

96-F-24

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in the Japanese Safety Net

by

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November 1996

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**Financial Fragility and Recent Developments
in the Japanese Safety Net***

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October 1996

* This is a revised version of the paper prepared for the 71st Annual Western Economic Association International Conference, June 1996 at San Francisco. The author acknowledges useful comments made by Frank Packer, Murdoch MacPhee and Ramon Moreno on the earlier version.

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Abstract

The bad loan problem in the early 1990s has revealed the fragility of the Japanese banking system. This paper examines how the safety net mechanism operated by the Ministry of Finance (MOF) created this fragility. Although the safety net protected most depositors and other investors from losses associated with bank failures, the MOF did not implement prudential regulations to prevent the moral hazard on the part of bank management that the comprehensive safety net was likely to induce. The human relationship between the regulatory authorities, particularly the MOF, and private banks through the so-called *amakudari* system was not effective in disciplining bank management. Rather, the *amakudari* system reduced bank capital and thereby made the banking system more fragile. This fragility did not come to light during the high growth period because stringent competition restricting regulations worked to support the fragile safety net. However, deregulation and structural changes in domestic financial markets removed this support. Thus, as financial deregulation proceeded, it became increasingly likely that the potential fragility would surface. The extremely easy money policy since the mid 1980s and the drastic move to a tight money policy after the late 1980s were just the prelude to turmoil in the Japanese banking sector.

I Introduction

The purpose of this paper is to investigate why the bad loan problem in Japan has been so serious. As was the case with many other countries, Japan made a mistake in adopting an unstable monetary policy; taking an extremely easy money policy in the late 1980s and belatedly, but abruptly, tightening policy in the early 1990s, resulting in wide fluctuations in prices of assets such as stocks and real estate. Many people regard this unstable monetary policy as the ultimate cause of the bad loan problem.

However, this paper advocates the hypothesis that the safety net long operated by the monetary authorities created a potential fragility in the banking sector which led to the bad loan problem and disorganized the responses of policy makers to this problem.¹⁾ The specific features of the safety net exacerbated moral hazard, on the part of bank management, after sharp declines in asset prices. The decline in banks' profitability, due to both structural changes in corporate finance and financial deregulation since the early 1980s, made it difficult for the government to implement a quick rescue program in collaboration with major private banks.

This paper examines mechanisms of the safety net implemented by the Japanese monetary authorities in the postwar period, and derives policy implications about the possibility of financial reform with a view to strengthening Japan's financial system. The next section, section II, explains the current situation of Japan's bad loan problem, as well as discussing the disclosure of information about non-performing loans in the banking sector. The section emphasizes that the bad loan problem is particularly acute in the weakest link of Japan's banking industry, such as credit cooperatives. Section III examines features of the Japanese safety net, pointing out that it was

characterized by comprehensive risk-sharing, which is likely to induce private banks, particularly those in financial distress, to take excessive risk.

Section IV examines prudential regulation in Japan. Prudential regulation is necessary to prevent banks' excessive risk-taking induced by the comprehensive safety net. This section argues that Japanese monetary authorities did not discipline bank management by means of effective prudential regulations such as a capital adequacy requirement. In particular, the human relationship between monetary authorities and private banks through the so-called "*amakudari*" system tended to make the Japanese banking system more fragile by decreasing bank capital. Section V explains that, instead of prudential regulations, the handsome amount of rents that banks enjoyed under competition-restricting regulations used to be effective in preventing excessive risk-taking. Section V also shows that the existence of banks' rents was favorable to the monetary authorities' program of bailing out failed banks in collaboration with other banks.

Section VI discusses how structural changes in the financial system have undermined the effectiveness of the Japanese safety net. Both structural changes in corporate finance and financial deregulation since the early 1980s have decreased bank profitability. The decline in bank profits induced banks to include much riskier assets in their portfolios than before, and also made it difficult for the monetary authorities to depend on private banks' collaboration in dealing with bank failures. The final section, section VII, summarizes the arguments in this paper.

II The Scale of Deterioration of Banks' Balance Sheets

This section examines the present situation of non-performing loans in the Japanese banking sector. First, the imperfect nature of disclosure of non-performing loans is emphasized. Then, this section explains how Japanese banks have delayed coping with the accumulated non performing loans.

1. The disclosure of non-performing loans

It is difficult to grasp the exact situation of the Japanese bad loan problem because information about banks' bad loans is only partially disclosed even now. For example, *shinkin* banks and credit cooperatives have not yet disclosed any information about non-performing loans. The Major 21 Banks²⁾ and the regional banks only started to disclose semi-comprehensive categories of non-performing loans in March 1996; i.e., (a) loans to bankrupted borrowers, (b) loans with interest payment overdue for longer than 180 days, and (c) loans with interest reduction to borrowers in trouble.

Actually, the Major 21 and the regional banks began to disclose figures for non-performing loans in 1993. However, until March 1996, the Major 21 did not disclose the non performing loans belonging to category (c), and the regional banks disclosed only category (a). On the other hand, miscellaneous cooperative banks such as *shinkin* banks, credit cooperatives and agricultural cooperatives have not yet disclosed figures for non-performing loans at all. It is noteworthy that, as Table 1 shows, deposits of these cooperative banks account for nearly 30 percent of total bank deposits. Thus, although the disclosure of information has been improving to some extent, our knowledge about non-performing loans in the banking sector is still far from complete.³⁾ In particular, it will be some time before the cooperative banks disclose their non-performing loans.

2. Fragility of cooperative banks

In April 1996, the Ministry of Finance (MOF) submitted a report to the Diet about non-performing loans in the banking sector. The report published aggregated figures for non-performing loans held not only by major banks and regional banks but also, for the first time, by *shinkin* banks and credit cooperatives. Table 2 summarizes these figures. The estimated amount of total non-performing loans is ¥38 trillion as of September 1995. This figure is just 5.4 percent of their total loans outstanding at September 1995, so that non-performing loans may appear to be easily manageable for Japanese banks. However, it would be too hasty to say so. The figures for non-performing loans vary widely across categories of financial institutions. For some categories, the ratio of non-performing loans to total loans is considerably higher than the industry average.

The credit cooperatives seem to be particularly fragile. According to Table 2, the estimated bad loans/total loans ratio is 12 per cent for the credit cooperatives, or twice as high as that for the Major 21, which is estimated at 6 per cent. As for *shinkin* banks, it was reported that if they were to subtract non-performing loans from their equity capital, almost 90 percent of these banks would be unable to satisfy the domestic standard of capital adequacy requirement (4 percent) imposed on commercial banks in Japan.⁴⁾ This newspaper report suggests the serious difficulty of non performing loans for the cooperative banks.

3. Delayed recovery process

This paper keeps track of the amounts of officially reported bad loans and

their relative importance for the Major 21 Banks based on the officially disclosed information about non-performing loans. As has already been explained, these major banks have disclosed their bad loans to the greatest extent. Table 3 shows an outline of the aggregated balance sheet for the Major 21 Banks from March 1990 to September 1995.

From March 1993, when these banks began to disclose both loans to bankrupted borrowers and loans overdue (over six months), until September 1995, the amount of officially reported bad loans stayed at around ¥12 trillion in spite of their endeavor in writing off bad loans and accumulating special provisions for specific non-performing loans (special provisions increased to ¥4.9 trillion from ¥1.9 trillion during the same time period). This suggests that there was a ceaseless stream of bad loans for these major banks due to the stagnant Japanese economy during the early 1990s.

On the other hand, these banks do not seem to have succeeded in strengthening their capital bases. We estimate the market value of equity capital for these banks by adding hidden reserves, two categories of provisions and the accumulated amount of junior debts in Table 3. During the two and a half years from March 1993, the estimated equity capital did not increase, and its ratio to bad loans decreased from 4.69 to 4.43. Thus, according to the official figures for bad loans, the Major 21 have not yet recovered from the damage of bad loans. Some authors expected that these major banks would take two years (from 18 percent as of September 1993) to achieve a loan loss reserve coverage equal to 50 per cent of official non performing loans.⁵⁾ In reality, loan loss reserves accounted for just 40 percent of non-performing loans as of September 1995.

III The Safety Net in Japan

We define the financial safety net as a social system of ex post dealing with distressed banks and of distributing social costs associated with bank failures among related parties. The government provides a financial safety net in order to minimize the spillover effects of the managerial failures of banks and other financial institutions on the financial system as a whole. The safety net also has important implications for risk sharing in the financial system. Specifically, the operation of the safety net changes the ex post distribution of social costs associated with bank failures. Thus, appropriate incentive mechanisms are required to prevent moral hazard type behavior that could endanger the viability of the safety net system. The wider the scope of the financial safety net, the stronger the incentives for banks to engage in moral hazard type behavior, and the more energetically the regulatory authorities must monitor banks to prevent excessive risk-taking.

1. The mechanisms of the safety net

The Japanese financial system operates under an extensive safety net provided by the regulatory authorities. The Ministry of Finance (MOF) has executed programs to rescue distressed financial institutions in tight collaboration with the Bank of Japan (BOJ) and private financial institutions, particularly major banks.⁶⁾ In most cases the MOF has guided (more precisely ordered) private banks to rescue their distressed peers. In 1965, for example, Kawachi Bank, a small regional bank in financial distress, was absorbed by Sumitomo Bank, while in 1978 Mitui Bank absorbed Toto Bank, which had suffered from stagnant performance for a long time. In both cases, the rescue programs were implemented under the administrative guidance of the MOF.

In other cases, the MOF has often placed its officers on the board of the distressed bank with a view to reorganizing its management. To dispatch officials to a distressed bank may be an effective signal by the MOF that the government has made a commitment to rescue the bank at any cost, thereby helping the MOF to persuade other banks to collaborate with the bailing out program.⁷⁾ However, this signalling does not seem to be always successful. One of the most recent cases was Hyogo Bank, to which the late chief of the Banking Bureau was sent to reorganise its management. Despite this intervention, Hyogo finally went bankrupt in October 1995. This paper will later examine how the human relationship between monetary authorities and private banks influences the stability of the banking sector.

2. Comprehensive safety net

Since the actions taken by the authorities in rescuing troubled banks have been covert, it is difficult to estimate the social costs of the safety net and the exact distribution of the burden among the various agents. However, it is obvious that the safety net was comprehensive in the sense that not only depositors but also almost all other debt holders (except for a few major banks) were exempted from the burdens of bailing out distressed banks.⁸⁾ Even shareholders of failed banks seemed to be rescued from bank failures. For example, in the case of credit cooperatives, their failures did not require equity holders to share the costs of failures, although the equity holders should have been responsible for monitoring and disciplining management. The costs of preserving financial stability have fallen disproportionately on sound private banks, particularly major banks. The monetary authorities have rarely paid the costs of the bail-out procedure, confining their role to coordinating the rescue

program endured by private banks and other financial institutions.

In some cases, the BOJ may have extended loans to distressed banks at the official discount rate — which was substantially lower than money market interest rates — but it is impossible to obtain any information about these unofficial rescue programs. After the rescue of Yamaichi, the BOJ utilized emergency loans (authorized by Article 25 of the BOJ Act) for the first time to support the Tokyo Kyodo Bank, newly established in 1995 to take over two failed credit cooperatives in the Tokyo prefecture. The amount of the BOJ's emergency loans increased abruptly during 1995 due to managerial crises in several small and medium scale banks (including Hyogo Bank) to reportedly reach a little more than ¥1.0 trillion.

3. Danger of forbearance policy

The MOF is authorized to have strong discretionary power in dealing with troubled individual banks. However, the MOF's implementation of the safety net has been essentially covert. There have also been no explicit rules or procedures for the authorities to obey in implementing the safety net. Therefore, it has been almost impossible for outsiders to evaluate the MOF's performance in operating the safety net. Herein lies a danger of the forbearance policy in which the authorities postpone taking determined actions to liquidate de facto insolvent banks. The bureaucrats in charge of monitoring the management of individual banks have significant incentives to postpone any definite policy decision which would reveal their incompetence to the public. It is well known that the forbearance policy is likely to incur large social losses when the troubled banks finally fail after remaining in business for a long time due to this policy.⁹⁾

It is easy to understand why the forbearance policy tends to increase the social cost of dealing with bank failures. A bank at the brink of bankruptcy has a particularly strong incentive to take extreme risk because it stands to lose almost nothing when it fails. On the other hand, depositors and most other investors are not cautious about the riskiness of individual banks' management under the comprehensive safety net. The insufficient disclosure is likely to worsen the situation. Therefore, unless the authority stops its operation, the distressed bank continues to increase liability, most of which will finally be transferred to the official safety net.

Unfortunately, we have observed a number of cases which suggest a forbearance policy on the part of the authorities during the early 1990s. For example, we may cite the case of Cosmo Credit Cooperative, which failed and was taken over by Tokyo Kyodo Bank in March 1996. Although Cosmo had already fallen into serious difficulty, with negative profits in early 1992, the Tokyo metropolitan government, responsible for monitoring management of credit cooperatives located in Tokyo allowed it to conceal its actual bad situation by manipulating accounts.¹⁰⁾

4. Deposit insurance in Japan

The experience of the US financial system suggests that deposit insurance should be an important element of the safety net. However, this has not been the case in postwar Japan. Although the system of deposit insurance was introduced in 1971 in Japan, deposit insurance was not actually utilized until 1992. The MOF continued to implement the traditional safety net to avoid the straightforward bankruptcy of depository financial institutions. The MOF gave priority to the protection of weak (and therefore inefficient) banks over the promotion of

competition in the Japanese financial industry, even after the introduction of deposit insurance. The Deposit Insurance Corporation (DIC) remained nominal for a long time. Its functions were limited compared with those of its US counterpart (the FDIC), being confined to paying off insured deposits in cases of bank failure, although the DIC has never resorted to paying off. In 1986, the Law of Deposit Insurance was amended to strengthen the DIC's competence. For example, the amended law allows the DIC to support schemes of rescuing or disposing of distressed banks by giving the necessary funds to private agents involved in the schemes. The DIC functioned for the first time only in April 1992, when it supplied ¥8.0 billion to help Iyo Bank absorb Toho Sogo Bank.

Although the DIC has been equipped with a means of paying off insured deposits of failed banks from the time of its establishment, the MOF announced in December 1995 that they are not yet prepared to exercise it, although a quarter century had passed since the start of deposit insurance. It was a surprising announcement. Even now the MOF is concerned that widespread turmoil would occur if the paying off were executed. The long-standing implementation of the comprehensive safety net has produced among depositors and other investors a perception that they will never be required to share the burden if their banks should go bankrupt. Because of this widespread perception, the MOF's adoption of paying off insured deposits without rescuing investors of other bank debts would result in an unexpected shock to the financial system.¹¹⁾

As Ueda(1996) describes, "the most important safety net in this country has not been the deposit insurance system, but the public's confidence in the MOF and the BOJ's ability to avoid a major instability in the financial system." This safety net may have had the merit of freeing people from the need to bother with

the soundness of individual banks' management. However, it has also deprived investors of incentives to monitor the performance of individual banks and hindered the development of market mechanisms to discipline bank management. The lack of market mechanisms, in turn, has made it impossible for the MOF to abandon the traditional safety net.

IV Prudential Regulations in Japan

The safety net with comprehensive risk sharing deprives depositors and other investors of incentives to carefully monitor individual banks' management. The financial markets have not pressured banks to strengthen their capital bases. Thus, the banking system will become fragile unless, in place of the financial markets, the monetary authorities either impose effective prudential regulations such as a capital adequacy requirement or directly discipline banks' management to prevent them from taking excessive risk.

1. Capital adequacy regulations

Capital adequacy requirements, accompanied with rigorous monitoring by regulators, are a typical means of prudential regulation. During the period of economic reconstruction immediately after World War II, the MOF was seriously concerned about the prudence of bank management, because banks' equity capital per deposit had fallen sharply from 29.9 per cent in 1930 to only 5.6 per cent by 1953. With a view to strengthening banks' capital bases, the MOF started in 1953 instructing banks to reduce current expenses to 78 per cent or less of current revenues. This administrative guidance continued until 1973.

In 1954, the MOF introduced the capital adequacy regulation, which required

banks to increase broadly defined capital to more than 10 per cent of total deposits.¹²⁾ This could be regarded as a forerunner of the capital adequacy regulation introduced by the Bank for International Settlements (BIS) in 1987. However, some depository financial institutions were not covered by this capital adequacy regulation. For example, the *sogo* banks were required only to maintain more than the prescribed minimum amount of equity capital (book value). Thus, they could have increased their leverage ratio without limit had they wished to do so. When the *sogo* banks converted to regional banks in February 1989, the MOF started to impose the same minimum capital adequacy ratio on the *sogo* banks (now called the regional banks II) as for the city banks and the other regional banks. *Shinkin* banks, which are nonprofit financial institutions, had been free from the capital adequacy regulation until May 1986, when the MOF introduced administrative guidance in the form of a minimum capital adequacy ratio.

Thus, until the late 1980s, the capital adequacy regulation did not cover the whole range of depository financial institutions. Moreover, the regulation seemed to be ineffective. Figure 1 shows that, from 1960 to the mid 1970s, the average of the (broadly defined capital/deposits) ratio for the banking sector, which is comprised of city banks and regional banks, remained almost constant at 6 per cent, far below the MOF's requirement of 10 per cent. Furthermore, the average capital/deposit ratio dropped abruptly to below 4 per cent during the 1980s.¹³⁾

2. Bank capital and *amakudari*

A possible explanation for the low level of bank capital may be that the close relationship between the monetary authorities and private banks worked as a

substitute for bank capital. Specifically, the monetary authorities (i.e., the MOF and the BOJ) quite often send their post-retirement officials to the managerial board of private banks through the so-called *amakudari* system. Many banks have maintained a stable human relationship with the monetary authorities, which might help the authorities to monitor banks' management effectively. Effective monitoring by the monetary authorities might be efficient in disciplining private banks as a substitute for a formal capital adequacy requirement.¹⁴⁾

Amakudari from the regulatory authorities to private banks might signal to the financial market that the banks accepting officers will be closely monitored by the regulators through the specific human relationship. If this were true, the financial market would be less motivated to monitor the soundness of those banks accepting *amakudari* officials. Alternatively, managers of the banks accepting *amakudari* would anticipate that, in case of need, they will be able to depend on rescue from the public authorities more easily than otherwise. In either case, the banks accepting *amakudari* would be induced to lower their equity capital ratios compared with their peer.¹⁵⁾ If this explanation were true, the Japanese safety net would have had the merit of economizing on banks' equity capital while ensuring stability in the banking industry. In other words, the safety net might help banks to take on higher leverage ratios than otherwise, thereby strengthening financial intermediation centered on bank credit.

This paper tries to determine to what extent the regulatory authorities' stance towards private banks has effectively reduced banks' capital by examining the relationship between individual banks' equity capital and *amakudari* from both the MOF and the BOJ to private banks. Table 4 seems to

confirm the hypothesis discussed above. This table classifies 124 regional banks into four categories, i.e. those accepting *amakudari* officials from both the MOF and the BOJ (category I), those accepting officials from the MOF, but not from the BOJ (category II), those accepting officials from the BOJ, but not from the MOF (category III), and those accepting *amakudari* officials from neither the MOF nor the BOJ (category IV) as of 1985. Then, this table compares averages of the equity capital per total assets (EQU), and the equity capital per total deposits (DEP) for categories I, II, and III with those of category IV for the period from 1980 to 1984.

Both the capital/asset ratio and the capital/deposit ratio are significantly higher for categories I and II than for category IV. For example, the equity capital per total asset (EQU) for banks accepting *amakudari* officials from both the MOF and BOJ (category I) was on average 0.750 per cent less than that of those banks accepting officials from neither the MOF nor the BOJ (category IV). As for the equity capital per total deposit (DEP), the same is true. The average of DEP is 4.049 for category IV, while those for categories I and II are respectively 0.922 and 0.780 per cent less than the average for category IV. These results suggest that those banks that maintained close human relationships with the MOF through the *amakudari* system tended to have smaller capital bases than those accepting *amakudari* only from the BOJ and those not accepting any *amakudari* officials.¹⁶⁾

Some may claim that the capital base of the banks accepting *amakudari* was relatively low because the MOF staff had been sent to badly performing banks. Since weak performance tends to lead to a weak capital base for individual banks, Table 4 may indicate that the relatively weak banks were eager to accept *amakudari* officials from the MOF, rather than that the *amakudari* caused the

lower equity capital. As this paper has already mentioned in the previous section, there have been some cases in which the MOF dispatched officials to a bank's managerial board when the bank was in difficulty with a view to restructuring their management. Daiko Bank, located in Niigata prefecture, was a conspicuous example. The bank fell into managerial difficulty during the late 1970s because of aggressive involvement in the real estate development boom of the early 1970s, recording negative profits and negative equity capital (book value). The MOF sent an officer to Daiko to reorganize its management. Despite this endeavor, however, Daiko continued to record negative profits and negative book value of equity capital until the early 1980s. Regarding this case as abnormal, Table 4 excludes Daiko from the sample.¹⁷⁾

However, most banks have a long history of accepting *amakudari* officials from the monetary authorities since immediately after World War II, regardless of their management performances. As Rixtel(1994) explains, the *amakudari* relationship is long-lasting for most banks. The lower section of Table 4 presents the average performances during the latter half of the 1970s for each of the three categories I, II, and III compared with those of the category IV. There are no significant differences in the relative performances of the four categories of sampled banks except for the equity capital ratios EQU and DEP. Thus, the figures reject the conjecture that those banks accepting *amakudari* from the MOF showed lower profit rates or lower asset growth during the late 1970s. The banks accepting *amakudari* officials from the MOF as of 1985 recorded a lower capital ratio on average than those accepting no officials from the MOF during the first half of the 1980s, even though their profitability and asset growth were not significantly different from those of the other banks.

3. Did the book value of equity capital matter?

The banks accepting *amakudari* officials from the MOF tended to have lower equity capital in terms of book value. However, the book value of equity capital is different from its economic value. Lower equity capital does not necessarily imply lower economic value of equity capital. Thus, this paper briefly investigates whether or not the book value of equity capital has mattered.

The existence of unrealized (hidden) profits associated with shareholding is the most important cause of the discrepancy between the book value and economic value of equity capital because the book value of stocks held by banks has been substantially lower than their market value.¹⁸⁾ Thus, the first question is whether the banks with smaller book value of equity capital compensated for this shortage by holding a larger amount of stocks with unrealized profits. Since the market value of each bank's shareholding was not disclosed in Japan until the end of the 1980s, this paper must resort to assuming that a larger amount of the shareholding implies a larger amount of unrealized profit associated with shareholding. Based on this assumption, if banks with a lower book value of equity capital hold a larger amount of stocks in their portfolios than other banks, a mere comparison of the book value of equity capital (such as that presented in Table 4) would be misleading.

Table 4 compares the average value of stocks per total assets held by each category of sampled banks. It is obvious that the banks in category I, II, and III did not hold a significantly larger amount of stocks than those in category IV, i.e., those banks accepting no *amakudari* officials. Thus, the existence of unrealized profits associated with shareholding does not force the author to change the conclusion that the banks accepting *amakudari* officials, particularly from the MOF, had lower equity capital than those banks that did not accept

amakudari officials at all.

The second question is whether banks accepting *amakudari* officials with lower equity capital showed poorer performances than other banks. Economic theory predicts that lower equity capital induces banks to take more risk. However, if the *amakudari* system effectively worked to discipline the accepting banks' management, their lower equity capital would not necessarily imply poorer performances. This paper investigates whether the *amakudari* system succeeded in suppressing banks' risk-taking, despite leading to lower bank capital by, focusing on the non-performing loans individual banks accumulated during the late 1980s and the early 1990s. As explained in Section II, the Major 21 Banks and the regional banks disclosed comprehensive figures regarding non-performing loans for the first time in March 1996. Figure 2 shows the distribution of bad loan ratios (bad loans per total loans) for 125 regional banks. The following discussion assumes that the amount of non-performing loans as of March 1996 indicates the consequences of individual banks' risk-taking during the latter half of 1980s and the early 1990s.

The middle row of Table 4 (BAD(Mar.96)) presents a comparison of banks bad loans per total loans in the categories I, II, and III with those in the category IV. The average of the bad loan ratio for the category IV (i.e., banks accepting no *amakudari* officials) is 2.207 per cent. On the other hand, the bad loan ratio for the category I is 1.918 per centage points higher than that for category IV. This divergence is statistically significant at the 1 per cent level. Thus, banks in both categories I and II, i.e., those accepting *amakudari* officials from the MOF, had, on average, a significantly (statistically significant at the 1 per cent level) higher bad loan ratio than banks in category IV, which did not accept officials from the monetary authorities at all as of 1985.

Based on the statistics in Table 4, this paper makes the following conclusions. The *amakudari* system, particularly *amakudari* from the MOF, made it possible for accepting banks to reduce their equity capital under the comprehensive safety net. However, the system was powerless in disciplining banks' prudential management. The banks accepting officials from the MOF tended to take on risk more aggressively, and consequently had higher bad loan ratios, as of March 1996, than the other banks.¹⁹⁾

4. A summary

Prudential regulations were not effective in Japan until the end of the 1980s. The brief description of the capital adequacy guidance provides evidence supporting this conclusion. Table 5 provides a list of prudential regulations for commercial banks, i.e., the city banks and the regional banks, as of 1974. The MOF has kept almost all of the prudential guidance listed in this table intact. However, on the whole, bankers did not consider that these official guidelines were to be met at any cost, and the MOF was generous enough to permit some divergence between required and actual figures attained by individual banks.

The MOF did not regard prudential regulations as essential for financial stability, even though the gradual but steady deregulation of the financial system was already undermining the effectiveness of the traditional safety net. According to the National Federation of Credit Cooperatives, nearly 40 per cent of credit cooperatives had violated the regulation limiting loans to a single party (to 20 per cent of capital in the broad sense) as of September 1994. This episode suggests how ineffective prudential regulation has been in Japan.

The relationship between the monetary authorities and private banks through the so-called *amakudari* system was not effective as a substitute for

effective prudential regulations in disciplining banks. Rather, the *amakudari* system induced banks to lower equity capital ratios, and to engage in aggressive risk-taking during the so-called "bubble period" of the late 1980s.

V Role of Competition Restricting Regulations

The previous section explained that Japanese prudential regulation was ineffective until at least the late 1980s. Ineffective prudential regulation produced the danger of financial fragility as early as the high growth period of the 1960s and 1970s, because the existence of a comprehensive safety net was likely to induce banks to engage in moral hazard like behavior. However, this fragility did not come to light until the end of the 1980s. This was because the competition restricting regulations played an important role in supporting the safety net.

The competition restricting regulations, such as interest rate controls and restriction on new entry into banking and other financial business through the system of compartmentalization, conferred a handsome amount of rents on existing banks and other financial institutions. The primary purpose of the MOF's administrative guidance was to suppress full-scale competition in each of the compartmentalized financial businesses, thereby protecting the less competitive small-scale banks such as *sogo* banks, *shinkin* banks and credit cooperatives. The MOF's policy stance was often called the "convoy administration."²⁰ Figure 3 shows average profit rates (net income divided by equity capital) in the banking industry since 1955. Japanese banks enjoyed high profit rates during the high growth period from the late 1950s to the early 1970s, when extensive competition restricting regulations were effective and

domestic financial markets were segregated from foreign markets.

The rents created by the competition-restricting regulations contributed to stabilizing the banking system under the Japanese comprehensive safety net in two ways. First; as economic theory shows, the existence of rents provides private banks with incentives to refrain from excessive risk-taking in order to continue enjoying handsome rents, even without effective prudential regulations.²¹⁾ Furthermore, thanks to protection offered by the competition restricting regulations, even inefficient banks rarely went to the brink of managerial difficulty that is particularly likely to induce moral hazard behavior.²²⁾

Second, the monetary authorities were able to utilize the rents accumulated in the banking sector as a means of dealing with banks in financial distress. Specifically, the regulators relied on private banks' collaboration in implementing the safety net, and major banks faithfully bore a disproportionate share of the costs involved. This mechanism would not have worked had the major banks not enjoyed the rents stemming from the competition-restricting regulations. The MOF also utilized the competition restricting regulations to give private banks an incentive to accept its initiatives in the process of dealing with bank failures. The MOF manipulated the regulatory means to do favors for those banks who toed the line and to penalize those who failed to heed their guidance. In other words, specific administrative guidance based on the competition-restricting regulations was an instrument for the MOF to determine the distribution of rents among banks. Thus, the competition-restricting regulation was strategically important for the MOF in order to maintain the viability of the comprehensive safety net.²³⁾

VI Impact of Structural Changes on the Safety Net

Figure 3 shows that the average of bank profit rates has declined considerably since the mid 1970s. This decline corresponded to structural changes in the financial system, which have been related to both substantial changes in corporate finance and the gradual introduction and enforcement of deregulation measures.

First, the government started to issue a large amount of bonds to compensate for the decline in investment expenditure by private enterprises in the mid 1970s. The large amount of outstanding government bonds stimulated trading in government bonds and brought forth momentum for the liberalization of interest rates. Secondly, pressures from abroad forced the Japanese government to deregulate domestic financial markets. In particular, the Yen-Dollar Ad Hoc Committee, set up in 1983 due to strong requests from the Reagan administration, resulted in specific time schedules for the liberalization of both interest rates and the Euro-yen markets.²⁴⁾ Thirdly, blue-chip companies became financially mature, reducing their reliance on bank loans. The internationalization of capital markets promoted this trend. These changes have led to a decline in the relative importance of banking in the financial system, which in turn has undermined bank profitability.²⁵⁾

1. Structural changes in corporate finance

The low economic growth since the latter half of the 1970s implied a decrease in the amount of investment expenditures that the corporate sector needed to finance. As Table 6 shows, major companies reduced their dependence on borrowing from banks, while increasing their reliance on internally-generated

funds (mainly consisting of depreciation and retained profits). At the same time, fund-raising in the form of securities issues became increasingly important to Japan's major companies.

The liberalization of foreign exchange transactions and international capital movements, which began in 1980 with the revision of the long-standing Foreign Exchange and Foreign Trade Control Law and was promoted by the Yen-Dollar Committee, partly accounts for this change in corporate finance. Many Japanese firms, particularly large ones, were issuing corporate bonds in the Euro and other foreign markets. This exerted strong pressure on the notoriously restrictive domestic corporate bond market to relax the rules governing corporate bond issues. The number of Japanese firms recognized as eligible to issue bonds in the domestic market has increased rapidly since the mid 1980s.²⁶⁾ Firms did not necessarily sever their intimate ties with banks when they issued corporate bonds; often their main banks supported bond issues in foreign markets by providing the firms with a guarantee. However, the influence of banks on major firms' finance and management was substantially weakened by financial internationalization.

The long-term relationship between major banks and firms seems to have been diminished as a result of this structural change in corporate finance. Table 7 shows the relative share of loans supplied by major banks (city banks and long-term credit banks) to their main client blue-chip firms (listed on the Tokyo Stock Exchange and belonging to their *kin'yu keiretsu*) in their total credit supply. According to this table, loans by major banks to their *keiretsu* firms have been decreasing in importance. This suggests that major banks have been forced to extend their credit outside their familiar territories constructed through the "main bank relationship."

Figure 4 shows changes in the industrial distribution of bank loans since the 1960s. During the 1960s and 1970s, almost 50 per cent of bank loans was directed to the manufacturing industries, which included many blue-chip companies familiar to banks. Since the early 1980s, however, the relative importance of manufacturing has declined in the loan market. To compensate for this, banks have increased their credit supply to finance and insurance companies (the most important of which was the sector of nonbank finance companies such as *jusen*), real estate agents, and personal sectors. This is partly due to the fact that blue-chip firms in the manufacturing industries had become financially mature, as has been explained above, and partly due to the fact that the long term trend of yen appreciation since the late 1970s forced industrial changes from the traded good to the non-traded good industries. The latter sectors used to be located outside the territory of banks and are relatively unfamiliar to banks' managers.

In contrast to major companies, small and medium sized enterprises (SMEs) continued to rely on bank credit even after the mid 1970s. Japanese securities markets were unable to accommodate SMEs, with stringent eligibility requirements for corporate bond issues in effect shutting SMEs out of the corporate bond market. The loan market for SMEs therefore continues to be important for banks, particularly for small regional banks and cooperative credit banks. However, in the early 1980s, city banks and other major banks started to invade this market. In the mid 1970s, the amount of credit that city banks supplied to SMEs accounted for only a third of their total loan supply. However, by the end of the 1980s, the share of loans to SMEs had risen to 70 per cent. This has made the market for loans to SMEs more competitive, thereby undermining the profitability of small banks, which had previously dominated

this market throughout the high growth period. City banks and other banks have also increased their business in housing loans, thereby exerting strong pressure on *jusen* companies specializing in such loans.

Thus, the decrease in borrowing of large companies, although gradual, eroded the profitability of the banking sector and forced banks to enter riskier businesses such as loans to land developments. The drop in the banking sector's profitability shown in Figure 3 is thus closely related to changes in corporate finance. These changes may have been a major cause of the banks' aggressive risk taking of the 1980s in the presence of the comprehensive safety net.²⁷⁾

2. The franchise value hypothesis?

Many scholars argue that financial deregulation in the 1980s undermined the profitability of the banking industry, thereby reducing the franchise value for banks. According to this view, it is not a mere coincidence that many countries experienced a similar bad loan problem in the banking industry during almost the same period of the late 1980s and the early 1990s, because banks in those countries were forced, as a consequence of financial deregulation, to compete not only with their peers, but also with other financial institutions belonging to neighboring industries. This heightened competition led to a reduction of banks' rents or 'franchise value', thereby inducing banks to engage in moral hazard type behavior by taking excessive risk.²⁸⁾

Is this hypothesis applicable to the Japanese bad loan problem of the early 1990s? It is not easy to derive a clear-cut answer to this question. It is undeniable, *ex post*, that Japanese banks extended their loans to risky projects such as land developments. However, it is unclear whether banks actually increased risk-taking by taking advantage of the risk-sharing mechanism

implicit in the Japanese safety net, as the franchise value hypothesis would suggest. Banks may have increased their loans to risky projects because they actually regarded those projects as safe. If so, the bad loans resulted from simple errors on the part of banks in evaluating the credibility of borrowers. Similarly, the banks' extension of credit to SMEs, the real estate industry, and other risky fields may have been forced by the structural changes in the Japanese economy, not by a decline in their risk aversion.

However, it seems safe to say that the Japanese bad loan problem is to some extent consistent with this hypothesis. During the late 1970s and early 1980s, most major Japanese banks downgraded their credit investigation section by subordinating it to the business section. Thus, they reportedly gave the business section priority over the loan examination process. This organizational change would appear to be a direct manifestation of change in the risk attitudes of banks. After 1990, when they discovered gravity of the non-performing loan situation, the majority of banks switched back to their former organizational structure.

3. Limitation of the traditional rescue method

Since the beginning of the 1990s, when the so-called 'bubble economy' burst, it has become increasingly difficult for the MOF to maintain the traditional procedure of bailing out bank failures. This is reflected in the utilization since 1992 of the deposit insurance system to cope with the financial distress of individual banks, although, as we have explained, the options of paying off insured deposits off has never been exercised. The scale of the DIC is as yet limited, but its increasing use marks a significant change in the operation of the Japanese safety net. One of the reasons for this shift is that, with structural

changes in financial markets, there are fewer rents in banking for the MOF to use in influencing banks. With financial deregulation, it has become difficult for the authorities to manipulate regulatory means to favour some financial institutions over others. For example, interest rate deregulation has reduced the meaning of branch offices for individual banks, making the MOF's administration with respect to the branch network less important.²⁹⁾

A few recent cases exemplify the difficulties the MOF faces in using traditional bail-out policies. In the summer of 1992, Toyo Shinkin Bank, located in Osaka, was broken up because of insolvency due to bad loans. The MOF reportedly wanted Sanwa Bank, a leading city bank, to absorb it in the traditional fashion, but was unable to persuade Sanwa to do this. Instead, Toyo Shinkin was broken up into a number of pieces, each of which was absorbed by a different financial institutions. In the process, the Deposit Insurance Corporation paid ¥20 billion to Sanwa, which absorbed the largest part and played a major role in the reorganization.

Another event signalling that traditional methods are running into trouble occurred early in 1994. Three local banks in the Tohoku area jointly announced a plan for a merger, another typical MOF bail out method. One of the banks had a serious bad loan problem, and many parties, including the MOF, were pessimistic about its future viability. The merger plan, which was undoubtedly the result of MOF administrative guidance, had to be abandoned following fierce resistance from employees of the relatively sound banks involved. Some of the banks' managers also reportedly argued against the merger.

Table 8 presents a short chronology of the DIC's assistance to troubled banks. The traditional methods of dealing with bank failures have not yet disappeared, and as the chronology suggests, many private banks are still

playing an important role through by collaboration with the regulators. However, the role of the DIC in the process appears to have become increasingly important, and it is likely that the deposit insurance system will be utilized substantially in the future.

Use of the deposit insurance system to facilitate reorganization does not, however, imply that banks will undergo formal bankruptcy procedures. It seems likely that the MOF will continue to avoid explicit bank failures, instead by using the deposit insurance system intensively, rather than preferential regulatory treatment, to provide sound banks with incentives to merge with insolvent ones or to collaborate with the authorities in restructuring troubled banks. This implies a slow reorganization of the financial system and a marked increase in the burden borne by the DIC. To keep this burden manageable, the DIC will need to have its monitoring power strengthened in order to keep the cost of bail-out within manageable bounds. In particular, the DIC should be able to order banks in distress to cease operations before the negative value of their net wealth becomes too great. In fact, the New Law for Strengthening the DIC, instituted in 1996, authorizes the MOF to take such a policy of "prompt corrective action."

The explicit involvement of the DIC in the operation of the safety net should be beneficial to the Japanese economy. The social costs of bailing out distressed banks will become more transparent, and this will facilitate assessment of the efficiency of the current financial safety net. It will also make the regulatory authorities' administration more accountable, as suggested by the recent experience of dealing with the two cooperative credit banks in Tokyo. The improvement of accountability is desirable because it will discipline the regulatory authorities, thereby preventing the forbearance policy, and will rationalize the safety net mechanisms.

VI Concluding Remarks

The safety net implemented by the Japanese monetary authorities was so comprehensive that the financial market lost the function of monitoring and disciplining bank management. The authorities were not seriously concerned with prudential regulations to prevent moral hazard type behavior. Because of the covert nature of the safety net, the authorities were not motivated to avoid the forbearance policy which increased the social costs associated with bank failures. Thus, the Japanese banking system has been potentially fragile for some time. Competition restricting regulations prevented the fragility from emerging by conferring rents on the existing banks. The rents worked to motivate banks to engage in prudent management despite the existence of the comprehensive safety net. The MOF was able to manipulate specific aspects of the competition-restricting regulations in an attempt to induce banks to collaborate with the program of bailing out distressed banks.

However, financial deregulation and structural changes in corporate finance have undermined the effectiveness of this stabilizing mechanism and intensified the danger of fragility-emerging. Thus, the unstable monetary policy since the mid 1980s was just the prelude to the financial turmoil of bad loans. The MOF suddenly found it difficult to deal with distressed banks in collaboration with major banks. However, since they had neglected for so long to prepare alternative systems for dealing with bank failures, they have been unable to skillfully implement any policy to dispose of bad loans, and have been forced to leave the banking industry to gradually heal itself in the early 1990s.³⁰⁾ This is the reason why Japan has taken such a long time to resolve the bad loans

problem in the banking sector.

The Japanese government is now reorganizing the safety net. The DIC will take broader and more positive responsibility for dealing with distressed banks, and the regulatory authorities are to intervene in dealing with problem banks, following explicit rules just like those of the US Prompt Corrective Action. A special organization has been established within the DIC to quickly take over the failed credit cooperatives which are most seriously suffering from bad loans.

Although these reform measures seem to be reasonable, there remains some uncertainty regarding the safety net. In particular, how should the regulatory authorities coordinate their examination power with the DIC's functions of dealing with bank failure? In order to deal with bank failures efficiently, the DIC requires detailed information about individual banks' current management. Also, the DIC's financial powers and the examination authority currently lying with the MOF should be integrated into a unified organization. The DIC should be staffed by persons with expertise concerning developments in financial markets, and have a research section for the analysis of bank behavior in the ever-changing market environment, in order to keep their monitoring ability from becoming obsolete. Thus, rationalization of the safety net will require a reorganization of the MOF.

Endnotes

1) This paper defines all depository financial institutions as banks including not only the city banks and regional banks, but also various cooperative credit banks. See Table 1.

2) The group of Major 21 Banks consisted of eleven city banks, three long-term credit banks, and seven trust banks. Since Mitsubishi Bank and Tokyo Bank merged in April 1996, at present the number of city banks is ten.

3) Official figures for non-performing loans do not seem to be sufficiently comprehensive. We should also pay some attention to the fact that the loans sold to the CCPC are not counted in the figures in Table 2. When a bank sells non-performing loans to the CCPC at discount prices, the amount of bad loans is reduced by that amount in the bank's balance sheet. However, if the CCPC is unable to collect the loans within several years, the selling banks must take them back. Most non-performing loans sold to the CCPC (¥9.9 trillion in book value and ¥4.3 trillion in terms of purchase prices) have not yet been collected. By September 1995, the CCPC had collected only ¥0.274 trillion of the purchased loans. Thus, it would be safe to consider the amount of bad loans sold to the CCPC as still remaining on the balance sheet of the banking sector.

4) *Nihon Keizai Shimbun*, May 16, 1996.

5) See Weisbrod(1994).

6) Until the end of the 1980s, the number of banks that came close to failing was small, with the largest rescue program involving not a bank but Yamaichi Securities Company in 1965. In this rescue, coordinated by the MOF, the BOJ provided emergency loans of ¥28.2 billion to Fuji Bank and two other banks which functioned as conduits supplying financial support to Yamaichi.

7) As this paper will explain below, many banks, particularly small-scale banks, have accepted officials of high rank from the monetary authorities independently of their temporary performances. This phenomenon is called "*amakudari*" in Japanese, which means "descending from heaven."

8) Actually, until the late 1960s, there were a few cases in which depositors were forced to bear some part of losses associated with bank failures. See Yamawaki(1996).

9) See Kane(1985) and (1993)

10) *Nihon Keizai Shimbun*, May 7, 1996. The failure of Musashino *Shinkin* Bank is also an example of the forbearance policy that came to light in 1996. Musashino *Shinkin* had been in trouble since 1993 and the MOF was in charge of examining the bank's account statements before publication. The MOF reportedly allowed the bank to engage in window dressing to record positive profits even as of March 1996, when the estimated amount of problem loans was nearly 70 per cent of total loans. The MOF guided the bank to conceal its difficulties by allowing managers to manipulate financial statements. In September 1996, the MOF decided to introduce an explicit system of ordering banks in trouble to improve their management based upon officially announced criteria. *Nihon Keizai Shimbun*, October 11, 1996.

11) Needless to say, before adopting the policy of paying off deposits, the MOF should introduce more perfect disclosure of individual banks' bad loans to help investors outside the deposit insurance coverage to select sound banks.

12) Broadly defined capital includes not only equity capital (book value), but also some reserve items.

13) The MOF amended the capital adequacy regulation in 1986 when the accounting rules governing bank financial statements were changed. Through

this amendment, the MOF probably intended to make the capital adequacy regulation more practical and realistic, and it is unclear whether the MOF was yet aware of the increasing need for prudential regulations in banking as of the mid 1980s. The new capital adequacy rule required banks' broadly defined capital to be at least 4 per cent of total assets, hardly a stringent requirement. Since 1987, banks with branches or offices in foreign countries have been subject to the BIS capital adequacy rule, but other banks continue to face only this domestic capital adequacy requirement of 4 per cent.

14) There are a number of hypotheses to explain why the Japanese financial system has accepted the *amakudari* system. Rixtel(1994) provides a useful overview of these hypotheses. Neglecting all other hypotheses, this paper concentrates on analysing *amakudari* from the viewpoint of effectiveness of the financial safety net.

15) The hypothesis that the *amakudari* relationship helps banks to increase their leverage ratio is analogous to the main bank hypothesis in that effective monitoring by the main bank of borrower firms reduces the agency cost associated with external financing. See Hoshi, Kashyap, and Scharfstein(1991), and Aoki, Partick, and Sheard(1994).

16) In contrast to the case of the MOF, *amakudari* from the BOJ did not seem to influence banks' capital base. This interesting result may suggest that the BOJ is not as influential as the MOF in the framework of banking administration.

17) In reality, long before the difficulty came to light, Daiko accepted *amakudari* officials from the MOF. Therefore, it is not true that the managerial difficulty caused *amakudari* in the case of Daiko. The author made sure that including the abnormal case of Daiko in the sample does not change the essential points of his argument.

18) See, for example, Horiuchi and Shimizu(1986).

19) This paper does not explain why so many Japanese banks have accepted *amakudari* officials from monetary authorities. This paper does not intend to deny the rationality of the *amakudari* system either. As long as the MOF continues to regulate competition, the *amakudari* system is likely to be inconsistent with the purpose of prudential regulations. However, if the MOF's administration turns to being more market-oriented than before, as the MOF itself declared in the internal report published in September 1996, the number of officials knowledgeable about the workings of financial markets will increase. It would be a social loss if they were not employed by private banks after retirement.

20) The MOF's administration of branch offices was another significant area of regulation. During the high growth period, when almost all deposit interest rates were under regulation, branch offices were an important means of non-price competition for banks and essentially the vehicle by which they competed for deposit funds. Under the MOF's administration, banks were not free to either expand or change the location of their branch networks. In permitting new branches, the MOF reportedly gave preferential treatment to small banks. The number of branches of small-scale banks increased more rapidly than did that of city banks, both during and after the high growth period. See Horiuchi(1984).

21) See, for example, Klein and Leffler(1981) and Herring and Vankdure(1987).

22) Aoki(1994) argues, by assuming asymmetric information about banks' monitoring activities, that the rent was necessary to motivate private banks to faithfully and efficiently monitor their borrowers. He suggests that the long-term relationship between major banks and borrower firms, called the

"main bank relationship," in Japan was crucially dependent on the competition restricting regulations. However, the restricting full-scale competition was not always necessary to motivate banks to supply a "high quality" level of monitoring. The *laissez-faire* market would be able to motivate banks to conduct good monitoring. See Klein and Leffler(1981).

23) Even now, the MOF manipulates its administrative guidance with a view to induce private banks to collaborate with its rescue program. In 1994, for example, Mitsubishi Bank obtained preferential treatment from the MOF in exchange for rescuing Nippon Trust Bank, which had been seriously damaged by the accumulation of a huge amount of bad loans since the early 1990s. Mitsubishi Bank was 'rewarded' by being allowed to pursue a full complement of trust banking business through Nippon Trust, which is now its subsidiary. Other banks are prohibited by the MOF from engaging in full-line trust banking business through their trust bank subsidiaries. The same story is true of the case in which Daiwa Bank financially supported Cosmo Securities Company, which was seriously damaged by the depression in the securities market after the "bubble" burst at the beginning of the 1990s. Cosmo has been a subsidiary of Daiwa Bank. However, Cosmo retained its stock brokerage business which, has not yet been permitted to the securities subsidiaries of other banks.

24) Frankel(1984) explains the process of the Yen/Dollar agreement. Takeda and Turner(1994) discusses the relationship between the internationalization of Japanese financial markets and domestic financial deregulation in great detail.

25) Bank profitability recovered to some extent in the second half of the 1980s. However, this recovery was associated with higher risk. In hindsight, interest rate margins on lower-quality loans were booked at ex ante spreads that would be found insufficient ex post. See Marsh and Paul(1996).

26) See Horiuchi(1995).

27) Weisbrod, Lee and Rojas-Suared(1992) argue that the decline in the demand for liquid bank deposits has reduced profits in the banking industry in both the United States and Japan. Banks can issue demand deposits at zero interest rates because of the high liquidity of those deposits. According to Weisbrod, Lee and Rojas-Suared(1992), as the development of financial innovations has made it easier for investors to exchange high yielding financial assets and demand deposits, the social demand for demand deposits has decreased exerting downward pressures on banks' profits.

28) See, for example, Keeley(1990) and Dewatripont and Tirole(1993).

29) The MOF partially abandoned branch administration by allowing regional banks and shinkin banks to freely increase the number of branch offices in May 1993. At that time, the MOF announced that the branch regulation for city banks would be gradually liberalized while taking into account the influence on small and medium sized financial institutions. In May 1995, the MOF totally liberalized the regulation regarding the number of branch offices for all banks.

30) More precisely, the MOF has implemented some emergent policy packages to cope with the bad loan problem since 1992. However, these policies were mostly cosmetic in essence.

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Table 1: Japan's Banking Industry and
the Disclosure of Non-performing Loans (As of March 1996)

	Deposit liabilities (¥ trill.)	Loans to bankrupted borrowers	Loans past due over 180 days	Loans with token interest	Relief loans to distressed borrowers
Major 21 banks	250.1(36.7)	○	○	○	×
Regional banks	228.7(32.6)	○	○	○	×
<i>Shinkin</i> banks and Credit cooperatives	121.0(17.8)	×	×	×	×
Agricultural cooperatives and others	81.1(11.9)	×	×	×	×
Total	680.9(100.0)				

(Note) ○=Disclosed, ×=Not disclosed. The figures for deposit liabilities are as of December 1995.
(Sources) Bank of Japan

Table 2: Non-performing Loans in the Banking Sector
(As of September 1995: ¥ billions)

	Total	Loans to bankrupted borrowers	Loans past due	Loans with reduced interest and others
Major 21 banks	23,808(6.08)	3,406	9,608	10,815
Regional banks	7,799(4.22)	1,452	4,098	2,249
<i>Shinkin</i> banks	3,433(4.95)	1,206	2,156	71
Credit cooperatives ¹⁾	2,153(12.14)	509	1,614	30
Other cooperatives	873(2.08)	112	527	234
Total	38,087(5.40)	6,686	18,003	13,399

(1) Figures for Kizu and Cosmo, both of which had gone bankrupt by September 1995 are excluded.

(2) Figures in parentheses indicate the percentage of non performing loans per total loans.

(Sources) Federation of Bankers Associations of Japan, Kin'yu, various issues, and Nihon Keizai Shimbun, April 25, 1996.

Table 3: Aggregated Bad Loans and Equity for the Major 21 Banks

(¥ trillion)

	Mar/90	Mar/93	Sep/93	Mar/94	Sep/94	Mar/95	Sep/95
(A) Total Asset							
(Book Value)	688.5	596.0	581.8	583.2	579.4	575.5	587.7
(B) Loans							
(Book Value)	338.4	363.0	357.8	357.3	353.7	353.6	364.9
(C) Bad Loans	n.a.	11.7	12.7	11.5	12.2	11.6	12.0
(D) Estimated Equity	65.8	53.8	59.6	56.6	56.3	47.3	53.2
Equity							
(Book Value)	19.6	21.4	21.4	21.5	21.7	21.4	21.7
Hidden Reserve	43.8	17.8	23.6	20.2	19.4	9.0	12.8
Provisions for							
Losses	2.3	2.2	1.9	1.3	1.3	1.3	1.4
Special Provi-							
sions	0.0	1.9	2.2	3.0	3.5	4.3	4.9
Junior debts	0.2	10.6	10.3	10.3	10.4	11.3	12.3
(E) Estimated Equity							
Bad Loan Ratio	----	4.60	4.69	4.92	4.61	4.08	4.43
(F) The BIS Ratio (%)	9.86	9.49	10.05	9.84	9.83	9.09	9.50

(1) Estimated Equity = Hidden Reserve + Provisions for Losses + Special Provisions + Junior Debts + Equity (book value)

(Source) Federation of Bankers Associations of Japan

Table 4: *Amakudari* and performances of regional banks

Categories	IV	I minus IV	II minus IV	III minus IV
The averages 1980 - 1984				
EQU	3.436	-0.750(4.067)	-0.662(3.600)	-0.107(0.505)
DEP	4.049	-0.922(4.230)	-0.780(3.629)	-0.124(0.499)
PRO	17.471	0.782(0.686)	1.654(1.471)	1.593(1.229)
GAS	7.937	0.747(1.225)	-0.106(0.177)	0.345(0.498)
STK	0.982	0.095(0.634)	-0.205(1.391)	-0.071(0.417)

BAD(Mar.1996)	2.207	1.918(2.374)	2.058(2.585)	-0.312(0.339)

The averages 1975 - 1979				
EQU	3.841	-0.765(3.414)	-0.797(3.612)	-0.133(0.522)
DEP	4.553	-0.915(3.540)	-0.927(3.641)	-0.135(0.460)
PRO	21.300	0.280(0.199)	1.662(1.201)	-0.021(0.013)
GAS	12.810	0.384(0.693)	0.337(0.618)	0.699(1.062)
STK	0.778	0.012(0.097)	-0.176(1.472)	-0.093(0.672)

(Notes) EQU=the equity capital per total assets(%), DEP= the equity capital per total deposits(%), PRO=the current profit per equity capital(%), GAS=the annual growth rate of total assets(%), STK=share holding per total assets(%). The banks in category I, II, and III are those accepting amakudari officials from both the MOF and the BOJ (the number of sampled banks is 40), those banks accepting only from the MOF (the number of sampled banks 44), and those banks accepting only from the BOJ (the number of sampled banks is 21), respectively, in 1985. The banks in category IV do not accept any amakudari officials at all (the number of sampled banks is 19). Figures in parentheses are the absolute value of t-statistics.

Table 5: Prudential Regulations as of 1974:
The MOF designated the following items as the desirable standards
under administrative guidance.

1. Loans/deposits ratio is to be no higher than 80 per cent.
 2. (a) Liquid assets/deposits ratio is to be higher than 30 per cent.
(b) For the banks that do not satisfy (a),
Increment of liquid asset/increment of total deposits ratio is to be higher than 30 per cent.
 3. Ratio of current expenses (excluding tax) to current revenue is to be constantly decreased. (Until 1973, the MOF indicated a maximum level of 78 per cent for this ratio.)
 4. Annual dividend per share is to be less than 12.5 per cent of the face value of the share.
 5. Broadly defined capital/deposits ratio should be higher than 10 per cent.
 6. The amount of loan to a borrower is to be less than
 - (a) 20 per cent of the bank's equity capital for the city banks and regional banks;
 - (b) 30 per cent of the bank's equity capital for the long-term credit banks and the trust banks;
 - (c) 40 per cent of the bank's equity capital for the foreign exchange banks.
-

(Note) The MOF has since altered prudential regulations to some extent. For example, as the Banking Law was substantially revised in 1982, ceilings on credit to a borrower were introduced by the Banking Law; the total amount of credit to a borrower should be less than 20 per cent of the bank's equity capital.
(Source) The Banking Bureau of the MOF, (1974).

Table 6: Structure of finance for the major companies
(Averages over five year period: %)

Period	Internal Fund	Borrowing	Bonds	Stocks	Trade credit
1960-64	22.9	33.8	6.8	10.8	16.2
1965-69	37.5	36.9	5.2	3.8	22.7
1970-74	35.1	41.6	5.1	3.2	21.9
1975-79	45.8	26.5	10.6	8.0	17.7
1980-84	55.3	16.4	8.5	10.4	9.6
1985-89	45.2	6.4	17.4	15.8	5.0
1990-94	87.3	5.2	11.1	4.6	-7.1

(Source) Bank of Japan.

Table 7: Relative importance of major banks loans to their '*keiretsu*' firms
(¥ billion and per cent)

Year	Total amount of loans (A)	Loans to ' <i>keiretsu</i> ' firms (B)	(B/A)
1965	9,783	1,515	15.5%
1970	18,725	2,182	11.7
1975	52,877	5,450	10.3
1980	75,436	6,040	8.0
1985	160,798	7,756	4.8
1990	308,504	9,364	3.0

(Note) Here, the major banks include city banks and long-term credit banks. The '*keiretsu*' firms are those listed on the Tokyo Stock Exchange and whose 'main banks' are one of the major banks. We identified the 'main banks' for each firm based on research by Keizai Chosa Kyokai.

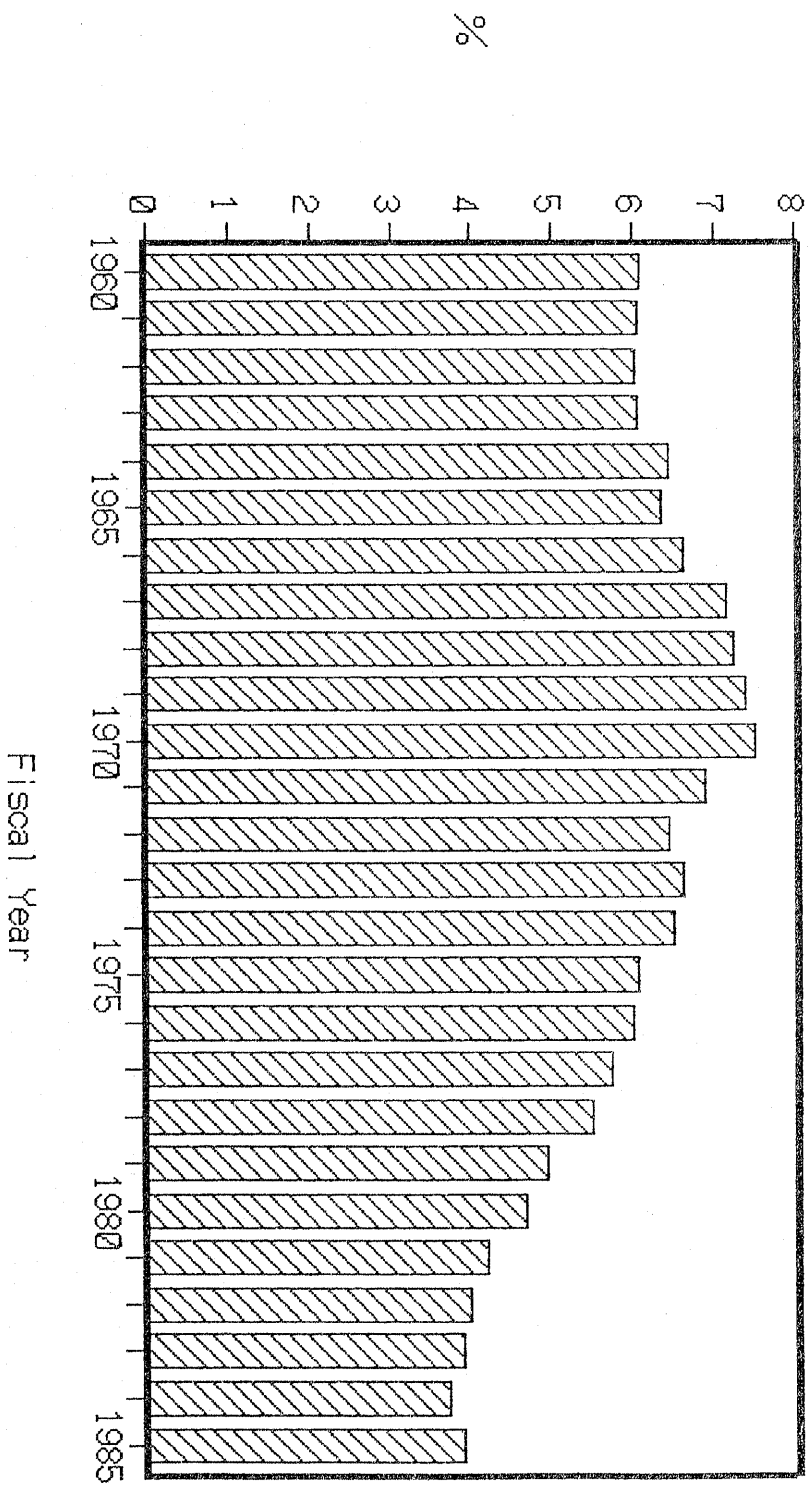
(Source) Keizai Chosa Kyokai

Table 8: Financial assistance from the Deposit Insurance Corporation

Troubled banks (Date)	Ex post disposal	Amount
Toho Sogo (April 1992)	Absorbed by Iyo Bank	¥8.0 billion loaned
Toyo <i>Shinkin</i> (October 1992)	Absorbed by multiple banks after being dissolved	¥20.0 billion given
Kamaishi <i>Shinkin</i> (October 1993)	Dissolved, with assets and deposits being taken over by Iwate Bank	¥26.0 billion given
Osaka-Fumin C.C. (November 1993)	Absorbed by Osaka Koyo C.C.	¥19.9 billion given
C.C. Gifu Shogin (March 1995)	Absorbed by C.C. Kansai Kogin	¥2.5 billion given
Tokyo Kyowa C.C. and Anzen C.C. (March 1995)	Both integrated into the new Tokyo Kyodo Bank sponsored by the BOJ	¥40.0 billion given
Yuai C.C. (July 1995)	Absorbed by a labor coop- erative credit bank in Kanagawa prefecture	¥3.0 billion given
Cosmo C.C. (Feb. 1996)	Dissolved, with assets and deposits being taken over by Tokyo Kyodo Bank	¥11.0 billion given
Hyogo Bank (April 1996)	Integrated into the new Midori Bank	¥47.3 billion given
Taiheiyo Bank (June 1996)	To be dissolved, with assets and deposits be- ing taken over by a new bank sponsored by major city banks	¥8.0 billion given

(Note) C.C. denotes a 'credit cooperative.'
(Source) Federation of Bankers Associations of Japan, Kin'yu, various issues.

Figure 1: Equity Capital/Deposit Ratio
For Japanese Banks (%)



The number of banks

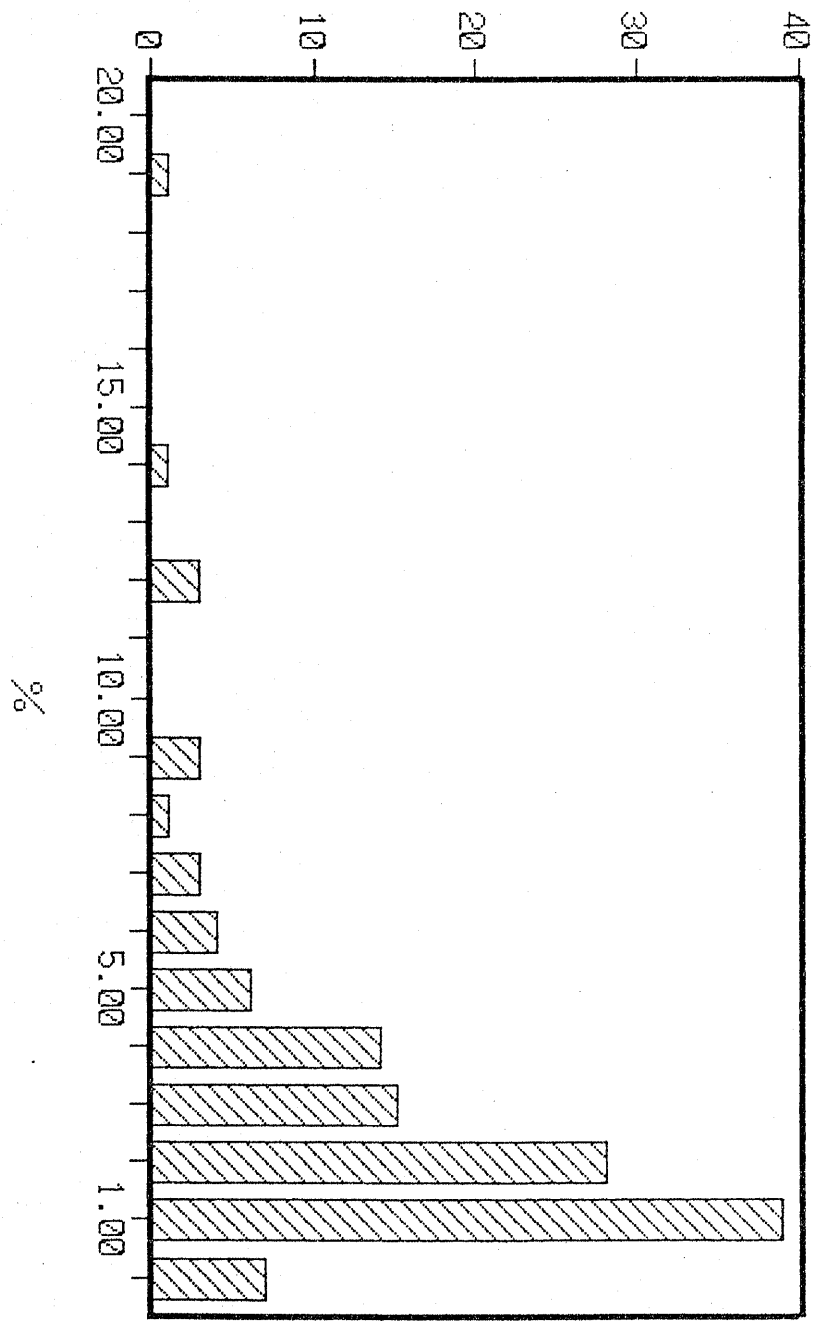


Figure 2: Bad Loans of Regional Banks
As of March 1996 (% of total loans)

Figure 3: Profitability in the Banking Industry (Current Income/Capital)

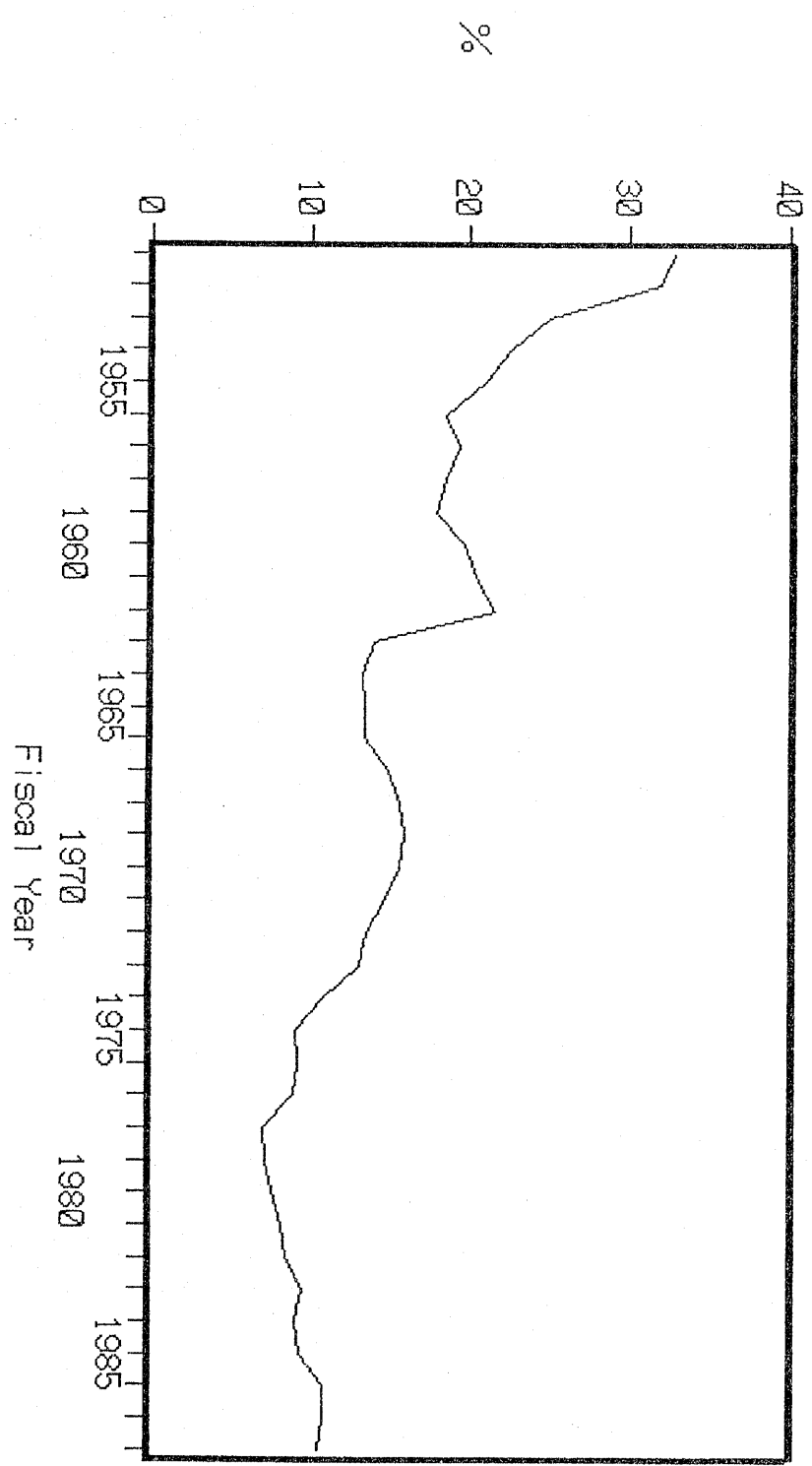


Figure 4: Industrial Distribution of Bank Loans (%)

