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Corporate Investment and Restructuring

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This chapter discusses corporate investment in the Japanese economy over the last few decades and the policy prescriptions that are now required to induce efficient investment. The chapter complements that by Hashimoto and Higuchi, since both discuss the problems at the real side of the Japanese economy and their possible solutions. The present chapter is closely related to that by Hoshi and Kashyap; while they deal with the nonperforming loan problem from the perspective of financial institutions, I discuss the problem here from the perspective of companies.

Macroeconomic issues are discussed first, followed by microeconomic issues. The next section assesses aggregate nonpublic investment in the Japanese economy. Section 2 discusses the necessity of structural change and the absence of 'the cleansing effect' of the recession in the postbubble economy period —— the reallocation resources to more efficient uses as companies restructure or close down and workers shift to other jobs. In the traditional Japanese 'main bank' system in the 1960s and 70s, banks played a key role in reallocating capital to more productive investment opportunities and in restructuring old companies. However, in the second half of the 1990s, the nonperforming loan problem overwhelmed and paralyzed both the banks and any prospects for the development and implementation of a sustained corporate restructuring policy. In Section 3, several individual corporate restructuring cases are examined and the reasons that the restructuring process in Japan has been so ineffective and inefficient are discussed. Section 4 draws policy implications and concludes the chapter.

1 Aggregate investment

Because the non-performing loan problem has been present for the last 10 years, it is tempting to describe the current situation of the Japanese economy in terms of a conventional credit crunch. However, the reality is considerably more complicated. In Figure 1, Japanese and US private investment since the 1980s are shown. Panel (a) of Figure 1 shows the growth rates of real nonresidential investment in the two countries. Instead of showing actual investment growth, GDP growth rates have been subtracted from investment growth rates so that unusual increases and declines in private

investment are more apparent. In Panel (a), the slowing of Japanese investment in 1992−94 is very significant. This should be considered as a reflection of the extremely high growth rates of 1988−90 rather than an autonomous decline. The depth of this trough of investment growth is not significantly different from the decline in investment that the US experienced in 2001−02. We know that private investment is generally more volatile and far more cyclical than other components of GDP. Thus, the decline of private investment in the 1990s is more likely to have resulted from a slowing in output growth, not the other way around.

This is more apparent in Panel (b), in which private investment is shown as a percentage of GDP. The aggregate investment made by the private sector in Japan apparently declined during the post bubble economy, and the level of private nonresidential investment has hovered around 15% of GDP. Despite this, current non-residential investment is at the same level as during the first half of the 80s. Japanese investment in the 90s was at higher levels than during the recent US peak in 2000. Although a direct comparison of aggregate investment levels in different countries is difficult, there is no empirical evidence that the slowing of private investment in the 90s was anything more than a downturn of the type that is typically associated with recession. Thus, it is difficult to argue that the Japanese economy has suffered from structural underinvestment.

[Figure 1 here]

On the other hand, the return to capital investment has been quite low in the post bubble period. As shown in Figure 2, panel (A), taken from Ito and Fukao (2003), the real rate of return on capital based on macro data has been diminishing since the early 1970s and has been particularly low since 1991. At the same time, the capital-output ratio continued to increase at a similar pace between the 1970s and the 1990s. More precisely, the upward trend in the capital-output ratio flattened in the 1980s, relative to 1970s, and then picked up again in the 1990s. This evidence is consistent with the argument that aggregate investment did not slow during the 1990s. In panel (B) of Figure 2, I present the evidence based on microeconomic data, the Return on Equity

(ROE). There has been more variation in ROE data than in the GDP/JIP database data, but the decline in the ROE in the 1990s is obvious. It is thus possible to argue that the Japanese economy's real problem is overinvestment and that investment should be further reduced.

[Figure 2 here]

For additional evidences, in Figure 3 and Figure 4, I show the diffusion indexes for the 'lending attitudes of financial institutions' and 'excess production capacity' from the Bank of Japan's *Short-term Economic Survey of All Enterprises* (the 'Tankan' survey). The graph of lending attitudes in Figure 3 suggests that there was a credit crunch only in 1998–99, following the series of spectacular bank failures in late 1997. Except for this limited period, there is no sign of a serious credit crunch. (See Woo (2003) for more detailed evidence on the absence of a credit crunch in the Japanese economy before 1997 and Watanabe (2003) for evidence of a credit crunch in 1998–99.) The slowing of investment in 1992–94 was part of a decline typically associated with recession. However, Figure 4 implies that excess production capacity has been a problem for the Japanese economy since 1992, immediately after the collapse of the bubble economy. There have been cyclical movements, but the underlying level of excess capacity in the post bubble period has clearly been higher than it was during the 1980s.

[Figures 3 and 4 here]

Overall, this evidence suggests that Japanese investment did not slow following the collapse of the bubble economy. However, the return on capital invested has been at a historically low level in this period. The only explanation that can reconcile these two empirical facts is that Japanese firms and their creditors have made bad investment decisions through the 1990s. In other words, the Japanese economy has been suffering from the misallocation of capital rather than from insufficient capital investment.

As already explained, if we take a short-term or business-cycle viewpoint, it is natural to suspect that *underinvestment* has been the problem. However, a long-term view suggests that *overinvestment* is more likely to be the main problem for the

Japanese economy. In the rapid growth in the 1950 and 60s, Japanese economic growth was based on the accumulation of physical capital and the improvement of human capital. By the beginning of the 1980s, Japan had already accumulated a substantial level of per-capita physical capital stock. The mechanism for the rapid growth in the 1950 and 60s had lost its effectiveness because Japan had caught up with the West (Fukao, Inui, Kawai, and Miyagawa, 2003b). As a result, the real rate of return on capital based on macro data, in panel (A) of Figure 2, has been diminishing since the early 1970s.

There was already very little room left in the early 1980s for Japan to grow by simply adapting to imported technology. Accordingly, it is realistic to focus on the lack of structural change since that time, and on why Japan could not switch more quickly from capital-intensive to R&D-intensive growth. Given the degree of industrialization and the level of per-capita GDP in Japan, I contend that its industrial structure should have changed more rapidly and the proportional size of the service sector should have increased more dramatically over the past twenty years. This view emphasizes the lack of structural reform (*Ko-zo kaikaku*) during this period as being the root of many of Japan's current economic problems. Fukao, Inui, Kawai, and Miyagawa (2003B) and Miyagawa (2003) have provided detailed accounts of the associated productivity slowdown and the absence of industrial structure change, with respect to sectoral productivity data. Hayashi and Prescott (2002) are among others who examined the recent productivity decline in Japan and argued for the necessity of structural change for a different reason[1].

[1] The empirical results of Fukao et al. (2003b) differ from those of Hayashi and Prescott (2002) because (i) Fukao et al. adjust for improvements in labor quality and reductions in working hours; and (ii) Hayashi and Prescott include the external assets of the private sector in 'private capital stock.' As a result, the decline of Japanese productivity in the 1990s, as calculated by Fukao et al., is smaller than that calculated by Hayashi and Prescott. However, some researchers argue that the productivity slowdown in Japan during the 1990s was even milder than implied by the calculations of Fukao et al. Jorgenson and Motohashi (2003) calculated Japanese productivity growth, treating real estate as a production input and using US relative prices for IT products, to arrive at an even higher rate of productivity growth than Fukao et. al.'s estimate. See also Kawamoto (2004) for evidence against a productivity decline in the 1990s.

A related literature emphasizes the role of the business cycle, particularly recessions, in the process of structural change and sectoral shifts[2]. Caballero and Hammour (1994, 1996) analyzed such a mechanism on the production side. The title of their paper 'the cleansing effect of recessions' (Caballero and Hammour, [1994]) contains the most important parts of their analysis. Caballero, Kashyap, and Hoshi (2003) brought such a point of view to bear in their analysis of the nonperforming loans problem and the current inefficient patterns of investment in the Japanese economy. The position I take here and in the following sections is close to those of these studies. However, my focus here is to ask why structural change has been so slow in Japan since the 1990s and why the cleansing effect of recession has been so ineffective, and to search for possible remedies for the problem.

2 The reallocation of resources and the nonperforming loan problem

Various structural impediments are believed to be responsible for the inefficiency of resource reallocation in the Japanese economy and hence its chronic stagnation. Such structural problems include various regulations, inflexible long-term labor relations, weak shareholder discipline in corporate governance, and the malfunctioning of the financial system, particularly since the bursting of the bubble economy in the early 1990s. Structural impediments in goods market —— such as regulations that block the entry of large chain stores into the retail industry —— are pressing issues. However, it is unlikely that the prolonged recession has been caused by such microeconomic stasis alone. Accordingly, labor issues and the misallocation of capital are central to my discussion of possible solutions to the Japanese economic malaise. In the remainder of this section and in the next section, I will examine the malfunctioning of the resource allocation mechanism in Japanese capital investment.

The graph in Figure 5 plots changes in capital stock against productivity growth. The sectoral capital and productivity values used in the following discussion are from the

[2] Blanchard and Diamond (1990) and Davis and Haltwinger (1990, 1992) initiated this type of research on the labor market, and in particular, what they referred to as 'job creation and job destruction'. See Genda (1998) for a similar analysis of the Japanese labor market.

Japan Industry Productivity (JIP) Database, which contains annual information on 84 sectors—including 49 nonmanufacturing sectors—from 1970 to 1998. These sectors cover the whole Japanese economy[3]. In the following analysis, public sector, agricultural sector, and semipublic industries (electricity, gas, and water) are excluded from the sample to focus on the mechanism of resource allocation in the private sector. Sample periods of 1985−91 and 1992−98 were chosen. If we ignore one outlier, namely the leasing industry, we see no clear relationships or perhaps slightly negative relationships between the levels of capital stock and productivity for both sample periods. And the negative relationship between two are little stronger in the 1992–98 sample. Table 1 shows the fraction of industries experiencing an increase of capital and lower productivity growth at the same time. Apparently, in the 1992−98 sample, there was a tendency for industries with lower productivity to invest more capital. Perhaps Japanese economy has been suffering from the misallocation of capital investment since the 1970s. But, the problem got worse in the post bubble period.

[Figure 5 and Table 1 here]

To assess the change in investment patterns quantitatively, the following reallocation measure for capital investment was calculated using the data of JIP Database:

$$\sigma_t = \left(S_{i,t}\left(G_{i,t} - G_{A,t}\right)^2\right)^{1/2},$$

where $G_{i,t}$ = growth rate of input in Sector i, $G_{A,t}$ = growth rate of the total input, and $S_{i,t}$ = the share of input in Sector i.

If the input here is labor, σ_t corresponds to the measure that Lilien (1982) proposed for measuring labor mobility between the sectors[4]. Saita and Sekine (2003) first used this measure to assess the ability of funds to be reallocated through the banking sector.

[3] This database was originally compiled by a group of economists led by Kyoji Fukao for the research project *Japan's Potential Growth* at the Economic and Social Research Institute, Cabinet Office, Government of Japan. See Fukao, Inui, Kawai, and Miyagawa (2003A) for detailed documentation. The data are available from: http://www.esri.go.jp/en/archive/bun/abstract/bun170index-e.html

[4] The basic idea is that if the reallocation of labor is time-consuming, sector-specific shocks cause a temporary increase in unemployment. Lilien (1982) argued that this simple measure of the size of sector-specific disturbances appeared to account for a large proportion of the variation in aggregate investment.

They show that the σ_t measure of bank lending declined significantly in the post bubble period and argue that it is inefficiency in resource reallocation rather than a lack of investment that caused the persistent stagnation of Japanese output in the 1990s. See also Miyagawa (2003) and Ohtani, Shiratsuka, and Nakakuki (2004) for the related empirical analyses on misallocation resources.

Figure 6 applies this measure to the real capital stock of each industry in the JIP database. Panel (a) of Figure 6 suggests that the reallocation of capital suddenly declined in 1991−92, and throughout the 1990s never fully regained its previous level. In Panel (b), the manufacturing and service sectors are displayed separately[5]. This graph suggests that the lack of reallocation of capital has been considerably greater in the manufacturing sector, a difference between the two sectors that has persisted since the early 1980s. Panel (b) reveals that the increase of reallocation in 1997–98 happened mostly in the service sector. On the other hand, the lack of 'creative destruction' was a problem of Japanese manufacturing even before the bubble economy.

[Figure 6 here]

Next, we look at the same problem of resource reallocation with respect to the role of the financial system. One of the problems believed to be responsible for the malfunction of the Japanese banking system in the 90s was the lending made by banks to allow their borrowers to survive to avoid having their loans recorded as realized losses. This type of loan, the '*Oi-Gashi*' ('additional lending'), is translated into English as 'evergreening' or 'forbearance' lending.

Table 2 shows the average growth rates of bank borrowings for the construction and real-estate industries, and the total for all industries excluding these two. The construction and real-estate industries were the most heavily involved in the real-estate speculation of the late 1980s and were the most severely hit by the contraction of bank

[5] There are several ways to calculate these measures separately. For Figure 6, they were calculated using the aggregate $G_{A,t}$, and $S_{i,t}$ in the manufacturing and in non-manufacturing sectors, respectively. However, the results were almost identical whether using each sector's growth for $G_{A,t}$ or shares in all industries for $S_{i,t}$.

loans in the 1990s. The data for borrowing are taken from *Financial statements statistics of corporations by industry*, published by the Ministry of Finance. The sample periods are 1991–97 and 1991–2002. The former corresponds to the period before the banking panic in late 1997. While the growth rates of the two industries exceed the total of other industries, even in the 1991–2002 sample, the differences are far more significant in the 1991–97 sample. Accordingly, there appears to have been evergreening in those two industries. A number of other studies, including Hosono and Sakuragawa (2003), Peek and Rosengren (2003), Sekine, Kobayashi, and Saita (2003), and Watanabe (2004) also provide evidence that in the post-bubble period there was evergreening in lending associated with real estate.

[Table 2 here]

The evidence examined in this section is illustrative rather than decisive. However, along with the related existing studies mentioned in this section, it suggests the following. First, there is little evidence that the slowdown in business investment from 1991 to 1997 was caused by a credit crunch. On the other hand, there had already been a significant decline in the ability of the financial system to reallocate resources between 1991 and 1997. This was consistent with the argument based on macro data in the previous section that the Japanese economy has been suffering from a misallocation of resources rather than insufficient investment. Second, the series of banking failures in the winter of 1997 caused a sharp decline in bank lending and physical investment in 1998–99. This is the only period in which the credit-crunch story might apply.

3 Mobilizing resources: recent corporate restructuring in Japan

In the previous section, I argued that it is the misallocation rather than the shortage of investment that contributes to the current difficulties of the Japanese economy throughout the 1990s. Bank loans have drained into many underperforming or insolvent companies to save them from liquidation at the expense of new and productive firms. To change this pattern is not an easy task, since capital and labor are complementary

inputs of production. Such change will be accompanied by the problems with respect to labor relations and corporate governance[6].

In this section, rather than deal with all of these problems simultaneously, we focus on the immediate policy problem —— the current state of corporate restructuring in Japan. Labor relations and corporate governance are mentioned only insofar as they are relevant to this discussion of corporate restructuring.

3.1 Changing Japanese corporate governance: background[7]

Japanese corporate restructuring has been significantly different since the mid 1990s compared with the era of the main bank system in the 1960s and 1970s. See Sheard (1994) for detailed accounts of corporate restructuring under the conventional main bank system. First, under the main bank system in past, the banks were much more powerful and exerted more influence on borrowers firms. Even though there were a number of cases of financial distress immediately after the first oil crisis in the mid 1970s, total amount of non-performing loans is much smaller relative to total number in the 1970s than the 1990s[8]. Also the banks' financial positions were much sounder. The banks maintained significantly more diversified portfolios then than they do today, because in that period banks were the only providers of external funds to most Japanese companies. Through the 1980s and 1990s, major Japanese firms with a solid reputation switched from the banks to the capital markets for their funding (Campbell and Hamao 1994; Hoshi, Kashyap, and Scharfstein, 1993). In other words, Japanese banks have now lost their best borrowers and are left with companies that are not strong enough to raise funds in the markets.

[6] For example, Ahmadjian and Robbins (2002) report that the presence of foreign shareholders accelerated the restructuring of Japanese companies.

[7] See Patrick (2003) for a general discussion on the recent changes in Japanese corporate governance.

[8] While the average number of bankruptcies was similar (14,855 for 1974–88, 16,149 for 1995–99), the average total debts of bankrupt companies was five times larger in the second half of the 1990s than in the period straight after the first oil crisis in the 1970s (2,257 billion yen for 1974–88, 11,756 billion yen for 1995–99).

Second, in corporate restructuring before the bubble economy, a main bank would act as an arbitrator or a judge. Banks were, in principle, good guys. The causes of companies' financial difficulties were either some exogenous shock or mismanagement. The case of exogenous shock is exemplified by the recessions following the first oil crisis in the mid 1970s and in the sharp appreciation of the Japanese yen in 1985–86. A well-known example of mismanagement case is the first rescue of Mazda in the mid 1970s by the Sumitomo Bank (Sheard, 1994). In such cases, a main bank would intervene and replace existing management if it was necessary, mainly to protect the interests of creditors including the main bank itself and partly for the benefit of the lifetime employees of the company. In post bubble corporate restructuring, the banks have been somewhat, and often largely, responsible for the wrongdoings that have caused companies' financial troubles[9]. Hence, banks have become both the source and salvation of such problems, and have found itself increasingly difficult to play the role of independent arbitrator as they did under the main bank system. For these reasons, bank-led corporate restructuring has been very ineffective and slow since the 1990s.

As the banks could not play their role of independent arbitrator any more, there was no party outside management-employee and lender-borrower relations to offer advice on and lead corporate restructuring; there have been virtually no restructuring business in Japan until several years ago. This is because there had been few bankruptcies of major Japanese companies for a long time; those that did occur would have been managed by the main banks.

3.2 Policy measures taken to facilitate efficient corporate restructuring

As the stagnation of the economy continued in the 1990s, pressure built on the government to respond to the increase of financially distressed firms and bankruptcies. As shown in Figure 7, while the increase in the number of bankruptcies was quite mild,

[9] In hindsight, Japanese banks might have been wise to restructure their traditional business practices and to follow the strategies of US and European financial institutions in the 1980s, to avoid losing their best borrowers. Instead, they participated in the real-estate boom. In the second half of the 1980s, Japanese banks seriously neglected credit analysis and monitoring. These factors are the source of the current nonperforming loans problem.

the total amount of debt increased significantly in the second half of 1990s[10]. This suggests that larger corporations have gone bankrupt since the second half of the 1990s.

[Figure 7 here]

The first response was the long-awaited reform of the legal system. Japanese insolvency law system has its origins in the post-WWII reconstruction period. Since then, there was no major change for nearly fifty years, and the lack of legal procedure to facilitate the rehabilitation and restructuring of struggled firms (procedures corresponds to those outlined in Chapter 11 for the United States) was seen by Japanese legal professionals as a major deficiency. However, this did not raise serious concerns until the bubble economy bursts in the early 1990s, because problems could be solved by private bank-led restructuring processes. However, following the Jusen (Housing Loan Corporations) scandal in 1995, the need for Chapter 11–type procedures was again acknowledged[11]. Fundamental reform of Japanese insolvency law system began in 1996. A further increase in bankruptcies following the financial crisis of late 1997 accelerated this reform process (Aoyama, 2000).

The new *Civil Rehabilitation Law* (Minji Saisei Ho), which replaced the old *Composition Law* (Wagi ho), is the first part of a comprehensive reform of Japanese insolvency law regime. The Civil Rehabilitation Law enabled DIP (debtor in possession) finance and speeded up the procedure prior to rehabilitation process being admitted by the court. The Japanese Diet passed the law in December 1999 and the law came into effect on April 2000. The Civil Rehabilitation Law prepared the legal infrastructure that facilitates quick and efficient corporate restructuring outside the private main–bank–led restructuring process (Yamamoto 2003). As shown in Figure 8, the number of mergers and acquisitions increased significantly between 2000 and 2001,

[10] The numbers of debts and the total amount of debt in Figure 8 include both financial and non-financial corporations. The total amount of debts peaked in year 2000 because two medium-sized life insurance companies, Kyoei life insurance and Chiyoda life insurance, went bankrupt in October of that year.

[11] In the Jusen scandal, the Japanese government directly intervened and spent taxpayers' money to clean up the mess, even though, technically speaking, Housing Loan Corporations are private financial institutions. Such an intervention was justified on the grounds that Japanese insolvency law was inefficient so that legal proceedings would have taken too long and might have destabilized the Japanese financial system (Yamamoto, 2003).

which suggests that the Civil Rehabilitation Law faciliated and increased market-based restructuring of financially distressed firms.

[Figure 8 here]

Responding immediately to the introduction of the Civil Rehabilitation Law, the Development Bank of Japan (DBJ) introduced the business rehabilitation support program. Hence the DBJ's involvement in the restructuring business began well before the much-publicized establishment of the Industrial Restructuring Corporation Japan. At the same time, the DBJ's involvement in corporate restructuring has been discreet. The DBJ has primarily been involved in a bail-out scheme as one of lenders or as a lender to the company that have taken over struggling firms. The DBJ is also a major lender to newly established private equities and consortiums of financial institutions specialize in investment to distressed firms (Tomii 2003, Yokoyama 2004).

In the fall of 2002, the Koizumi administration announced the establishment of the Industrial Revitalization Corporation of Japan (IRCJ) as part of its overall economic policy package. Purportedly, the IRCJ was going to be the public financial institution that specializes in the restructuring of firms that are in financial difficulties, but that have competitive core businesses. The Koizumi administration emphasized need for the IRCJ by arguing that the Japanese restructuring business in the private sector was still in its infancy and that public intervention was needed for efficient and speedy restructuring. In other words, once major restructuring is complete or when the restructuring business in the private sector sufficiently develops, the IRCJ will no longer be necessary. For this reason, the IRCJ's tenure was limited to five years. Investment bankers, business lawyers, and other professionals in corporate restructuring were drawn from the private sector to form the operating team of the IRCJ. The IRCJ began operating in April 2003. While the IRCJ's activity has been more widely publicized than has that of the DBJ, there is a broad perception that the IRCJ has not done enough and should have intervened more aggressively in private restructuring. These issues are discussed in detail in latter subsections.

3.3 Recent corporate restructuring in Japan

3.3.1 The case of the Long-term Credit Bank

The trouble of the Long-term Credit Bank (LTCB) became public knowledge in 1998. This was before the major reform of insolvency law system took place and people still had not lost their faith in conventional main bank system. So it was a surprise to the Japanese business community when Ripplewood came on the scene out of nowhere as the buyer of LTCB in 1999–2000. However, the LTCB case turned out to be a rare case of the successful restructuring of a Japanese financial institution. The LTCB case reveals the conflicts of interest surrounding the restructuring of corporate Japan. In below, an outline of the events is discussed and some implications are drawn. The chronological account of the LTCB/Shinsei case owes much to Tett (2003).

During the initial stage of the LTCB's restructuring in 1997–98, the Japanese government, in particular the conservative part of the Liberal Democratic Party, presumed that corporate borrowers should be protected. They implicitly assumed that if the bank was nationalized and then resold to another entity, all corporate borrowers with the bank would continue to receive their funds. Hence, even after nationalization, the government did not remove a substantial number of nonperforming loans from the LTCB's portfolio.

The sale of the nationalized LTCB was managed by Goldman Sachs and this was the first time a foreign investment bank was assigned to such a politically sensitive role. The bidding process was reasonably competitive. However, the retention of the LTCB's nonperforming loans scared off most of the prime candidates, such as Paribas, JP Morgan and Chuo-Mitsui. More precisely, the key point was the due diligence process in assessing the amount of non-performing loans. Many candidate buyers felt that they were not allowed to access necessary information. Others thought that it is simply impossible to assemble enough information to provide accurate assessment because of the constraints (in size and in time) and the complexity of LTCB's non-performing problem.

The LTCB was finally sold to Ripplewood, a then-unknown US private equity firm in 1999. To create a sufficient incentive for Ripplewood to purchase the LTCB, the Ministry of Finance added an option giving the purchaser the right to return to the government loans once they lost more than 20 percent of their value. From Ripplewood's point of view, this was absolutely fair. Ripplewood and the management of the new bank replacing LTCB —— Shinsei bank —— intended to exercise the put option whenever it is necessary. However, the Japanese government and the business community were implicitly expecting Shinsei to play according to Japanese business customs, which suggested that Shinsei should have continued to lend to existing borrowers and not exercised the put option. Also Ripplewood hoped to get some Japanese financial institutions / investors on board, but no one they approached agreed to take part because they felt that the new arrangement would be politically controversial. The LTCB deal thus contained the seeds of conflict from the start.

As soon as the Shinsei bank started trading in March 2000, Sogo —— the department store chain had been bankrupt for years and to whom LTCB was one of the creditors —— was restructured. This provided an opportunity for the Japanese business community to discover how Shinsei would act. The main bank for Sogo, the Industrial Bank of Japan (IBJ), wanted to organize a bail-out scheme for the company. However, Shinsei refused to take part since it would create new losses. At the same time, Shinsei started to exercise the put option given by Ministry of Finance and returned loans worth a trillion yen. These actions greatly shocked both the government and other Japanese banks.

Japanese banks had an incentive to participate in IBJ's bail-out for Sogo, since they too were in a similar position to the main banks with respect to other financially distressed companies: if a bank refused to participate in the bail-out of the IBJ, other banks might refuse to participate in bail-outs that the bank itself was or would be organizing as main bank too. Since, by Japanese convention, a main bank was supposed to be responsible for the lion's share of the restructuring process, all banks were keen to avoid a situation of noncooperation. Under these circumstances, postponing a serious restructuring is a collusive solution among Japanese banks. However, this behavior can

be maintained only if all the creditors have similar positions as main banks and can sustain their current financial positions. In Sogo's case, the LTCB had already disappeared and its replacement, Shinsei, had a profile of incentives and obligations that was significantly different from those of the Japanese banks. The collapse of the traditional cooperative solution was thus unavoidable.

Japanese banks and financial regulators now began to recognize that their collusive soft bail-out schemes would solve no problems, but would merely postpone them until another bank failed. Shinsei's case is of historical importance because it brought the problem to a head. The conventional main bank led bail-outs could be implemented only when the main bank had a financial position deep enough. Since all Japanese banks now have serious problems on their balance sheets, the conventional restructuring process of the borrower, in which the burden of restructuring accrues chiefly to the main bank, creates an incentive for a main bank to avoid significant restructuring. However, the failure of only a small fraction of collusive schemes and their displacement by market-based valuations would create a significant impact on entire bail out scheme and induce its collapse.

Shinsei's restructuring process has been very successful but has been attacked in the domestic media and by politicians. Shinsei kept exercising the Ministry of Finance's option on bad loans and refused to renew lending to troubled companies. Both left- and right-wing politicians portrayed Shinsei's behavior as virtual theft by foreign capital at Japanese taxpayers' expense. Perhaps, it was rational that Japanese companies were willing neither to buy into the LTCB nor to invest in the Shinsei deal, given the magnitude of the *ex post facto* loss of reputation.

In February 2004, Shinsei Bank's stock was relisted on the Tokyo stock exchange, five and half years after LTCB's nationalization. Shinsei ended its first day of trading at 827 yen, a 58 percent premium on its issue price. At the issue price of 525 yen, the consortium headed by Ripplewood raised $2.36 billion on the sale of about half of its 67 per cent stake. The Japanese government, which retains a one-third stake in Shinsei, has also seen the value of its stake increase, although this gain has been offset by the fact

that it injected over 4,000 billion yen into LTCB/Shinsei to prevent its collapse. By all accounts, Shinsei's IPO was a huge success and proof that banking reform in Japan is possible and is being realized[12].

3.3.2 The case of Kanebo

The case of Kanebo is important because it involves the restructuring of a well-known company with a long history and because it was outside the service sector —— areas such as real estate and construction —— that expanded rapidly during the bubble economy. The problems that Kanebo faced embody the problems that are faced by conventional Japanese corporate governance in general and many old Japanese companies in particular. It also reveals the problems concerning the roles of public financial institutions such as the Industrial Revitalization Corporation of Japan (IRCJ) and the Development Bank of Japan (DBJ).

Kanebo started as a spinning company in the late 19th century. During the industrialization of Japan in the Taisho and early Showa eras, the company's spinning and textile business grew very rapidly. After the World War II, during the high-growth era of the 1950s and 1960s, Kanebo sold the real estate in metropolitan areas on which their spinning mills had stood. With the funds from these sales, Kanebo entered into various new businesses toward the end of the high-growth era. Led by a young and charismatic president, Junji Ito, Kanebo became a diversified conglomerate by the late 1960s. Kanebo proclaimed its own business strategy of 'pentagon management', since the business had grown to comprise five areas, namely textiles, cosmetics, pharmaceuticals, foods, and home products. After the first oil crisis, Kanebo experienced difficulties as did many other Japanese companies. However, Ito did not lay off workers and Kanebo did not pay dividends for nine years, from 1976 to 1984.[13] Ito was able to retain his position as the president because of help from the main bank and

[12] However, many observers also believe that the game is not over. The general opinion is probably that Shinsei by itself will not be able to survive competition once other major Japanese banks have fully recovered from their troubles. Many forecast that Shinsei will eventually be bought by, or merge with, a major player.

[13] Kanebo has not paid dividends since 1995.

strong support from Kanebo's labor union. Ito is thus well known as a charismatic and labor-friendly manager[14].

Even though Kanebo emphasized the diversification of its business portfolio, the failure of its business strategy is obvious. Kanebo has never been able to restructure its textile business, which was traditionally its core business. As shown in Panel (A) of Table 4, even immediately before merger talk with Kao in 2002−03 (which will be discussed in below), the textile division still comprised 30 percent of its sales. By the late 1990s, Kanebo had succumbed to a pitfall that many diversified companies had experienced[15]. Its intracompany resource allocation had been distorted and the profits of the cosmetic business, with the second-highest sales in the domestic market, were being drained to make good losses in the other four divisions, particularly textiles.

[Table 4 about here]

In the winter of 2003, Kao, a conglomerate whose cosmetics sales are the fourth highest in Japan, emerged as a merger partner of Kanebo. Kao is perhaps best described as the Japanese counterpart of Procter & Gamble. While Kao is also a diversified conglomerate, its business areas are more closely integrated than are Kanebo's. Kao has been one of the most capital-market-oriented and profit-oriented companies in Japan. It is also one of the companies most frequently discussed in US business school cases as successful Japanese corporations[16]. Even though company sizes of Kao and Kanebo are almost same and they compete in the same cosmetic market, the difference in their profitability is striking. As shown in Panels (B) and (C) of Table 4, Kao has been one of

[14] As a well-known business figure, Junji Ito was appointed as the vice president, and subsequently as president, of Japan Airlines (JAL) by Prime Minister Nakasone in 1985. This appointment followed the airplane crash that killed more than 500 people in August 1985 and a series of business scandals involving JAL. However, Ito resigned after just 18 months, which suggested that he was forced to resign because of political pressure.

[15] The negative effects of business diversification on the efficiency of internal capital allocation have been discussed extensively, both theoretically and empirically. See Part B of Jeremy Stein (2003) for a survey of recent works on this subject.

[16] The success of Kao's profit-oriented marketing strategy is often contrasted with the failure of the image-chasing marketing of Shiseido, the top Japanese company in the cosmetics industry. However, Kao found that its cosmetics line lacked high-end products. Kao's motivation in buying the cosmetics division of Kanebo might have been to acquire Kanebo's brand image.

the most profitable Japanese companies in the post bubble economy period. On the other hand, Kanebo, taken as a whole, has been a loss maker throughout the 1990s.

Even though it had started as the merger negotiation, it was essentially Kao's buyout of Kanebo, supported or maybe drafted by Sumitomo-Mitsui bank who was the main bank to both Kao and Kanebo. Kao naturally wanted to purchase Kanebo's cosmetics division only, not the whole company. This seemed to be the only way that Kanebo could avoid bankruptcy, whether the buyer was Kao or another company. However, Kanebo's management withdrew from the deal, blaming strong opposition from its labor union. In February 2004, instead of selling itself to Kao, Kanebo turned to the Industrial Revitalization Corporation of Japan (IRCJ), a state-funded body set up in 2003 to rescue struggling companies. Right after Kanebo turned to the IRCJ, newspapers reported that the IRCJ was going to inject 500 billion yen into Kanebo while Kao's offer for Kanebo's cosmetic division had been about 400 billion yen. In the IRCJ's actual rescue plan, released in March, the total amount to be injected into the new company that will inherit Kanebo's cosmetic business was just 366 billion yen. The bail-out that IRCJ offered was probably very similar to any deal with Kao that might have been finalized. Under the IRCJ deal, Kanebo's management had to resign and the cosmetic division was separated into an independent company. Even before the deal with Kao came to public attention, there seemed to be no other way forward than a major restructuring of its unprofitable businesses; i.e., everything except the cosmetics division. There was no governance mechanism within the company or through the monitoring of its main bank that would enforce such restructuring. As the IRCJ's assessment of Kanebo progressed, the IRCJ came to the same conclusion[17]. The deal was clearly much less generous than Kanebo's management and labor had hoped. Kanebo's other business segments are now likely to face drastic restructuring.

[17] In the end, this is perhaps the same old story: as past management practices continue to be examined, misconduct and accounting manipulation surrounding transactions between Kanebo and its subsidiary are becoming the focus of attention.

3.4 Lessons from recent restructuring cases

LTCB/Shinsei's successful restructuring and Kanebo's bailout by the IRCJ exemplify the main difficulties in the restructuring of corporate Japan.

1. In today's Japan, since the main banks have been heavily involved in the mismanagement of their corporate borrowers, and must bear major responsibility for bad-loan problems, it will be extremely difficult to solve the problem by involving only management, labor, and financial institutions. It often requires a third party such as Ripplewood in the case of LTCB/Shinsei to implement major restructuring. Significant restructuring today sometimes requires major layoffs of workers. Since layoffs go against the lifetime employment system that has prevailed in postwar Japan, it often takes a third party to implement a breaching of implicit contracts between management and workers so that restructuring can proceed[18]. This is the point emphasized by Shleifer and Summers (1988) in the context of US merger boom in 1980s.

2. There is an important underlying issue in the previous discussion about the need for a third party. In the end, many troubled companies were insolvent from the very beginning of the nonperforming loan problem. Why, then, have banks, financial authorities, and the troubled companies continued to postpone restructuring for years, even though the nonperforming loans have snowballed and the situation has worsened? There are two possible answers. The first is simple: there has been ignorance and a lack of foresight by the key stakeholders. The second answer is that bank executives and bureaucrats have been guilty of a combination of short-termism and conservatism. In the postwar Japanese economy, senior bankers and bureaucrats were part of the elite in Japan. They typically attained their position by being appointed by their predecessors or by inheriting it as a result of being an 'insider'. The duration of their terms is

[18] Knowing the difficulties of such negotiations as insiders, experienced bankers leave Japanese banks. They then join foreign banks or establish their own private equity funds and return to negotiations as third parties. This is why the restructuring business is now developing quickly in Japan. In the case of the ongoing restructuring of Mitsubishi Motors, for example, a private equity fund has become the largest shareholder of Mitsubishi Motors. The CEO of this private equity is a former employee of Mitsubishi Bank.

limited.[19] Hence, it is difficult for bankers and bureaucrats to reverse their predecessors' decisions and acknowledge the mistakes and/or wrongdoing of those who appointed them. They also do not have an incentive to care about the long-term future of banks and the Japanese financial system.

For example, in the case of LTCB, many LTCB bankers realized that things were going wrong even before the bubble economy. They proposed a reform plan that has many things in common with what the foreigners tried to do twenty years later. However, the idea of radical reform was dismissed, and the LTCB eventually jumped on board the real-estate lending boom in the late 1980s. This led to the turmoil and eventually the demise of the LTCB in the 1990s. During the post-bubble downturn, LTCB management simply covered up the seriousness of the nonperforming loan problem through elaborate accounting malpractice. They never grappled with the need for serious restructuring.

The absence of pressure from creditors is a key issue in understanding the tardiness of the restructuring process in corporate Japan. While there has been a lack of incentive for borrower companies such as Sogo and Kanebo to restructure, neither have the managers of large Japanese financial institutions been motivated to restructure nonperforming loans. They have just kept their fingers crossed, hoping to finish their terms without facing a serious problem and to walk away with lucrative retirement benefits.

3. The role of public financial institutions such as the IRCJ and the DBJ might be important, but they occupy an ambiguous position: in the idealistic public image, the IRCJ is the last resort for financially distressed Japanese companies, and would protect them from antilabor market mechanisms and exploitative foreign funds. In a more realistic view, if the IRCJ's/DBJ's assessments of the companies in its hands were objective and fair, their conclusions should not be significantly different from market-based solutions. Public financial institutions are necessary only when there is some market failure that prevents private restructuring from working properly. We shall return to this issue in the next subsection.

[19] A term is no longer than 10 years for bank CEOs and BoJ governors, and less than five years for senior officers in the Ministry of Finance.

4. Apparently, financially distressed companies and their creditors (the banks) expect something more generous than market-based restructuring from the IRCJ. Criticizing the IRCJ's plan to supply funds only to Kanebo's cosmetic business, Shigemitsu Miki, Chair of the Japanese Bankers Association and CEO of the Tokyo-Mitsubishi financial group, suggested that IRCJ should rescue the remaining parts of the company because 'the IRCJ should take the risk that the private sector cannot take' (Nikkei newspaper, February 24, 2004). This statement implies that 'the IRCJ has a deep pocket backed up by the government, so it should rescue the companies that the private sector cannot rescue'.

   It could be argued that the IRCJ's rescue of distressed companies will have a positive spillover to other companies and financial institutions, and that it is therefore desirable. On the other hand, it is also reasonable to argue that such a public intervention is unfair to healthy rival companies, such as Shiseido (top company in Japanese cosmetic industry) in the case of Kanebo, and Ito-yokado and Aeon (other major super market chains) in the case of Daiei's rescue by the government.

   Another problem is that there is no agreed boundary for judging whether a case is too risky for the private sector and thus requires government intervention. So there is a serious concern that the activities of the IRCJ and other public financial institutions might distort decisions with respect to privately led business restructuring: the IRCJ's actions, for example, could drive down the potential profits of restructuring businesses, profits that are necessary to attract private funds to take risks in supporting the restructuring in the first place.

3.5 The role of public financial institutions in corporate restructuring

The economic principle that is supposed to determine the necessity of public financial institutions in the restructuring process is very simple. Public financial institutions like IRCJ and DBJ are necessary only when there is a market failure. However, in practice,

it is nearly impossible to determine objectively if there is really a market failure and if the public intervention is necessary.

Indeed, what is market failure? It is useful to distinguish between two types of market failures in the context of this discussion. The first type of market failure is the difficulty of restructuring government-related businesses. The second type of market failure is the lack of necessary business restructuring activities in the private sector. The argument that emphasizes the second type of market failure is similar to the infant-industry argument in international trade. That is, a public financial institution is only needed until enough the restructuring business develops in the private sector, and that waiting for gradual development in the private sector is socially costly. This type of argument suggests the eventual withdrawal of public financial institutions from the restructuring business. Both the DBJ and the IRCJ acknowledge this about their roles (Tomii 2003, Yokoyama 2004).

There have been cases in which public financial institutions have played important roles when there was the first type of market failure. In restructuring of government related businesses, it is often legally questionable whether a private fund should directly support a restructuring. For example, the Kyushu Industrial Transportation Company (Kyusyu Sangyo Kotsu) was one of the very first cases to which the IRCJ offered a bail-out. Kyushu Industrial Transportation is a local transportation company whose main businesses include local bus lines in the Kyushu area. Local bus lines are highly regulated and must deal closely with regulatory authorities. Also the competitors of the firm include local bus lines that are owned by local governments and that continue to operate even though they have been running at a loss for many years. In such a case, a public financial institution has advantage in negotiating with local government. Hence, the roles of IRCJ and DBJ have been beneficial and necessary indeed.

On the other hand, when the necessity of public financial institutions is argued based on the insufficiency of restructuring activities in the private sector, the argument will be inevitably subjective. The creation of the IRCJ was very effective in promoting the necessity of restructuring business in the Japanese business community. As its

byproduct, some debtor firms and financial institutions were appeared to be expecting that IRCJ will act as a generous benefactor to financially distressed firms. Hence, there seemed to be a substantial gap between high hope on IRCJ and the reality of its activity. After the first year, such a too hopeful image of IRCJ has faded. As real intention of IRCJ becomes apparent, banks and companies have learned that IRCJ's principle in dealing with distressed firms is not very far from market-based approach and is anti-interventionist. Hence I believe that, in the end, the IRCJ will not provide a serious threat to business restructuring by the private sector. The IRCJ's tenure was always designed to be limited to the period 2003–08[20]. The restructuring process of each distressed company it assists is limited to the duration of three years. The senior members of the IRCJ are themselves successful investment bankers and business lawyers who could earn higher incomes if they remained in the private sector. They have a very limited incentive to 'go soft' on distressed companies at the expense of taxpayers.

The role of the DBJ in restructuring is potentially more important and also more problematic than that of the IRCJ. In Table 5, the DBJ's recent business areas are shown. The categories that include the restructuring business are the item 'Reform of economic structure' under 'Economic revitalization.' The share of 'Reform of economic structure' in terms of total loans and investments by the DBJ jumped from 19.5% in fiscal year 2000 to 27.7% in 2002. While the growth rate of the DBJ's total business increased only modestly, the item that includes business restructuring grew very rapidly.

[Table 5 here]

So a clear line must also be drawn between the DBJ's restructuring activities and its traditional activities in the promotion of regional economies. The DBJ is one of the public financial institutions that some consider as leftovers of traditional industrial policy and the high-growth era. It is therefore quite natural that the DBJ should wish to

[20] However, as many skeptics suggest, the IRCJ's tenure may be extended. Given the fact that the reinstatement of a deposit insurance cap and payoff scheme has been postponed so many times by the Japanese government, this possibility cannot be ignored. Such a possibility is not something one should regard as a 'risk,' but it would probably do more harm than good.

play an active role in corporate restructuring to avoid the shrinkage of its organization —— power, status, and staffing levels. The DBJ is also more vulnerable than the IRCJ to political pressure. It has been under the influence of the Ministry of Finance, and its past presidents have been retired top-ranking MoF officials. The DBJ's liabilities include heavy borrowings from the Fiscal Investment and Loan Program (FILP)[21]. Even though the role of the DBJ is not as well publicized as that of the IRCJ, all potential risks concerning the IRCJ's role can be applied to the DBJ. The DBJ has greater incentive to be 'soft' on distressed companies for political reasons, even though there is no evidence that this has actually been the case[22].

The biggest concern raised by public intervention in corporate restructuring is its potential to be over-generous. Keeping inefficient companies alive is likely to result in a huge wastage of resources that should be allocated to other more productive investment opportunities (Cabarello, Hoshi, and Kashyap, 2003). Companies that have already become insolvent cannot be revived without disadvantage to their competitors. Even if the intention of a public financial institution was sincere, whenever it intervenes in a restructuring that private funds have avoided, it means depositors' or taxpayers' money has been exposed to a higher risk than the market was willing to take. Public intervention is only justified when it is likely to be accompanied by sufficient economic and social benefits above those that will accrue, on balance, from the nonintervention option. Even if an interest group in the economy is eager to have the company revived, and sees an opportunity to exert political pressure for this to be achieved through public intervention, the result is typically a burden for the economy as a whole. In this sense, the disinterested assessment and valuation of financially troubled companies by public financial institutions are crucial to the restructuring of corporate Japan.

However, determining the proper role of public financial institutions is inevitably a subjective task. This is nowhere truer than in the restructuring of the large supermarket chain Daiei. The government had an incentive to keep Daiei alive and avoid drastic

[21] See Doi's chapter and Doi and Hoshi (2003) for information on the FILP and its problems.
[22] This should not be seen as a criticism of the DBJ. On the contrary, it is surprising that the DBJ has successfully avoided political pressure relating to its core activities.

restructuring since the company has many branches and its impact on local economies is so large. So Daiei was allowed to survive without going to IRCJ and to avoid scarp and build of the company. This was obviously a highly politically motivated intervention at the expense of taxpayers and Daiei's rivals. If the IRCJ and the DBJ were to be more generous in assessing distressed companies, it would inevitably involve the redistribution of wealth from taxpayers to the stakeholders of distressed companies —— their management, employees, and creditors. It is important to acknowledge this point and to examine the economic policy implications of the role of public financial institutions in restructuring corporate Japan. The matter must therefore be openly debated and the public financial institutions must be aware of their accountability to taxpayers.

I believe both IRCJ and DBJ have been reasonably successful in helping restructuring process of corporate Japan in last several years. Since public expectations about IRCJ were so high at the beginning, many people are expressing disappointments and dissatisfaction about IRCJ. However, anything beyond their current activities would involve a substantial risk of being too soft.

4 Policy recommendations and final remarks

As of summer 2004, the Japanese economy seems to be on a track leading to recovery from the stagnation of the last decade, and business investment spending seems to be growing strongly. However, previous signs of recovery have turned out to be false, and in any case, a sustained recovery will not diminish the underlying need for corporate restructuring. The task will not be easy, and nonperforming problems will persist unless drastic measures are taken. This is not because the Japanese economy is in a hopeless situation, but because the easiest steps in the restructuring process have been completed: the most difficult parts remain. The successful cases of restructuring we have witnessed so far, such as hotels and resorts, had expanded rapidly in the bubble era. For such companies, objective values could be calculated relatively easily and the conflicts of interest among related parties were more easily resolved. However, the restructuring of

older companies in traditional industries has been extremely slow. More specifically, according to the analysis in Section 2, they are likely to be medium-sized companies with a long history of manufacturing. These cases involve tangled borrower−lender relationships, embodied in the main bank system, and deeply entrenched management−labor relationships revolving around the lifetime employment system. Because the interests of stakeholders in these two relationships are likely to be in conflict, addressing the problem will require subtlety, risk, and effort over a long period.

There is no way to solve these tangled long-term relationships without bringing in a third party. It does not have to be a foreign investor, such as Ripplewood in the case of LTCB/Shinsei; however, since corporate restructuring business directly deals with the complex business, political, social and cultural conventions of a particular country, restructuring business unavoidably involves highly country-specific knowledge and skills. Unlike introduction of market-oriented financial transactions such as derivatives, the development of distress finance and M&A in Japan has taken time. But, restructuring is a rapidly growing business in Japan, and there are now many domestic distress funds that specialize in a more modern approach to restructuring, particularly after the purchase of LTCB by Ripplewood. The business model for successful restructuring is in the process of being developed, and the public is gradually recognizing the need for restructuring. There is reason for optimism.

On the other hand, we should be cautious about public intervention in the restructuring of corporate Japan, since the government has been a part the cause of the nonperforming loan problem from the start. There is a substantial risk that the IRCJ and the DBJ might be overly generous to distressed companies, and that their activities might crowd out private restructuring businesses. For these reasons, even though public expectations about IRCJ's activities have been so high, I am skeptical about the necessity of further intervention in private restructuring process by IRCJ. Explicit rules governing the extent of government intervention in the restructuring of corporate Japan are crucial and as yet significantly underdeveloped. In that sense, the IRCJ's finite tenure was a positive move. The DBJ's activity is relatively unrestricted. The roles of

both institutions have been satisfactory so far, but need to be examined carefully and discussed openly.

Finally, the coordination of policies on corporate restructuring with the policy measures discussed in other chapters of this volume is an important issue. Most importantly, the restructuring of nonfinancial corporations is inseparable from the restructuring of their lenders, as discussed in the chapter by Hoshi and Kashyap. In particular, the drastic restructuring of the banking sector will necessarily cause the restructuring of their borrower firms. Consideration should be given to allocating 'unusually' active roles to the IRCJ, the DBJ, and other public financial institutions, when the government takes a really serious step in the restructuring of the banking sector.

The related labor market issues are discussed in Higuchi and Hashimoto's chapter. The most difficult part of corporate reform will be the challenging of entrenched interests of traditional large manufacturing and government-related businesses. In addition to their heavy dependence on bank financing, long-term labor relations are a serious impediment, as in the case of Kanebo. When a company that had been loyal to its employees is restructured, its older employees are typically the biggest losers. On the other hand, if restructuring is impeded and capital continues to be allocated suboptimally, the younger generations of Japanese workers will be the losers, because fewer new jobs will emerge for them. In that sense, corporate restructuring is an intergenerational issue.

Restructuring is also entwined with macroeconomic policy. Some proponents of restructuring object to aggressive monetary policy because they believe it will create undesirable transfer in real terms from creditors to debtors, which may delay the restructuring process. However, achieving positive but low levels of inflation, as discussed by Ito and Mishkin, will increase nominal interest rates, especially at the long-end of the term structure. This would be more likely to create a favorable environment for restructuring and further to expose companies that should in any case be restructured.

In the end, there is no magic strategy that will revive unprofitable businesses. The problem will remain as long as restructuring is postponed. It is necessary to create legal and institutional structures that support and expedite corporate restructuring[23]. It is important to establish public financial institutions that engage effectively in restructuring, forcing companies either to become profitable or to disappear. Most importantly, all policy measures should be designed to support a market-based restructuring process, and not to replace it.

* * *

Postscript: In early August 2004, Daiei's largest creditors —— UFJ, Mizuho, and Sumitomo-Mistui banks —— announced that they intended to seek the IRCJ's help in restructuring the large supermarket chain. Daiei's management insisted that intervention by the IRCJ was unnecessary. However, it appears that Daiei cannot avoid scrapping and rebuilding the company this time. How the IRCJ handles Daiei's case will attract public attentions and might constitute a turning point for corporate restructuring in Japan.

[23] See, for example, Takagi (2003) for a non-technical discussion of the recent reforms of new restructuring laws in Japan.

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Table 1
Proportion of Industries that Experienced Negative Productivity Growth

Among industries whose increases in capital stock were above average:

	1985–1991	1992–1998
Proportion of industries that experienced negative productivity growth	35%	69%

Among industries whose increases in capital stock were positive:

	1985–1991	1992–1998
Proportion of industries that experienced negative productivity growth	32%	62%

Data: JIP database

Table 2
Average Growth Rates of Bank Borrowing

	Construction	Real estate	Other industries
1991–1997	3.73%	5.68%	1.66%
1991–2002	0.41%	0.06%	–0.68%

Data source: *Financial statements statistics of corporations by industry*, Ministry of Finance.

Table 3
Average Growth Rates of Bank Borrowing and Corporate Investments in 1991–2002

Investment	Less than 10 million	10 million – 100 million	More than 100 million
Manufacturing	–12.7%	–4.9%	–5.8%
Non-manufacturing	–10.3%	–4.6%	–2.1%

Borrowings	Less than 10 million	10 million – 100 million	More than 100 million
Manufacturing	–7.4%	1.7%	–0.19%
Non-manufacturing	–7.4%	–0.16%	–1.7%

Data source: *Financial statements statistics of corporations by industry*, Ministry of Finance.

Table 4
Kanebo on the Verge of Collapse

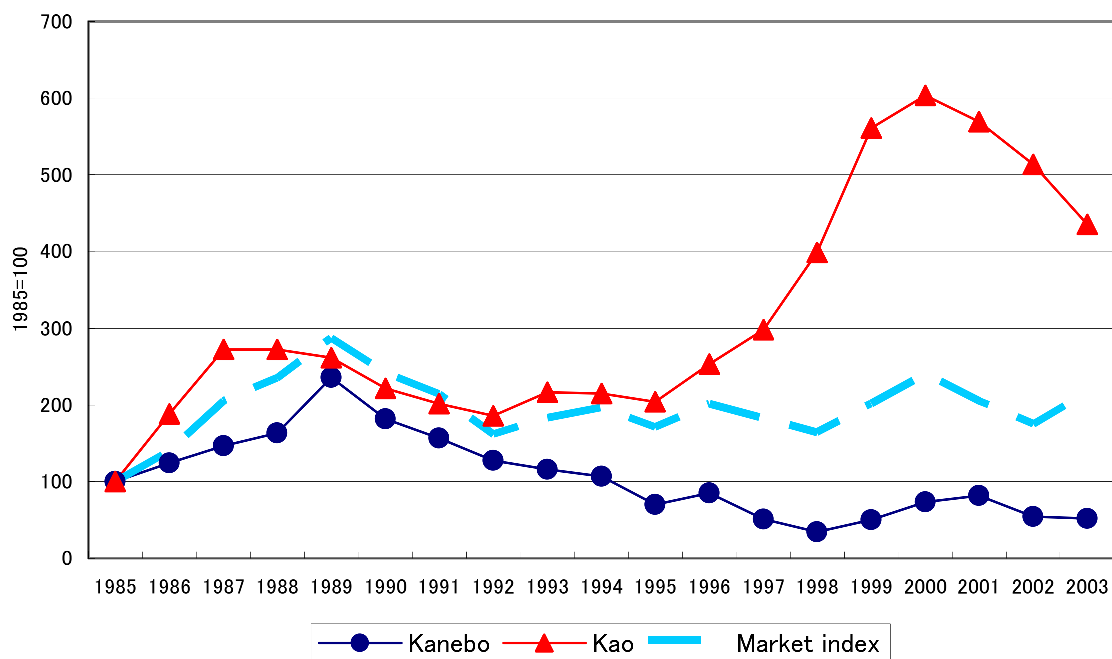
(A) Kanebo's business areas

	March 2003			March 2002		
	Sales	Growth (%)	Share (%)	Sales	Growth (%)	Share (%)
Cosmetics	211,211	–0.8	40.8	212,898	0.5	40.3
Home products	50,419	–12.8	9.7	57,850	0.6	10.9
Textiles	159,757	0.8	30.8	158,537	–2.3	30.0
Foods	49,185	–1.3	9.5	49,817	0.4	9.4
Pharmaceuticals	21,186	6.1	4.1	19,966	–16.5	3.8
Others	26,479	–10.2	5.1	29,745	–39.5	5.6
Total	518,240	–2.0	100.0	528,816	–4.8	100.0

Data: Author's calculations based on balance sheet data

Table 4 (continued)

(B) Kanebo vs Kao: stock prices



(C) Kanebo vs Kao: financial ratios

Kanebo

	2003	2002	2001	2000	1999
Asset	687,073	723,175	712,610	684,351	672,633
ROE	–2.44	–5.12	NA	NA	NA
EBIT/Sale	5.07	4.42	6.56	5.53	3.95

Kao

	2003	2002	2001	2000	1999
Asset	720,849	772,144	783,760	750,016	751,725
ROE	14.07	12.83	13.18	12.23	8.54
EBIT/Sale	13.76	13.74	13.88	11.91	10.36

Assets: million yen, ROE, EBIT/Sales: percent

Table 5
Development Bank of Japan's Business Areas

New loans and investments by fiscal year (billion yen)

	2000	**2001**	**2002**
Economic revitalization	2,595	3,548	3,796
Reform of economic structure	*2,333*	*3,305*	*3,497*
Development of intellectual infrastructure	*262*	*242*	*298*
Creation of self-reliant regions	2,859	2,478	2,532
Enhancement of the quality of life	6,007	6,062	5,733
Improvement of social capital	532	467	557
Total	11,995	12,556	12,620

Percentage in total loans and investments

	2000	**2001**	**2002**
Economic revitalization	21.6 (%)	28.3	30.1
Reform of economic structure	*19.5* (%)	*26.3*	*27.7*
Development of intellectual infrastructure	*2.2* (%)	*1.9*	*2.4*

Growth rates

	2000–2001	**2001–2002**
Economic revitalization	36.7 (%)	7.0
Reform of economic structure	*41.7* (%)	*5.8*
Development of intellectual infrastructure	*–7.6* (%)	*23.1*
Subtotal of others	–4.2 (%)	–2.1
Total	4.7 (%)	0.5

Data source: Development Bank of Japan, Annual Report 2003.

Figure 1
Private Investment in Japan and the US

Panel (a)
Differences between real non-residential investment growth
and real GDP growth rates

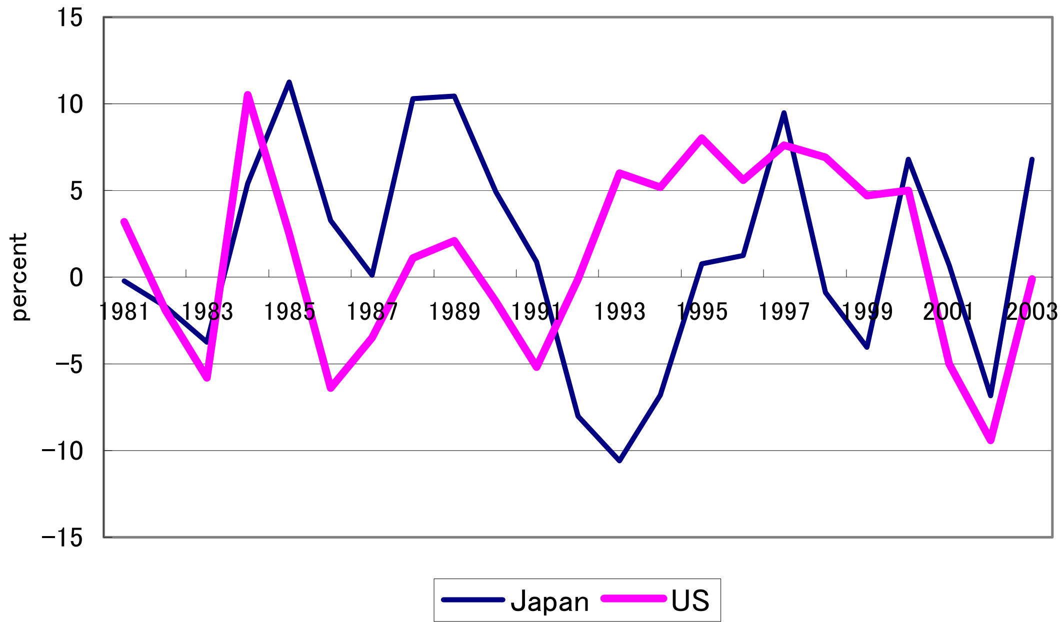
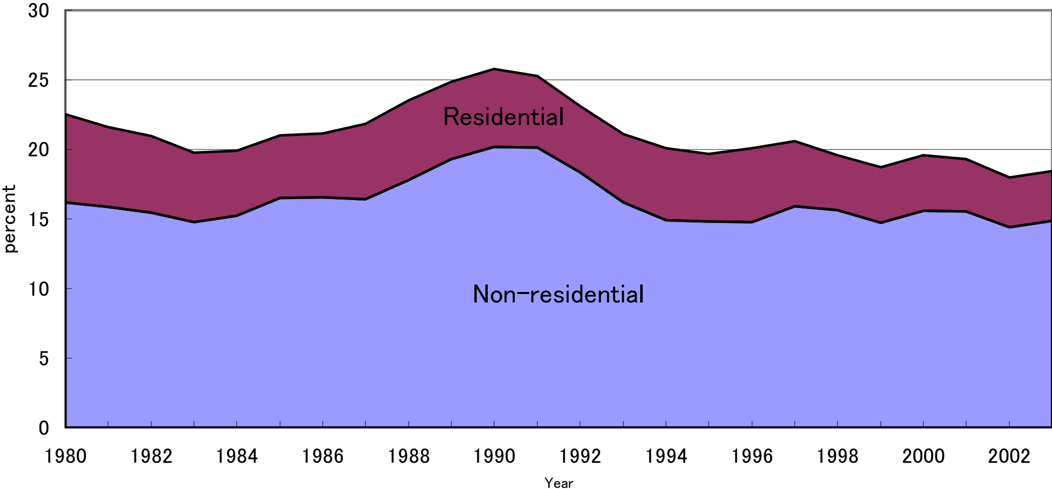


Figure 1 (continued)

Panel (b): Investment as a percentage of GDP



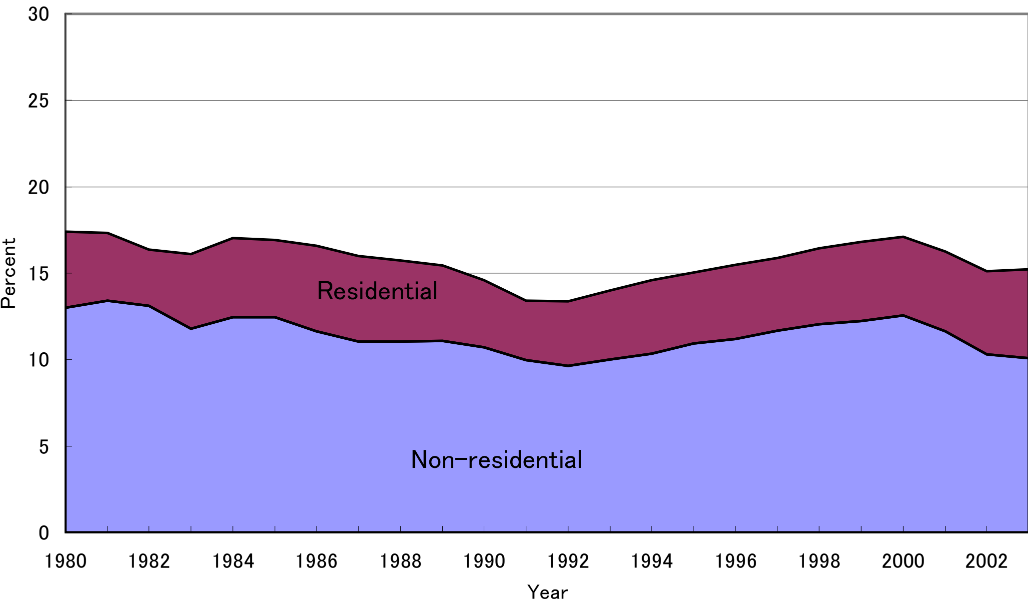
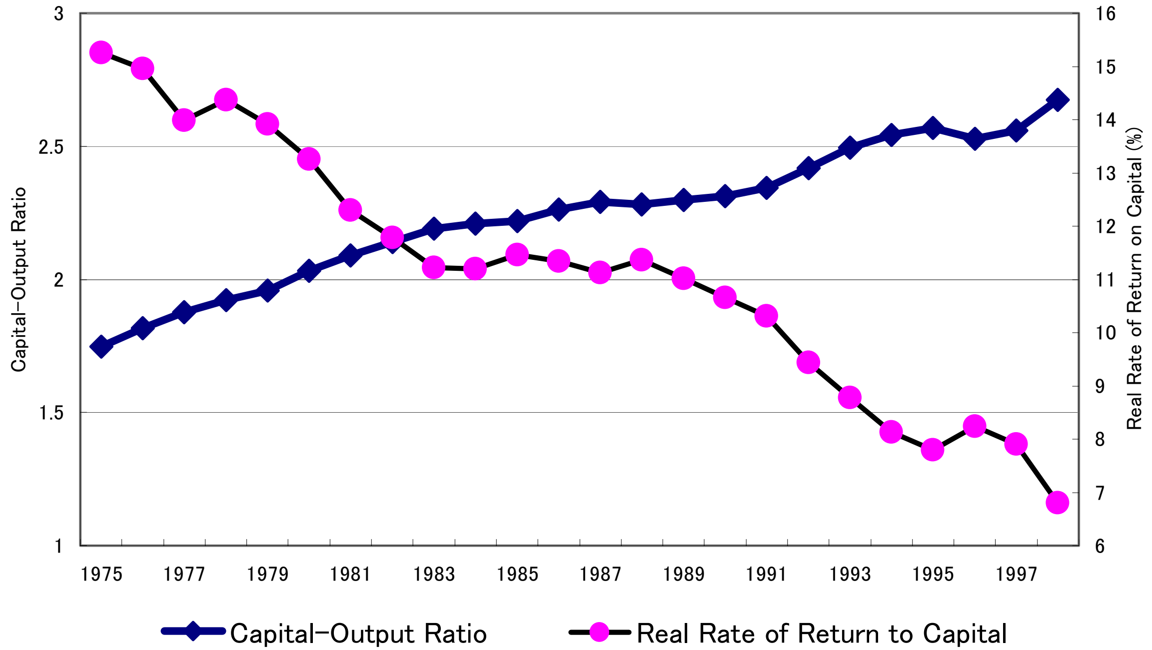


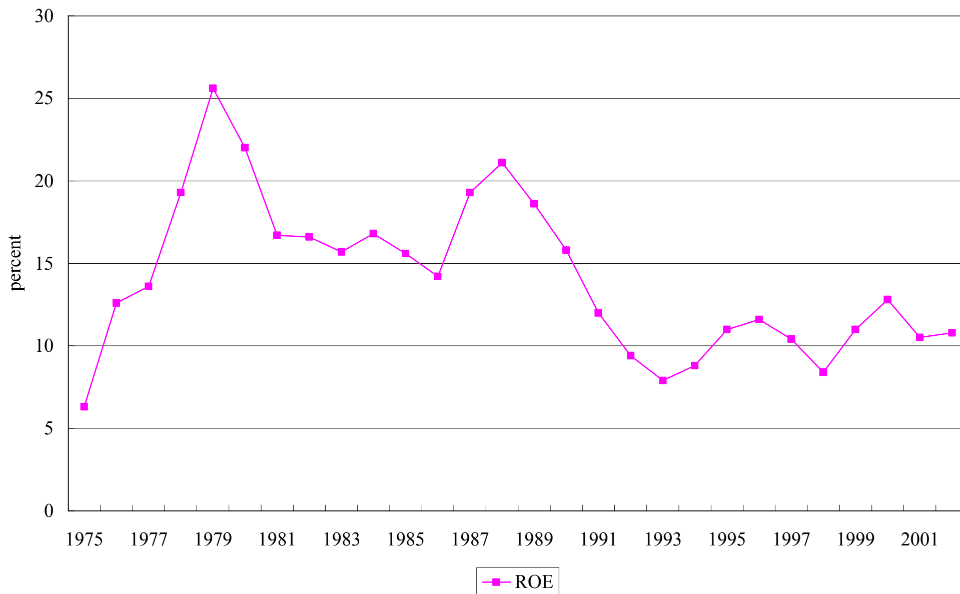
Figure 2
Japan's Capital-Output Ratio and the Rate of Return on Capital

Panel (A): Capital-output ratio and rate of return on capital (GDP data)



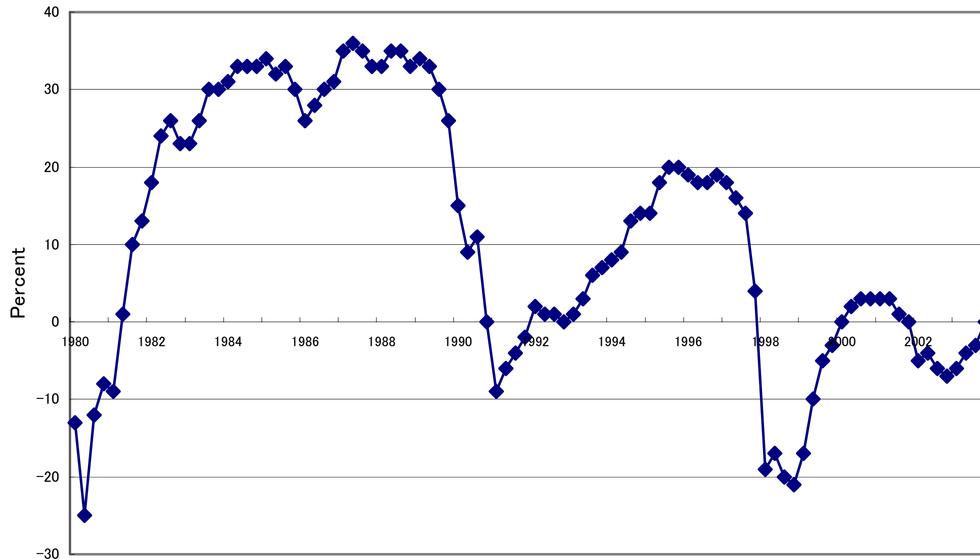
Data source: Capital stock = JIP database, Return on capital = 'operating surplus' in GDP data

Panel (B): Return on equity



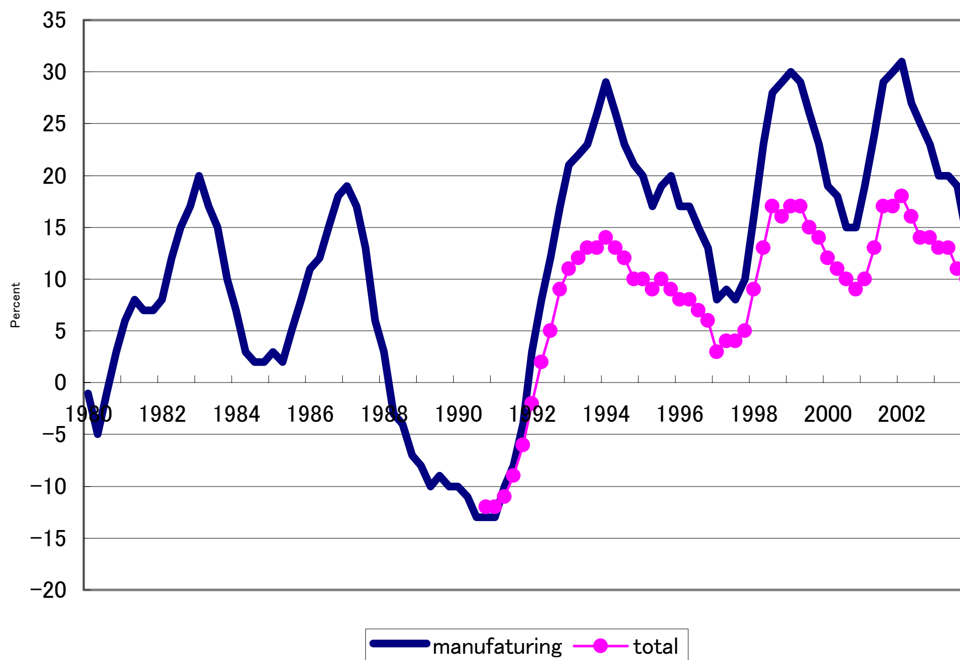
Data source: *Financial statements statistics of corporations by industry*, Ministry of Finance.

Figure 3
Lending Attitudes of Financial Institutions



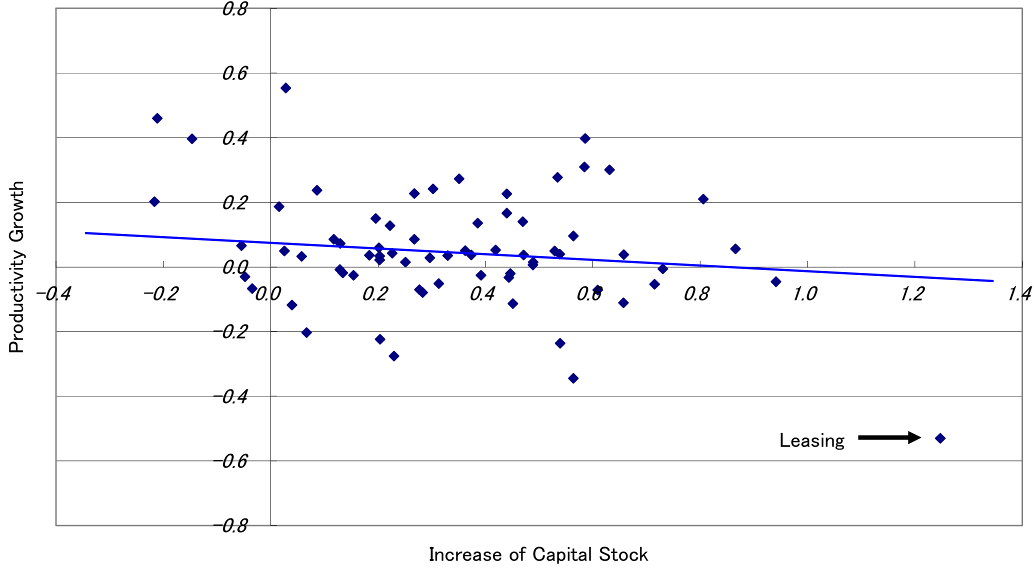
Note: Lending Attitudes of Financial Institutions (Diffusion Index of "Accommodative" minus "Severe") in *Tankan* survey. Original data was obtained from the Bank of Japan's home page.

Figure 4
Excess Production Capacity

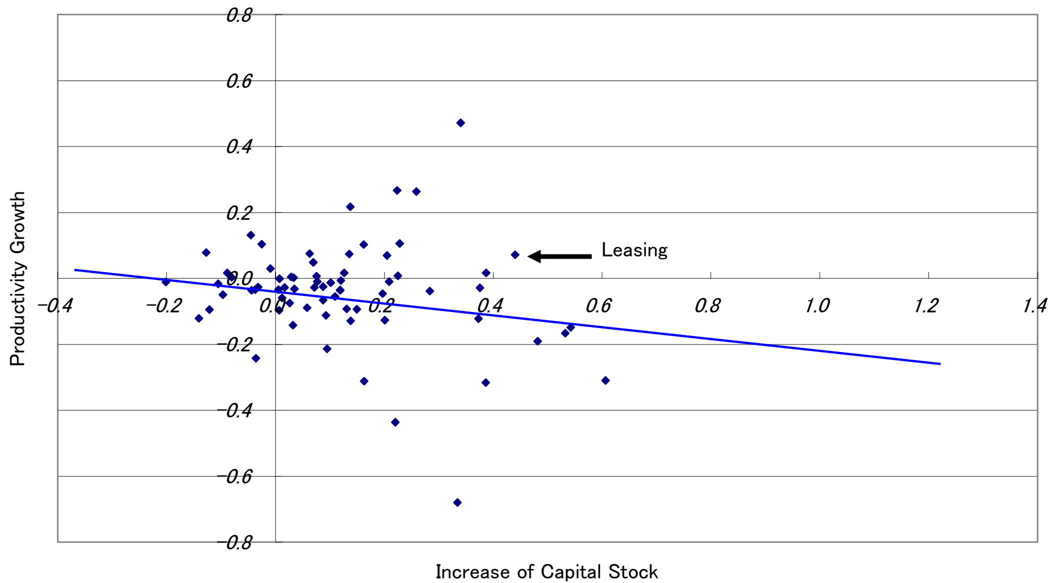


Note: Production Capacity (Diffusion Index of "Excessive Capacity" minus "Insufficient Capacity") in *Tankan* survey. Original data wa obtained from the Bank of Japan's home page.

Figure 5
Increase in Capital Stock and Productivity Growth



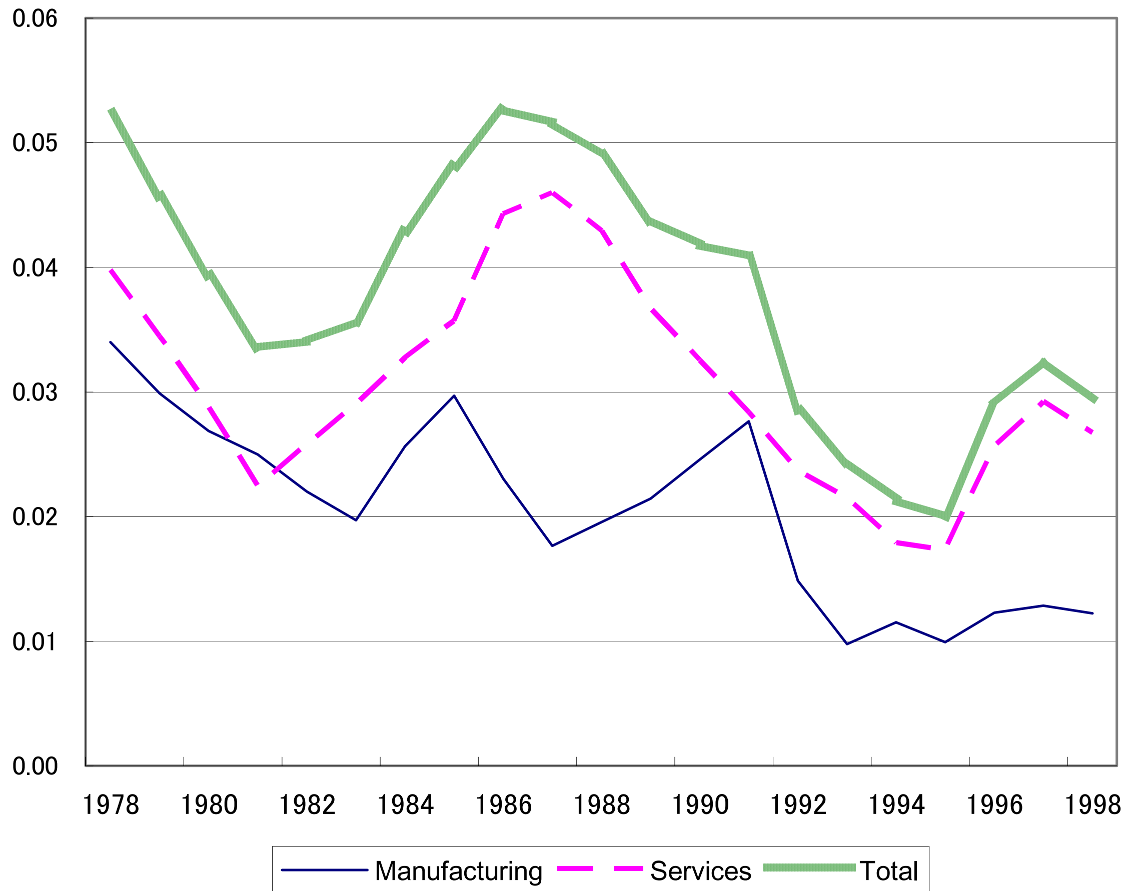
Fitted line: $y = -0.103x + 0.094$ $R^2 = 0.025$



Fitted line: $y = -0.197x - 0.020$ $R^2 = 0.046$

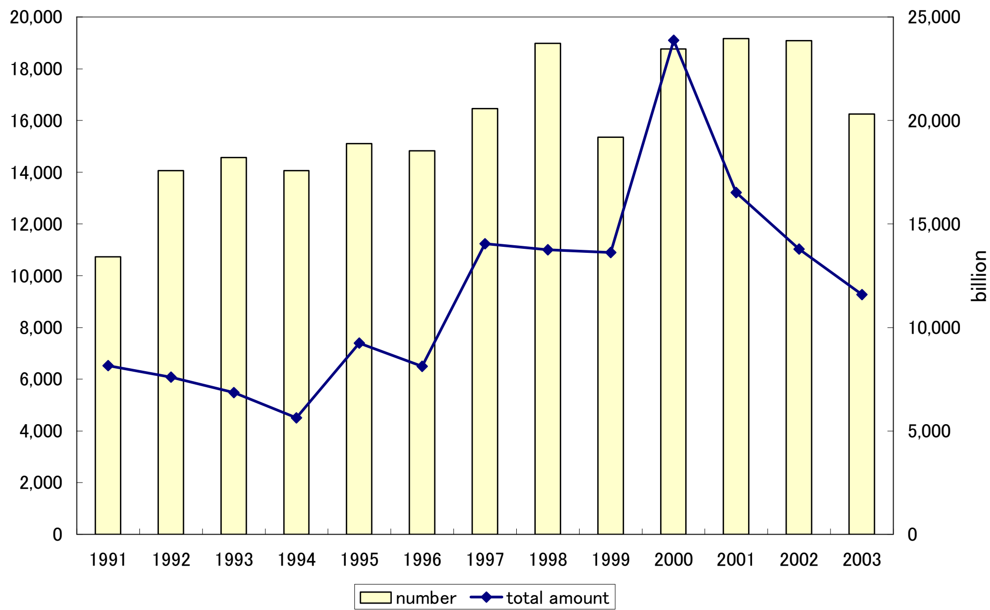
Note: Data from Fuako et al. (2003). Agriculture and the public sectors are excluded. Fitted lines are least-squares regression lines obtained by excluding the leasing industry from the sample. Both slope coefficients are statistically insignificant.

Figure 6
Reallocation of Capital in Japan



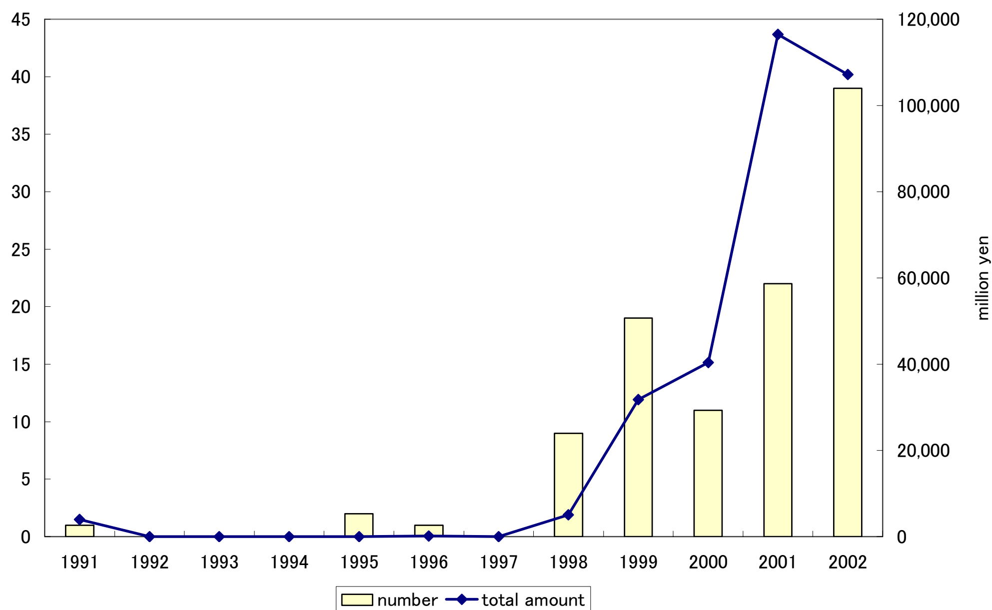
Y-axis is the measure σ_t, which is defined in the text. Here, capital is the input. The larger σ_t, the greater the reallocation. There are several ways to calculate the measure by sector. Here, aggregate $G_{A,t}$ and $S_{i,t}$ in each sector are used. However, the results are almost identical whether using each sector's growth for $G_{A,t}$ or shares in all industries for $S_{i,t}$.

Figure 7
The Number of Bankruptcies in Japan and their Total Value



Note: The left vertical axis is the number of bankruptcies in Japan. The right vertical axis indicates that total value of debt outstanding in yen. Data from Tokyo Shoko Research Ltd.

Figure 8
The Number and Total Value of Buyouts in Japan



Note: The left vertical axis is the number of buyouts. The right vertical axis is the total value in yen. Data from the Mitsubishi Research Institute and ChuoAoyama PricewaterhouseCoopers.