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The Japanese Banking Crisis of the 1990s: Sources and Lessons

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Abstract

For a large part of the past decade, Japan has witnessed a steady deterioration in the health of its banking system. This paper examines what went wrong and why it has taken so long for the system to recover. While the paper traces the roots of the crisis to accelerated deregulation and deepening of capital markets without an appropriate adjustment in the regulatory framework, it identifies weak corporate governance and regulatory forbearance as the two factors behind what might have been an unnecessary prolongation of the distress of the financial system.

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I. INTRODUCTION

For a large part of the past decade Japan has witnessed a steady deterioration in the health of its banking system. This deterioration, which set in with the bursting of the asset bubble at the end of the 1980s, culminated in a full blown systemic crisis in 1997 following the failure of a number of high profile financial institutions. Given the relatively large size of Japanese banks and their predominance in corporate funding in Japan, this crisis has had profound implications for both the Japanese and the global economy.

The Japanese banking crisis presents a particularly apt opportunity for a case study for three reasons. First, most of its underlying causes (excessive asset expansion in periods of economic boom, liberalization without an appropriate adjustment of the regulatory environment, weak corporate governance and regulatory forbearance when the system is under stress) are typical of banking crises in general. Second, the Japanese banking crisis serves as a warning that such a crisis can befall a seemingly robust and relatively sophisticated financial system. The fact that only a decade ago Japanese banks were considered to be among the strongest in the world makes the extent of their decline only the more remarkable (Table 1). Finally, the Japanese banking crisis demonstrates that the costs associated with such a crisis can be considerable. Beyond the fiscal cost associated with the restructuring of the banks (funds equivalent to about 12 percent of GDP have already been allocated by the government), the banking crisis was probably responsible to a great extent for the stagnation of the Japanese economy in the 1990s (Brunner and Kamin, 1995; Bayoumi, 1998; Motonishi and Yoshikawa, 1998).[2]

The purpose of this paper is to provide a survey of the Japanese banking system in the 1990s with a view to gaining a better understanding of what exactly went wrong and why it has been taking such a long time for the system to recover. The paper covers a span of about 15 years, beginning with the last years of the bubble and ending with some positive recent developments. The paper traces the roots of the problems in the banking system to an acceleration in deregulation and a deepening of the capital markets in the late 1980s, which exacerbated the problem of overcapacity in the system. These developments, in the absence of an adequate regulatory and supervisory framework and bank risk management control, led to an intensification of competition and heightened risk taking which further weakened the banks. The paper will argue that the subsequent "gamble for resurrection" actually prompted a relaxation of credit conditions for most of the 1990s.

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[2] Observers have pointed out that, due to the importance of credit channels for the transmission of monetary policy in Japan, the weakening of the banks has reduced the effectiveness of loose monetary policies to stimulate the economy (Woo, 1999; Morsink and Bayoumi, 1999; Sekine, 1999).

A unique characteristic of the Japanese banking crisis is its exceptional length in international comparison (Hutchison and McDill,1999; Nishimura, 1999). This paper argues that weak corporate governance and regulatory forbearance stifled any incentive for meaningful restructuring of banks as well as their corporate borrowers. These two factors, by contributing to what might have been an unnecessary prolongation of the crisis, inevitably raised the cost of the final resolution.

The rest of the paper is structured as follows. Section II provides the background to the asset bubble economy and the effects from the collapse of the bubble on the banking system. Section III describes the regulatory framework in place, including the introduction of the Basel Capital Standards and the existing loan classification and loan loss provisioning practices. Section IV examines the responses of banks to the new banking environment. Section V discusses the issue of bank corporate governance. Section VI sets out the stage prior to the later banking crisis. Section VII provides some evidence of regulatory forbearance. Section VIII discusses the resolution strategy, including the legal resolution framework and the recapitalization of the banks by the government. Section IX identifies a number of recent positive developments. Section X offers some concluding observations.

II. The Bubble Economy

A. Preconditions

The Japanese macroeconomic environment in the second half of the 1980s was characterized by above-trend economic growth and near-zero inflation. These positive conditions, resulting in a significant decline in the country risk premium and a marked upward adjustment in growth expectations, boosted asset prices and fueled rapid credit expansion during this period (Yamaguchi, 1999).

The second half of the 1980s also witnessed an acceleration in the pace of financial liberalization and deregulation, which consisted of:

- Relaxation of interest rate controls,[3] starting with the liberalization of term deposit rates in 1985. (See Box 1 for a history of interest rate deregulation.)
- Capital market deregulation, including the lifting of the prohibition on short-term euro yen loans (which were not subject to interest rate controls) to domestic borrowers in

[3] This was in part due to the pressure of the U.S. government which took the position that the liberalization of the financial system in Japan would help address the strong dollar problem by stimulating demand for yen denominated instruments and would help U.S. financial institutions to break into the Japanese market.

1984; the gradual removal of restrictions on access to the corporate bond market;[4] and the creation of the commercial paper market in 1987. The last two developments significantly strengthened the ability of large corporations to borrow directly from the market.

- Relaxation of restrictions on permissible activities of previously tightly segregated institutions, including the raising of different types of lending ceilings. For example, the agricultural, fishery and credit cooperatives saw an increase in their lending ceilings to non-members.

These developments had important consequences for banks and other depository institutions (Hoshi and Kashyap, 1999). The incipient price competition, which was beginning to place a downward pressure on banks' risk-adjusted interest rate margins, led them to expand the riskier segments of their loan portfolios.[5] In particular, they sharply increased their consumer lending and lending to the real estate industry and to small and medium sized enterprises (Table 2). Meanwhile, the persistent focus of banks on market share[6] and the fact that their lending decisions were primarily based on collateral requirements rather than on cash flow analysis caused them to loosen credit standards as real estate prices climbed.[7] In fact, in order to speed up credit check procedures for loan approval, many banks transferred the responsibility for loan risk evaluation from their credit investigation bureaus to less independent monitoring bureaus that reported directly to the banks' sales divisions.

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[4] By the late 1980s rated firms were able to avoid meeting the bond issuance criteria set by the Bond Issuance Committee. All rules relating to bond issues were abolished in 1996.

[5] Marsh and Paul (1996) argue that profit margins of Japanese banks, in decline since the early 1970s, were temporarily boosted in the late 1980s by a shift toward higher risk loans.

[6] Banks' preoccupation with market shares is in many ways a vestige of the interest rate control regime. Under that regime, the fact that banks' lending spreads were more or less fixed and that they derived most of their income from their interest earnings meant that their outstanding loans largely determined the size of their net income. Moreover, Noma (1986) show that Japanese banks are more interested in scale expansion than profit maximization.

[7] Cargill, Hutchison and Ito (1997) have suggested that financial deregulation might have contributed to the speculative bubble of the 1980s.

Box 1. Deregulation of Interest Rates in Japan

Interest Rate Controls

The Temporary Interest Rate Adjustment Law (TIRAL), introduced in 1947, provided the principal framework for interest rate control. It allowed the Ministry of Finance (MOF) to convene the Policy Board of the Bank of Japan (BOJ) in order to establish, revise, or abolish interest rate ceilings for financial institutions. The Policy Board set the ceilings in consultation with the Interest Adjustment Council (comprising industry, MOF, and BOJ representatives). The TIRAL allowed the BOJ to develop detailed guidelines for ceilings on deposit rates (time deposits; fixed savings; installment savings; current deposits; deposits for tax payment; ordinary deposits; special deposits) and on short-term lending rates (and on rates of discounted bills whose sum was greater than one million yen and whose maturity was less than one year). The TIRAL applied to city banks, regional banks, trust banks, long-term credit banks, *shinkin* banks, the Norinchukin Bank, the Shoko Chukin Bank, credit cooperatives, labor banks, and agricultural cooperatives (the *shinkin* banks, agricultural cooperatives and the credit cooperatives were, however, exempt from regulations on lending rates). Government financial institutions and postal savings were exempt from the TIRAL.

As the result of interest rate control, there was very little interest rate variation between different financial institutions. Following the loosening of controls on lending rates in 1959, the Federation of Bankers Association of Japan introduced a system which set short-term lending rates between the official discount rate and the ceiling imposed by the TIRAL. This system was abolished in April 1974 when the Anti-monopoly Law was tightened. However, in practice, the bank at which the chairman of the Federation of Bankers Association of Japan served would announce its rates of interest and the other banks follow suit. For long-term lending rates, there were no formal restrictions. However, the long-term prime rate charged to electric power and other blue-chip companies by long-term credit banks, trust banks, and insurance companies were publicly announced and functioned as the basis for other rates. These rates rarely varied by lending institutions.

Deregulation

In 1979, certificates of deposits (CDs) were introduced as deposits exempt from the TIRAL. When they were first introduced, their issues were required to be of the minimum size of 500 million yen and of maturity between 1 to 6 months. Following the recommendation of the Japan-U.S. Yen-Dollar Ad hoc Committee in May 1984, deregulation of deposit rates accelerated, starting with large deposits. In March 1985, term deposits with market interest rates were introduced. Though they were not exempt from the TIRAL, their rate ceilings were high enough for banks to peg the rates to the CD rates. In October 1988, large deposits (these instruments were initially restricted to deposits greater than 1 billion yen and of maturity greater than 3 months but less than two years) were introduced and they were exempt from the TIRAL.

Maturity and denomination requirements of the three instruments above were gradually loosened during the late 1980s. In June 1989, term deposits with market interest rates were introduced at the retail level with the minimum amount of 0.5 million yen. The minimum amount requirement was gradually reduced and finally abolished. In October 1993, depository institutions were allowed to introduce deposits with floating rates and of maturity longer than 3 years. In order to segregate ordinary banks from long-term credit banks, ordinary banks were not allowed to accept deposits with maturity of more than one year. Ordinary banks were allowed to introduce deposits with maturity of one year and a half in 1971, those with maturity of two years in 1973 and those with maturity of three years in 1981. Finally, in September 1994, all remaining interest rate controls on deposits rates were abrogated.

B. Collapse of the Bubble

The highly overvalued Japanese stock market peaked at the end of 1989 (Figure 1a) following consecutive increases in the Bank of Japan's (BOJ) discount rate (Figure 1b) and then collapsed after the summer of 1990. Meanwhile, to contain the continued rise in land prices, the Ministry of Finance (MOF) introduced, in April 1990, guidelines limiting total bank lending to the real estate sector (though the government later lifted the cap on banking loans to the real estate sector after the fall of real estate prices). This move contributed to the leveling off of Japanese banks' asset growth, with total bank assets declining from 508 trillion yen in 1989 to about 491 trillion yen in 1990. In 1992, officially monitored land prices started to decline (Figure 1c).

The subsequent slowdown in economic growth, together with the drastic decline in stock and real estate prices, significantly weakened the health of banks and other financial institutions. This weakening manifested itself as follows: first, as the result of prices of property holdings by real estate companies falling by half, the quality of loans to the real estate industry deteriorated rapidly; second, the value of collateral eroded;[8] third, the decline in the value of banks' equity holdings began to put pressure on bank capital. Finally, the deceleration of economic growth reduced the ability of debtors to continue to service their loans.

The downgrading of Japanese banks by credit rating agencies, which had already begun in 1989, continued (Table 1). By 1992, many banks (which had previously enjoyed higher credit ratings than their corporate borrowers) saw their marginal costs of funding rising above those of many of their borrowers. This development, together with the incremental lifting of restrictions on the access of Japanese corporations to the domestic and euro bond markets, led to an acceleration in new bond issues (Figure 1d) exerting further pressure on the banks. Between 1984 to 1991, the percentage of funds raised by the corporate business sector through bond issues rose from 3.6 percent to 24.5 percent (Genay, 1993).

III. Banking Regulations in Place

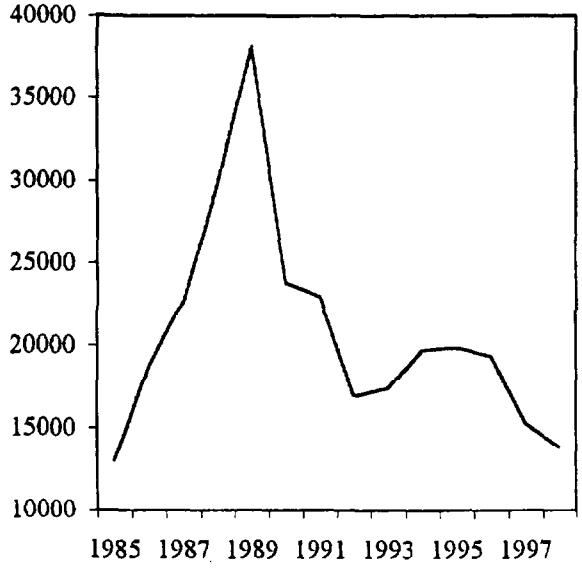
A. The Basel Capital Accord

The Basel Capital Accord was fully implemented in March 1993 (the end of fiscal year 1992 in Japan). Although Japanese authorities required only those banks with international operations to comply with the 8 percent capital adequacy requirement, many regional banks with no international operations also elected to comply with it and not with

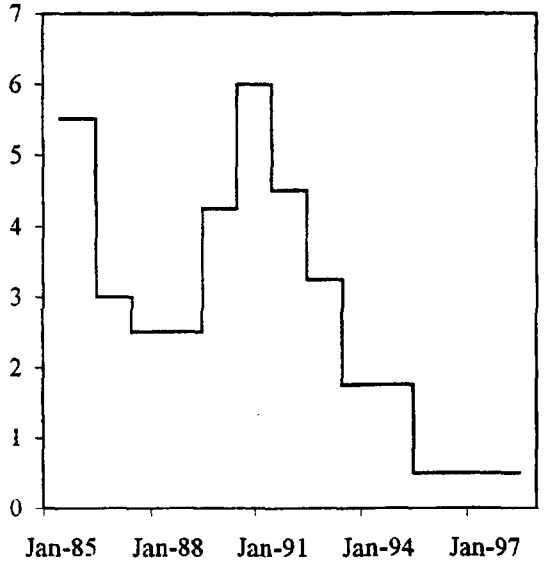
[8] For example, since prior to 1991 many borrowers could borrow up to 90 percent of the value of their real estate collateral, the about 50 percent drop in real estate prices between 1991 and 1998 meant that over 40 percent of such loans became uncovered.

Figure 1. Nikkei 225; Bank of Japan Discount Rate; Growth in Residential Land Prices and Outstanding Corporate Bonds

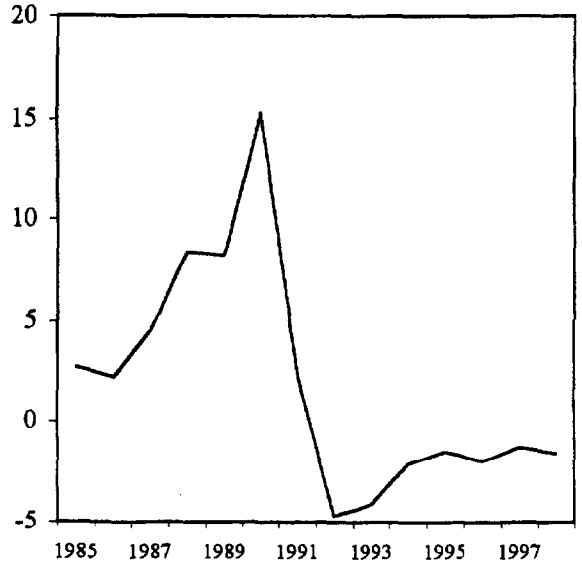
1a. Nikkei 225



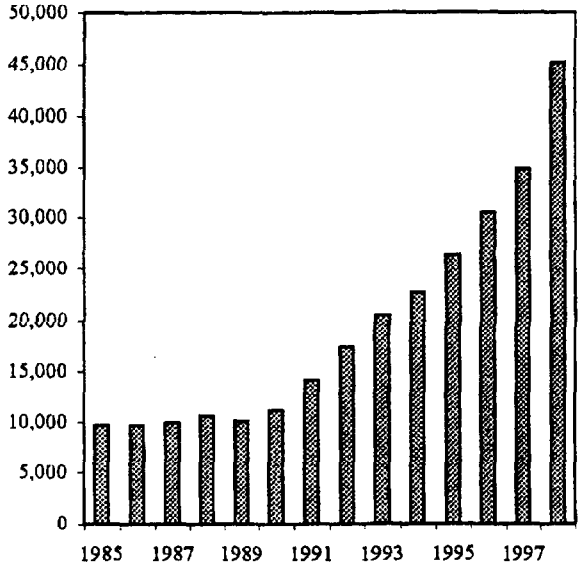
1b. Bank of Japan Discount Rate
(in percent)



1c. Gowth in Residential Land Prices



1d. Outstanding Corporate Bonds
(in billions of yen)



Source: Bank of Japan

the domestic 4 percent requirement.[9] Despite the sharp decline in Japanese stock prices, none of the banks experienced problems meeting the new capital requirement in March 1993. This was partly due to the book value of the stocks they held being well below market valuation.[10] In Japan, although banks are prevented from owning more than 5 percent of the outstanding shares of any one company (Anti-monopoly Law, Article 11), there is no ceiling on the total amount of stocks they may own. The market value of shares held by banks in March 1993 was 56.4 trillion yen, compared with the book value of only 34.5 trillion yen (Fukao, 1998). Even though regulations permitted banks to use only 45 percent of these unrealized gains (amounting to 22 trillion yen) towards their tier 2 capital, these nevertheless accounted for about 25 percent of total bank capital in that year.

B. Loan Classification and Loan-Loss Provisioning

Since 1964 banks have been allowed to set up tax deductible, *general* reserve accounts for possible future loan losses (as differentiated from *specific* loan loss reserves). These reserve accounts were intended to cover loans classified as "normal" and "substandard" and banks were not required to make any additional specific provisions against substandard loans. Banks had the option of setting their general reserves to reflect their average loan loss during any previous three years or setting them at a reference level determined by the tax authorities and recommended by the regulatory authorities. Historically, banks often opted to setting their general reserves at the reference level (after 1989, the reference level was fixed at 0.3 percent of total outstanding loans[11]), partly because for most banks the reference level was above their actual loan loss experience. What is surprising is that the increase in actual nonperforming loans beyond 0.3 percent of total loans sometime during the 1990s did not cause banks to voluntarily increase their general reserves to take advantage of the available tax relief. This would suggest that either the banks did not want to transfer their tier 1 capital to their tier 2 account[12] (especially when their tier 2 capital

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[9] The calculation of the domestic capital ratio requirement is different from that under the international standard. For example, the former is not based on risk-weighted assets and does not allow inclusion of non-core capital.

[10] Japanese commercial codes allow corporations to value stock holdings in their investment accounts either at cost or the lower of cost or market value. Before 1997, banks had opted the latter method.

[11] The ceiling for the reserve account was initially fixed at 0.42 percent of total loans in 1964 but was reduced five times down to 0.3 percent by 1989, to reflect the downward trend of historical loan loss (Federation of Bankers Associations of Japan, 1989).

[12] Under the rules of the Basel Capital Accord (which Japanese authorities applied to Japanese banks), banks are allowed to count the general provision against loans toward tier 2 capital up to the limit of 1.25 percent of risk weighted assets.

was reaching the level of their tier 1 capital), or that they felt that by raising their reserve accounts they would be signaling to the market an expectation of further increases in nonperforming loans. There might have also been a coordination problem among banks, with individual banks not wanting to draw attention to themselves by unilaterally raising their reserve accounts. If this is true, it raises questions as to why the authorities did not readjust the 0.3 percent reference level.[13]

For doubtful and loss loans, banks were expected to make specific provisions. Fifty percent of these specific provisions were tax deductible; however, the guidelines for tax deductibility of specific provisioning were very stringent. For example, in order for loss loans to qualify for tax deductability, tax rules required borrowers to maintain a negative net worth for a period of at least two years.

Banks were also very slow in writing off loans with low probability of recovery. This was partly due to the very strict tax guidelines that permitted write-offs only after the loan loss amount had been ascertained in bankruptcy or foreclosure proceedings. In some cases, banks themselves were reluctant to write off loss loans (until formal bankruptcy proceedings were under way) since they feared that as borrowers might perceive the write-offs as a signal that the banks had given up on loan recovery they would be thus prompted to stop repayment.

In January 1993, Japanese banks established the Cooperative Credit Purchasing Company (CCPC). Although the CCPC was structured as an asset management vehicle (whose function is to purchase nonperforming loans from banks and to undertake recovery of these loans), the apparent purpose behind its creation was to allow banks to take advantage of tax deductibility for loan write off: the tax authorities permitting banks to recognize the difference between the book value and sale price[14] of loans they sell to CCPC as tax deductible expenses. It is important to point out that the CCPC's purchase of nonperforming loans is financed by corresponding loans from the selling banks to the CCPC, a scheme which only succeeds, as pointed out by Taniuchi (1997), in replacing the residue value of a bad loan with another non-interest bearing loan to the CCPC. In short, while the CCPC provides the banks with some tax relief for their nonperforming assets, it does little, if anything, to facilitate the asset recovery process.[15]

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[13] In 1997, the authorities eliminated the option of using the reference level from the tax regulations.

[14] These transactions take place at an initial price (which is supposed to reflect fair market value) with the explicit agreement that the final price of the transactions be established after the CCPC has managed to sell the loans.

[15] By 1997 the CCPC had sold less than 5 percent of its portfolio.

IV. Strategy of Banks

A. Adjustment of Credit Approval Procedures and Guidelines for New Loans

To adjust to the post-bubble economic environment, some banks transferred the responsibility for loan risk evaluation from monitoring bureaus back to credit investigation bureaus. Credit approval procedures thus became more stringent and more emphasis was placed on the borrower's or project's cash flow analysis rather than on simple collateral requirements. Collateral value was more closely scrutinized and the average loan to collateral ratio for many banks was reduced considerably. These signs would suggest that at least in the immediate aftermath of the bursting of the bubble there was a significant tightening of credit standards and conditions. The Tankan Survey shows that the willingness of financial institutions to lend, as reported by enterprises, fell dramatically between 1990 and 1992 (Figure 2).

B. Forbearance and Restructuring of Bad Loans

An important feature of the Japanese financial culture is the main bank system. The main bank, delegated by other lenders, acts as a quasi-insider monitor of the borrowing firm and as a mediator when borrowers fall into stress (Aoki and Patrick, 1994; Fukuda and Hirota, 1996). The principal advantage of the main bank system is the reduction in monitoring cost in face of asymmetric information.[16] Until the 1990s, the main bank system worked reasonably well in Japan. The main banks were responsible for identifying problem borrowers before they became insolvent and for assisting them in restructuring their businesses. Ex-employees of the main banks were often appointed by the borrowers as directors to facilitate information exchange between the firms and the banks (Genay).

However, the effectiveness of the main bank system (one of the cornerstones of Japanese corporate governance) began to suffer when the main banks themselves came under stress (section VI discusses corporate governance issues for banks). This, together with the general reluctance of main banks to allow their borrowers to default - as this would reflect badly on their monitoring reputation in the loan market and because when a borrower defaults, its main bank is often required to absorb some of the losses incurred by other creditors - the main banks began to exercise forbearance even when the long-term viability of their borrowers came into question. In the 1990s, Japanese banks reportedly restructured nonviable loans by reducing interest rates and extending their maturity. It was not uncommon for banks to capitalize unpaid interest and to open new credit lines in order for borrowers to repay overdue loans. This was possible in part because the loan classification and provisioning requirement for restructured loans (and their enforcement) were weak and banks were able to classify non-performing loans as performing immediately upon the

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[16] Kawai, Hashimoto and Izumida (1996) found that firms with main banks pay significantly lower interest-rate premia than do firms without main banks.

Figure 2. Financial Institutions' Willingness to Lend (Tankan Survey)

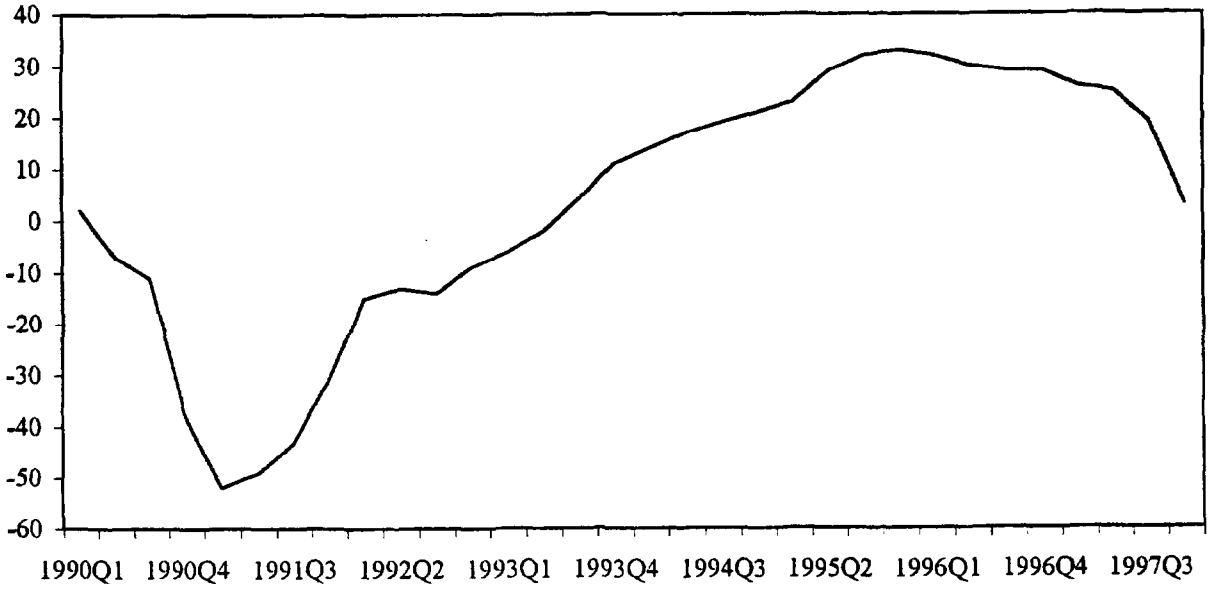
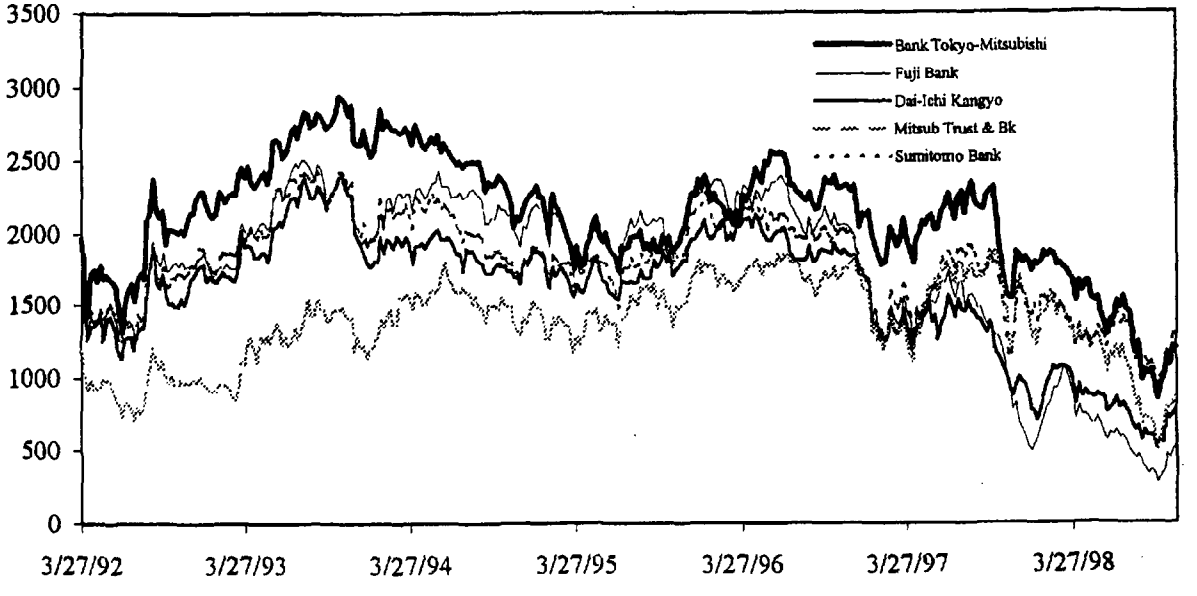


Figure 3. Stock Prices of Major Banks
(in Yen)



Source: Bank of Japan and Reuters

restructuring of the loans.[17] Banks accelerated the restructuring of their problem loans consequent on their incipient capital constraint.

Banks also used their "related companies" for cleaning up their balance sheets. Prior to December 1998, they were required to consolidate, in their financial reporting, only those subsidiaries and affiliates in which they had more than a 50 percent stake and 20 percent stake respectively. To circumvent the consolidation requirement, banks had set up "related companies" which were neither subsidiaries nor affiliates, and to which they transferred their nonperforming loans at above market value. These "related companies" were jointly owned by the banks (whose shares in these companies were less than 5 percent) and the firms with which the banks had interlocking shares. This loophole in the regulations was closed only in December 1998.[18]

C. Increasing Capital Base

Banks have two sources of capital: paid-in capital and retained earnings. During the 1980s, when bank stock prices were high, many banks raised capital through public offerings in order to expand their lending in pace with the boom in the real estate sector and later to prepare for the implementation of the Basel Capital Accord. After the bubble burst, banks nevertheless still tried to raise capital in the market, prompted by the need to increase their write-offs and provision for rising non-performing loans. However, between 1992 and 1997, only Sakura Bank (1992 and 1994), Daiwa Bank (1994), Tokai Bank (1996) and Mitsubishi Bank (1995) were able to raise tier 1 capital in the market. All these banks raised their capital by issuing debt instruments that convert into equity after several years.[19] This form of new

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[17] In the United States, for instance, banks are allowed to reclassify restructured loans as performing only after the borrowers have made three consecutive payments. Until then, interest payment is recognized only on a cash basis.

[18] Before December 1998, regulations for the purpose of consolidation and disclosure were specified as follows: the subsidiaries of banks (defined as companies of which banks have more than 50 percent stake) have to be consolidated in the financial reporting of banks on a line by line basis; the affiliates of banks (defined as companies of which banks have more than 20 percent stake) have to be consolidated in the financial reporting of banks using the equity method. In December 1998, these regulations were tightened. The subsidiaries of banks and any company of which the bank group (a keiretsu with which a bank is associated) has more than a 40 percent stake have to be consolidated in the financial reporting of the banks on a line by line basis; banks' affiliates and any company of which a bank or bank group has more than a 15 percent stake and whose decisions are controlled by the bank should be consolidated using the equity method.

[19] Sakura Bank raised 200 billion yen through two convertible preferred stock issues (in March 1992 and April 1994) which were converted to common stock upon maturity in June 1995 and October 1997. Daiwa Bank issued 50 billion yen of exchangeable bonds in March

(continued...)

equity issues with delayed conversion apparently was designed to "placate Japanese regulators who appeared to believe that ordinary equity issues would at least depress a bank's stock price[20] [21] if not the level of Japanese stock prices in general" (Ammer and Gibson, 1996). Ammer, Gibson and Levy (1996) and Ammer and Gibson show that these banks actually had to pay a substantial premium to raise capital in this way, with Tokai Bank's security issues underpriced at issue by at least 13 percent. But by 1997, following the sharp decline in bank stocks (Figure 3) and consecutive downgrades by rating agencies of even the best banks, banks suspended any further attempts to raise capital in the market.

Almost all banks issued subordinated debt, partly to compensate for the decline in tier 2 capital caused by the drop in unrealized profits of securities holdings. When the credit ratings of Japanese banks fell, banks tended to offer these securities in private offerings to institutional investors (such as insurance companies seeking relatively higher returns in a low interest environment) as well as to companies in their financial groups not defined as affiliates.[22] But even subordinated debt issues fell out of favor with investors by 1997 when the risk in the subordination became apparent.

D. Arresting Eroding Margins

To compete with commercial paper and corporate bond markets to which blue chip Japanese corporations increasingly turned for their financing needs, the banks expanded their offering of euro-yen loans to a wider base of borrowers. These loans, carrying lower interest rates than the domestic prime rate, were previously extended only to blue chip corporations with access to the international capital market. Concurrently, banks also started to expand their prime rate offerings to small and medium sized enterprises which in the past would not have been able to qualify for these loans. Although these initiatives may have slowed the decline in demand for bank credit, they resulted in an erosion of banks' short-term lending

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1994, which were exchanged into common stock in March 1998. It also raised an additional 50 billion yen through a domestic private placement of convertible preferred stock with a thirty year maturity. Tokai Bank in 1996 raised 100 billion through a euro-market issue of 81/2 year convertible preference shares.

[20] The decline in Sakura's stock price around the time of its first of two equity issues may have "rattled" the regulators.

[21] Banks have substantial exposure to each other's stock prices through their cross-share holding arrangement (see section VI).

[22] In Japan, banks are not allowed to use any subordinated debt issued by them to their affiliates (for definition see footnote 18) toward their tier 2 capital.

margins (Table 4) and this despite the fact that the continued decline in interest rates should have benefited banks' lending spreads.[23]

To protect their margins, banks began to take on more risks by, for example, extending the average maturity of their lending (Table 5). Between 1990 and 1997, loans with maturity greater than one year rose from about 56 to nearly 60 percent of total loans, while loans with maturity of less than 3 months declined from around 12 to 8 percent. These developments can be attributed to two factors. One, the shift of bank lending from short-term working capital finance to longer-term project finance, as evidenced by the shift from loans on bills to loans on deeds (Table 6). The lengthening of loan maturity, which exposed banks to both more interest rate risk (and liquidity risk[24]), is probably the reason why average spreads on long-term lending, unlike average spreads on short-term lending, did not fall (Table 4). Two, the restructuring of problem loans (discussed in section V).[25]

To boost short-term profits, the banks also relaxed credit conditions, as shown by the steady increase in unsecured loans as a percentage of total loans until mid-1990s, a reversal of a trend of the late 1980s (Table 7). Another piece of evidence for relaxed credit conditions is the continued migration of loans from loans on bills to overdrafts.[26] The conditions of loans on bills are relatively more stringent than those on overdraft loans. Clearinghouses for bills and checks block any further access to the clearing facility of issuers of bills who miss two consecutive payments. Overdraft loans, however, provide borrowers with more

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[23] Many banks, especially city banks, had significant maturity mismatch between their assets and liabilities. This is partly because city banks (and regional banks) are not allowed to issue debentures and they were not, until October 1993, allowed to offer deposits whose maturity exceeded 3 years. This meant that their overall interest margins expanded during declines in interest rates (Bank of Japan, 1996).

[24] Under the loans on bills arrangement, banks can always sell their holdings of bills in the secondary market including to the Bank of Japan in its repo operations. Securitization of loans on deeds, though possible, has not become common as it is in the United States.

[25] It is difficult to evaluate the relative importance of these two factors. However, it can be argued that the fact that capital investment was stagnant for most of the 1990s undercuts the importance of the first factor.

[26] Part of the explanation for this migration is the stamp tax levied on the issuance of bills which might have prompted the more cost conscious borrowers to shift to loans on deeds and overdraft loans.

flexibility for repayment. Whereas the roll over of loans on bills needs to be requested and approved, the roll over of overdraft is in practice automatic.[27]

A recent paper by Woo (1999) suggests that until 1995, weakly capitalized banks expanded their lending more rapidly than strongly capitalized banks: in a series of cross sectional regressions, the paper shows that bank lending was negatively correlated with bank capital in the early part of the 1990s, and this despite the introduction of the Basle Capital Standard.[28] Woo argues that this is reminiscent of the "gamble for resurrection" of the insolvent American savings and loans in the 1980s and could be possibly attributed to the relative laxity of the regulatory environment, particularly the lack of pressure on banks with declining capital to restrain asset growth during this period.

E. Tapping Unrealized Capital Gains

With shrinking margins and mounting nonperforming loans to provision for and to write off, banks had to tap into the unrealized gains on their holding of bonds, stocks and real estate. Many banks liquidated their bond holdings whose unrealized gains had been boosted by the declining market interest rates. Many banks also realized the hidden capital gains on their real estate holdings by selling their office space outright and leasing it back. In some cases, these gains were very substantial, given that some banks had these holdings in their possession for several decades. Between 1995 and 1998, the book value of land and properties holdings by Japanese banks shrank from more about 10 trillion yen to about 3 trillion yen (Table 8).[29] [30]

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[27] The overdraft facility also gives more discretion to the lenders as to how they classify the loans. In this connection, the rise in overdraft loans could be interpreted as an accumulation of disguised non-performing loans. This is especially the case if we could project the aggregate size of overdraft loans to the situation of individual borrowers. Given that overdraft loans are designed for liquidity purposes and for that reason should fluctuate according to the borrowers' receipts and payments, if they are rising at the level of each individual borrower (these numbers are not available) as they are at the aggregate level, it would suggest that banks have been accommodating the deterioration of their borrowers' liquidity conditions.

[28] American banks, similarly facing the introduction of the BIS capital standard in this period, were found to curtail their lending in response.

[29] To exclude the effect of closed banks during this period, only banks that operated continuously between 1995 and 1998 are included in the sample.

[30] Because of the very significant difference between the book value and market value of banks' real estate holdings, the actual realized gains from the liquidation of these holdings were far greater than the change in the book value of these holdings.

Since 100 percent of realized capital gains could be applied to offset pre-tax losses[31] as opposed to only 45 percent of unrealized gains counted toward tier 2 capital, banks also tapped into the unrealized gains on their stock holdings. This method became especially attractive when banks' tier 1 capital was declining – due to increased provisioning and write-offs - relative to the level of their tier 2 capital[32] (Figure 4). There are, however, limitations associated with this method of boosting book capital. Japanese corporate borrowers and their main banks had over the years developed a culture of cross-share holdings as part of a long-term business relationship. Banks had often, therefore, to repurchase the stocks they sold at market price. This meant that (1) the book value of the stocks was increased, reducing the return on assets (unrealized capital gains were not counted toward bank assets) and that (2) bank capital became more susceptible to stock price fluctuation because of the reqirement that stocks be accounted for at the lower of cost or market valuation. In any case, by 1997, banks had largely exhausted the unrealized gains on their securities holdings (Table 8).[33]

V. Corporate Governance of Japanese Banks

In order to understand the rapid pace of deterioration of Japanese banks' financial conditions, it is important to examine the issue of their corporate governance. It has been recently suggested that the failure of corporate governance is one of the key factors behind the Japanese banking crisis (Fukao, 1998).

A. Major Shareholders

The corporate governance system of Japanese banks is largely determined by the bank ownership structure. Although bank shares are widely held, generally relatively few shareholders account for the majority of total outstanding shares of a bank. For example, the 30 largest shareholders of Bank of Tokyo Mitsubishi accounted for more than 40 percent of its outstanding shares in March 1999.

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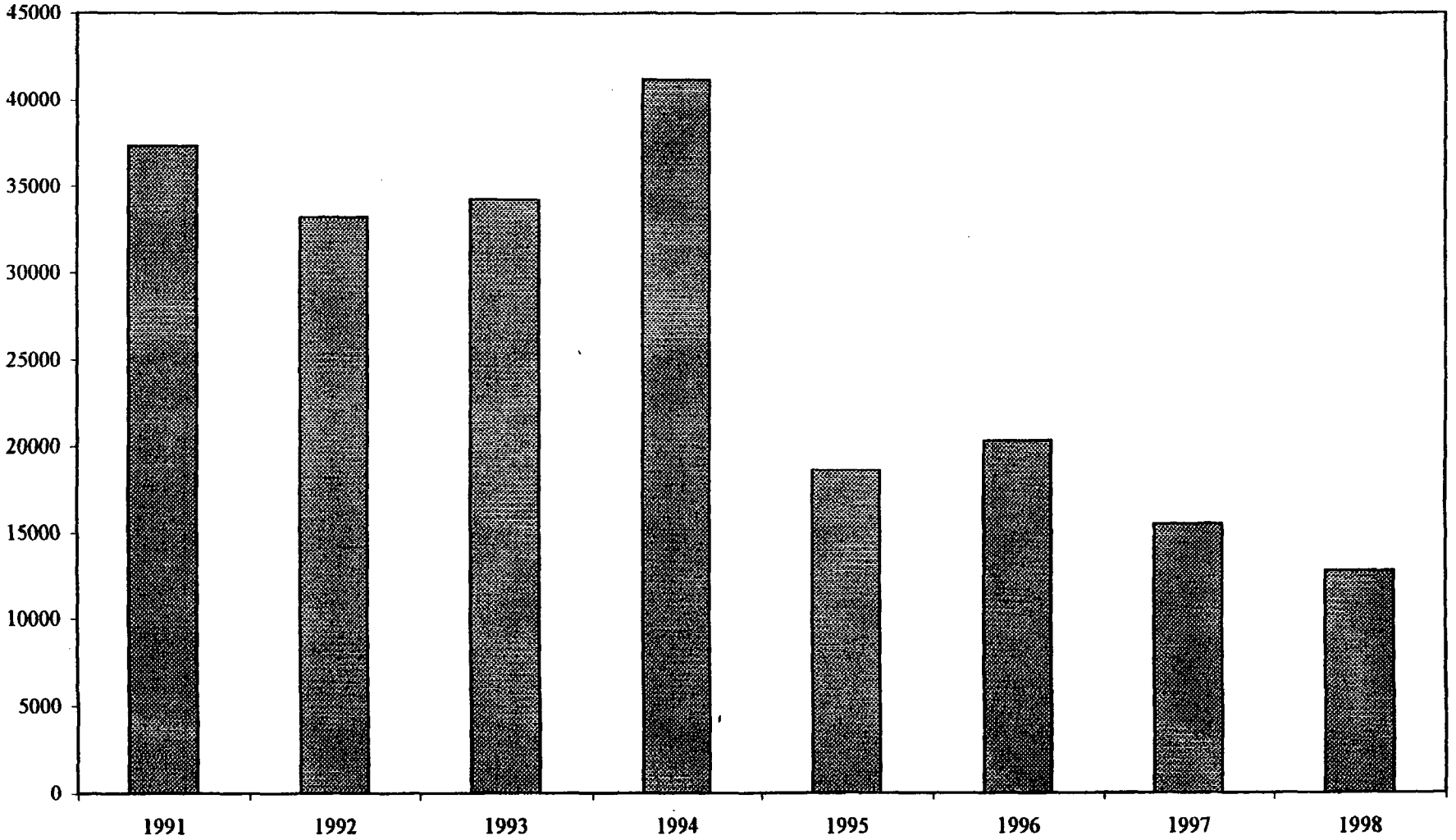
[31] When banks realize 100 percent of hidden gains in stocks by selling them in the market, these capital gains, treated as income, are taxed at the effective tax rate of approximately 50 percent.

[32] Under Basle Capital Accord, tier 2 capital can be counted toward capital up to the amount of tier 1 capital.

[33] The ratio of bank stock holdings to their core capital was about 300 percent for long-term credit banks and about 200 percent for city banks. A study by Nikko Research Center issued in January 1997 showed that a further decline in the Nekkei Average to the 13,000 and 18,000 range could have wiped out the unrealized capital gains of the 20 major banks.

Figure 4. Discrepancy Between Tier and Tier 2 capital
(billions of yen)



A typical Japanese bank has four groups of major shareholders:

- Life insurance companies. The largest institutional investors in the world (partly on account of the very high saving rate in Japan), life insurance companies own bank shares partly for investment purposes but also as a means of enhancing business relationships with banks (as they sell insurance products to bank employees and customers). Life insurance companies are also large holders of subordinated debt issued by banks.
- Corporate borrowers of the banks. As part of the main bank system, Japanese banks and their corporate borrowers developed a system of cross-shareholding as a symbol of their long-term commitment and business relationship (even when the banks and the borrowers are not in the same financial group, or *keiretsu*). Although these cross shareholding arrangements weakened steadily throughout the 1990s as large corporations turned increasingly to the capital market for their funding, corporate borrowers still account for about 50 percent of total outstanding shares of Japanese banks.[34]
- Bank employees. Bank employees acquire shares in their banks through employee stock participation plans. It is also usually expected of retired bank employees, nominated as board directors, that they have some holdings in the banks. Bank employees are often among the largest shareholders of regional banks.
- Other banks. Possibly orginially conceived to fend off any hostile takeovers by foreign banks after foreigner investors gained access to the Japanese capital market, Japanese banks developed a system of cross-shareholding between them (especially between city banks and regional banks) in order to expand their business base.

B. Shareholders and Corporate Governance

The ownership structure described above has given rise to a largely ineffectual corporate governance system in which shareholders have only a modest control over the management of banks. The mutual life insurers[35] (the largest shareholders of most major banks), for instance, have little sway over banks because of the limitation of their own corporate governance (Fukao, 1998).[36] As for the borrower-shareholders of the banks, the fact that bank credit has remained for the majority of them their principal source of funding

[34] This aspect of Japanese banking makes banks resemble listed credit cooperatives (Irvine, 1998).

[35] In Japan most life insurance companies are structured as mutual companies.

[36] This is related to the fact that as mutual companies, policy holders are nominal owners of the life insurers, and may total tens of thousands.

weakens their position as shareholders.[37] This is especially the case when these borrower-shareholders are themselves under stress and depend on banks for their restructuring financing. Even the healthy borrower-shareholders are more interested in getting favorable terms for their borrowing than high returns from their bank stock holdings.

The lack of incentive for shareholders to exercise their corporate governance power also applies to the employee-shareholders of the banks. The interdependency between corporate management and employees which characterizes the Japanese employment system as a whole often results in the employees siding with management. In addition, the employee-shareholders tend to prefer wages to dividends because of the double taxation on the latter. In theory, of course, there is no reason why banks as shareholders of other banks should not exercise their corporate governance role, especially as they also have additional exposure to each other through their interbank activities. However, many banks were "in the same boat" and the "convoy system", a strategy designed by the authorities to use good banks to help bail out bad banks, weakens their ability to exercise their shareholder rights. In short, this type of ownership structure implies that bank management can often count on the support of the majority of their shareholders[38] and has little trouble in proxy solicitations or at shareholders' meetings. It is very rare for the "silent majorities" to vote against management's decisions.

The composition of boards of directors also contributes to the weakness of bank corporate governance. Board members are typically "promoted" from the ranks of employees and generally do not see their roles as representing shareholders' interests. It is rare for Japanese banks to appoint external directors other than from those companies with which they have long-term business relationships. Board members are expected to resign when their terms expire so that their junior employees can replace them. This system gives little incentive for board members to take decisive action in order to cope with problems their banks face, as long as nothing goes wrong during their tenure.

C. Internal and External Auditors

Japanese corporate law provides for both external and internal auditors. In reality, however, their roles are very limited. Internal auditors are appointed from among former bank employees, a fact that may significantly limit their independence. As for external auditors, as in many countries, they were known as generally reluctant to express opinions on the financial statements of corporations for fear of losing clients. This situation was made possible partly because, until recently, it was very rare for accountants to be sued or deemed

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[37] Japanese non-financial companies finance about 62 percent of their liabilities and equity through borrowing versus 13 percent in the U.S. in 1998 (The Bank of Japan, 1999).

[38] Individual investors are generally small. For example, individual shareholders only account for less than 10 percent of Tokyo Mitsubishi Bank's total outstanding shares.

liable for approving financial statements misrepresenting the business conditions of a company. Recently, however, this changes has begun to change as shareholders and creditors of failed financial institutions have begun to sue the accountants of these institutions for compensation.

D. Consequences

Weak corporate governance has had two profound and detrimental effects on the Japanese banking system:

- Bank management is not under pressure to maximize profitability. Instead, bank management focuses on market share and on providing stable employment and services for clients.[39] The average yields on working assets of Japanese banks, together with their returns on assets (ROA) and the returns on equity (ROE), have been in the 1990s among the lowest by industrialized countries comparison (Figure 5). Weak profitability means that when loans go bad, banks do not have enough retained earnings to deal with them and, furthermore, they have problems raising new capital in the market when their capital declines pari passu with write-offs and provisioning.
- The absence of checks and balances (accountability) means that bank management lacks the incentive for restructuring and will postpone dealing with problems during their tenure. This is one of the reasons why bank management failed to take a proactive stance with regards to dealing with mounting nonperforming loans, resulting in an unnecessary protraction of the crisis. Moreover, because the internal and external audits are weak, bank management actually tried to conceal their problems.[40]

VI. The Beginning of the Crisis

Partly because of weak corporate governance, most banks failed to take any appropriate measures to adjust to the new economic conditions, preferring to wait for stock and property prices to return to their pre-collapse level (Taniuchi, 1997). Although most of the financial system still managed to hang on until at least 1995, the problems facing the *jusen* companies (housing loan corporations) were publicly recognized at a relatively early stage, by early 1992.

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[39] The chairman of one Japanese bank was quoted as saying "Our purpose is to serve clients and Japanese industry. There must be profit, but profit must be reasonable. If we make too much profit, we are eating the profits of our clients" (Irvine, 1998).

[40] Former executives of the now defunct Long Term Credit Bank and Nippon Credit Bank are currently facing trials for fraudulent accounting and false disclosure related to the recognition of losses for nonperforming loans of their banks.

Figure 5. ROE, ROA and Yields on Working Asset Comparisons

Figure 5a. ROE Comparison

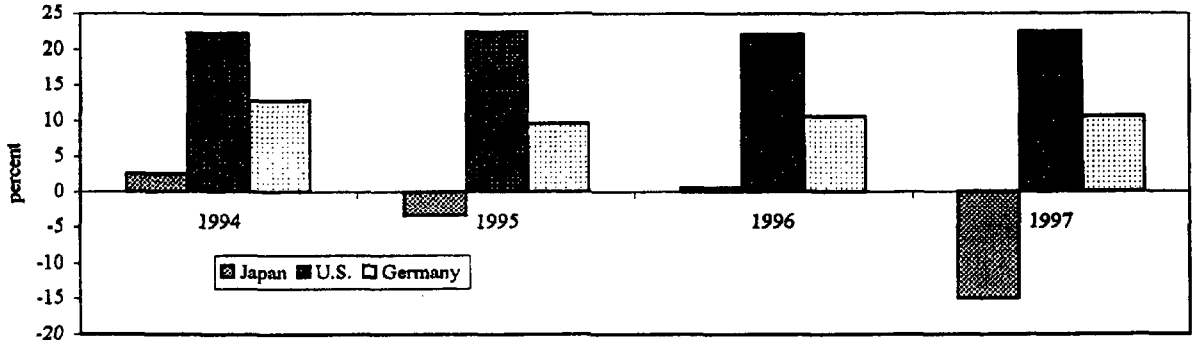


Figure 5b. ROA Comparison

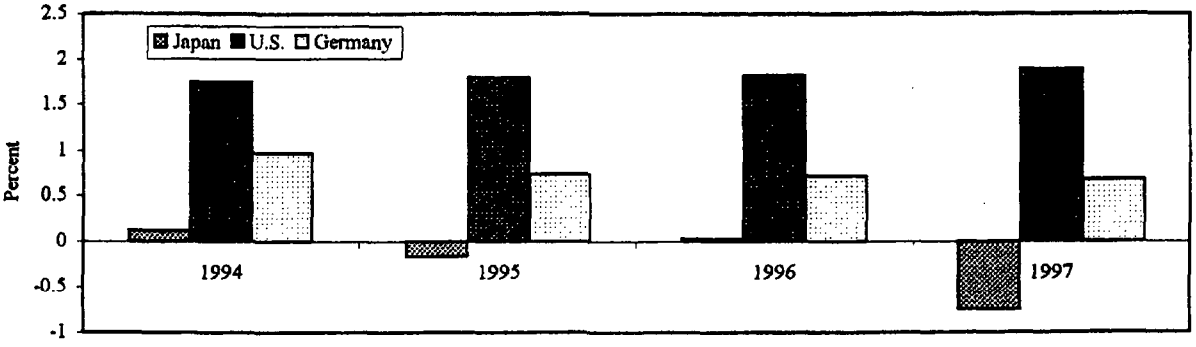
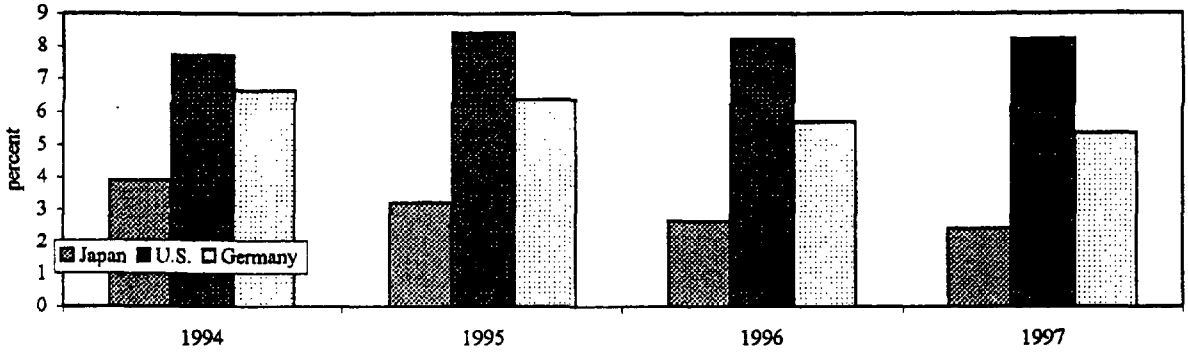


Figure 5c. Yields on Working Asset Comparison



Source: Comparative Economic and Financial Statistics, Bank of Japan

A. The *Jusen* Companies

The *jusen* companies were established in the mid-1970s by banks, securities companies and insurance companies to engage in home mortgage lending. Displaced by banks from the home mortgage market in the 1980s, *jusen* companies found their way to real estate lending in the second half of the decade and, by the beginning of the 1990s, the real estate sector had become their primary market. Funded by agricultural cooperatives (to which the MOF April 1990 guidelines restricting lending to the real estate sector did not apply), *jusens'* lending to the real estate sector grew sharply in the 1990-91 period.

Concerns over the quality of *jusens'* lending rose in 1992. In the spring of 1993, creditors and owners of *jusen* companies reached an agreement to implement a ten year rehabilitation plan with the support of the MOF. The plan, which consisted of reduced interest rates on outstanding loans to the *jusen* companies and additional liquidity injection by the creditors, was predicated on the assumption of a recovery of the real estate market over a ten-year period. Instead, real estate prices fell even further. In August 1995, after the MOF conducted a special examination of the *jusen* companies, the MOF, the creditors and the owners of seven *jusen* companies agreed to dissolve them;[41] in the spring of 1996, the Diet passed a plan to inject government funds to facilitate their liquidation; and in July of that year, the Housing Loan Administration Corporation was established to assume their assets and liabilities. The shortfall in the assets was mainly born by the parent banks and creditor banks of the *jusen* companies. The parent banks wrote off all their equity stake and loans to these companies (worth 3.5 trillion yen) while other creditor banks wrote off about 1.7 trillion yen of loans.[42]

B. Bankruptcy of Credit Cooperatives and of a Regional Bank

Towards the end of 1994, the Tokyo metropolitan government suspended the operations of two insolvent credit cooperatives, Tokyo Kyowa Credit Cooperative and Anzen Credit Cooperative. Subsequently, Tokyo Kyodo Bank was established (with capital participation of the Bank of Japan, commercial banks and credit cooperatives) to liquidate their operations. The resolution of these two cooperatives represented a clear departure from the authorities' previous policy of not allowing any depository institution to fail. This was partly because by 1995 the authorities, which until then had sought existing financial

[41] The examination revealed that 74 percent of the jusen loans were nonperforming.

[42] However, the agricultural cooperatives, which as a group had the largest exposure to the jusen companies, were fully reimbursed in the settlement, partly because of their political clout. The Ministry of Agriculture maintained that forcing agricultural cooperatives to incur losses would have had serious consequences for these institutions, which were not only credit institutions, but also perform joint purchasing, marketing and distribution services to farmers.

institutions ("white knights") to acquire those in serious distress, could no longer find any institution strong enough or willing to fulfill such a role.

In July 1995, the Tokyo metropolitan government ordered Cosmo Credit Cooperative to suspend new deposit taking and lending operations. In August 1995, the Osaka prefectural government issued the same order to Kizu Credit Cooperative. These cooperatives had in the 1980s expanded their business so rapidly (by lending primarily to the real estate industry) that by the time of their closure they had become de facto full range banks.

"Regulatory arbitrage" was one of the main factors behind the failure of the credit cooperatives. These cooperatives, supervised by the prefectural governments, were subject to looser supervision and regulation than those applied to banks, a fact which allowed them to engage in more risky banking activities than the latter. With the relaxation of restrictions on their lending to non-members, they contributed to an unhealthy competition in the credit market, which indirectly contributed to the weakening of all financial institutions.[43]

In August 1995, the MOF also ordered Hyogo Bank, a regional bank, to suspend new deposit taking and lending and subsequently its business was transferred to the newly established Midori Bank. By this time it was clear that the supervisory authorities had no other choice but to close insolvent financial institutions. Depositors (institutional depositors in particular) reacted by transferring their deposits from banks with low credit ratings to those with higher credit ratings or to the Postal Savings scheme (Table 9). The ensuing segmentation of the deposit market and the interbank market required depository institutions with low credit ratings to offer higher interest rates to attract funding.

The failures of these institutions provided the impetus to create a framework to use public money to resolve failed institutions and to extend protection to all depositors of all credit cooperatives.[44] In June 1996, the Diet passed six laws, establishing the Housing Loan Administration Corporation and the Resolution Collection Bank (which took over the Tokyo Kyodo Bank) designed to cope with the liquidation and the recovery of assets of failed *jusen* companies and credit cooperatives. The new laws also strengthened the Deposit Insurance Scheme.[45]

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[43] This was also the case with the agricultural and fishery cooperatives, which were supervised by the Ministry of Agriculture, Forestry and Fishery.

[44] However, political and popular opposition was deemed to be too great to expand the scheme to cover ordinary banks. Deposit insurance fund could contribute to the resolution of a bank only to the extent that would have been required under a payoff scenario. Indeed, because of this limitation, Midori Bank had to assume nonperforming loans of the defunct Hyogo Bank that could not be written off by contribution from the deposit insurance fund.

[45] The Deposit Insurance Corporation established the Financial Stabilization Fund, with funds provided by private financial institutions and made a capital subscription of 200 billion

(continued...)

VII. Regulatory Weakness and Forbearance

If the flow of deposits from weak banks to stronger banks did not become even more pronounced, it was because most Japanese depositors operated under the assumption of an implicit full government guarantee on their deposits.[46] The government, by choosing not to actively dispel this notion, would eventually have no other choice but to fulfill the public's expectation. As the implicit guarantor of bank liabilities, it would have been in the interest of the government to minimize the potential fiscal cost of bank restructuring. However, it can be argued that the strategy of the government until 1997, the postponing in dealing with the problems, actually raised the fiscal cost of the final resolution of the banks.

Between 1990 and 1995, the authorities did very little to arrest the decline in the conditions of the banking system. This was in part due to what turned out to be a false hope that the economy would soon turn the corner and that a full economic recovery would buoy the banks (Nishimura, 1999). And after 1995, even though it had become clear that banks' problems had considerably worsened and a more systematic public intervention would eventually become inevitable, regulators hesitated to take strong action because of their fear of triggering a public panic, especially in the absence of an adequate deposit insurance scheme and a legal framework for bank restructuring to deal with a full blown banking crisis. Therefore, until 1997, the regulators are thought to have exercised forbearance.[47] Although there is no definite evidence supporting the theory of regulatory forbearance, a number of related observations would indicate that the hypothesis cannot be easily rejected:

- The regulatory authorities, which had the power to delicense banks, intervened only after the distressed banks had become insolvent, implying that they often only took action once they had no other choice. For example, the Tokyo metropolitan government had already in the spring of 1993 known about the insolvency of the Tokyo Kyowa Credit

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yen to the Housing Loan Administration Corporation, with 100 billion yen from the Financial Stabilization Fund and from the Bank of Japan.

[46] Until 1997, the actual guarantee under the Deposit Insurance scheme was only up to ten million yen per account.

[47] Many senior bureaucrats from the MOF and the BOJ, upon their retirement, move into high positions at commercial banks. Known as *amakudari* (in literal translation: "descent from heaven"), these appointments are intended sometimes as rewards for retiring officials and sometimes as part of the authorities' response to arrest the worsening of distressed banks. Critics have pointed out that this system, by creating an interdependent relationship between the supervisors and the supervised, inevitably leads to conflicts of interest and retardation of action by the supervisors (Hsu, 1994).

Cooperative and the Anzen Credit Cooperative (closed at the end of 1994) after conducting special joint examinations with the MOF.

- Banks were allowed to continue to pay dividends even after it had become evident that retained earnings were needed to strengthen their capital base and to help provision for loan losses (the tradition of paying low but consistent dividends regardless of company performance has been a widespread corporate practice in Japan). This was possibly due to the belief (shared by the regulatory authorities) that the suspension of dividend payment would be a signal of distress and lead to a sharp fall in bank stock prices or possibly even to runs on banks. Thus, for several years banks went on paying dividends, even when they recorded negative net profits. Table 10 shows that in 1991 Japanese banks together paid out 750 billion yen in dividends from a combined net profit of 2.3 trillion yen. By 1997, after banks lost about 9 trillion yen, the dividends paid out were still 680 billion yen.
- In Japan, guidelines issued by the Stock Exchange require any listed corporations to be delisted if they incur negative income for three consecutive years. In 1995, banks incurred a combined loss of 5 trillion yen, after setting aside 23 trillion yen for provisioning. In 1996, banks tried to avoid reporting losses, because if they did they would risk being delisted the following year if further deterioration of their operating environment were to force them to incur losses again. Therefore, banks reduced their provisioning by half in 1996 so as to report a small profit (Table 10). And only in 1997 did they increase their provisioning again. The fact that nonperforming loans continued to rise all throughout the late 1990s would suggest that the provisioning requirement was not rigorously enforced.
- Loan classification rules were lax relative to international best practice and consequently, it took too long for banks and regulators to recognize the extent of nonperforming loans in the system. When, at end-March 1998, major banks reported non-performing loans based on the more stringent standards introduced (so as to be broadly in line with those current in the United States), this change raised their disclosed non-performing loans by around 50 percent compared with the figures that would have been reported under the old system (Levy, 1998).

A number of factors have been identified as contributing to the delay in regulatory response to the deteriorating bank conditions: lack of political leadership; existence of competing regulatory authorities; agency problems in administering deposit guarantees (Cargill, Hutchison and Ito, 1997). Regulatory forbearance was possible also in part because of the system of informal administrative guidance prevailing at the time. In any event, regulatory forbearance and laxity probably only served to further weaken the banks, as the consequent moral hazard problem resulted in banks engaging in a gamble for resurrection.[48]

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[48] Cargill, Hutchison and Ito pointed out that both deposits and lending of Tokyo Kyowa Credit Cooperative and Anzen Credit Cooperative nearly doubled between March 1992 and

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Furthermore, the help the authorities extended to banks to meet their capital requirement served as an additional disincentive for the undertaking of painful restructuring and for dealing with non-performing loan problems, and when these were ultimately addressed, the price was at a far higher cost of resolution.

VIII. Resolution Strategy

A. Failure of Major Financial Institutions

Several large and high profile financial institutions went into effective bankruptcy in 1997. In April, the MOF ordered Nissan Life Insurance, one of the nationwide insurance companies, to suspend its operations. In November, Sanyo Securities, one of the second tier securities firms, filed an application for rehabilitation. On the same day, Sanyo also defaulted on its borrowing in the call market, the first of such occurrences in Japanese history.[49] This led to a sharp curtailment of interbank activities. In the same month, the MOF ordered Hokkaido Takushoku Bank, one of the city banks in Japan, and Yamaichi Securities to suspend their operations. Both eventually announced the closure of their businesses. These developments led to a sell-off of bank shares in the Tokyo stock market as well as to an increase in the cost of funding of Japanese banks in the overseas interbank markets (the so called "Japan premium").

B. Authorities' Response

In 1997, the Japanese authorities introduced under the "Law to Ensure the Soundness of Financial Institutions" the Prompt Corrective Action (PCA) framework, loosely modeled after the American framework (Table 11). The PCA, which was to take full effect in April 1998 and was introduced on a preliminary basis in 1997 has two main components.

- The introduction of a self-assessment process which places on the banks themselves the responsibility for valuing their assets on a prudent and realistic basis, according to well-defined guidelines. These procedures also require that the banks' own findings (including the necessary provisioning for loan losses and capital ratios) be subject to review by external auditors and to inspection and monitoring by bank examiners.

November 1994. The majority of the new loans made in this period eventually became nonperforming.

[49] Securities firms are allowed to participate in the interbank market though there is a limit on the amount they can borrow. Insurance companies are allowed to participate in interbank market as providers of funds.

- The specification of the capital ratio thresholds under which regulators can order banks to take remedial action ranging from reduction of branches to reduction of dividends and liquidation in the case of insolvency. This constitutes an important milestone because it significantly narrows the scope for regulatory forbearance by placing pressure on the regulators to act when a bank weakens.

In 1997 it also became clear that even big financial institutions were not too big to fail, although the authorities had repeatedly declared in public that no such banks would be allowed to do so. This realization and the perception of weakness in other banks in the system prompted depositors to more aggressively withdraw their funds from weakened depository institutions.[50] On the 26th of November of that year, the Minister of Finance (Mr. Mitsuzuka) declared that, regardless of the limited coverage under the Deposit Insurance System, the government would guarantee the full amount of deposits both in yen and in foreign currencies, debentures by banks, and certain types of trust offered by trust banks until the end of March 2001.

By 1998, the severity of the problems faced by the banking system and the need to use public funds to restructure the system were finally recognized by the public and lawmakers alike. In February 1998, the Diet passed two laws to amend the Deposit Insurance Law and to establish emergency measures for stabilizing the financial system. The new laws authorized the provision of 30 trillion yen[51] to bail out banks and protect depositors. Although these new measures represented steps in the right direction, they were incremental and the banking supervisory authorities were still not sufficiently equipped to deal with the magnitude of the problem.

In March 1998, many banks experienced difficulties in meeting the capital requirement. Consequently, all major banks applied for public capital injection. Because weak banks did not want to draw attention to themselves by applying for more capital injection than the stronger ones, most of the banks applied for the same amount (100 billion yen). Though reportedly the Bank of Tokyo-Mitsubishi had been reluctant to apply for capital injection (to avoid any government intervention in the management of its business), as the head of the Tokyo Bankers' Association in 1997 it was the first to announce its

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[50] Although depositors had not played an active role in the corporate governance of banks until the latter part of the 1990s, the intensification of the withdrawal of their deposits from weak financial institutions in 1997 was instrumental in forcing the government to deal with the problems in the banking sector.

[51] 17 trillion yen was to be used for dealing with bank failures up until March 2001; the remaining 13 trillion is to be used for recapitalization of banks through the purchase of preferred shares and subordinated debt.

application for capital injection. The government subsequently injected 1.8 trillion yen (0.4 percent of GDP) into these banks mainly in the form of subordinated debt.

To help banks further strengthen their capital positions, if only merely for the books, the authorities relaxed accounting rules, allowing banks to count 45 percent of their revalued real estate holdings toward tier 2 capital (Table 12). Moreover, given that the market value of the stock holdings of many banks had fallen below their cost, the authorities allowed banks to change the lower of cost or market accounting to cost basis accounting for equity securities held for investment purposes.[52]

C. Credit Crunch

The year 1997, characterized by increased distress of the financial system, by heightened regulatory pressure and increased market scrutiny, was a turning point year for the Japanese banking system. These events culminated in a fundamental shift in the lending behavior of banks. Woo (1999) finds that the cross-section correlation between bank lending growth and bank capital, which had been negative for most of the first half of the 1990s, became positive in 1997, suggesting that weak banks, constrained by their capital positions, began to grow less rapidly than better capitalized banks. Woo also finds that capital weakness tended to constrain bank lending growth more than asset growth, indicating that the slowdown in bank lending was not entirely due to funding capacity.

Woo attributes this phenomenon partly to the increased failures of distressed financial institutions in 1997, which substantially abated the moral hazard problem in the system by signaling a fundamental shift in the strategy of the government in dealing with ailing institutions. Regardless of the motivations for this change in strategy (whether prompted by the government's realization that its resources for rescuing the banking system were limited or by its resolve to introduce some discipline into the system), it helped inject some credibility into the supervisory and regulatory framework and led banks to recognize they would suffer the same fate as the closed banks if they did not quickly restore soundness. The introduction of the PCA (which is designed around the capital ratio requirement) and the fact that the capital ratios of weakly capitalized banks had come close to the 8 percent threshold led these banks to cut back on their lending.[53] These findings are supported by two related observations. First, the Tankan survey (Figure 2) indicates that the willingness of financial institutions to lend, as reported by enterprises, dropped significantly in 1997. Two, while lending by foreign banks in Japan contracted even more sharply than domestic banks for the

[52] The new regulations did not, however, allowed banks that opted the cost basis accounting rule to count unrealized gain on stock securities toward their tier 2 capital.

[53] For example, banks cut back on their lending to blue chip Japanese corporations with which they had maintained close business ties over the years but the lending to which was not profitable. Banks arranged for their security subsidiaries to help these corporations issue corporate bonds. Banks also cut back their loans to overseas corporations with high credit rating, especially after the yen had started depreciating against the dollar.

first half of the 1990s, foreign bank lending surged in 1996 and accelerated in 1997 just when Japanese bank lending actually started to contract (Table 13).[54]

The government responded to the ensuing so called "credit crunch" by an increase in funding for the credit guarantee schemes. The latter, designed to help small and medium sized companies gain access to the credit market, had been in existence since 1953. The banks exploited the guarantee schemes because, for the purpose of calculating the BIS capital ratio, they were allowed to attach a zero risk weight to government guarantee loans.[55] By 1998, the governmental schemes had been growing so rapidly (Table 14) that they largely exhausted their funding. The government offered additional funding (20 trillion yen) to the guarantee schemes in late 1998 and a new round of injection of funds was approved in the summer of 1999. In September 1999, the government announced yet another scheme to support the small sized and medium sized companies by guaranteeing their corporate bonds issues.

The governmental lending agencies (specialized in lending to small and medium sized enterprises and funded through the postal savings system)[56] also increased their lending activities in 1997. Indeed, it is reported that some banks tried to recover their impaired loans from small and medium sized companies by requesting them to borrow from these governmental agencies.

D. Legal Resolution Framework and Further Recapitalization

The Financial Supervisory Agency (FSA) was established in June 1998 to take over the supervision of banks from the MOF and to consolidate the segmented supervisory function previously held by various bodies.[57] The FSA was granted considerable operational autonomy and independence in order to allow the supervisors to operate more effectively.

In October 1998, the Diet passed the Financial Revitalization Law and the Financial Early Strengthening Law, and amended the Deposit Insurance Law to provide the broad

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[54] The migration of loans to blue chip firms from Japanese banks to foreign banks was most noticeable for euro-yen loans.

[55] These schemes allow banks to engage in more risky lending to boost their margins.

[56] These agencies are primarily providers of long-term loans to small and medium sized enterprises and housing loans. These agencies generally offer lower lending rates than banks partly because they are not profit oriented.

[57] The FSA took over from the MOF the supervision of banks, securities firms, insurance companies and non-bank financial institutions, from the Regional Financial Bureaus the supervision of *Shinkin* banks, and from the prefectural governments the supervision of credit cooperatives.

framework for the resolution of banking problems. The new laws augmented the procedures available for dealing with bank failures by introducing management by financial resolution administrators and temporary nationalization or special public management. The new laws also merged the Resolution and Collection Bank (RCB) and the Housing Loan Administration Corporation (HLAC) into the Resolution and Collection Corporation (RCC) whose expanded mandate allowed it to purchase bad loans not only from failed banks but from solvent financial institutions as well.

At the same time, the Diet doubled the total amount of government funds set aside for the strengthening of the banking sector to 60 trillion yen (12 percent of GDP), out of which 25 trillion yen were earmarked for recapitalizing weak but solvent banks, 18 trillion yen for dealing with insolvent banks through nationalization and liquidation and finally, 17 trillion yen for full deposit protection of insolvent banks. The Financial Revitalization Committee (FRC) was established to oversee the bank restructuring process.

The increased funding allowed for additional capital injection into the banks. By end-March 1999, the application for the second round of government capital injection by the major banks amounted to 7.5 trillion yen, four times as much as the first round of capital injection in 1998. The modalities of the injection were the purchases by the Deposit Insurance Corporation (DIC) of preferred shares and/or subordinated debts issued by the banks. Contrary to the injection in 1998, the amount varied by bank and reflected the conditions of individual banks. To qualify for the capital injection, the FRC required each bank to submit a restructuring plan (including the raising of new capital from the private sector) which would be subject to review on a quarterly basis. If not satisfied with the progress in the restructuring of a bank, the FSA could convert its holdings of preferred stocks to common stocks after a certain grace period (the length of the period varies and is determined according to the strength of the bank) and as largest shareholder put pressure on the management. The Bank of Tokyo Mitsubishi, the largest and the soundest bank, did not apply for capital injection. Instead, it made public its intention to pay off the subordinated debt it issued to the government in March 1998.

These new measures allowed the FSA to tighten the operations of its supervisory authority. After conducting full scale special on-site examinations of all major banks in the fall of 1998 and all regional banks in the winter and spring of 1999, the FSA concluded that the self-assessment of asset quality undertaken by the banks in March 1998 was based on too optimistic assumptions and that the major and regional banks had significantly understated their non-performing loans.

Closures or suspensions of banks continued during 1998. The Long Term Credit Bank of Japan, which announced its merger plan with Sumitomo Trust Bank in June 1998, was nationalized in October 1998 after the passage of the law for temporary nationalization. Nippon Credit Bank was likewise nationalized later in the year. The net worth of these banks had become negative after the FSA requested them to apply stricter loan classification standards and to make provisions accordingly. The Deposit Insurance Company acquired all the outstanding shares of Long Term Credit Bank and Nippon Credit Bank and provided

financial support to allow them to continue their operations. The government's capital injection at the end of March 1998 to both banks, however, proved to be worthless.

Once the FRC and the FSA were satisfied that, after the second round of public capital injection, major banks had sufficient capital (capital adequacy ratio of 10 percent or more based on the stricter loan classification), they turned their attention to the regional banks. In April 1999, the FSA extended the PCA framework to banks without international operations.[58]

The FRC also announced guidelines for government injection of capital to regional banks. Public funds would be used to either support banks indispensable for the growth of the regional economy or to facilitate consolidation of banks. The FRC required that banks applying for public funds meet capital adequacy of 8 percent instead of the 4 percent domestic capital adequacy requirement.

In September 1999, the FRC decided to approve the application by three regional I banks, Ashikaga Bank, Hokuriku Bank, and Ryukyu Bank and one regional II bank, Hiroshima Sogou Bank, for capital injection totaling 260 billion yen, after which they met capital adequacy ratio of 8 percent.

IX. Some Positive Recent Developments

Although it would appear that the Japanese banking crisis has for the time being been stabilized, the long term health of the sector still heavily depends on the ability of banks to undertake meaningful restructuring, including tackling the still sizable asset quality problems, dealing with weak corporate profitability and strengthening corporate governance. This section discusses three recent developments, which in many respects represent departures from old practices. Should these developments become part of a trend, they bode well for the future.

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[58] Based on the result of a special inspection, the FSA declared three regional II banks (Kofuku, Kokumin, and Tokyo Sowa) insolvent and placed them under the government's control. The FSA also recommended the merger of Hanshin Bank with Midori Bank (Midori Bank had been established, as mentioned above, to take over Hyogo Bank in August 1995 and had since been functioning like the American Resolution and Trust Corporation in western Japan). The FSA ordered two regional II bank (Namihaya Bank and Niigata-Chuo Bank) and one regional I bank (Hokkaido Bank) to increase their capital to meet the 4 percent CAR. Kofuku, Kokumin, Tokyo Sowa, Namihaya Bank and Niigata-Chuo Bank all went into bankruptcy in 1999.

The first of these three developments is a series of recent announcements of voluntary mergers, these being the first mergers since a number that took place in the early 1990s[59] and since the merger between Bank of Tokyo and Mitsubishi Bank in April 1996. In May 1999, Mitsui Trust and Chuo Trust announced their plan to merge by the end of fiscal year 1999, and in the following August another merger was announced between three banks, the Industrial Bank of Japan, Dai-Ichi Kangyo, and Fuji Bank, to be completed by the end of fiscal year 2001. The latter banks plan to consolidate their business by creating a bank holding company structure and, if the merger goes through, will create the largest bank in the world in terms of assets. Credit rating agencies have so far responded favorably to these mergers. Moody's Investors has already announced that it is considering upgrading the ratings of these banks. These mergers are significant because they reflect the banks' recognition of the need to reduce overcapacity (through, for instance, layoff and consolidation of branches), even when this may require a surrender of power by the management of the merging banks. However, whether these mergers are to be followed by others and whether they will eventually lead to the much needed downsizing and diversification of the banking business is yet to be seen.[60]

The second development is the approval by the FRC, in September 1999, of the application by Ripplewood Holdings (an American investment firm) to acquire the nationalized Long Term Credit Bank of Japan (LTCB). This is an important milestone because it is the first time a foreign financial institution will acquire a major bank in Japan.[61] The sale of LTCB opened the Japanese market to foreign competitors. If this trend were to continue, it will reinforce the introduction of modern banking practices in Japan. Already, the nominated CEO of LTCB (Mr. Masamoto Yashiro, a former CEO of Citibank Tokyo) announced that the function of the board of directors will be separated from that of the management of the new bank. He also announced plans to reduce the proportion of interest revenue to total revenue to below 50 percent while stressing the importance of focusing on profitability[62] and shareholders' value. Should all these objectives be carried out, they could serve as a new business model difficult for Japanese banks to ignore.

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[59] Mitsui Bank and Taiyo-Kobe Bank merged into Sakura Bank in 1990 and Kyowa Bank and Saitama Bank merged into Asahi Bank in 1991.

[60] Some critics of the planned mergers, while raising questions about whether they are likely to generate real restructuring, have pointed out that the mergers could further undermine the discipline in the system by making banks even bigger for the authorities' "too big to fail" strategy (Nikkei, December 8, 1999).

[61] Merrill Lynch bought Yamaichi Securities in 1998.

[62] Many industry analysts have pointed out that to increase profitability, Japanese banks must cut back on their low margin volume lending.

The third development is the planned merger between Sumitomo Bank and Sakura Bank announced in October 1999 (which will result in the second largest bank after the merger of Daiichi Kangyo Bank, Fuji Bank, and the Industrial Bank of Japan). This merger is of particular importance because it is one between two banks belonging to two competing industrial groups (the Sumitomo group and the Mitsui group). The rivalry between industrial groups in Japan has until now prevented corporate restructuring involving different companies belonging to different industrial groups. To the extent that the merger between Sumitomo Bank and Sakura Bank represents a fracturing of the industrial group system, it may open doors to inter-*keiretsu* corporate restructuring and create an impetus for economy wide restructuring in Japan.

X. Conclusion

Several important lessons can be drawn from the experience of the Japanese banking crisis:

- When market forces are not at work to promote consolidation and timely exit of unprofitable institutions, deregulation in a financial system already characterized by overcapacity can lead to excessive competition and risk taking, with the consequence of weakening the resilience and health of financial institutions (Nishimura, 1999). This is especially the case when deregulation is not accompanied by a corresponding adjustment in the regulatory framework and internal risk management control.
- Uncoordinated deregulation, such as when the pace of deregulation is not even across different types of financial institutions, can be particularly harmful. For example, "regulatory arbitrage", resulting from unequal regulatory and supervisory treatments of different financial institutions engaging in similar activities, can give rise to unhealthy competition and concentration of risks. The sequencing of deregulation can be also very important. The fact that Japanese banks were still not allowed to underwrite securities[63] while the bond market was being liberalized (which made available alternative sources of funding for blue chip corporations) probably helped weaken the banks.
- Property cycles and asset bubbles can have profound repercussions on the health of the financial system (financial deregulation in an expansionary macroeconomic environment may contribute to asset price inflation). To mitigate these repercussions, prudent banking requires banks to base their lending decisions on cash flow analysis of the borrowers (and not on simple collateral requirement) and to adjust their assessment of the creditworthiness of the borrowers in a timely manner. Because of the difficulty of forecasting economic cycles, pro-cyclical provisioning requirements may be a useful tool to help protect banks from unexpected economic downturns.

[63] Banks were not allowed to set up securities subsidiaries until 1994.

- The main bank system which is centered around the monitoring role of the main banks relies excessively on the ability of the main banks to perform its role effectively. Distressed main banks may not have the proper incentive to relay the true conditions of troubled borrowers to other creditors and to initiate and carry out the necessary restructuring process. Instead, such banks may delay dealing with the troubled borrowers by exercising forbearance, worsening the problem in the process.
- Weak corporate governance can prevent banks from undertaking meaningful restructuring to arrest their deterioration. Effective corporate governance, which requires shareholder activism and is built around disclosure standards, effective internal and external audit arrangements, separation between board and management, and the accountability of board directors to shareholders and regulators, is critical to provide the necessary checks and balances between shareholders, bank board and management. Cross shareholding between banks and their borrowers can, on the one hand, prevent banks from taking forceful action with regards to their troubled borrowers and, on the other, discourage the shareholder-borrowers from playing their role in the corporate governance of the banks.
- Transparent accounting standards (such as pertaining to loan classification, accrual of interest and marking-to-market of assets) are an important tool in effective supervision. Accounting standards should be designed around the need to promote substance over form and to discourage manipulation. Consolidated accounting, especially when there are substantial transactions between financial institutions and their affiliates and subsidiaries, facilitates consolidated supervision. Inclusion of qualification by accountants should be an integral part of the publicly disclosed audited financial statements.
- Although regulation and supervision of banks constitute the last line of defense, regulatory authorities need to take a proactive attitude toward supervision. Regulatory forbearance can postpone a crisis, but at the cost of raising the fiscal cost of the final resolution. By giving rise to moral hazard problems, regulatory forbearance and "too big to fail" doctrines can lead to "gamble for resurrection" which often weakens financial institutions further. Prompt Corrective Action framework is often necessary to force and/or to empower the regulators to take difficult action against weak financial institutions (especially when the problems arise from supervisory negligence).

Table 1. Credit Rating of Japanese City Banks

	Bank of Tokyo-Mitsubishi	Dai-Ichi Kangyo Bank	Fuji Bank	Sakura Bank	Sanwa	Sumitomo Bank	Tokai Bank
1980		B	A/B		B	A/B	B
1981		B	A/B		B	A/B	B
1982		B/C	A/B		B	A/B	B
1983		B/C	A/B		B	A/B	B
1984		B	B		A/B	A/B	B
1985		B	B		A/B	A/B	B/C
1986		B	B		B	B	B/C
1987		B	B		B	B	C
1988		B	B		B	B	B/C
1989		B	B		B	B	B/C
1990		B	B	B/C	B	B	B/C
1991		B	B	B/C	B	B	B/C
1992		B/C	B/C	B/C	B/C	B/C	B/C
1993		B/C	B/C	C	B/C	B/C	B/C
1994		B/C	B/C	C	B/C	B/C	B/C
1995		B/C	C	C/D	B/C	B/C	C
1996	B/C	C	C	D	C	C	C/D
1997	B/C	C	C/D	D	C	C	C/D
1998	C	D	D	D	C/D	C/D	D
1999	C/D	D	D	D	D	C/D	D

Source: Fitch-IBCA.

Table 2. Sectoral Lending by Banks 1/
(as percentage of total outstanding loans)

	Manufacturing	Real estate	Construction	Individuals	SMEs
1985	26.12	7.71	5.69	9.25	53.50
1986	23.58	9.61	5.52	9.79	56.57
1987	20.46	10.22	5.23	11.29	60.47
1988	19.09	11.14	5.26	12.86	64.46
1989	16.65	11.54	5.40	15.25	69.55
1990	15.74	11.28	5.31	16.27	70.36
1991	15.57	11.60	5.59	16.84	70.84
1992	15.06	12.08	5.94	16.78	71.12
1993	16.04	11.40	6.24	16.09	68.99
1994	15.64	11.69	6.41	15.94	69.48
1995	14.98	11.84	6.42	16.70	70.09
1996	14.56	12.19	6.32	17.32	70.31
1997	14.11	12.49	6.33	17.76	69.89
1998	14.33	12.77	6.47	18.42	69.20

Source: Bank of Japan
1/ The numbers do not include euro-yen loans.

Table 3. Credit Growth of Different Sectors of the Financial System
(in percent)

	GDP growth	Credit Growth of Banks	Credit Growth of OBIs 1/	Credit Growth of NBFIs 2/
1985	6.61	10.83	5.77	7.99
1986	4.69	9.49	8.75	7.37
1987	4.26	11.17	23.66	22.93
1988	6.92	10.94	15.15	22.85
1989	6.96	11.63	10.68	22.54
1990	7.51	9.21	9.91	21.10
1991	6.57	5.29	6.45	12.24
1992	2.79	2.33	9.09	5.55
1993	0.92	-1.12	6.41	5.44
1994	0.82	0.20	5.48	3.17
1995	0.83	1.68	0.98	-1.92
1996	3.44	1.17	3.69	7.03
1997	1.42	0.51	-2.29	-9.82
1998	-1.92	0.79	-	-

Source: International Financial Statistics.
1/ Other banking institutions include specialized credit institutions, which cover resident foreign banks, financial institutions for small business, financial institutions for agriculture, forestry and fishery, securities finance institutions and other private financial institutions, government financial institutions, the Trust Fund Bureau, Postal Savings, and Postal Annuity.
2/ Nonbank financial institutions comprise life and non-life insurance companies, the National Mutual Insurance Federation of Agricultural Cooperatives, and mutual insurance federations of agricultural cooperatives.

Table 4. Interest Rate Spreads
(in percent)

	Avg. time deposit rates 3-6 months 1/ (A)	Avg. new lending rates Short-term 2/ (B)	Lending spreads short-term (B-A)	Avg. time deposit rates 2-3 years 1/ (D)	Avg. new lending rates long-term 2/ (E)	Spreads long term (E-D)
1991	5.70	7.73	2.06	6.11	7.59	1.48
1992	3.10	5.65	2.48	4.59	5.89	1.30
1993	1.92	4.35	2.32	2.71	4.66	1.94
1994	1.61	3.53	1.80	2.02	3.91	1.89
1995	0.85	2.70	1.70	1.24	3.08	1.84
1996	0.22	2.03	1.63	0.65	2.50	1.85
1997	0.21	1.91	1.56	0.38	2.27	1.89
1998	0.19	1.88	1.55	0.30	2.21	1.91

Source: Bank of Japan
1/ Deposits of less than 3 million yen. The rates exclude regulated interest rates.
2/ Short-term loans are loans with maturity less than 1 year. Long-term loans are loans with maturity greater than 1 year.

Table 5. Maturity Structure of Loans
(As percentage of total loans)

	Within 3 months	Between 3 months and 1 year	Longer than 1 year	Others 1/
1985	21.2	33.8	39.0	6.0
1986	18.7	32.6	41.6	7.1
1987	17.7	28.9	44.7	8.7
1988	16.8	25.5	48.0	9.7
1989	12.6	23.9	52.7	10.8
1990	11.7	19.3	56.4	12.6
1991	11.2	19.0	56.4	13.4
1992	10.7	20.6	55.3	13.4
1993	9.7	21.1	55.9	13.3
1994	9.3	21.5	55.6	13.6
1995	8.8	19.8	58.2	13.2
1996	8.0	19.3	59.0	13.7
1997	8.2	18.6	59.2	14.0

Source: Bank of Japan
Note: 1/ Others consist mainly of overdraft loans.

Table 6. Bills Discounted and Loans by Type
(As percentage of total loans)

	Bills discounted 1/	Loans on bills 2/	Loans on deeds 3/	Overdrafts 4/
1989	6.83	27.56	52.11	13.50
1990	5.89	24.86	54.48	14.77
1991	5.63	23.62	54.52	16.23
1992	4.92	24.07	54.31	16.70
1993	4.75	23.96	54.51	16.78
1994	4.43	23.70	54.43	17.44
1995	4.03	22.48	55.94	17.54
1996	3.80	20.43	57.62	18.15
1997	3.52	19.52	57.90	19.06
1998	2.83	18.43	59.72	19.02

Source: Bank of Japan
1/ Bills discounted usually involves commercial bills issued by a third party. Company A receives from company B a promissory note, which company A discounts at a bank. These bills are generally short term, with maturity less than one year. 2/ Loans on bills are backed by bills issued by the borrower. These loans are structured in such a way as to be paid back as the bills mature. The average maturity of this type of loans is under one year. Companies have historically used this type of borrowing arrangement to finance their working capital.
3/ Loans on deeds are loans with a written contract. This type of loan generally carries a maturity between 3-5 years. Companies typically use this type of borrowing arrangement to finance medium and longer term investments. 4/ Overdraft loans are loans that carry a commitment by banks to provide loans up to a pre-specified ceiling. These loans are also typically used by borrowers to finance short term liquidity needs.

Table 7. Security Types for Bank Loans
(As percentage of total loans)

	Loans Secured by Real Estate	Loans Secured by Stocks and Bonds	Loans Secured by Others 1/	Loans Secured by Third Party Guarantee	Unsecured Loans
1985	21.72	1.96	9.57	26.31	40.44
1986	22.08	2.17	9.87	25.97	39.91
1987	23.19	2.35	9.43	25.61	39.41
1988	23.86	2.62	9.18	26.76	37.59
1989	25.69	2.63	8.31	29.31	34.06
1990	27.22	2.31	8.60	29.93	31.94
1991	28.08	1.91	8.29	30.32	31.41
1992	28.41	1.65	8.11	29.69	32.12
1993	27.93	1.66	8.16	29.93	32.32
1994	26.93	1.52	8.01	30.47	33.08
1995	25.36	1.53	7.90	31.83	33.37
1996	24.08	1.30	7.68	32.86	34.08
1997	23.46	1.38	7.46	34.07	33.63

Source: Bank of Japan
Note: 1/ Others include deposits.

Table 8. Bank Holdings of Real Estate and Unrealized Gains
(in billions of yen)

	Bank Holdings of Land and Buildings	Unrealized Gains on Investment Securities	Unrealized Gains on Stocks
1991	5,573	110,703	81,622
1992	7,724	128,968	91,966
1993	8,078	177,671	125,467
1994	7,522	86,526	53,309
1995	10,651	132,976	101,550
1996	9,255	64,436	47,579
1997	8,944	12,420	10,609
1998	3,385	n.a.	n.a.

Source: Bank Scope

Table 9. Deposits Growth of Different Financial Institutions 1/
(in percent)

	City Banks	Credit Cooperatives	Postal Savings
1991	-4.84	0.23	14.18
1992	-6.05	2.65	9.31
1993	1.29	3.33	7.90
1994	1.95	4.11	7.66
1995	3.03	-5.40	8.02
1996	0.06	-3.23	5.36
1997	2.86	-3.34	6.96

Source: Bank of Japan
1/ Private sector deposits. Includes deposits by other financial institutions.

Table 10. Aggregated Bank Income Statement
(billions of yen)

	1991	1992	1993	1994	1995	1996	1997	1998 1/
Net interest revenue	14,618	19,189	18,456	19,539	19,523	19,080	17,408	10,562
Other op. income	4,649	4,648	6,269	5,670	6,853	5,272	6,740	3,386
Overheads	13,193	15,332	15,593	16,654	14,474	14,744	14,888	10,526
Loan loss provision	1,650	3,897	9,163	12,544	23,342	11,532	25,809	21,202
Others	982	6	3,163	5,610	6,534	2,160	6,243	7,790
Profits before tax	5,410	4,616	3,131	1,619	-4,905	236	-10,304	-9,990
Tax	3,045	2,780	1,618	1,347	442	597	-619	-2,515
Net income	2,367	1,835	1,515	271	-5,346	-360	-9,683	-7,474
Dividend paid	750	864	875	892	710	675	687	343

Source: Bank Scope
1/ 1998 data are preliminary

Table 11. Japan and the United States: Summary of Prompt Corrective Action Provisions

Japan		United States		
Capital Levels 1/	Regulatory Actions	Capital Level 2/	Mandatory Actions	Discretionary Actions
n. a.	n. a.	"Adequately capitalized" Total ≥8 percent, and Tier 1≥4 percent, and leverage ratio < 4 percent	Disallowed brokered deposits except with FDIC approval	None
Capital ratio < 8 percent for banks engaged in int. operations; Capital ratio < 4 percent for banks without int. operations	Order formulation and implementation of management improvement plans	"Undercaptialized" Total <8 percent, or Tier 1 <4 percent, or Leverage ratio < 4 percent	Suspend dividends and management fees. Require capital restoration plan. Restrict asset growth. Require approval for acquisitions, branching, and new activities. Disallowed brokered deposits.	Order recapitalization. Restrict interaffiliate transactions. Restrict deposit interest rates.
Capital ratio <4 percent for banks engaged in int. operations; Capital ratio < 2 percent for banks without int. operations	Order recapitalization plans. Impose restraints on asset growth. Impose ban on new activities and branches and limits on current activities. Impose bank on new subsidiaries and overseas affiliates and limits on the current activities of such entities. Limit payment of dividends. Limit payment of bonus to directors and management. Limit deposit interest rates.	"Significantly undercapitalized" Total < 6 percent, or Tier 1 < 3 percent, or Leverage ratio < 3 percent	Same as above. In addition, order recapitalization. Restrict interaffiliate transactions. Restrict deposit interest rates. Restrict pay of officers.	Same as above. In addition, order conservatorship or receivership if bank fails to submit or implement a plan to recapitalize. Improve any provision for "critically" undercaptalized" banks if necessary.
Capital ratio < 0 percent for banks engaged in int. operations; Capital ratio < 0 percent for banks without int. operations	Suspend whole or part of banking business. This order can be replaced with lesser action if (1) the net value of assets, including unrealized gains, is positive; (2) the net value including unrealized gains is negative but expected to be positive after considering: (a) the implementation of management improvement plans and other specific measures; (b) business income and profitability; © the bad asset ratio. A business suspension order can be issued at any time when the net value of the assets, including unrealized losses is, or is expected to be, negative.	"Critically undercapitalized" Tangible equity to total assets ratio of ≤ 2 percent	Same as above. In addition, order receivership or conservatorship within 90 days. Order receivership if critically undercapitalized for four quarters. Suspend payments on subordinated debt. Restrict certain other activities.	n.a.

Sources: Japan, Ministry of Finance; and United States, Federal Deposit Insurance Corporation.

1/ The international capital standards (BIS capital adequacy standards) apply to banks with international operations. The adjusted national capital standards apply to banks with purely domestic operations.

2/ The total capital ratio cited is the total risk-weighted capital: the leverage ratio is the ratio of Tier 1 capital to total assets.

Table 12. Capital Ratios Under New Accounting Standards and Old Accounting Standards for the Major 19 Banks 1/

	Capital Ratio			Tier 1 Capital Ratio		
	Mar-97 (%)	Mar-98 (old standards) (%)	Mar-98 (new standards) (%)	Mar-97 (%)	Mar-98 (old standards) (%)	Mar-98 (new standards) (%)
City Banks						
Tokyo – Mitsubishi Bank 2/	9.28	8.20	8.54	4.97	4.27	4.27
Dai-Ichi Kangyo	8.76	7.51	9.09	4.38	3.76	4.63
Sakura	8.93	7.62	9.13	4.46	3.81	4.56
Sumitomo	8.75	8.33	9.23	4.5	4.17	4.76
Fuji	9.23	7.29	9.41	4.8	3.65	4.79
Sanwa	9.11	8.31	9.61	4.55	4.15	4.80
Tokai	9.09	8.82	10.26	4.55	4.41	5.41
Asahi	8.71	7.44	9.39	4.44	3.72	4.69
Daiwa	9.02	n.a.	10.30	4.73	3.56	5.35
Long-Term Credit Banks						
IBJ /2	9.04	9.31	9.74	4.83	4.79	4.95
LTCB	9.22	n.a.	10.32	4.61	3.82	5.16
NCB	2.99	n.a.	n.a.	1.5	n.a.	n.a.
Trust Banks						
Mitsubishi Trust 2/	9.68	n.a.	10.35	5.15	5.99	5.99
Sumitomo Trust	8.97	n.a	9.90	5.45	4.22	5.27
Mitsui Trust	9.56	8.66	10.41	5.35	4.33	6.02
Yasuda Trust	9.87	n.a.	13.56	5.73	3.97	7.14
Toyo Trust	10.02	9.29	10.68	5.79	4.64	5.78
Chuo Trust	9.11	n.a.	12.73	4.93	5.03	7.95
Nippon Trust	11.24	n.a.	9.83	10.29	8.21	9.26

Sources: FitchIBCA, based on published financial statements as of May 22, 1998.

1/ The calculation for the old standards adjusts for the revaluation of real estate holdings (45 percent of which can be included

in Tier 2 capital under the new standards) as well as the change from the lower of cost or market accounting of unrealized equity

Securities holdings to cost basis accounting from the old standards to the new standards.

2/ These three banks did not adopt the new accounting methods for unrealized equity securities holdings.

Table 13. Comparison of Credit Growth of Domestic and Foreign Banks in Japan 1/
(in million of yen and percent)

	Credits by domestic banks	Credit growth of domestic banks	Credits by foreign banks in Japan	Credit growth of foreign banks in Japan
1990	4,243,430	-	-	-
1991	4,458,893	5.08	121,462	-
1992	4,603,939	3.25	106,827	-12.05
1993	4,726,330	2.66	97,340	-8.88
1994	4,748,158	0.46	76,640	-21.27
1995	4,776,618	0.60	76,064	-0.75
1996	4,827,009	1.05	87,185	14.62
1997	4,823,121	-0.08	101,275	16.16
1998	4,779,785	-0.90	107,444	6.09

Source: Bank of Japan
1/ End-fiscal year data.

Table 14. Activities of the Credit Guarantee Corporations
(in billion of yen)

	Guarantee Applications Accepted (during the period)		Payment under Guarantee (during the period)		Guarantee Obligation Outstanding	
	Number of cases	value	Number of cases	value	number of cases	Value
1990	1,145,280	11,874	15,567	79	2,490,615	18,595
1991	1,196,422	12,189	19,822	145	2,676,463	21,216
1992	1,365,306	13,747	28,139	275	2,873,669	23,345
1993	1,511,741	14,821	35,443	350	3,145,544	25,781
1994	1,513,402	14,948	40,786	390	3,395,798	27,356
1995	1,545,584	15,334	43,725	417	3,593,347	28,524
1996	1,559,130	15,213	47,954	428	3,762,107	29,255
1997	1,570,709	14,892	49,166	460	3,891,566	29,369
1998	2,163,161	27,159	70,009	682	4,323,622	39,539

Source: The Bank of Japan

REFERENCES

Aoki, Masahiko and Hugh Patrick, 1994, The Japanese Main Bank System: Its Relevance for Developing and Transforming Economy, Oxford University Press.

Ammer, John and Michael Gibson, "Regulation and the Cost of Capital in Japan: An Case Study," July 1996, International Finance Discussion Papers, Board of Governors of the Federal Reserve System.

Ammer, John, Michael Gibson and Amnon Levy, "Underpriced Again: The April 1996 Tokai Bank Euro-convertible Preference Issue," May 1996, unpublished note, Board of Governors of the Federal Reserve System.

Bank of Japan, "Comparative Economic and Financial Statistics – Japan and Other Major Countries", 1999, Bank of Japan.

Bayoumi, Tamim, "The Morning After: Explaining the Slowdown in Japanese Growth in the 1990s", 1998, IMF Working Paper.

Brunner Allan and Steven Kamin, "Bank Lending and Economic Activity in Japan: Did "Financial Factors" Contribute to the Recent Downturn ?" 1995, International Finance Discussion Papers 513.

Cargill, Thomas, Michael Hutchison and Takatoshi Ito, "Preventing Future Banking Crisis in Japan", 1997, prepared for the Conference "Preventing Banking Crisis: Analysis and Lessons from Recent Bank Failures", sponsored by the Federal Reserve Bank of Chicago and the World Bank, Chicago, June 11-13, 1997.

Federation of Bankers Association of Japan, The Banking System in Japan, 1989.

Fukao, Mitsuhiro, "Japanese Financial Instability and Weakness in the Corporate Governance Structure", 1998, Seoul Journal of Economics (Korea), 11, pp. 381-422.

Fukuda, Atsuo and Shin'ichi Hirota, "Main Bank Relationships and Capital Structure in Japan", 1996, *Journal of the Japanese and International Economics* 10, 250-161.

Genay, Hesna, "The Ownership Structure of Japanese Financial Institutions", 1993, Working Paper Series, Federal Reserve Bank of Chicago.

Hoshi, Takeo and Anil Kashyap, "The Japanese Banking Crisis: Where Did It Come From and How Will It End", 1999, NBER Working Paper 7250.

Hsu, Robert, "The MIT Dictionary of the Japanese Economy", 1994, MIT Press.

Hutchinson, Michael and Kathleen McDill, "Are All Banking Crisis Alike? The Japanese Experience in International Comparison", 1999, NBER Working Paper 7253.

Irvine, Steven, "Why Japanese Banks Don't Care About Profits", 1998, Euromoney, March.

Kawai, Masahiro, Juro Hashimoto and Shigemi Izumida, "Japanese Firms in Financial Distress and Main Banks: Analyses of Interest-Rate Premia", 1996, Japan and the World Economy; v8 n2, pp. 175-194.

Morsink, James and Tamim Bayoumi, "The Monetary Transmission Mechanism in Japan," 1999, Japan: Selected Issues, IMF.

Quarterly Bulletin, Bank of Japan, November 1996.

Levy, Joaquim, "Resolving Japan's Banking System Problems", Japan - Selected Issues, 1998, IMF.

Marsh, Terry and Jean-Michel Paul, "Japanese Banls' Bad Loans: What Happened", 1996, mimeo.

Motonishi, Taizo and Hiroshi Yoshikawa, "Causes of the Long Stagnation of Japan during the 1990s: Financial or Real", presented at the NBER Tokyo Conference October, 1998.

Nikkei, "A Pitfall in the Consolidation of the Big Banks ", December 8, 1999.

Nishimura, Yoshimasa "Causes of the Failures of the Supervision over Financial Institutions," 1999, Bungeishunju, Bunshun Bunko (in Japanese).

Noma, Toshikatsu, "Scale-maximizing Behavior of Japanese Banks: An Empirical Analysis," 1986, Economic Studies Quarterly, 37, pp. 336-50 (in Japanese).

Sekine, Toshitaka, "Firm Investment and Balance-Sheet Problems in Japan", 1999, IMF Working Paper.

Sundararajan, V. and Tomas Balino, "Issues in Recent Banking Crises", 1991, Banking Crises: Cases and Issues, edited by V. Sundararajan and Tomas Balino, IMF.

Taniuchi, Mitsuru, "Recent Developments in Japan's Financial Sector: Bad Loans and Financial Deregulation", 1997, Journal of Asian Economics, Vol. 8, No. 2.

Woo, David, "In Search of Credit Crunch: Supply Factors Behind the Slowdown in Japan", 1999, IMF Working Paper.

Yamaguchi, Yutaka, "Asset Price and Monetary Policy: Japan's Experience," 1999, speech given at a symposium sponsored by the Federal Reserve Bank of Kansas City in Jackson Hole, Wyoming, between August 26 and 28, 1999.