) The transformation of industrial relations to the superiority of management over labor reduced demand for consumption. The fear of unemployment and wage decline reduced consumption by households. This decline stagnated the Japanese economy. (4) The cross-shareholding system created a heavy burden on the Japanese corporate firms. The decline in stock prices deteriorated the financial positions of the Japanese firms. The decline in stock prices also reduced bank credit in the "land standard." The underdeveloped welfare system increased savings and reduced consumption, which accelerated stagnation during this depression.

Therefore, we need to restructure these international and domestic institutions in order to recover from the current depression. (1) We need a stable international monetary system. (2) We can not assume that the financial system of "deregulation and no relief" or "deregulation and limited relief," in other words, "deregulation and self-responsibility" will be able to work well. According to the studies of American economic and financial history, the system of "deregulation and no relief" led to the financial crisis of 1907, and the system of "deregulation and limited relief" resulted in the financial crisis of 1929. We need to restructure the system of "regulation and relief." (3) We have to transform industrial relations to one of a cooperative system. (4) The cross-shareholding system will be and should be gradually disassembled. "The land standard" system should be removed. The current welfare system also should be reformed in order to rebuild the faith by the Japanese in the future of this system.

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