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Weakening Market and Regulatory Discipline in
Japanese Financial System

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Abstract

As the Japanese financial system gradually deteriorated in the late 1990s, the government expanded the financial safety net to avoid systemic crisis and to protect various type of creditors. As the government expanded the safety net to protect virtually all the stakeholders of banks including shareholders, the financial market gradually lost its disciplining forces on individual banks. Certainly, the safety net always generates some form of moral hazard among creditors of banks. However, the fact that FSA has to protect even the subordinated creditors and shareholders indicates that FSA has completely failed in keeping the financial system reasonably sound. As a result, Japanese stock market is losing the capability of giving price signal to investors. The protection of equity holders is spreading to industrial companies and to life-insurance companies. In order to normalize Japanese financial system, the FSA and banks have to do two things, restore profitability in banking and raise enough capital. Without the restoration of sound banking sector, we cannot expect market forces to discipline banks in a constructive way.

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Weakening Market and Regulatory Discipline in Japanese Financial System

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1. Introduction

Japanese banks incurred heavy losses in the early 1990s due to the crush of the bubble economy of the 1980s. However, most banks could survive this shock thanks to the thick cushion of accumulated profit and latent profit in their stock portfolio. However, in the second half of 1990s, some banks started to run out of this cushion due to the rapidly accumulating loan losses under the accelerating deflation. Banks could not obtain enough profit margins on their commercial lending activities because the borrowers faced fairly high real borrowing costs due to deflation. Moreover, the Bank of Japan's zero-interest rate policy wiped out the banks' rents from their zero-interest demand deposit. As a result, the capital injections to banks by the government in 1998 and 1999 could not revitalize the banking sector and the injected public money had been depleted as a quasi subsidy to the banking sector.

In the second half of 1990s, the primary supervisor of banks has changed its name; Ministry of Finance, Financial Supervisory Agency, and Financial Services Agency. Generally speaking, these supervisors have allowed banks to understate the amount of bad loans. They also allowed under-capitalized banks to operate under very lenient application of capital requirement rules. Only exception was the period between 1998 and 1999 when the Financial Rehabilitation Commission supervised the regulators. In my opinion, this forbearance policy was induced by the following factors. Firstly, regulators had to pay attention to the borrowers from banks such as small and medium sized companies who support many politicians. Secondly, the regulator did not want to sentence death to weak banks that followed all the instructions from the regulator himself, including the request to save still weaker banks than themselves.

As the financial conditions of banks deteriorate, the market put a pressure on weaker financial institutions. Massive withdrawal of deposited securities to Yamaichi Securities triggered its demise. Increasing cancellation of bank debentures of long-term credit banks resulted in the nationalization of Long-Term Credit Bank of Japan and Nippon Credit Bank. A lower stock price of a weakened bank often induced outflows of deposit from them and induced them to ask FSA for protection.

However, the absence of the market for corporate control and the extensive cross shareholding generally prevented strong shareholder pressure on banks. Largest shareholders of major Japanese banks were generally large life-insurance companies or other banks. Under most circumstances, cross shareholders would not vote against the

will of the management. As a result, banks did not carry out major restructuring until they obtained capital injection from the government in 1999. One senior director of a major bank told me that when his bank reported a big loss for the first time in many years, he was stunned to find that hardly any major shareholders complained at the annual meeting.

As the Japanese financial system gradually deteriorated in the late 1990s, the government expanded the financial safety net to avoid systemic crisis and to protect various type of creditors. At first, only the depositors were protected by the deposit insurance system. When the inter-bank market lost liquidity in the late 1997 after the first default of borrowing by Sanyo Securities in the call market, the protection of creditors was extended to inter-bank instruments. When Long-term Credit Bank of Japan and Nippon Credit Bank were nationalized in 1998, the government protected the interest of life-insurance companies that held subordinated loans of these banks. Finally, when Resona Bank faced a crisis in 2003, even the shareholders of the bank were protected. The government bought about JPY 296 billion of common stocks of Resona Holdings at 52 yen per share and JPY 1.66 trillion of preferred stocks even though the holding company's net asset was effectively negative.

As the government expanded the safety net to protect virtually all the stakeholders of banks, the financial market gradually lost its disciplining forces on individual banks. Even after the introduction of the Prompt Corrective Action in April 1998, the average amount of grant to the absorbing banks of 132 failed deposit-taking institutions was about 25 percent of the gross debt of the failed institutions. In other words, FSA does not close deposit-taking institutions until they become deeply insolvent. This excessively forbearing policy on banks has made it difficult to apply prompt corrective action measures on financial institutions. When Resona Bank notified the FSA that they do not have enough capital to meet the minimum standard, the FSA issued the prompt corrective action on Resona and, on the same day, the FSA decided to inject JPY 2 trillion of public capital to the bank.

Certainly, the safety net always generates some form of moral hazard among creditors of banks. Especially when there is an element of systemic risk in the banking sector, it would be necessary to use a very strong medicine even though it has severe side effects. However, the fact that FSA has to protect even the subordinated creditors and shareholders indicates that FSA has completely failed in keeping the financial system

reasonably sound. As a result, Japanese stock market is losing the capability of giving price signal to investors; after the rescue of Resona Bank, the stock prices of fragile banks and companies rose more than sound companies. According to many observers of Tokyo Stock Exchange, the recovery of stock prices since May 2003 is due to the increasing confidence in the eventual bailout of bank shareholders by the Japanese Government. Many analysts call this recovery a “moral-hazard rally.”

The protection of equity holders is spreading to industrial companies and to life-insurance companies. In recent years, banks sometimes wrote off a part of the debt of insolvent borrowers without wiping out shareholders' equity. For example, IRCJ (Industrial Revitalization Corporation Japan), a government sponsored company for corporate rehabilitation, decided to wave a part of the debt of Mitsui Mining while allowing the existing shareholders to keep somewhat less than a half of the equity. The government also sponsored a new law that would allow mutual life-insurance companies to write off a part of the policyholders' claim, a senior liability, without requiring the companies to write off surplus notes (similar to redeemable preferred stocks) and subordinated debts. This new law became effective in August 2003. Since major banks provide a large amount of surplus notes and subordinated debts to life-insurance companies, this law would protect banks, the junior claimant, than policyholders, the senior claimant.

In order to normalize Japanese financial system, the FSA and banks have to do two things, restore profitability in banking and raise enough capital. Banks have to earn enough profit margins to cover their credit cost and operating expenses. When the gradually accelerating deflation keeps real interest rates high, it is very difficult to raise lending interest rates for weakened borrowers. Stopping deflation with strong macro-economic policies would greatly help banks to regain profit margin. It is also necessary to restore profitability in the banking industry by weeding out weaker financial institutions. The FSA has to redefine BIS core capital of banks by eliminating deferred tax assets and double gearing among banks and life-insurance companies. Without the restoration of sound banking sector, we cannot expect market forces to discipline banks in a constructive way.

2. Systematic Neutralization of Market Forces by the Government

Market forces did play an important role of disciplining unsound banks until late 1990s. However, as the financial institutions weakened under a prolonged weak economy, the

government gradually expanded the protection of bank creditors. As a result, the market forces have been disarmed by the government. In this chapter, we document the systematic neutralization of market forces by the government in deposit, bank debenture, short-term money, and stock markets..

2.1. Slow-moving financial crisis: 1991-96

(1) Crush of the bubble economy and increasing problem loans

The market value of the Tokyo Stock Exchange 1st section as a ratio to nominal GDP had been staying between 20 to 40 percent range from early 1950s to early 1980s. However, the stock prices started to rise in the mid 1980s and reached 140 percent by the end of 1989. After the crush of the bubble, this ratio fell to about 50-80 percent range. In relation to nominal GDP, the residential land price almost doubled in the second half of 1980s and the commercial land price tripled in the same period. After the bubble, the fall of commercial land price index is extremely sharp, falling to less than 20 percent of the peak level relative to nominal GDP.

The ratio of land price index and nominal GDP index declined twice in the past 30 years. In the early 70s when this ratio declined, the nominal land price did not decline much and this fall was induced by a sharp inflation of goods and services. However, in the 90s, the fall in this ratio was induced by a fall in nominal land prices. These differences are important in evaluating the fallout from the collapse of the bubble. In the first episode, investors who bought land with borrowed money could repay their debt. On the other hand, in the second episode, the real estate investors could not honor their debt obligations.

At first, bankers and bank supervisors thought that the fall in land prices would be temporary. They expected that by waiting for a recovery of the economy, banks could eventually recover most of their bad loans. However, the wait and see strategy did not work this time and the real estate prices continued to fall. The understatement of bad loan problems by some banks rapidly became a falsification of financial statements. Since a falsification of financial statements of listed companies carries a stiff criminal penalty, the management of banks with large bad loans faced a difficult choice, covering up the extent of their problem to keep their bank open or face a bank run by disclosing the reality and they chose the first option. Apparently, bank supervisors actively supported this choice of banks until early 1997.

Exhibit 1 shows the historical data of problem loans of Japanese banks. Since the disclosure of the bad loan situation improved gradually, the data are not consistent over the years (row B). For example, the definition of bad loan outstanding has been widened twice and, as a result, the disclosed figures jumped up due to this discontinuity. Until fiscal 1995, only major banks disclosed loan loss figures. Japanese banks have lost JPY 88.2 trillion due to bad loans since March 1992 until March 2003 (cumulative amount of row A). In spite of this enormous loss amounting 17 percent of GDP in 2002, Japanese banks still have more than JPY 35 trillion of disclosed bad loans or about 7.6 percent of loan portfolio.

In my opinion, the disclosed bad loan figures understate the real situation. The more broadly defined bad loan figures are published by the Financial Services Agency. Exhibit 2 shows that the total "classified loans" of banks (not disclosed on an individual basis) amount to JPY 71.1 trillion at the end of March 2002. Since FSA terminated the publication of this important data, I estimated the amount of classified loan data for March 2003 based on the disclosed bad loan data (see note to Exhibit 2 for details). According to this estimation, the classified loan has declined to JPY 64.8 trillion which still remains very high.

Under the Bank Examination Manual of the FSA, banks are required to classify their loan portfolio to the following categories; normal, substandard, doubtful and estimated-loss loans taking account of the default risk of the borrowers and the quality of collaterals. Based on this classification, banks estimate their loan-loss reserves and the amount of write-offs. Since the classified loans are more broadly defined than disclosed bad-loans, the amount of classified loans is about twice as much as the disclosed bad loan figure.

(2) Declining Credit Ratings and Japan Premium

Reflecting the increasing loan losses and declining stock prices, the credit rating of Japanese banks declined rapidly. In mid 1980s, Japanese banks enjoyed highest credit ratings under regulated interest rates and huge unrealized capital gains in their equity portfolio. However, financial deregulations and asset-price deflation completely changed the relative credit worthiness position of Japanese banks. By 1992, Japanese banks have the lowest average credit rating among major countries.

Against this dire picture, both the Ministry of Finance (MOF) and the Bank of Japan

(BOJ) denied the severity of bad-loan problem and collaborated to postpone the costly resolution of insolvent financial institutions. There are several reasons for the slow response of policy makers.

- (i) A number of large financial institutions were either insolvent or severely undercapitalized.
- (ii) In order to resolve the crisis, public money is necessary. However, using taxpayers' money is not popular.
- (iii) High officials of the Banking Bureau of the MOF rotate in a few years. As a result, there is a strong incentive for them to postpone the resolution of politically difficult problems.

One important factor in this context was the mismanagement of Jusen crisis. Jusen companies are non-bank financial institutions and they were affiliates of groups of banks. Jusen started their business as housing-loan companies but their business was limited by two factors. Japan Housing Loan Corporation, a governmental loan company, provided subsidized loan with prime collateral. Parent banks also started to provide housing loans in the late 1970s. As a result, the Jusen companies are gradually marginalized in housing loan market. In the 1980s, Jusen companies started to shift their business to more risky real-estate loans. Jusen companies often took second-rated collateral to make high-risk loans.

After the collapse of the bubble, Jusen companies quickly became insolvent. This became obvious for related parties by 1992-93 period but parent banks and MOF officials decided to wait for a recovery of real-estate prices. By 1995, it became a serious political problem. Since Jusen companies financed its real estate loans with borrowed money from small agricultural credit unions, the failure of Jusen companies would induce failures of a number of such unions. Since agricultural unions had a strong lobby in the Diet, the national congress of Japan, politicians put strong pressures on the MOF to resolve Jusen crisis without inducing failures of agricultural credit unions. As a result, JPY 680 billion of public money was used to cover a part of the losses of unions without bankruptcy procedures or asking the managers to take responsibility. Seven of the eight Jusen companies were liquidated and most of the losses were borne by parent banks. Against this rather skewed loss-sharing scheme of Jusen resolution by the MOF and politicians, public opinion was extremely critical, making it politically impossible to discuss further use of public money to resolve

financial crisis. As a result, a further postponement of resolution was carried out.

Market participants were well aware of Japan's problem. As the asset price deflation continues, the funding cost of Japanese banks started to increase relative to European and American banks due to the rising credit-risk of Japanese bank. Even most sound banks had to pay a risk premium (so-called Japan premium) for their inter-bank borrowings (Exhibit 3).

2.2. Episodes of Market Discipline in 1997 and 98

In November 1997, the failure of Sanyo Securities, Hokkaido Takushoku Bank and Yamaichi Securities sharply increased financial instability. These events generated a severe credit crunch in the Japanese financial market, inducing an extremely serious recession. Then what has caused this enormous problem for Japan? In my opinion, there are two factors behind this financial crisis.¹

One is the crash of the stock and real estate market bubble in the 1990s. The second is the lost confidence in the accounting and auditing system in Japan. We note that the actual amount of bad loans discovered at failed financial institutions has been far larger than the amount published prior to the failure. The Hokkaido Takushoku Bank was forced into bankruptcy even though it posted profits and paid dividends for the year to March 1997. Financial statements for that year reported JPY 0.3 trillion in capital; inspections after the failure found a negative equity of JPY 1.2 trillion as of March 31, 1998. This indicates a window-dressing of almost JPY 1.5 trillion.

Likewise, Yamaichi Securities was hiding JPY 260 billion of losses on securities investments--worth more than one-half of its equity capital--which neither Ministry of Finance inspections nor Bank of Japan examinations were reportedly able to uncover.

Depositors and investors of bank debentures issued by long-term credit banks imposed some market discipline. Deposits flew out of banks with low credit ratings because depositors feared that they would not be able to withdraw deposit quickly if their banks were closed. LTCB and Nippon Credit Bank faced a rapid early redemption of their debentures in 1997 because their debentures were not covered deposit insurance system explicitly (Exhibit 4). Stock prices of weaker banks fell sharply and triggered mild

¹ Fukao [1998a] documents the process of financial crisis in 1997.

bank runs in some cases.

These financial-institution failures have exacerbated suspicions both at home and abroad regarding the financial statements and supervision of Japanese financial institutions. It was this mistrust of financial statements that widened the “Japan premium” charged in overseas markets, blocked the domestic call market (which is used for short-term inter-bank loans), and multiplied the number of cash-pressed financial institutions turning to the Bank of Japan for loans. Japanese financial markets clearly experienced a kind of credit crunch because of a rash of failures, declining asset prices, and growing mistrust of financial statements and regulators.

Exhibit 5 shows the Bank of Japan survey of industrial companies on the lending attitudes of their banks. Shadows show the periods when the Bank of Japan raised short-term interest rates to have time money policy. From the end of 1997 until early 1999, the lending attitudes of banks were very tight in spite of the fact that the Bank of Japan was trying to ease monetary policy.

This credit crunch in turn cut into corporate investment and hiring, increased bankruptcy rates, and reduced consumption and housing investments because workers feared for losing their jobs. That resulted in a further contraction of credit in what became a vicious cycle. In other words, unreliable financial statements had proved a serious impediment to the functioning of a market economy.

The contraction was somewhat abated by the Emergency Economic Package announced by the Liberal Democratic Party and Ministry of Finance at the end of 1997. The government prepared JPY 13 trillion for the capital injection to solvent banks and JPY 17 trillion for the protection depositors of failed banks. The Ministry of Finance should have used the fund effectively: by forcing banks to write off all the bad loans, the financial institutions and the financial oversight by the government could have regained the public confidence. However, most of the money was left unused. Only JPY 1.8 trillion of JPY 13 trillion was thinly injected to 21 large banks at the end of March 1998 without any complete examination or comprehensive cleanup of bank balance sheets.

The failure of the capital injection became apparent only a few months later. In the summer of 1998, the stock price of Long-Term Credit Bank of Japan (LTCB) fell sharply when Sumitomo Trust and Banking effectively refused the merger with LTCB.

LTCB was a big bank with JPY 26.2 trillion of assets at the end of March 1998. In October 1998, just before the Long Term Credit Bank of Japan went bankrupt, Financial Revitalization Act and Bank Recapitalization Act were enacted in disorderly atmosphere. This time, the government prepared JPY 60 trillion, about 12 percent of GDP: JPY 25 trillion for the capital injection into solvent banks under Bank Recapitalization Act, JPY 18 trillion for the resolution of failing banks under Financial Revitalization Act such as the capital injection into rescue banks, bridge banks, and the disposition of bad loans, and JPY 17 trillion for the protection of depositors by Deposit Insurance Corporation.

Under Financial Revitalization Act, LTCB and Nippon Credit Bank were nationalized in October and December 1998. Under Bank Recapitalization Act, JPY 7.5 trillion of capital was injected to 15 major banks at the end of March 1999. Unlike the former attempt, this program was much better designed, succeeding to eliminate persistent Japan premium that started in late 1997 (Exhibit 3). The gradual recovery of the Japanese economy and the announcements of big mergers among major banks also contributed to calm the public concern over the financial system until 2002.

2.3. Evolving Japanese Depositor Protection System

In this section, we review the evolution of Japanese deposit insurance system and other schemes to protect creditors of banks.²

(1) Establishment of Deposit Insurance Company

The Deposit Insurance Law established the DIC (Deposit Insurance Corporation) in 1971. The initial role was to protect depositors of failed financial institutions up to one million yen per person by direct payout of insured deposits. The limit of coverage was increased twice to JPY 10 million by 1986 and the DIC obtained a new power to assist mergers of failed institution and a sound one to protect depositors.

The DIC fund had never been used until 1992 when it assisted Iyo Bank to rescue Toho-Sogo Bank. It was relatively easy to find a willing buyer when bank branches carried a regulatory rent. Until early 1990s, deposit interest rates were controlled below the market rates. Moreover, establishment of new branches were also controlled by the Ministry of Finance. As a result, when there is a weak bank, it was relatively easy to find a rescuer that want to obtain a new subsidiary or new branches with

² See Deposit Insurance Corporation of Japan [2002, 2003].

negative equity. However, in the early 1990s, the ceilings on deposit interest rates were removed and the regulation on branching was considerably loosened. This change made the job of bank regulators much more difficult.

After a few failures of small financial institutions in 1994 and 95, the DIC Law was amended in 1996 to allow the DIC to fully protect depositors beyond the normal JPY 10 million as a temporary emergency measure until March 2001 (Exhibit 6). At the same time, the “general” deposit insurance premium was raised from 1.2 BP (basis points) to 4.8 BP, which covers the cost of protection up to the JPY 10 million. In addition, “special” deposit insurance premium of 3.6 BP was introduced to cover the cost of deposit protection beyond the JPY 10 million (Exhibit 7). At the end of 1997, the DIC obtained the power to purchase bad loans from failing financial institutions when they collectively create a new bank.³ The borrowing limit of DIC from the Bank of Japan and private financial institutions was also raised from JPY 1 trillion to JPY 10 trillion.

In spite of the full protection of all the deposits beyond the limit of normal coverage, public concern over the soundness of financial system became extremely intense after the successive failures of Sanyo Securities, Hokkaido Takushoku Bank and Yamaichi Securities in late 1997. Depositors were not sure that the DIC had enough money to honor the commitment of the government to protect all the deposits.

In October 1998, just before the LTCB went bankrupt, Financial Revitalization Act and Bank Recapitalization Act were enacted in disorderly atmosphere.

(2) Financial Revitalization Act and Bank Recapitalization Act of 1998

The purposes of these two laws could be summarized as follows: Financial Revitalization Act is a special law regarding the resolution of insolvent deposit financial institution; Bank Recapitalization Act, on the other hand, concerns the capital injection to those financial institutions which are solvent, but losing the confidence of investors and depositors so that they are facing difficulties to raise capital in the market on their own.⁴

³ Since this measure is likely to preserve weak financial institutions as a new bank under largely unchanged management structure, this method of assistance was abolished in March 1999 after the assisted merger of Fukutoku Bank and Naniwa Bank was carried out in October 1998.

⁴ See Fukao [2000] on the details of these Acts.

Where the regulatory authority judges that a financial institution has a negative equity, or likely to stop repaying the deposits in the near future, Financial Revitalization Act is to be applied. By putting the institution under national receivership, the law tries to protect their customers including both depositors and borrowers. After the effective nationalization, however, this Act attempts to privatize the institution promptly, by making the management efficient, injecting capital, and disposing of its bad loans. Public funds are going to be used to protect the depositors and to replenish its damaged capital base. On the other hand, where a financial institution is solvent but under-capitalized, Bank Recapitalization Act is to be applied. Public funds are going to be injected to its capital base. By doing this, it will be possible to stabilize the performance of financial institution and restore the credibility towards them.

What are the reasons behind the enactment of these laws? For Financial Revitalization Act, it could be argued that bankruptcy code and reorganization order, which nearly corresponds to Chapter 10 of the former US Bankruptcy Act of 1898, were not designed to deal with the insolvency of financial institutions. Under these laws, often applied to the resolution of insolvent industrial companies, procedures are taken through suspending the repayment of the debts that had existed before the failure. These actions are necessary to treat all the creditors of the insolvent company equally. But for a large-sized financial institution, which holds enormous number of clearing accounts for depositors and financial transactions with both domestic and overseas clients, to suspend the payment only for a few days would give tremendous adverse effects on the financial market. Depositors would not be able to make their daily payments and those clients who could no longer borrow from the bank would face the risk of chain-reaction bankruptcy. So as to avoid such a broad range of negative effects, the disposal of insolvent banks should not accompany a general suspension of payment.

Financial Revitalization Act is designed for those financial institutions having a large influence on the stability of financial system, or having an important role in particular region. When those banks face financial difficulties, the Act fully protects their creditors by using public funds. At the same time, the Act penalizes both shareholders and the management of the banks. Although Financial Revitalization Act is the legislation with time limit until March 2001, it will be necessary, even after its expiration, to maintain the Act as a permanent law so as to deal with insolvent financial

institutions. As a result, the DIC law incorporated this law as an emergency measure in its May 2001 revision.

Financial Revitalization Act was applied to the Long Term Credit Bank of Japan in October 1998 and to the Nippon Credit Bank in December of the same year, and both banks were put under national control. The outstanding shares were wiped out and they were nationalized without compensation to the existing shareholders.

There was an argument that by putting those banks under national control, enormous number of settlements over transactions on financial derivatives would come up simultaneously and this would create a disorder within the world financial market. Nonetheless, thanks to the corporation of financial regulatory authorities, it did not bring about any turmoil to the market. In addition, all the depositors were protected, and chain-reaction bankruptcy was avoided. One of the purposes of the Act, namely, to protect the clients of the bank, was thus achieved. On the other hand, the authorities concerned must work harder to privatize those banks under a national receivership, or to lead them to make a fresh start by transferring their business to a third party.

With regard to Bank Recapitalization Act, it is not necessary to have such legislation, unless there is a sense of financial disorder as strong as there is today. Capital of private enterprises should be raised through voluntary market transactions. Looking from the economic point of view, shares can be issued in the market, so long as the business condition is disclosed sufficiently and investors can expect a reasonable return on the investment corresponding to the risk involved. The expected return on stock, which investors require the company to earn explicitly or implicitly, is called the cost of shareholders' equity, i.e. the total amount of both dividend and the capital gain.

However, when the confidence in the financial system is seriously eroded, it is extremely difficult for financial institutions with large loan portfolio to disclose the details of their business conditions to such an extent that investors become satisfied. Therefore, even for those banks which have positive going concern values, it would be almost impossible to raise a large sum of capital for stabilizing their business conditions, since investors require extremely high cost of shareholders' equity. Where the risk of market failure caused by the incomplete transmission of information is larger than the risk of government failure, it would be possible to justify the capital injection of public fund to financial institutions.

It is not clear whether Bank Recapitalization Act was legislated on the basis of such a policy decision, but the legislation itself can be justified with this logic of economics.

At the time of the legislation of the two Acts, the Deposit Insurance Law was also amended. As a result, a principle of the resolution of failed financial institution was established and a new mechanism for rehabilitating solvent but under-capitalized ones. The DIC obtained the following temporary roles in this process; to act as an administrator of failing institutions, to establish bridge banks to keep failed institutions running, to own stocks of temporarily nationalized institutions and choose directors for them, to purchase bad loans from financial institutions, and to purchase shares of undercapitalized institutions so as to bolster their capital position.

(3) The Further Amendments of Deposit Insurance Law

In May 2000, Deposit Insurance Law was amended so as to prepare the permanent resolution scheme for failing banks because Financial Revitalization Act and Bank Recapitalization Act were scheduled to expire at the end of March 2001. In this amendment, procedures of systemic exception from the minimum cost principle became a permanent feature of the system.

The Exhibit 8 summarizes the Article 102 of Deposit Insurance Law of May 2000 that stipulates the measures against a financial crisis. Type 1 measure corresponds to Bank Recapitalization Act and Type 2 and Type 3 measures correspond to Financial Revitalization Act. The Prime Minister can protect all creditors of a bank if he thinks that such a measure is necessary to avoid serious disruptions in the financial market.

The termination of full protection of deposits was postponed for one year from the end of March 2001. In March 2002, while the full protection of time deposits was removed, the government postponed the removal of the full protection of payment deposits once again. JPY 10 trillion was added to the JPY 17 trillion funds for the protection of depositors. While the government pledges to remove the full protection payment deposits in March 2004, they introduced a permanent protection of all zero-interest deposits with payment services at the end of 2002 (see Exhibit 6).

(4) Problems in the Article 102 of the Deposit Insurance Law

Type 2 and Type 3 measures of the Article 102 should be applied to financial institutions

in the same way as the normal bankruptcy procedures are applied, although public funds are used to protect their creditors. Where the going concern value of a financial institution exceeds the liquidation value, reorganization would be desirable. But where the going concern value is less than the liquidation value, an orderly and gradual liquidation would be desirable. In both cases, shareholders' capital will be cancelled and the board members will have to resign.

The following problems arising from Type 2 and Type 3 Measures of the Article 102 could be pointed out:

Firstly, where a financial institution is put under the national control, the nationalized bank has to honor the existing employment contracts, since the status of juridical person of the bank is maintained. As a result, unlike the case of bankruptcy of an ordinary corporation where most employees are dismissed, the employees of a failed financial institution are well protected even though their compensation can be cut by 25 percent at most. Moreover, all the liabilities to workers will be protected in the same manner as other liabilities. Therefore, even a very generous retirement allowance will be protected with the public fund.

Secondly, in the resolution of an insolvent financial institution under Financial Revitalization Act, all of its subordinated debt will be protected. The subordination closes of these debts are triggered only when the issuing financial institutions apply to the court for the protection under the bankruptcy code or reorganization order. Since this resolution procedure is not counted as a formal bankruptcy procedure, all the subordinated debts of Japanese financial institutions are treated as ordinary debt and protected by the public funds. In this regard, the primary problem lies in the past financial supervisory policy that allowed banks to count such "subordinated debts" as their BIS capital.

In the resolution procedure of Long-term Credit Bank of Japan and Hokkaido Takushoku Bank, for example, their subordinated debt did not work as capital. Therefore, it is necessary to re-examine the contracts of subordinated debts, and those debts. Those debts to which subordination close are not applicable within the framework of Type 2 and Type 3 Measures of the Article 102 for the resolution of insolvent financial institutions should be excluded from the BIS capital with a short transition period.

One major problem in applying Type 1 measure, capital injection to solvent bank, or Type 2 and 3 measures, bankruptcy procedure, would be the choice of measure to a particular financial institution.

The government can underwrite capital increase of a particular bank under Type 1 Measure, only when the bank has positive equity capital. In addition, the stocks or preferred shares bought by the government must be marketable. Thus, in order for the government to recapitalize a particular bank, the business condition of the bank needs to become stable through the capital increase, and also there is an expectation of a reasonable return on the injected public fund.

In case of Type 2 and Type 3 Measures, on the other hand, a financial institution can be put under the national control (outright nationalization in Type 3 Measure) or under the national receivership with an assignment of financial receivers (Type 2 Measure). To put a bank under the effective national control so as to protect their depositors and borrowers, one of the following conditions needs to be satisfied; i.e. the bank has negative equity capital, the bank has stopped repaying their deposits, or there is a strong possibility of suspending the repayment.

Whether the financial institution has negative equity or whether there is a possibility of suspending repayment of deposits would decide the Measures to be applied. In practice, however, to which category the bank is going to be classified depends upon the judgment of the authority. Between a well-capitalized bank and an insolvent bank, there are numerous financial institutions that are more or less marginally capitalized. Whether a particular bank can survive or not depends not only upon the management but also on the macro-economic conditions domestic or overseas.

2.4. Protection of Shareholders in Resona Bank Rescue of 2003

The first application of Article 102 of DIC Law is the case of Resona Bank rescue in 2003. Resona Bank is the biggest bank under Resona Holdings, a bank holding company, with the asset of more than JPY 30 trillion. Resona group was formed by an integration of Daiwa Bank in Osaka and Asahi Bank in Tokyo and the fifth largest group just after so-called four Mega Bank groups.

Resona group banks supplemented their capital with massive deferred tax asset (DTA in

the following). Banks usually generate DTA with the following two factors:

(i) Japanese tax rule allows loss carry forwards for five years but no loss carry backwards. Combined tax rates of national and local corporate tax is about 40 percent. As a result, when banks accumulate losses in taxable income, they can show DTA up to 40 percent of estimated taxable income in the coming five years. This DTA will be unwound when the bank earns taxable income.

(ii) Rules on the write-off of bad loans are stricter in tax rules than in accounting rules. As a result, sometimes, a bank can recognize loan losses in their financial statements but cannot recognize losses in their statements for tax purposes. The over-paid tax on loan losses can be carried as DTA. The DTA will be unwound when the bank can recognize loan losses under tax rules.

In short, the DTA are the net present value of future tax shelter due to accumulated loan losses. The DTA have real value only when a bank can generate taxable income in the near future. The DTA have no liquidation value because the tax authority will not reimburse the DTA in the case of a bankruptcy of the bank. Therefore, the quality of DTA as an asset is low unless the bank is very profitable.

As Exhibit 9 shows, Resona Bank had more than JPY 400 billion of DTA which was larger than its shareholders' equity, JPY 366 billion. Moreover, Resona Bank reported losses in the past three years that ended in March 2003. In order to realize JPY 400 billion of DTA in the coming five years, the bank has to earn JPY 200 billion of taxable income every year and after tax ROE has to be as high as 32 percent:

Taxable income (JPY 200 billion) x tax rate (40%) x 5 years = JPY 400 billion

After tax income (JPY 120 billion)/Equity (JPY 366 billion) = 32.7%

This is clearly an unrealistic scenario. In fact, Asahi & Co. that had been auditing Asahi Bank, refused to allow Resona Bank to show any DTA on their financial statement for March 2003. However, Shin Nihon & Co. that had been auditing Daiwa Bank allowed Resona Bank to keep JPY 400 billion of DTA. The Resona management took the more lenient opinion of Shin Nihon & Co. and terminated the auditing contract with Asahi & Co. FSA apparently agreed with Shin Nihon & Co. and the Resona

management and treated Resona Bank a solvent financial institution.

Even with the lenient audit, Resona bank could not satisfy BIS capital rules and the bank asked FSA to give about JPY 2 trillion of capital injection under Type 1 Measure of Article 102 of DIC Law. FSA invoked a Prompt Corrective Action on May 17 and it also convened a Council for Financial Crisis on the same day. Prime Minister decided to provide Resona Bank JPY 1.96 trillion of capital through DIC. DIC exchanged the stock of Resona Bank with that of Resona Holdings, a listed company. DIC obtained JPY 296 billion of common stocks and JPY 1,664 billion of preferred stocks. In this exchange, the government effectively bought common stocks of Resona Holdings at 52 yen per share that was the prevailing stock price of Resona Holdings just before the announcement of public assistance.

This injection of public money to Resona Group started a strong rally in the Tokyo Stock Exchange. The share prices of major banks recovered sharply. In my opinion, this rally was the reaction to a big surprise to the market regarding the Resona rescue. While the existing shares of Long-Term Credit Bank and Nippon Credit Bank were wiped out, the shareholders of Resona Bank were protected by the public money. This was certainly a perverse but effective way to support bank stock prices.

After this injection of public money, the newly appointed Resona management undertook reexamination of their books. On October 10th, the management revised the projected current profit of Resona Group for the mid-term ending September 2003 from JPY 22 billion of profit to JPY 1760 billion of loss. The downward revision was huge, JPY 1,788 billion in just four month, amounting 93% of the injected capital. The downward revision of Resona Bank alone includes JPY 435 billion of additional loan loss reserves and JPY 330 billion of resolution costs of related companies.

The Resona Group rescue by the government indicates that FSA is now protecting shareholders of banks in addition to depositors. Banks are also increasingly accepting partial reduction of the outstanding debts of weakened borrowers without eliminating shareholders' equity. As a result, Japanese stock markets are losing its most important role; pricing the corporate performance and allocating funds to most efficient companies.

3. Absence of Regulatory Discipline by the FSA

As the financial system gradually deteriorated, the government expanded the protection from depositors to owners of subordinated debts and bank shares. As a result, the market forces were removed one after another. Under such conditions, the disciplinary forces of bank supervisors would become much more important. Unfortunately, however, this force is not working in Japan.

3.1. Malfunctioning of Prompt Corrective Action and BIS Rules

Capital requirements on banks are very important regulatory instrument to make the incentive of bank management in the right direction and to protect fund of deposit insurance system. However, FSA have failed to use capital requirements and prompt corrective action properly.

Exhibit 10 shows the degree of insolvency of all the failed deposit taking financial institutions from the introduction of prompt corrective action in April 1998 to September 2002. Altogether, 132 institutions have failed out of 976 DIC protected financial institutions that existed at the end of March 1998. The degree of insolvency is defined as follows:

Degree of insolvency

= DIC grants to protect all depositors / Total disclosed debt just before the failure.

The average degree of insolvency was 25.1%. The DIC protected financial institutions includes commercial banks, shinkin banks, credit unions, and labor banks (rokin). The average degree of insolvency of failed institutions is about the same among different groups and the size of the institutions. Even big banks showed relatively large degree of insolvency; Hokkaido Takushoku Bank, 18.8%, Long-Term Credit Bank, 11.6%, and Nippon Credit Bank, 29.3%.

Exhibit 11 shows the weak capital structure of Japanese banks. At the surface, the core capital of all commercial banks was JPY 24.8 trillion at the end of March 2003. However, this figure includes JPY 10.6 trillion deferred tax assets that have no liquidation value. In addition, there is sizable under reserving for bad loans. Our estimate in Exhibit 4 is shown again in Exhibit 11, column E. If we subtract JPY 5.4 trillion of under reserving for March 2003 and JPY 10.6 trillion from the core capital, the Japanese banks have only JPY 8.8 trillion of capital. The government provides

JPY 7.3 trillion of this capital. Thus, the net private capital is only JPY 1.5 trillion. Against this capital, banks have JPY 23.2 trillion of stock portfolio. Clearly, banks do not have enough capital to support huge stock investment.

Exhibit 12 shows the distribution of core capital ratios (leverage ratios) of major Japanese banks. By adjusting under reserving and deferred tax assets, four banks had negative equity at the end of March 2003. The weighted average capital ratio has declined from 3.21% in March 2000 to 0.30% in March 2003. Only two banks are maintaining more than 6% leverage ratios. One is Shinsei Bank. This bank is former Long-Term Credit Bank of Japan (nationalized in October 1998 and privatized in March 2000). The other is Aozora Bank. This bank is former Nippon Credit Bank (nationalized in December 1998 and privatized in December 2000). All other banks show declining trend in the ratios.

In spite of the declining net asset of banks, all the banks have been complying with BIS capital requirements. Under the Japanese accounting rules on banks and lenient application by the regulators, BIS capital ratios have been manipulated in many ways:

(i) Banks under reserved against bad loans as explained above. This tends to increase bank capital by the same amount. We have shown our estimate in Exhibit 2.

(ii) Banks kept large amount of deferred tax asset in spite of the fact that most of them have been losing money for the past 10 years. Exhibit 13 shows the share of DTA in the core capital of major Japanese financial groups. The DTA of Resona Bank and Mitsui Trust Holdings is larger than their core capital. The DTA of other banking groups is also very large compared with its core capital; more than half for UFJ and Sumitomo Mitsui Financial Group. If we apply US capital requirement rule that set the limit of DTA up to 10 percent of core capital, most major Japanese banks cannot comply with BIS capital requirements

(ii) The friendly life insurance companies hold stocks and subordinated loans of banks. At the end of March 2003, major 10 life-insurance companies hold JPY 1.1 trillion of bank shares and JPY 4.4 trillion of subordinated loans. Banks, in turn, hold JPY 1.0 trillion of surplus notes and JPY 0.9 trillion of subordinated loans of life-insurance companies. In addition, life-insurance companies hold a part of preferred capital notes of banks that are issued through their special purpose entities in

tax haven countries. This practice is a so-called double gearing and the cross-held quasi capital should not be treated as genuine capital of banks or life insurance companies.

3.2. Causes of Deteriorating Capital of Japanese Banks

The fundamental cause of the deterioration of bank capital is the high rate of loan losses. Exhibit 14 shows the profit-loss accounts of all commercial banks. In recent years, banks made around JPY 9-10 trillion each year as lending margin (row A, defined as interest and dividends earned minus interest paid). Revenue from such sources as bond and currency dealing and service charges were about JPY 3 trillion more recently (row B). This includes all other revenue except capital gains realized on stocks and real estate. Revenues from banks' principal operations therefore amount to roughly JPY 12 trillion to JPY 13 trillion a year (row A + row B).

Total costs – including personnel and other operating expenses – were over 7 trillion (row C). Operating costs declined during 1998-2001 because of cost cutting measures. It is likely to be difficult to continue this pace of cost cutting. Certainly, the banks may cut labor costs further by reducing employment and cutting average compensation. But the banks have to invest heavily in information technology to remain competitive.

In the 1990s bank stunted on improving systems because of preoccupation with bad-loan problems, and now they have poor quality computer systems. Thus, for example, the Zengin electronic fund transfer system, which is the main payment system among bank customers, cannot handle 2-byte codes, so it cannot send customer names and messages in kanji (characters.) As a result, more and more payments (especially utility bills) are handled by convenience store chains, which have installed sophisticated terminals.

Since the early 1990s more and more loans held by banks have turned into non-performing assets. Banks have suffered over JPY6 trillion in loan losses each year since fiscal 1994, and almost JPY10 trillion in the fiscal 2001 (row E). As a result, banks have not reported positive net operating profit since fiscal 1993 (row F). However, because of occasional realization of capital gains on stocks and real estate (row G), banks have shown a positive bottom line (row F + row G).

Clearly, the profit margin of Japanese banks is too small to cover the increased default risk after the crush of the bubble. Banks have not succeeded to increase their lending

margin under a strong competitive pressure from government-backed financial institutions and weakened borrowers under a deflationary economy. Moreover, under the terms and condition of government capital injection in March 1999, banks are legally required to maintain and increase loans to small and medium sized firms. Shinsei Bank that reduced the loan to small and medium sized firms was ordered to increase such loans by FSA. Because of this situation, banks often disregard the internal model-based required lending margin to make new loans to small companies. Under this poor loan market conditions, Citibank decided to reduce consumer loan business in Japan significantly.⁵

4. Measures to Restore Market Discipline in Japanese Financial Market

As we have observed in the preceding sections, the market forces are suppressed by the extensive safety net. The regulatory discipline has also been largely absent due to the very lenient application of BIS rules by the FSA. In order to normalize Japanese financial system, we have to carry out following measures: restore profitability in the banking sector, recapitalize banks, rollback excessive safety net, and restore regulatory discipline on the banking sector.

4.1. Restoring Profitability in the banking sector

First and foremost, we have to restore profitability in the banking sector.⁶ As we have observed in section 3, banks are losing money by high level of loan losses and very thin profit margin. Banking sector is running out of capital and they are surviving with government guarantee of their liabilities and occasional injection of public capital. In order to stabilize the banking sector, it is necessary to increase the lending margin of banks by about one percent point. As Exhibit 15 shows, borrowers are already facing relatively high real interest rates even under zero-interest policy by the Bank of Japan. This is due to gradual acceleration of deflation (Exhibit 16). Therefore, an increase in the average lending rate is likely to depress the Japanese economy and will aggravate the deflation. In order to avoid this adverse effect, it is necessary to raise nominal interest rates without raising the real cost of debt for weakened borrowers. Only way to do this is to stop deflation and have a mild inflation. By raising trend inflation rate

⁵ According to March 16, 2003 edition of Japan Economic Journal, Japanese edition, Citibank group would eliminate up-to 500 consumer-loan offices and about 2000 employees by the end of 2003.

⁶ See Fukao [2002] for a detailed analysis of the profitability of Japanese banking sector.

from minus 2 percent to plus 2 percent, for example, banks can raise average lending rate from current 2 percent to 4 percent. At the same time, the real cost of debt for borrowers will fall from 4 percent to 2 percent (Exhibit 17).

Banks certainly have to control cost to find profitable business. Most banks are downsizing their operations under strong pressure from FSA to show profit. But they are neglecting positive measures such as investing in human capital and new information technologies because of low profit.

One important reason of low profit is the competition with government sponsored financial institutions. In Japanese financial markets, the presence of government financial institutions (GFIs) is extremely large. Exhibit 18 shows the market share of private banks and GFIs at the end of 2000. In the loan market, the GFI share reaches 30% to 40% in rural prefectures, although it is only 26% overall. GFIs make very long-term loans at about 2%. They are especially dominant in housing loans, holding more than half the outstanding balance. Their lending rates are similar to those for short-term loans from private banks, but the average term is much longer. GFIs obtain subsidies of about JPY1 trillion per year as direct subsidy and indirect subsidy of zero-cost capital. These are estimated to provide a 60 basis point cost advantage relative to private financial institutions.⁷

In deposit and life-insurance markets, Postal Saving System and Postal Life Insurance have been a dominant player. Postal System was reorganized into a public company, Japan Post, controlled by the government in March 2003. The size of its deposit is JPY 240 trillion which is about the size of four largest private banking groups combined. The total asset of postal life-insurance is JPY 120 trillion and is about three times of Nippon Life, the largest private life-insurance company.

Japan Post does not pay corporate tax, deposit insurance fees or policyholder protection fund fees. The total cost advantage is about JPY 600 billion per year⁸. It does not have to comply with capital requirement rules. The deposits and insurance policy of Japan Post are fully guaranteed by the government. Deposit interest rates are set competitively against private deposit-taking institutions. There are more than 24,000

⁷ Estimation by the author. See Fukao [1998b].

⁸ See Japan Center for Economic Research [2001b] on the cost advantage of Postal Saving system.

post offices, giving the system a branch network larger than all the city and regional banks combined. The largest private banking group, Mizuho, has only about 600 offices. Japan Post does not charge account-maintenance fees, so it is difficult for private banks to charge such fees without alienating a large number of customers.

In order to restore profitability in the Japanese banking sector, the government has to remove competitive advantages of GFIs such as free government guarantees of their debts and tax advantages.

4.2. Capitalizing Japanese Banks

It is necessary to note that a simple injection of government capital to weakened banks will not stabilize the banking sector without a bigger lending margin. Loss-making banks will deplete the injected money sooner or later. For example, Resona Bank received JPY 808 billion of core capital and JPY 100 billion of subordinated loans from the government in 1999 when it was two separate banks; Daiwa Bank and Asahi Bank. In the spring of 2003, Resona Bank had depleted its capital and it received JPY 1,960 billion of additional capital from the government.

In order to revitalize the banking sector, the government has to do two things: allow banks to obtain enough lending margin that is consistent with the expected credit costs, and recapitalize only profitable and solvent banks.⁹ Key points are as follows:

- (i) The government provides public funds to recapitalize a bank only when the bank successfully raises additional capital on their own efforts in the market. By doing so, the bank would have to make themselves more attractive to investors.
- (ii) If the net worth of the bank before the public capital injection is depleted by the loss arisen after the capital increase, pre-existing ordinary shares should be cancelled with no compensation, and the preferred shares held by the government are to be converted into ordinary shares.
- (iii) The public funds can only be used to recapitalize the bank itself, rather than its subsidiaries or holding company.

In my opinion, this statement still provides a proper guideline for the use of public money to recapitalize Japanese banking sector. In reality, the government has been

⁹ See Shadow Financial Regulatory Committee of Japan [1998].

providing disguised subsidies as government capital to insolvent banks. As a result, the banking sector cannot recover profitability because healthier banks face unfair competition with unhealthy banks that are receiving disguised subsidies.

4.3. Rolling back excessive safety net

We have to remove the government guarantee of almost all of the banking sector liabilities. The government introduced a permanent protection of all the zero-interest payment deposits. Since the interest rates on time deposits are very close to zero, depositors do not mind to keep most of their deposit in payment deposits. This measure has weakened the pressure for restructuring among banks. As soon as we stabilize financial system, we have to introduce risk-adjusted deposit insurance premium and terminate the unlimited protection of payment deposits.

The government should not bail out shareholders and subordinated creditors of insolvent banks. The protection of the shareholders of Resona Bank seriously undermined the function of Japanese stock market.

4.4. Restoring Regulatory Discipline on the Banking Sector

The FSA has to redefine BIS core capital of banks by eliminating deferred tax assets and double gearing among banks and life-insurance companies. Under current FSA policy, banks can keep almost unlimited amount of DTA on their balance sheet. This put a tremendous pressure on accountants that have to set a limit on DTA for their clients. In the final days of Resona Bank, Mr. Satoshi Hirata, a CPA of Asahi & Co, apparently killed himself. He has been auditing Asahi Bank, which became Resona Group by a merger, for a long period of time. When Asahi & Co management took a hard stance against Resona Bank's DTA, he was caught between Resona Bank and Asahi & Co. Current accounting rules on DTA are clearly too ambiguous to be used for BIS capital rules. The FSA should limit the use of DTA in the core capital of banks.

The FSA should also restrict double gearing among banks, life-insurance companies and bank customers. In the effort to increase their capital, many banks resorted measures dangerously close to double gearing. Some banks also used their subsidiaries to raise additional capital. We list only well-known cases:

- (i) In February 2003, Sumitomo Mitsui Financial Group (SMFG) raised capital by

issuing JPY 150.3 billion (US\$ 1.27 billion) of preferred shares to the Goldman Sachs Group (GSG). At the same time, SMFG provided US\$ 1.375 billion of cash collateral to GSG so as to guarantee the following credit loss protection contract to a GSG subsidiary that will conduct credit-extension activities. SMFG will share 95% of losses of the subsidiary up to US\$ 1 billion for 20 years. SMFG will also share 70% of losses of the subsidiary up to US\$ 1.125 billion for 5 years.¹⁰

(ii) UFJ Bank established a wholly owned subsidiary, UFJ Strategic Partner Co. and Merrill Lynch bought JPY 120 billion preferred equity. This subsidiary will accept assignment of the problem loans of UFJ bank and it will manage them. The preferred equity from Merrill Lynch is counted as tier I capital of UFJ bank after consolidation. Since the preferred equity is the senior part of the total capital of the subsidiary, JPY 325 billion, the risk for Merrill Lynch is limited.¹¹

(iii) Mizuho Financial Group raised JPY 1,200 billion preferred equity. The equity was mostly subscribed by its Japanese customers and friendly life-insurance companies. There were 75 large subscribers that bought more than JPY 3 billion. Mizuho Bank and Mizuho Corporate Bank are among top three shareholders of 32 of the 75 large subscribers. Top three subscribers are Daiichi Life, JPY 45 billion, Yasuda Life, JPY 33 billion, and Sompo Japan Insurance, JPY 31.5 billion. Mizuho Corporate Bank is among the top two shareholders of the three companies.

The FSA should pay careful attention to the capital structures of big financial groups rather than superficial BIS ratios. Without the restoration of sound banking sector, we cannot expect market forces to discipline banks in a constructive way.

¹⁰ See the Goldman Sachs Group [2003].

¹¹ See UFJ Holdings [2003].

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Exhibit 1
Disclosed Loan Losses of Japanese Banks (All Commercial Banks)

Trillion yen											
Financial year	Mar-93	Mar-94	Mar-95	Mar-96	Mar-97	Mar-98	Mar-99	Mar-00	Mar-01	Mar-02	Mar-03
	← Only for major banks →										
Loss from bad loans (A)	1.6	3.9	5.2	13.4	7.8	13.3	13.6	6.9	6.1	9.7	6.7
specific reserves	0.9	1.1	1.4	7.1	3.4	8.4	8.1	2.5	2.7	5.2	3.1
write-off and loan sales losses	0.4	2.1	2.8	6.0	4.3	4.0	4.7	3.9	3.1	4.0	3.5
Cumulative amount of (A)	1.6	5.5	10.7	24.1	31.9	45.1	58.8	65.7	71.8	81.5	88.2
Bad loans outstanding (B)	12.8	13.6	12.5	28.5	21.8	29.8	29.6	30.4	32.5	42.0	34.8
Definition of B	←————→			←————→			←————→				
	defaulted loans and loans with arrears			defaulted loans, loans with arrears for more than 6 months and loans with concessional interest rates below ODR.			defaulted loans, loans with arrears for more than 90 days and loans with concessionary terms (similar to SEC rule)				

Source: Financial Services Agency and the Bank of Japan

Exhibit 2 Disclosed Bad Loans of Japanese Banks (All Commercial Banks)

Financial year	Mar-97	Mar-98	Mar-99	Mar-00	Mar-01	Mar-02	Mar-03
Non classified loans (category I)	550.0	544.8	487.5	472.4	470.7	440.5	407.8
Classified loans	76.7	71.7	64.3	63.4	65.7	71.1	64.8
Substandard (category II)	65.3	65.5	61.0	60.5	63.1	67.8	62.9
Doubtful (category III)	8.7	6.1	3.2	2.8	2.6	3.3	1.9
Estimated Loss (category IV)	2.7	0.1	0.1	0.0	0.0	0.0	0
Estimated required loan loss reserves (C)	27.4	22.9	19.4	18.8	19.1	20.3	18.0
Total loan loss reserves outstanding (D)	12.3	17.8	14.8	12.2	11.6	13.4	12.6
Estimated under-reserving (C-D)	15.0	5.1	4.6	6.6	7.6	6.9	5.4

Estimated
by the
Author

Source: Financial Services Agency and the Bank of Japan

Notes: Classified loan figures for March 1997 are rough estimates of the author based on the MOF announcements.

Estimated required loan loss reserves is defined as follows:

1% of category I loan + 20% of category II loan + 70% of category III + 100% of category IV loan

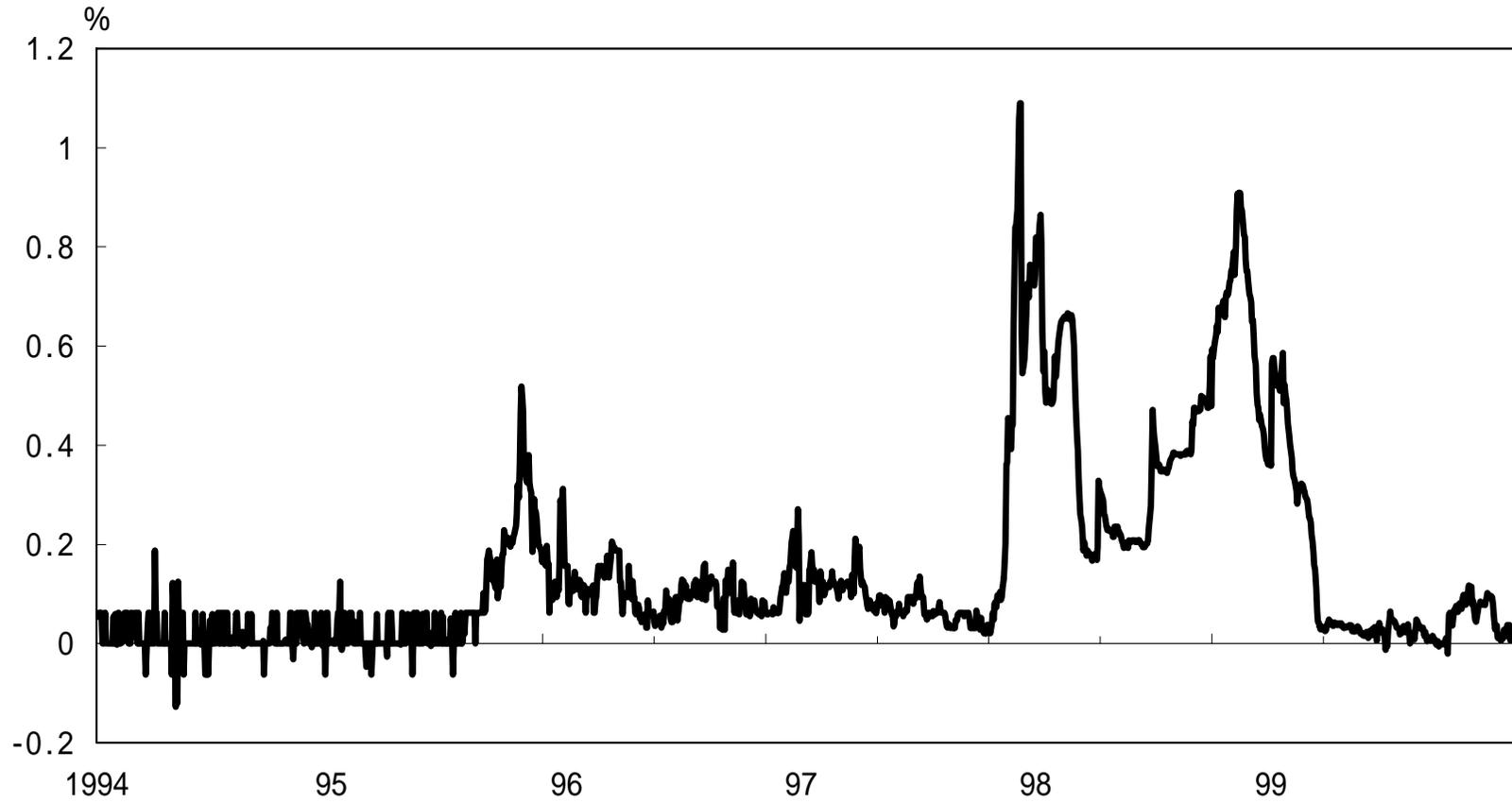
Since FSA did not disclose classified loan figures for March 2003, the classified loan figures and the required loan loss reserves were estimated from disclosed bad loan figures as follows:

Disclosed loan type	Classified Category				Estimated Required reserves
	Category I	Category II	Category III	Category IV	
Normal	0.90	0.10	0.00	0	2.9%
Special attention	0.40	0.60	0.00	0	12.4%
Doubtful loans	0.40	0.45	0.15	0	19.9%
Bankrupt loans	0.40	0.60	0.00	0	12.4%
Assumed					
Required reserves	1.0%	20.0%	70.0%	100.0%	

The conversion matrix was estimated from the disclosed bad loan figures and the FSA announcement of the classified amount for all banks and the data of some banks that disclosed both the conventional bad loan figures and the classified loan figures.

Fairly large amount of disclosed bad loans was classified as category I because they are protected by high quality collaterals or high quality guarantees.

Exhibit 3 Japan Premium in the US Dollar Interbank Market
Tibor - Libor

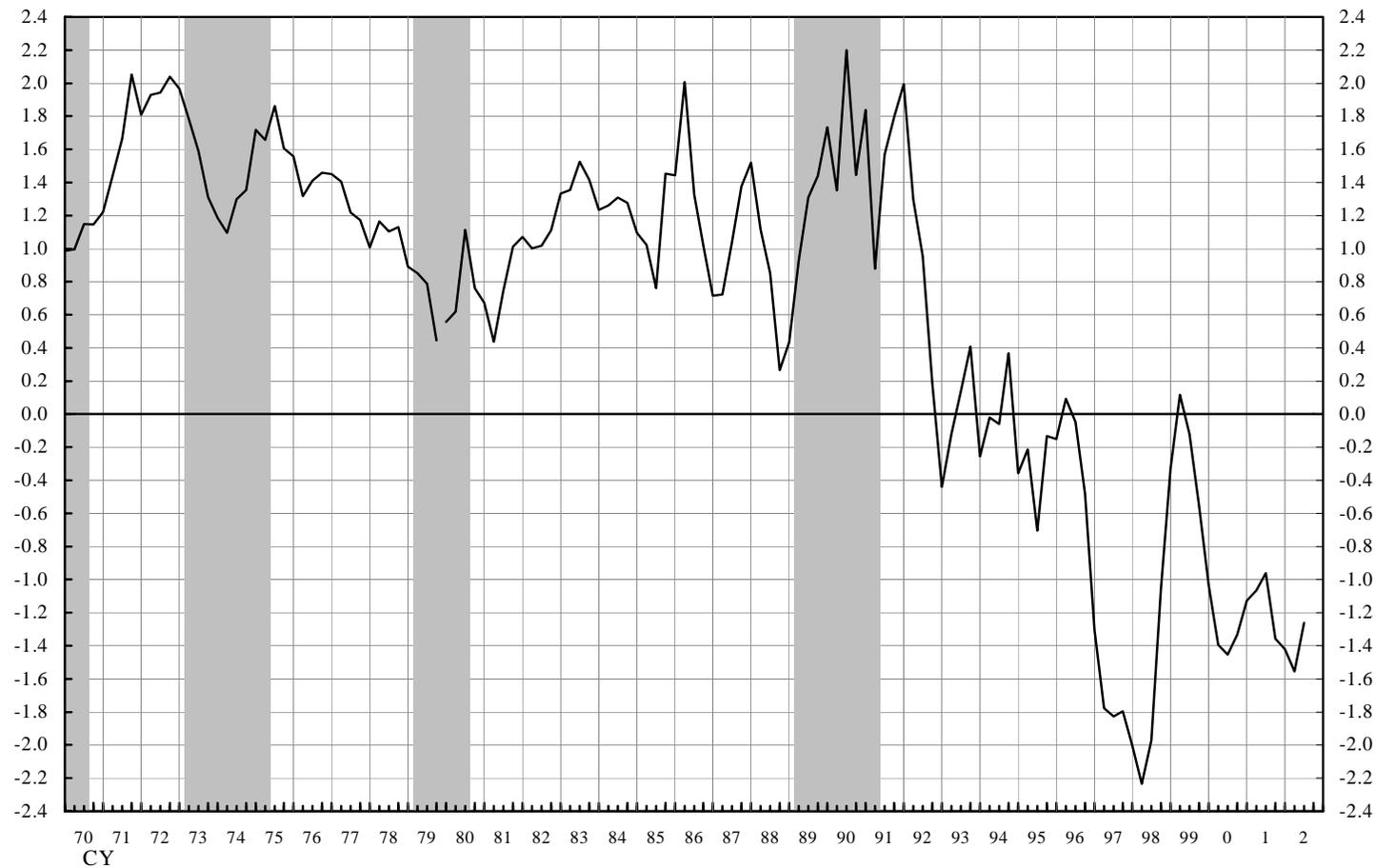


Source: Quick

Exhibit 4

Net Issues of Bank Debentures

(Percent of nominal GDP, at an annual rate, 3-qtr MA)

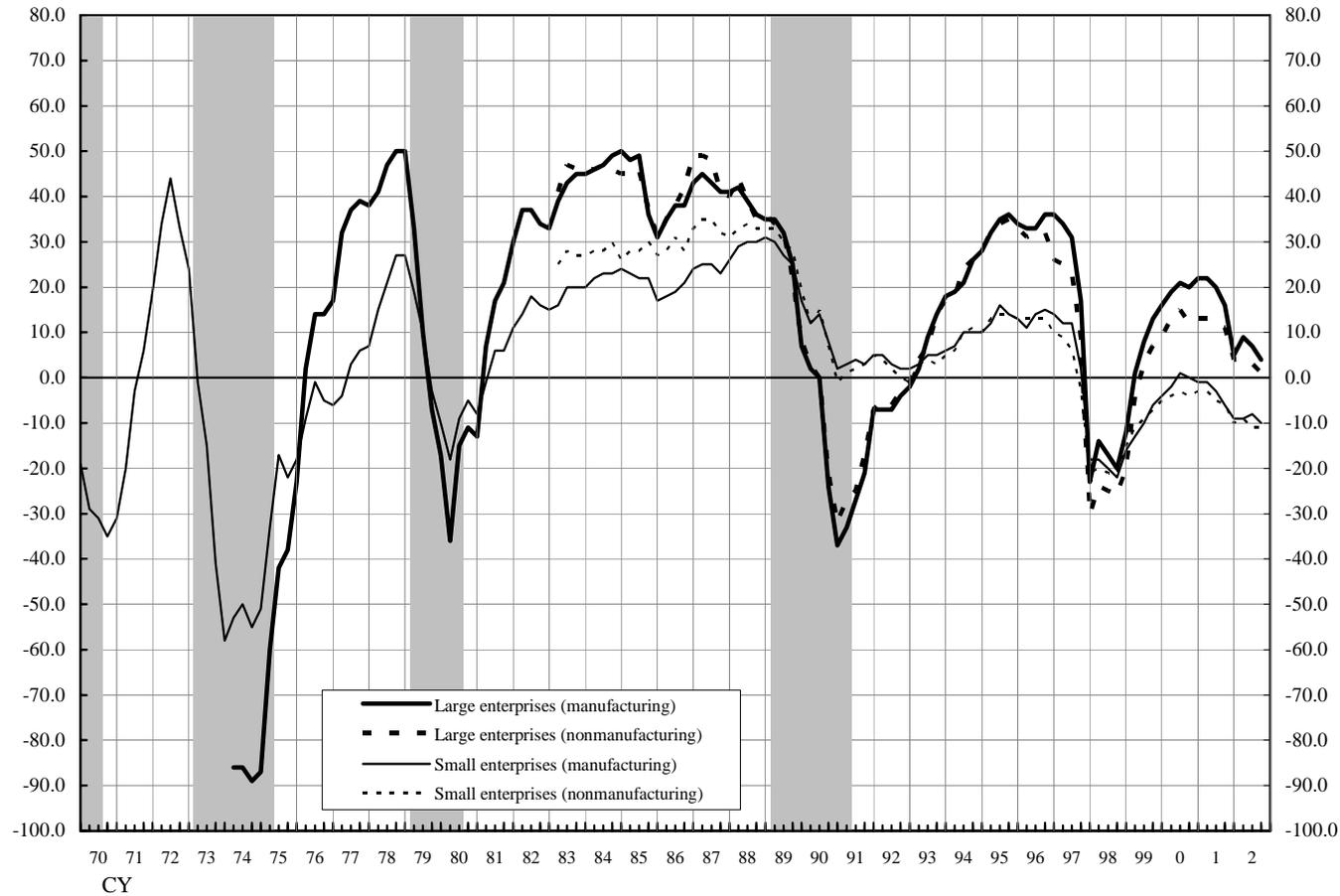


Notes: Bank debentures : data until 79/4Q = 68SNA basis, data from 80/1Q = 93SNA basis

Source: Bank of Japan CD-ROM, 2003.

Exhibit 5 Diffusion Index of Lending Attitude of Financial Institutions

(Based on the *Short-term Economic Survey of All Enterprises in Japan* <'Accommodative' - 'Severe'>; % points)



Source: Bank of Japan CD-ROM, 2003.

Exhibit 6

Development of Deposit Insurance Coverage

Domestic yen deposits

1971/4	Up to 1 million yen of principal amount per person is protected. Interest is not protected			
1974/6	Up to 3 million yen of principal amount per person is protected. Interest is not protected.			
1986/7	Up to 10 million yen of principal amount per person is protected. Interest is not protected			
1995/7/3	Ministry of Finance announced that DIC would protect all deposits for five years.			
1996/6	Deposit Insurance Law was amended to allow DIC to protect all deposits and other liabilities of banks until March 2001.			
	Domestic yen Current Deposits	Domestic yen Ordinary Deposits & Specific Deposits	Domestic yen Time Deposits	Payment Accounts under Processing
1996-2002/3/31	Fully protected	Fully protected	Fully protected	Effectively fully protected
2000/5	The Introduction of limited protection was postponed for one year from March 2001 to March 2002.			
2001/4	In addition to 10 million yen of principal amount, its interest is now protected.			
2002/4/1-2003/3/31	Fully protected	Fully protected	10 million yen	Effectively fully protected
2003/4/1-2005/3/31	Fully protected	Fully protected	10 million yen	Fully protected
2005/4/1-	Fully protected	Zero interest accounts with payment services are fully protected	Other payment deposits and time deposits are protected up to 10 million yen per person	

Notes: Prepared by the author based on Deposit Insurance Corporation of Japan [2003] and other publications.

Bold words indicate the unlimited protection by the DIC.

Foreign currency deposits and negotiable CDs are not protected by the DIC.

Exhibit 7

Deposit Insurance Premium

Fiscal year	Percent		
	Ordinary Premium	Surcharge Premium	Total Premium
1971	0.006		0.006
1982	0.008		0.008
1986	0.012		0.012
1996	0.048	0.036	0.084
2001			
Specified deposits	0.048	0.036	0.084
Other deposits	0.048	0.036	0.084
2002			
Specified deposits	0.094		Weighted average
Other deposits	0.080		0.084
2003			
Specified deposits	0.090		Weighted average
Other deposits	0.080		0.084

Source: Deposit Insurance Corporation of Japan [2003].

Notes:

1. Fiscal year starts on April 1st of the indicated year.
2. Specified deposits include current deposits, ordinary saving deposits and specific deposits. Specific deposits are payment accounts under processing.
3. Surcharge premium is applied from FY 1996 to FY 2001.

Exhibit 8

Measures Against Financial Crisis

Article 102 of Deposit Insurance Company Law

Prime Minister may take the following measures to the concerned financial institution when such measures are necessary to avoid very serious disruptions to the stability of the financial system of the country or the region where the institution operates. The decision has to be taken after a deliberation of a Council for Financial Crisis that consists of the Prime Minister, the Chief Cabinet Secretary, the Minister for Financial Stability, the Commissioner of the Financial Services Agency, the Minister of Finance and the Governor of the Bank of Japan.

<p>Type 1 Measure If the financial institution is solvent and has not failed:</p>	<p>DIC underwrites shares of the financial institution. Government can impose a reduction of stated capital.</p>
<p>Type 2 Measure If the financial institution is insolvent or has failed:</p>	<p>DIC provides aid beyond the minimum cost of resolution to protect creditors of the financial institution. The institution will be controlled by the financial receiver.</p>
<p>Type 3 Measure If the financial institution has failed and is insolvent and if type 2 measure is insufficient to achieve stability:</p>	<p>Nationalization of the financial institution without compensation to existing shareholders.</p>

Note: Failed institution means that it had stopped the payment of deposits or it is highly likely to stop it.

Source: Prepared by the author.

Exhibit 9

Consolidated Balance Sheet of Resona Bank at March 2003

Billion yen

Assets		Liabilities	
Cash and due from banks	1,703	Deposits	22,354
Trading assets	511	NCDs	414
Securities	5,114	Money market liabilities	5,315
Loans	21,444	Other liabilities	2,041
Premises and equipments	646		
Deferred tax assets	401	Total Liabilities	30,124
Loan loss reserves	-666		
Other assets	1,337	Shareholders' equity	366
Total Assets	30,490	Total Liabilities and equity	30,490

Source: Resona Bank disclosure materials.

Note: Loan guarantees amounting 4432 billion yen was removed from both the assets and liabilities of Japanese balance sheet. Under the Japanese accounting standards, total amount of guarantees has to be shown on the balance sheet.

Exhibit 10

Degree of Insolvency of Failed Deposit Taking Financial Institutions
From April 1998 to September 2002

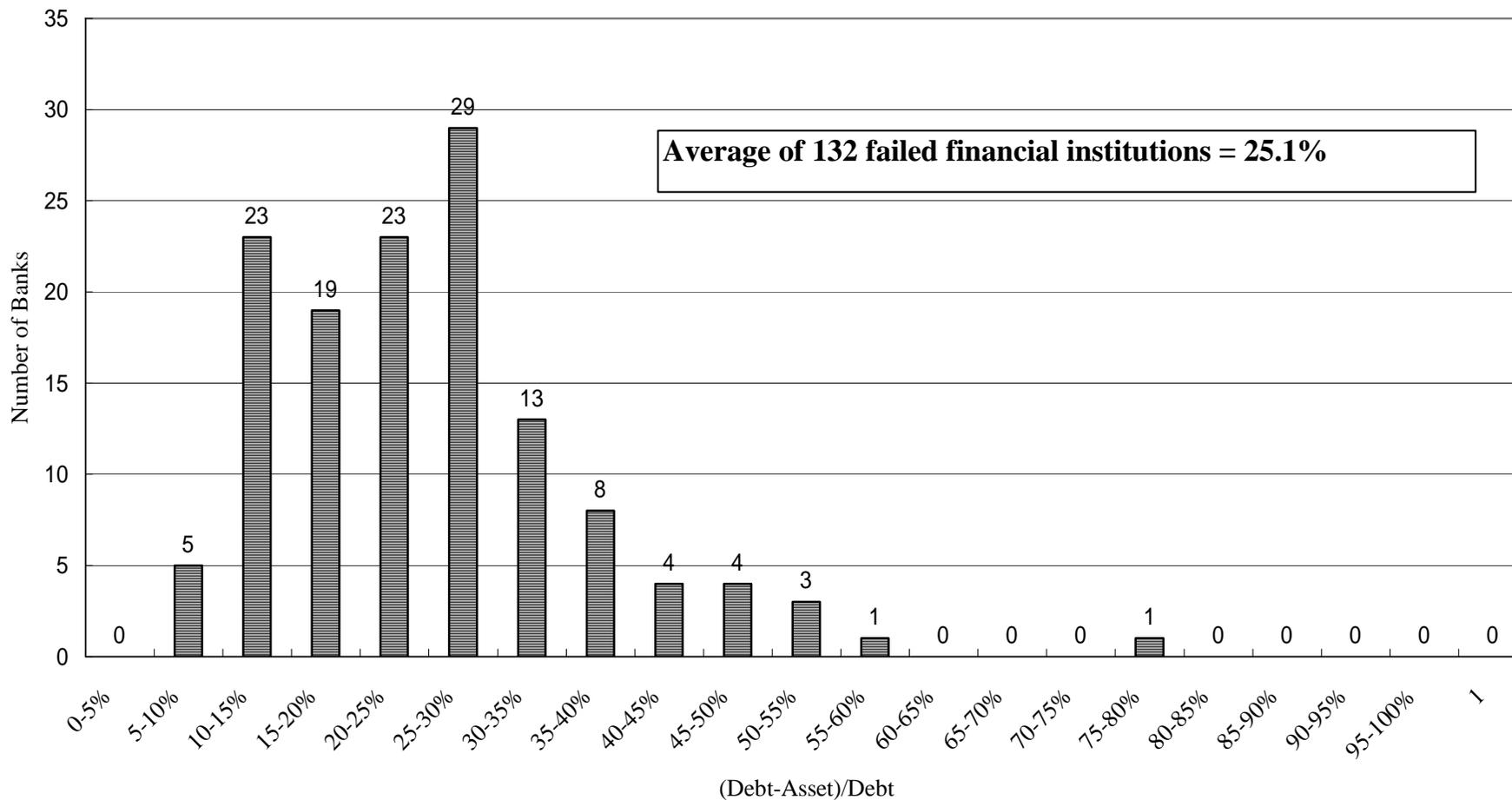


Exhibit 11

Stock portfolios and capital in the banking sector

(trillion yen)

	Market value of shares held by banks	Book value of shares held by banks	Capital account (Core capital)	Deferred tax asset	Estimated Under-reserving	Equity capital held by the government	Net capital Account	Nikkei225 Index
	A	B	C	D	E	F	$C+(A-B) \times 0.6-D-E-F$	
Mar-91	77.7	33.1	30.2	0.0	NA	0.0	57.0	26292
Mar-92	56.4	34.5	31.3	0.0	NA	0.0	44.4	19346
Mar-93	56.4	34.5	31.8	0.0	NA	0.0	44.9	18591
Mar-94	61.9	36.5	32.3	0.0	NA	0.0	47.5	19112
Mar-95	52.0	39.8	32.3	0.0	NA	0.0	39.6	15140
Mar-96	64.3	43.0	27.9	0.0	NA	0.0	40.7	21407
Mar-97	54.1	42.9	28.5	0.0	15.0	0.0	20.2	18003
Mar-98	50.8	45.7	24.5	0.0	5.1	0.3	22.2	16527
Mar-99	47.1	42.7	33.7	8.4	4.6	6.3	17.1	15837
Mar-00	54.5	44.4	35.2	8.1	6.6	6.9	19.7	20337
Mar-01	44.5	44.3	36.7	7.3	7.6	7.1	14.8	13000
Mar-02	34.4	34.4	29.3	10.7	6.9	7.2	4.5	11025
Mar-03	23.2	23.2	24.8	10.6	5.4	7.3	1.5	7873

Source of data: Federation of Bankers Associations of Japan, "Analysis of Bank Financial Statements," various issues; securities reports for

Note: Tables represent amounts on the banking accounts of all banks in Japan.

See Exhibit 2 for the estimation of under reserving.

Exhibit 12

Distribution of Adjusted Capital/Asset Ratio of Major Japanese Banks

	Total	Number of Banks						Weighted Average %	Nikkei 225 index
		Less than -2%	-2% to 0%	0% to 2%	2% to 4%	4% to 6%	More than 6%		
March-00	18	0	0	1	16	0	1	3.21	20337
March-01	18	0	0	10	6	0	2	1.91	13000
March-02	15	0	2	10	1	0	2	0.80	11025
March-03	14	1	3	8	0	0	2	0.30	7873

Notes

Major banks include city banks, long-term credit banks, and major trust banks.

We excluded three new but small trust banks; Nomura Trust, Mitsui Asset Trust, and Resona Trust.

Two privatized long-term credit banks after nationalization maintain "More than 6%" capital.

Adjusted Capital = Core Capital + Unrealized Capital Gains and Losses

+ Loan Loss Reserves - Estimated Required Loan Loss Reserves

- Deferred Tax Asset

Estimated Required Loan Loss Reserves = 100% of defaulted loans + 70% of risk loans

+ 20% of doubtful loans + 1% of normal loans

Adjusted Capital/Asset Ratio = Adjusted Capital/Gross Asset

Source: Japan Center for Economic Research [2001a, 2003b]

The figures are updated by the author.

Exhibit 13 The Ratio of Deferred Tax Asset in the Core Capital of Major Japanese Banks
March 2003

	Core Capital (A) Billion yen	Net DTA (B) Billion Yen	Ratio (B/A) Percent
Mitsubishi Tokyo Financial Group	3,338	1,303	39.0
UFJ Holdings	2,665	1,522	57.1
Resona Holdings	635	522	82.2
Resona Bank	366	401	109.6
Saitama Resona Bank	155	44	28.4
Sumitomo Mitsui Financial Group	3,168	1,842	58.1
Mizuho Financial Group	4,322	2,105	48.7
Mistui Trust Holdings	341	346	101.5

Source: Disclosure materials of individual banks.

Notes: Net DTA means deferred tax assets minus deferred tax liabilities.

Exhibit 14

Profitability of Japanese Banking Sector

	Trillion yen												
Financial Year	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002
Lending Margin (A)	7.1	8.9	9.8	9.2	9.7	10.8	10.7	10.0	9.6	9.7	9.4	9.8	9.4
Other Revenue (B)	2.6	2.2	2.5	2.8	2.1	3.3	3.7	3.6	3.1	2.5	3.0	3.1	3.6
Operating Costs (C)	7.1	7.5	7.7	7.7	7.8	7.8	8.0	8.0	7.5	7.3	7.1	7.0	7.0
Salaries and Wages	3.7	3.9	4.0	4.0	4.0	4.0	4.0	4.0	3.6	3.5	3.4	3.2	2.8
Gross Profit (D)=(A)+(B)-(C)	2.6	3.5	4.5	4.3	4.0	6.3	6.4	5.6	5.2	4.9	5.3	5.9	6.0
Loan Loss (E)	0.8	1.0	2.0	4.6	6.2	13.3	7.3	13.5	13.5	6.3	6.6	9.4	7.0
Net Operating Profit (F)=(D)-(E)	1.8	2.5	2.5	-0.4	-2.2	-7.0	-1.0	-7.9	-8.3	-1.4	-1.3	-3.5	-1.0
Realized Capital Gains (G)	2.0	0.7	0.0	2.0	3.2	4.4	1.2	3.6	1.4	3.8	1.4	-2.4	-4.1
Net Profit (F)+(G)	3.8	3.3	2.5	1.7	1.0	-2.6	0.2	-4.2	-6.9	2.3	0.1	-5.9	-5.1
Asset	927.6	914.4	859.5	849.8	845.0	848.2	856.0	848.0	759.7	737.2	804.3	772.0	722.0
Outstanding loans	522.0	537.0	542.0	539.0	539.0	554.0	563.0	536.0	492.0	476.0	474.0	465.0	452.0

Note: Financial Statement of All Commercial Banks.

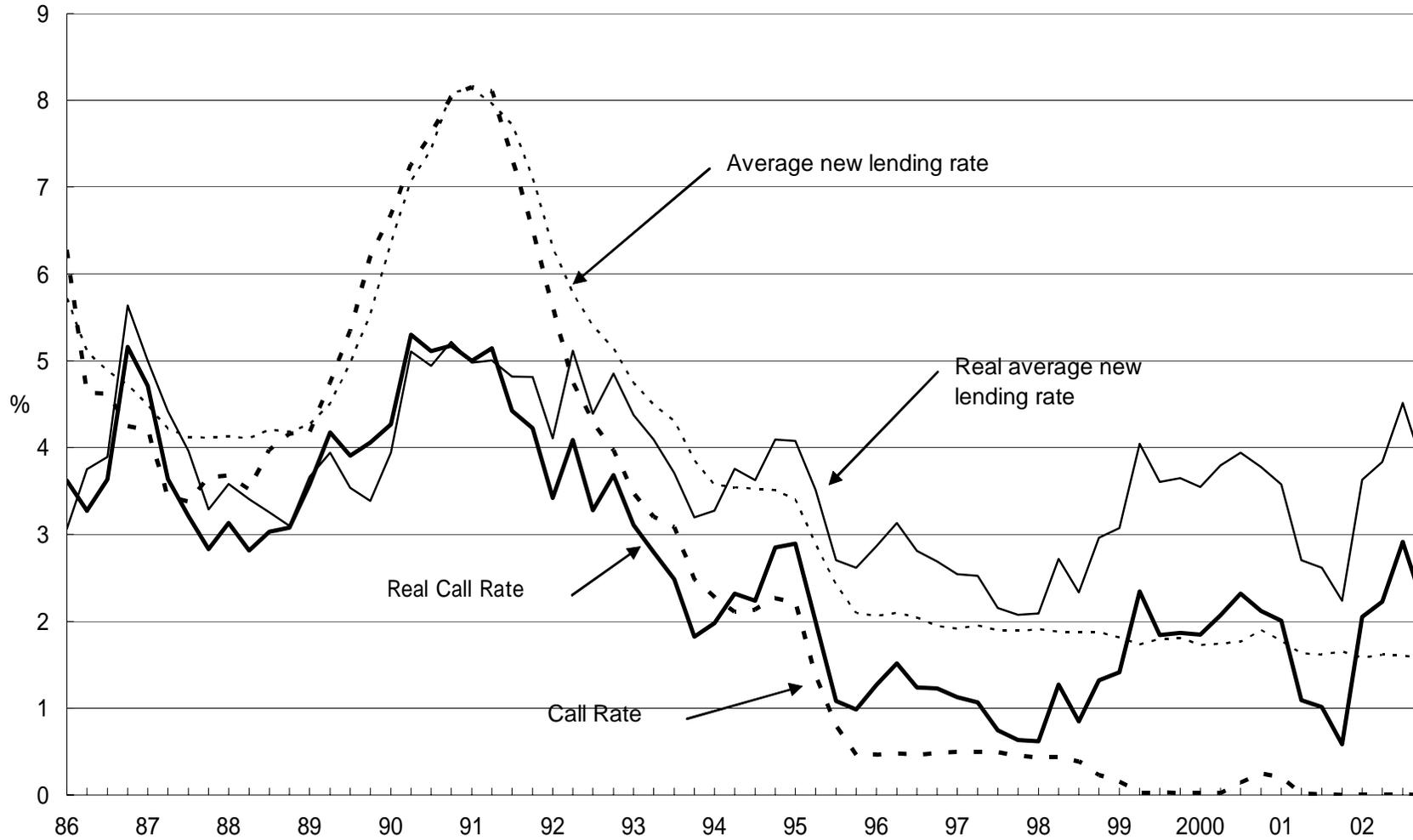
Other revenue (B) includes all the other profit such as dealing profits and fees but excludes realized capital gains of stocks and real estates.

Realized capital gains includes gains of stocks and real estates.

Source: Japan Center for Economic Research [2003b]

Exhibit 15

Real Interest Rates
(1986Q1-2002Q4)



Note: Real Interest Rates are estimated with 3Q moving average of GDP deflator inflation rate (SAAR).

Source: Japan Center for Economic Research [2003a]

Exhibit 16 CPI and GDP Deflator Deflation Rates

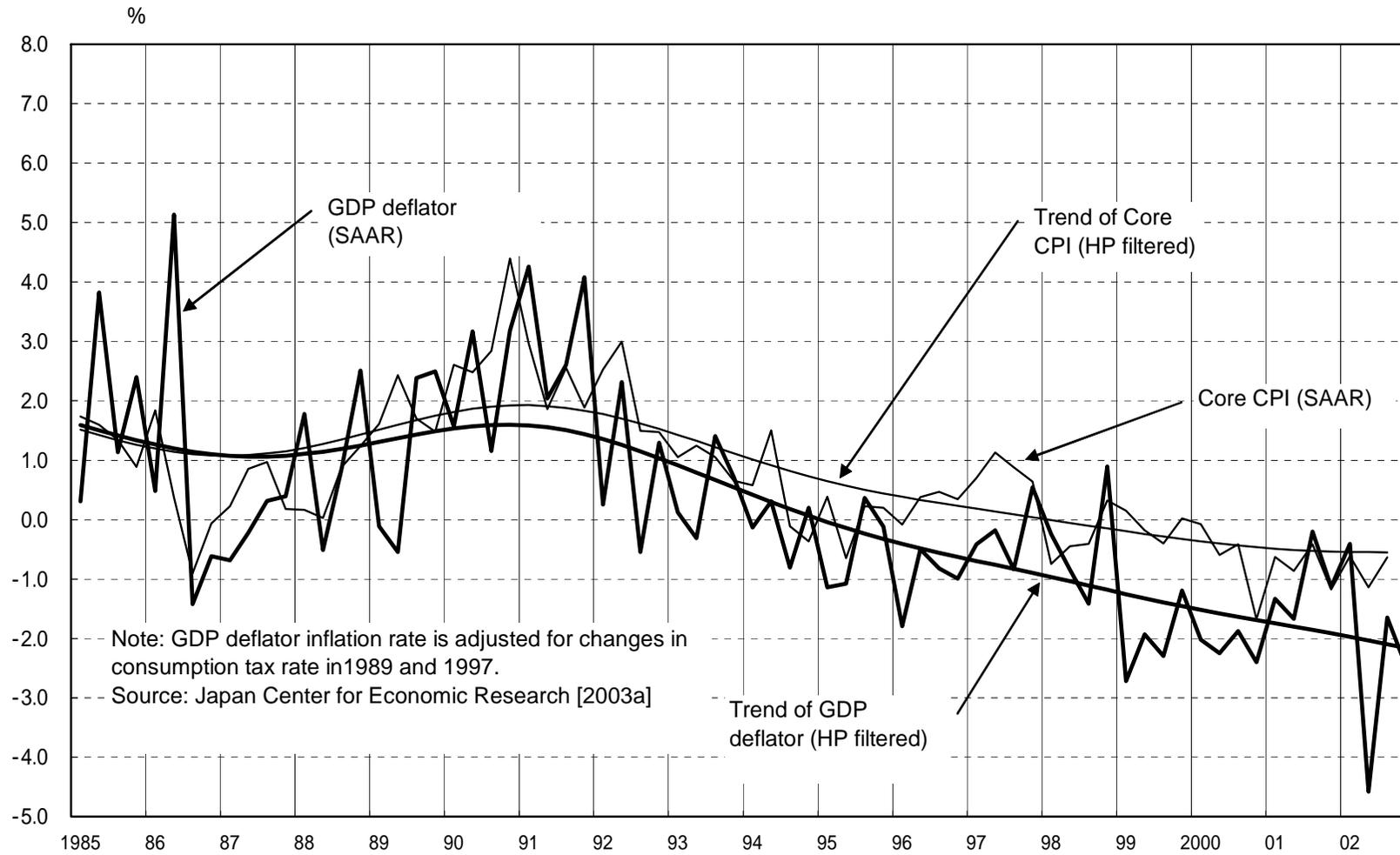


Exhibit 17

illustrative Example of Banking Sector Profit Margin

		Current Situations	Mild Inflation
Lending rate	(A)	2.0	4.0
Inflation rate	(B)	-2.0	2.0
Real interest rate	(A) - (B)	4.0	2.0
Funding cost of banks	(C)	0.2	1.0
Profit margin	(A) - (C)	1.8	3.0

Source: Prepared by the author

Exhibit 18

Relative Size of Government Financial Institutions (end of 2000)

Loan	Asset Trillion yen	Share Percent	GDP ratio Percent
Government sponsored agencies	163	26	32
Private banks	464	74	90
Total	627	100	122
Deposit			
Postal Saving System	255	34	50
Private banks	486	66	95
Total	741	100	144
Life Insurance (asset)			
Postal Life Insurance	119	40	23
Private life insurance companies	180	60	35
Total	299	100	58

Note: Prepared by the author from the data in the Bank of Japan, *Financial and Economic Statistics Monthly*, March 2001.