Japanese Financial Institutions' Efforts to Address Their Management Tasks

INTRODUCTION[1]

The environment surrounding the business of Japanese financial institutions remains severe due mainly to the prolonged weakness in the economy and the continuous downtrend in land prices. In addition, developments in stock prices including those of banks remain unstable.

The Bank Examination and Surveillance Department of the Bank of Japan is making various efforts through on-site examinations and off-site monitoring to gain a thorough understanding of the business operations and management strategy of financial institutions that have current accounts at the Bank. Based on the information gathered, it has analyzed the developments in profits and losses of banks and the nonperforming-loan (NPL) problem, and produced a list of management tasks that the banking sector faces in a report titled *Developments in Profits and Balance Sheets of Japanese Banks in Fiscal 2000 and Banks' Management Tasks*, released in summer 2001. In addition, it has published its view on financial institutions' risk management systems in other reports from time to time.

This report outlines the current state of financial institutions' business and how financial institutions that have current accounts at the Bank including *shinkin* banks have addressed their management tasks.

I. Summary

A. The Current State of Japanese Financial Institutions' Business

1. Addressing the NPL problem and thereby improving their profitability continue to be the urgent management tasks for Japanese financial institutions. In addition, high priority should be given to the task of controlling risks involved in holding stocks, mainly in the case of major banks.
2. Regarding all banks' profits and losses at the interim book closings at end-September 2001, NPL disposal continued to exceed operating profits from core business. Net income showed a loss due to (1) stock-related losses reflecting the fall in stock prices and (2) NPL disposal. Overall financial strength, which works as a buffer against losses, was weakening due not only to losses in net income but also to the deterioration in unrealized capital gains/losses on securities.
3. For *shinkin* banks, NPL disposal did not exceed operating profits from core business in fiscal 2000. Developments up to the end of fiscal 2000 showed their financial strength to be on an uptrend due mainly to an increase in capital subscription. However, some developments suggesting an increase in the cost of NPL disposal have been observed since the turn of fiscal 2001, and the outlook is somewhat uncertain.

B. Financial Institutions' Efforts to Address Management Tasks

1. Regarding credit risk management, including the NPL problem, the quality of assets has not improved significantly, as the deterioration in loan assets has not come to a halt yet. Establishment of the framework regarding credit risk management including an internal credit rating system has progressed, and the framework for self-assessment of asset quality has steadily improved. Nevertheless, there still seems to be room for improvement. It is important to utilize credit ratings when formulating a policy for overall loan asset management. Also, it is essential that financial institutions fully grasp the state of business of each debtor, refine their financial analysis, and ensure that these results are reflected in internal credit ratings in a timely manner. On this basis, it is important when necessary that financial institutions swiftly consider the following: (1) guidance on business recovery to debtor firms; (2) improving the adequacy of collateral, guarantees, or the like; and (3) sale of loan assets. In this process, an appropriate assessment of collateral real estate is indispensable. As a result of these processes, it is hoped that loan asset management will be conducted in a manner that is not vulnerable to changes in the surrounding environment.
2. The market risk management system has been improved in major banks, and they are expeditiously reducing the risk involved in cross-shareholdings for the purpose of long-term investment. Regional financial institutions are making efforts to gauge risks by using indicators and establish risk monitoring systems. It is, however, important for them to further strengthen such aspects of their risk management systems as risk analysis and internal checking functions, since there are cases where investment risks are not

1. This article is a translation of the report in Japanese released on April 8, 2002. For a key to the symbols and abbreviations used in this article, see page 34.

adequately assessed against the background of the current severe environment for profitability.

3. With various changes in the environment surrounding financial institutions' business, it is becoming more important for financial institutions to manage risks appropriately. They are attaching greater importance than before to securing the safety and soundness of their business operations computer systems in line with (1) consolidation among major banks and (2) heavier dependence on IT and the expansion of networks in financial business operations. There are, however, some tasks that remain to be tackled by them in relation to strengthening their risk management systems so that they function appropriately in line with the progress in outsourcing of systems sections and joint management of systems or administrative centers by financial institutions. With regard to payment and settlement risks, financial institutions have a deeper understanding of (1) the new points for business operations to be kept in mind since the introduction of real-time gross settlement (RTGS) and (2) the necessity to establish systems that would allow them to continue their operations even if their offices were damaged in a disaster.
4. Against the background of the diversification and increasing complexity of risks to be managed as described above, banks, in particular major banks, are addressing risk factors in line with integrated risk management to (1) secure their soundness by controlling risks in a way that reflects their financial strength and (2) aim at managing business on a risk-adjusted return basis. Banks whose risk profiles are complex due to consolidation and diversification of their business are being encouraged to establish integrated risk management systems.
5. In order to overcome the NPL problem, and thereby improve their profitability, financial institutions should give the highest priority to improvement and effective operation of their credit risk management systems. It is essential that financial institutions make efforts to improve their credit risk management and that in line with this firms also make efforts to reconstruct their business. The effectiveness of NPL disposal will be strengthened when corporate reconstruction progresses in parallel with financial institutions' efforts to achieve an appropriate balance between risks and returns. Furthermore, strengthening financial institutions' competitiveness by, for example, improving their cost efficiency and providing improved financial services which meet firms' needs, will (1) improve financial institutions' profitability and soundness of management; and (2) improve their risk intermediary function of indirect financing.

II. The Current State of Japanese Financial Institutions' Business[2]

City banks, long-term credit banks, trust banks, regional banks, and regional banks II (hereafter, all banks) recorded net losses at the interim book closings at end-September 2001, as the disposal of NPLs continued to be at high levels and large net stock-related losses were recorded. *Shinkin* banks recorded small net profits in fiscal 2000, which were slightly larger than those of the previous fiscal year reflecting a smaller amount of NPL disposal (Chart 1).

Net losses were recorded by the following numbers of financial institutions: (1) eleven out of 15 city banks, long-term credit banks, and trust banks (an increase from one in the first half of fiscal 2000); (2) 23 out of 117 regional banks and regional banks II (an increase from 20 in the first half of fiscal 2000); and (3) 56 out of 338 *shinkin* banks (an increase from 49 in fiscal 1999).

A. Profitability and NPL Disposal

Operating profits from core business,[3] which represent the fundamental profitability of financial institutions, have remained mostly unchanged in

2. Unless otherwise noted, data are on a nonconsolidated basis and are the results for (1) the interim book closings at end-September 2001 for city banks, long-term credit banks and trust banks (15 banks), regional banks and regional banks II (117 banks); and (2) the book closings at end-March 2001 for 338 *shinkin* banks. Data for the following banks are excluded considering the continuity and other constraints: Shinsei Bank, Aozora Bank, Tokyo Star Bank, Ishikawa Bank, Kansai Sawayaka Bank, trust banks, and foreign trust banks that started operating after October 1993, *shinkin* banks that do not have current accounts at the Bank of Japan, and failed *shinkin* banks that received financial aid from the Deposit Insurance Corporation of Japan (DIC).

3. In this report, operating profits from core business as defined below are used to gauge the fundamental profitability of financial institutions. They are roughly equivalent to the sum of the profits/losses generated from interest-earning assets and those from fees and commissions less general and administrative expenses.

Operating profits from core business = operating profits – net bond-related gains/losses + allowance for possible loan losses (APLL) + loan write-offs in trust accounts.

Net bond-related gains/losses = gains on bond-selling operations + gains from redemption of bonds – losses from bond-selling operations – losses from redemption of bonds – write-offs of bonds.

recent years for all banks. However, they were on a declining trend for *shinkin* banks reflecting the decrease in yields on securities. The recent book closings at end-September 2001 show that city banks, long-term credit banks, and trust banks recorded an increase in profits due to the expansion of profits in their international sections amid the decline in foreign interest rates (Chart 2).

All banks continued to dispose of NPLs[4] in large amounts that exceeded operating profits from core business (Chart 2). Meanwhile, *shinkin* banks disposed of NPLs in amounts smaller than operating profits from core business in fiscal 2000 for the first time in four years, following a downtrend after the peak in fiscal 1997. This reflected downward revisions of loan-loss provisioning based on historical loan-loss ratios, as *shinkin* banks had previously followed a conservative policy of setting aside a large amount of allowances (for example, for loans to borrowers "in danger of bankruptcy," allowance was set aside for the full amount uncovered by collateral). In contrast, city banks, long-term credit banks, and trust banks have announced a stance of largely increasing loan-loss provisioning in order to prepare for losses incurred by industries with bad business performance and large-scale borrowers with problems and the increase of expenses arising from the progress of final disposal of NPLs in severe business conditions caused by a prolonged economic deterioration. As a result, the disposal of NPLs for fiscal 2001 was forecasted in November 2001 to reach 6.4 trillion yen, a considerable increase from the 1.9 trillion yen initially forecasted in May 2001.

B. Net Stock-Related Gains/Losses

At the interim book closings for the first half of fiscal 2001, net stock-related losses due to the fall in stock prices were another factor besides the disposal of NPLs causing a decrease in all banks' profits. Stock price fluctuations had a great influence on profits/losses in the statement of income and the capital account in the balance sheet, due to the introduction of mark-to-market accounting for securities portfolios to all banks from April 2001 and tightened rules for impairment procedure.[5] Under the new accounting procedures, (1) unrealized capital losses for stocks whose market value has fallen by 30 percent or more from the acquisition cost (50 percent or more until fiscal 2000) at the end of the fiscal term and whose price recovery is unlikely should be written off, and (2) the net income after deducting the write-off and taking into account the tax effect should be reflected in the capital account.[6] As a result, all banks registered 1.3 trillion yen for net stock-related losses including gains/losses on stock sales (of which 1.0 trillion yen was recorded by city banks, long-term credit banks, and trust banks) at the interim book closings at end-September 2001 from a 1.5 trillion yen gain in fiscal 2000 (Chart 3).

The sum of net losses from stock-selling operations and the increase in unrealized capital losses on stocks indicate that the effect of the decline in stock prices was greater than the NPL disposal for all banks (Chart 4). The impact of stock price falls at *shinkin* banks has not yet been reflected in the financial results for fiscal 2001 (see Footnote 2 on page 3).

C. Financial Strength

Financial strength has been clearly weakening in the past few years for all banks, measured by the total of capital, etc., and unrealized capital gains/losses after taking into account the tax effect.[7] This is due to net losses associated with the disposal of NPLs and the deterioration of unrealized capital gains/losses on stocks caused by the fall in stock prices. *Shinkin* banks, on the other hand, saw a gentle uptrend in their financial strength until the end of fiscal 2000 due to accumulated internal reserves such as earned surplus generated through

4. The amount of NPL disposal = APLL + loan-loss provisioning and loan write-offs (direct loan write-offs + net transfers to special loan-loss provisions [SLP] + loan write-offs in trust accounts + net transfers to allowance for possible losses on special overseas loans).
5. See Box 1 on page 29 for the changes in the accounting rules concerning the impairment procedure for securities.
6. The impairment procedure is applied to all securities regardless of the purpose of holding the securities. However, net gains/losses (the difference between the market value and the acquisition cost) are reflected in the capital account only for securities categorized as "other securities" (excluding shares of subsidiaries).
7. Financial strength of financial institutions is defined by the total of capital, legal reserves, earned surplus, unrealized capital gains/losses on securities (all types of securities) and unrealized capital gains on real estate (only if the landholdings are revalued). Unrealized capital gains/losses on securities are the difference between the market value and acquisition cost, and unrealized capital gains on real estate are the sum of the revaluation differences, deferred tax liabilities relating to the revaluation, and unrealized capital gains/losses on landholdings after revaluation. Tax-effect is accounted in the figures.

net profits. However, it is unclear whether this trend continued in fiscal 2001, given the disposal of NPLs and the drop in stock prices (Chart 5).

At the interim book closings at end-September 2001, unrealized capital losses on securities recorded by all banks amounted to 1.1 trillion yen. By type of bank, net losses were recorded only at city banks, long-term credit banks, and trust banks, amounting to some 90 percent of earned surplus (Chart 6).

Capital bases increased considerably in fiscal 1998 for city banks, long-term credit banks, and trust banks, mainly due to injection of public funds. The increase was also prominent at regional banks and regional banks II during fiscal 1998–2000, due to capital raised in the private sector and injection of public funds. Many regional banks and regional banks II continued to raise capital in fiscal 2001 to prepare for the disposal of NPLs and stock price declines. Regarding *shinkin* banks, the amount of capital subscription has also surged in recent years (Chart 7).

Looking at financial institutions' financial strength in terms of risk-based capital adequacy ratios, all banks have maintained high ratios in general, but the level has been slightly decreasing in recent years. The ratio for *shinkin* banks rose slightly toward the end of fiscal 2000 against the background of an increase in capital subscription. However, it is uncertain whether this trend continued in fiscal 2001 as stated above (Chart 8).

As of end-September 2001, the risk-based capital adequacy ratio for all banks was 10.6 percent and about 2 percentage points of this was attributable to deferred tax assets (the amount of deferred tax assets was 9.8 trillion yen, slightly less than 20 percent of the regulatory capital). Deferred tax assets are registered in accordance with the appropriate accounting standards. However, attention should be paid to the fact that some banks registered deferred tax assets at the maximum amount allowed under the accounting rules, taking into account the recoverability of deferred tax assets judged by the banks' financial condition (see Box 2 on page 30 for the recoverability of deferred tax assets).

III. Financial Institutions' Efforts to Address Management Tasks

Financial institutions' management tasks are outlined in the following from the viewpoint of risk management and improving profitability, based on the business environment as mentioned above.

A. Credit Risk Management: Improving Asset Quality

1. The current situation of NPLs

The NPL problem remains an impending issue for financial institutions despite the continued massive disposal of NPLs. The deterioration in loan assets has not come to a halt yet as the emergence of new NPLs is not slowing.

At the interim book closings at end-September 2001, the amount outstanding of NPLs increased at all banks compared to end-March 2001. This was due to the continued deterioration in the quality of loan assets and the application of stricter classification criteria for restructured loans, which account for a large proportion of loans requiring special attention. At city banks, long-term credit banks, and trust banks, the amount outstanding of loans to borrowers that are "bankrupt" or "effectively bankrupt," "in danger of bankruptcy," or "need attention" under the self-assessment framework remained almost unchanged for April–September 2001 (Chart 9). Data for *shinkin* banks for fiscal 2001 are not available, but, considering the structural adjustment pressure remaining in regional economies, the quality of loan assets of *shinkin* banks is likely to have deteriorated.

The quality of loan assets has not improved as evident in the gradual uptrend in the ratio of NPLs to total credit exposure after deducting special loan-loss provisions (SLP) for all banks (Chart 9). NPLs (after deducting APLL and SLP) as a proportion of total credit exposure are also increasing slightly for city banks, long-term credit banks, and trust banks.

The continued emergence of new NPLs is considered to be one of the reasons for the lack of improvement in the indicators related to NPLs. A certain extent of progress has been made in the disposal of loans to "bankrupt" or "effectively bankrupt" borrowers or those "in danger of bankruptcy." However, new NPLs continue to emerge rapidly even after accelerating toward the end of fiscal 2000, resulting in a continued deterioration of the quality of loan assets (Chart 10).

The continued emergence of new NPLs is considered to stem from the prolonged economic downturn and the nature of financial institutions'

loan portfolios. More than 70 percent of the financial institutions' NPLs are accounted for by loans to the real estate, services, wholesaling and retailing, and construction industries, and about 50 percent of their total loans are to these industries (charts 11 and 12). Many firms in these industries continue to suffer from sluggish business conditions due to several factors such as the bursting of the economic "bubble" and structural adjustment pressure in the economy, burdened with debts far exceeding cash flow derived from profits (Chart 13). Thus, it is necessary for these firms to increase their profits in order to reduce the accumulated debts, although the business environment is severe and a clear turnaround of business performance in the short term is unlikely (Chart 14).

2. Evaluation of credit risk management

As findings in the previous sections indicate, to solve the NPL problem, financial institutions need to form an accurate picture of the actual condition of loan assets in a timely manner, including loans to "normal" borrowers, while continuing to dispose of NPLs. To achieve this, it is essential to establish a credit risk management system that enables the financial institutions to assess and monitor the quality of assets and the appropriate diversification of the loan portfolios as well as the state of each debtor.

Though to varying degrees, financial institutions are making a certain amount of progress in establishing and utilizing a credit rating system, which is the main pillar of credit risk management. In particular, major banks have promoted the establishment of an internal credit rating system and its utilization in (1) calculating credit cost and credit risk, and monitoring the state of assets; and (2) reflecting them in their management of credit extension, such as controlling profitability and formulating business policies for each level of credit rating. An internal credit rating system is being widely introduced also at regional financial institutions (Chart 15).

The task in credit risk management is to continue making efforts to refine the internal credit rating system. At some financial institutions, the internal credit rating system (1) does not reflect the actual financial condition of borrowers (taking into account nonperforming assets, unrealized capital gains/losses, off-balance-sheet assets, etc.); and (2) lacks rating categories to precisely evaluate assets of varying quality, leading to an excessive concentration of assets in a particular rating category. There is also room for improvement in the implementation of some financial institutions' credit risk management system, as they are slow in accurately reflecting changes of the business condition of borrowers.

Improvements in the utilization of credit risk management systems to financial institutions' business should also be made, as there are cases where the default rate is not set in a rational manner. Moreover, especially at some regional financial institutions, sections in charge of monitoring credit risks merely quantify risks and do not wholly fulfill the function of a middle office, such as making proposals regarding credit policies based on the analysis of risks.

Regarding segregation of duties, although credit audit sections have been established at some financial institutions, auditing of the self-assessment framework and internal credit ratings for loans is not necessarily functioning effectively.

On the other hand, steady improvements continue to be observed in the internal credit rating system regarding the self-assessment framework. On-site examinations conducted by the Bank reveal that corrections in loan classifications under the self-assessment framework have been made for fewer cases over the past few years (Chart 16). Nevertheless, it is hoped that financial institutions will gain a better grasp of the details of the state of each debtor's business and refine their financial analysis, since a certain amount of corrections was still necessary in some examinations.

Thorough understanding of the adequacy of collateral, guarantees, or the like is an important factor in the self-assessment framework. Secondary losses from the recent land price falls are estimated to be 10 to 20 percent of the total cost of NPL disposal, and the decline in the value of collateral real estate continues to create large additional costs (Chart 17). Losses are highly likely to expand greatly if collateral is sold through auctions or bulk sales. The results of the Bank's on-site examinations indicate that some financial institutions failed to adequately reflect market developments in their assessment of collateral real estate, thus stricter valuation is crucial to minimize additional losses.

Based on the points mentioned above, it is hoped that financial institutions will manage and

control credit risk through both management of overall assets and each individual loan. For overall assets, financial institutions should understand developments in the macroeconomic environment and other external factors and estimate possible losses from loan assets as a whole using their internal credit rating systems. Then, they should develop adequate credit policies concerning diversification of assets and lending criteria, which would contribute to business management considering credit risk. Regarding individual loans, the internal credit rating system should be utilized so that ratings adequately reflect the financial condition of borrowers. It is also essential that financial institutions, when necessary, provide guidance on business recovery to borrower firms, enhance the preservation of collateral, guarantees, or the like, and write off loan assets from balance sheets in a timely manner. In this process, the Resolution and Collection Corporation (RCC) should be utilized to deepen the market for loan assets, and diversification and acceleration of NPL disposal as well as business recovery of firms (see Box 3 on page 31 for the expanded functions of the RCC and Box 4 on page 32 for the secondary market structure for NPLs in Japan).

It is important that financial institutions review their credit portfolios, diversify risk profiles of loan assets (i.e., avoid concentration of loans to certain industries or large-scale lending), and make their assets resistant to economic cycles and other changes in the surrounding environment.

B. Market Risk Management: Major Banks' Measures to Reduce the Risk Involved in Holding Stocks

Major banks have long put emphasis on market value when conducting market risk management. In the market risk management of regional financial institutions, progress has been observed in this area: they have established systems focusing on market value for managing their securities portfolios by introducing systems to gauge and monitor risks using indicators such as basis point value (bpv) and Value at Risk (VaR). This move by regional financial institutions reflects more active investment in securities prompted by sluggish lending activity and the statutory introduction of mark-to-market accounting from fiscal 2001. Some regional financial institutions, however, need to further improve their methods of risk quantification by, for example, setting more appropriate assumptions and refining their analysis of risks identified. For the management of interest rate risk that arises from the gap between interest rates on deposits and loans, some regional financial institutions utilize only duration gap analysis and/or scenario simulation, without sufficient consideration of market value. It is hoped that they will further develop their methods of risk quantification while expanding the range of financial products whose market value is monitored.

Progress is being made in controlling market risk so that it is in line with financial strength, but the degree of the progress varies according to the type of financial institution. Major banks in general set a ceiling, based on their financial strength, on the size of risks that may be taken and the amount of possible losses in order to avoid a situation where losses would greatly impair their financial strength. Cross-shareholdings for the purpose of long-term investment, which previously tended to be treated as a sanctuary, are not exempted; major banks are establishing frameworks for managing risks associated with these stocks by setting guidelines on the upper limit of risks and managing stockholding positions duly bearing in mind the balance between risk and return. As a result, major banks are now strongly aware of the need to expeditiously reduce price fluctuation risks involved in cross-shareholdings for the purpose of long-term investment (Chart 18).

Regional financial institutions have also started to manage market risks in line with their financial strength. However, against the background of the current downtrend in profitability, some are making investments to gain profits without adequately assessing market risks involved. Specifically, they are (1) actively investing in high-risk financial products including structured bonds for higher yields, (2) lowering hedge ratios, and (3) reducing the book value per share by purchasing stocks whose market value declined. There are also some cases in which checking systems do not function fully, as seen in the insufficient segregation of duties between front, middle, and back offices in compiling financial statements for management purposes. Regional financial institutions should be aware that they should be engaged in risk-taking activity aimed at improving profitability only when an adequate risk assessment system is in place and is applied effectively.

C. Operational Risk Management

1. Integration of computer systems by major financial groups

Major financial groups proceeding with management consolidation are in the final stages of integrating computer systems one after another. Each group has been making preparations and conducting running tests, but there have been some problems before and after integration of computer systems. Since these financial groups engage in diversified business and operations are interrelated, unexpected trouble, such as a complete failure of the on-line system, could seriously affect interbank payment and settlement systems. It is, therefore, most important that they take appropriate measures to reduce operational risks and secure the safety and soundness of their computer systems.

To this end, financial groups should properly manage system integration as scheduled, make every effort to reduce risks in the transitional period, and draw up contingency plans when integrating their computer systems.

2. Measures to deal with changes in system infrastructure accompanying IT innovation

An increasing number of financial institutions are applying IT to their business operations against the background of IT innovation. One major example of this is the introduction of open network systems represented by the Internet. Some financial institutions have started on-line transaction services for financial products previously limited to trading over the counter. Moreover, financial institutions specializing in Internet banking have been established to provide services, such as on-line funds settlement services, at lower cost.

Financial institutions are also establishing system architecture using new configurations such as "hub and spokes" to enable smooth and easy processing of transactions among increasing numbers of subsystems. They are also continuing to actively introduce straight-through processing (STP)[8] among various systems to enhance efficiency and eliminate human error.

These changes in system infrastructure have, however, increased the possibility of risks inherent in these open systems materializing, such as unauthorized access to the computer system and infection with computer viruses. Moreover, it is necessary to note that a failure in one system could affect others and that problems in the subsystems could hinder interbank payment and settlement of funds and other fundamental banking operations. Financial institutions should, therefore, attach greater importance to securing the safety and soundness of their computer systems as operations become heavily dependent on them.

3. Outsourcing and joint management of business operations

An increasing number of financial institutions are outsourcing part of their business operations, including computer systems, to other firms, or jointly managing computer centers and/or administrative operation centers. They do so to meet diversified and specific needs of customers, cope with technological innovation, and cut operational costs.

In conducting outsourcing and joint management of business operations, it is essential to establish systems in which risks associated with such business operations are evaluated and analyzed and then managed appropriately. In the case of outsourcing, it is important to regularly conduct follow-up monitoring of the framework for operations and draw up contingency plans.

4. Quantification of operational risk

A growing number of major banks are now quantifying operational risk such as risks associated with computer systems and outsourcing mentioned earlier, legal risks, and others, in response to (1) the increasing complexity of the risk against the background of technological innovation and deregulation, (2) the need for improved efficiency of business management as part of achieving further managerial efficiency, and (3) the progress toward completion of the new Basel Capital Accord. They aim to (1) establish efficient risk management frameworks in which risks can be compared on a numerical basis and (2) refine integrated risk management by allocating economic capital to each business unit in line with the size and nature of risks held. Frameworks to quantify risks are being established gradually, and data are steadily being accumulated. Some major banks have even taken a further step and compute the maximum losses based on estimated loss distribution, while others quantify risks using scenario analysis in addition to their accumulated record of loss experience. These risk management frameworks need to be developed

8. STP is a system in which operational data are exchanged automatically among systems.

further to reduce risks in the future, with the involvement of top management and coordination among sections concerned such as risk management sections (Chart 19).

5. Internal audit systems

An increasing number of financial institutions are enhancing internal audit systems to verify the adequacy of their risk management systems in response to the diversification and increasing complexity of their operations. Audit sections of financial institutions, especially of major banks, have started to (1) introduce on a trial basis a "risk-based approach" in which they analyze risks associated with operations of various sections, including those in charge of treasury and computer systems, and decide the frequency of and points for audit accordingly; and (2) check the appropriateness of internal rules and make proposals to sections concerned about setting new rules or revising the existing ones based on audit results, in addition to ensuring compliance with them (Chart 20).

D. Payment and Settlement Risk Management and Liquidity Risk Management: Points Requiring Attention after the Introduction of RTGS

1. Changes in payment and settlement risk profiles after the introduction of RTGS

Systemic risk (the risk of systemic disruptions posed to financial institutions, and ultimately to the entire financial system, through a chain of settlement failures or delays in settlement) has been reduced substantially since the transaction method of the Bank's settlement system (the BOJ-NET) changed from the previous designated-time net settlement to RTGS.[9]

The introduction of RTGS has also changed the payment and settlement risk profiles of individual financial institutions as follows. First, payment and settlement procedures have become more complex and financial institutions have increased their dependence on computer systems. Under the RTGS system, funds or securities are debited immediately from accounts at the Bank on receipt of a payment order, and this has increased the need to control payment instructions and monitor intra-day balances in a timely manner. As a result, financial institutions handling a large volume of operations have introduced systems to control liquidity and made further progress in realizing STP for business operations from front offices through middle and back offices. These developments will contribute to enhancing efficiency in operations, but on the other hand they would also affect the funding activity of financial institutions carrying out the operation and the receiver of funds if the system were to fail. Thus, it has become ever more important for financial institutions to preemptively prepare measures against emergency.

Second, banks, especially those engaged in large amounts of funds settlements, need to further improve management of intra-day credits to customers. The introduction of RTGS has prompted a number of financial institutions to provide funds settlement services to other financial institutions to increase profits from fees and commissions to cover the rise in management costs. A financial institution providing such a service withdraws money from its current account at the Bank upon receipt of an order from a customer financial institution. If there is not enough money in the customer's account, the shortfall is covered by the trustee financial institution. Under the RTGS system, extension of intra-day credits to customers (because of a shortfall in the customers' accounts during the day) could trigger materialization of liquidity risk at the trustee financial institution. Thus, it is essential that financial institutions entrusted with large amounts of funds settlements manage intra-day credits to customers more carefully by, for example, setting limits on intra-day credits and monitoring customers' account balances.

2. Business continuity planning for a disaster affecting operating sites

The terrorist attacks in the United States underlined the importance of business continuity even if offices, computer centers, and other important operating centers were damaged in a disaster. The majority of financial institutions are establishing or have already established backup centers to deal with disasters, and others are expected to follow suit. For backup centers to operate effectively at times of disaster, financial institutions need to prepare manuals for operation procedure and establish systems to conduct testing (Chart 21).

9. On the first business day of January 2001, the Bank of Japan introduced the new RTGS system to the BOJ-NET for the settlement of funds and Japanese government securities.

3. Liquidity management

With regard to emergency measures, financial institutions in general have smoothly established liquidity management systems in preparation for the partial removal of the blanket protection of deposits. Financial institutions that had not previously prepared manuals and measures for securing liquidity (estimating the maximum amount of cash required in a day and planning ways to distribute it) have now made progress in preparing them. Financial institutions have also reduced assets, diversified methods of funding activity, and conducted foreign-currency funding in a conservative manner, in view of the possible deterioration in the financing conditions. As a result, large Japan premiums as seen in 1997 and 1998 were avoided.

E. Enhancing Integrated Risk Management Systems

In recent years, financial institutions, particularly major banks, have been addressing various risk factors as part of integrated risk management to (1) secure the soundness of management by controlling risks so that they are in line with their financial strength and (2) improve profitability and efficiency of management by managing business on a risk-adjusted return basis (Chart 22).

They are enhancing integrated risk management against the background of (1) diversification and the increasing complexity of risks to be managed, (2) the need to alter the management methods of the bubble period that led to the NPL problem, and (3) increased awareness of the need to realize further efficiency in management. Reorganization and integration of financial institutions are also pushing financial institutions to establish consolidated and objective standards for risk and profit management. In addition, the proposed new Basel Capital Accord seems to have encouraged financial institutions to look seriously at integrated risk management.

Based on such integrated risk management, major banks have introduced the "capital allocation system," under which capital is allocated to each of the risks mentioned in the preceding sections as buffers for business. Integrated risk management systems are being smoothly put into operation, with major banks (1) setting limits on risks that can be taken and losses that may be covered based on the amount of capital allocation and (2) evaluating capital adequacy in relation to the amount of risk. There is, however, room for further refinement in risk quantification. It should also be noted that it is difficult to allocate capital so as to fully cover risks associated with each business because of the massive amount of (1) cross-shareholdings for the purpose of long-term investment and (2) NPLs. As a result, integrated risk management is currently only partially utilized in formulating management strategy and evaluating business performance. It is hoped that financial institutions will expeditiously establish management systems to address risk profiles which will become more complex due to consolidation and diversification of business.

Some regional banks have also introduced integrated risk management systems on a trial basis. However, they need to improve methods of risk quantification and establish appropriate management systems with adequate involvement of top management.

F. Tasks regarding Financial Institutions' Profit-Generating Structure

1. Outline of a profit-generating structure

The preceding sections have outlined financial institutions' efforts to address management tasks, centering on risk management. This section will focus on ways to improve profitability and maintain and fortify financial strength, based on adequate risk management. Financial strength is indispensable for risk taking in financial institutions' various business operations, as it serves as a buffer for risks. It basically depends on financial institutions' profitability in a fiscal year, which can be used to accumulate internal reserves. A positive outlook for financial institutions' profitability that wins market confidence is vital to strengthen their capital bases through successful capital raising in the market.

With regard to the recent developments in financial institutions' profitability, the lending margin has been more or less unchanged while the securities margin has followed a declining trend. Developments in the overall interest margin, however, have differed by type of financial institution: the overall interest margin was almost flat for city banks, long-term credit banks, and trust banks, but it declined for regional banks, regional banks II, and *shinkin* banks. This seems to reflect a sharp fall in the securities margin for regional financial institutions, in addition to a larger decline in

lending, relative to the amount of deposits accepted (lending-deposits ratio), of these institutions compared with city banks, long-term credit banks, and trust banks due to weak demand for funds in the lending market. The level of overall interest margin for city banks, long-term credit banks, and trust banks, however, is relatively lower than for regional banks, regional banks II, and *shinkin* banks. This is mainly due to small margins on lending despite factors contributing to an increase in profit such as (1) a relatively high lending-deposits ratio (a higher weight of lending, which generates more profits than securities investment) and (2) a relatively low expense ratio (charts 23 and 24).

In general, declines in profitability, if continued, not only hinder the accumulation of earned surplus but also make uncertain the recoverability of deferred tax assets through narrowing of taxable income. Financial institutions are thus expected to take effective measures to increase profitability.

2. Profits from lending operations

With regard to the recent developments in financial institutions' profits from lending, which is one of the main pillars of their profitability, the interest margin on lending calculated taking into account the expense ratio and realized credit cost (cost burden from NPL disposal) at city banks, long-term credit banks, and trust banks were below zero and those at regional banks, regional banks II, and *shinkin* banks were around zero both due to high realized credit cost (Chart 25).

To accumulate internal reserves, it is indispensable for financial institutions to stabilize realized credit costs at a low level and secure appropriate margins in light of these costs. To this end, they should first improve their asset quality by utilizing the credit risk management framework discussed earlier in this chapter. The result of the Bank's on-site examinations shows that a number of financial institutions will continue to use a large proportion of net operating profits from core business to write off NPLs for the foreseeable future, if there is no positive turnaround in the current economic situation and no significant improvement in the quality of loan assets.

Ideal loan portfolios in terms of industry and size of borrower firms differ for each financial institution; they depend on developments in funds demand, features inherent in business operating regions, and what future financial intermediary role the individual financial institution intends to develop for itself (charts 11, 12, and 26). All financial institutions, however, should strive to secure a good balance between credit cost and interest margin on lending for each credit extension and on an aggregate basis for loan assets as a whole. Generally speaking, it should be noted that holding loan assets whose gross interest margins are below the appropriate level means continuing potentially unprofitable credit extension, which entails a high risk of realizing losses in the future.

Based on this understanding, it is necessary to increase the profitability of borrower firms in order to secure an adequate level of interest margin on lending. It is hoped that financial institutions' efforts to assist firms to reconstruct their business and investment funds will bear fruit. In addition, financial institutions should strengthen their competitiveness by, for example, providing high value-added financial services in a timely manner in response to the diverse needs of individual firms. And this will lead to securing of an adequate level of interest margin on lending.

3. Efficient control of general and administrative expenses

Efficient control of general and administrative expenses on a continuing basis is another important factor in strengthening financial institutions' profitability. In recent years, city banks, long-term credit banks, and trust banks have cut general and administrative expenses significantly, by more than 10 percent from the peak, and they have also reduced the number of employees and branches more drastically than regional banks, regional banks II, and *shinkin* banks (Chart 27). Meanwhile, many regional financial institutions plan to maintain the current number of branches, because their business is closely related to the regional economy and closing down or consolidation of branches could destabilize their business bases.[10] Reflecting the above factors as well as economy of scale, the expense management efficiency measured by expense ratio (general and administrative expenses/gross profits) is the highest for city banks, long-term credit

10. The number of branches held by *shinkin* banks recorded a new historical high in the most recent data that included branches handed over by failed financial institutions.

banks, and trust banks followed by regional banks and regional banks II, and then *shinkin* banks (Chart 28).

What follows takes a look at tasks that need to be addressed by regional financial institutions to improve their expense management efficiency. As discussed earlier, while the lending-deposits ratio is falling for regional financial institutions, the decline in yields on securities is more significant for these institutions than for city banks, long-term credit banks, and trust banks, partly due to the higher weight of investment in long-term Japanese government bonds (charts 23 and 24). To compensate for such declines in profits, regional financial institutions could (1) expand lending spreads, (2) increase noninterest income, or (3) restructure balance sheets by reducing assets that generate lower profits. Whatever measures they adopt, they urgently need first of all to cut their general and administrative expenses to remain competitive.

Changes in return on assets (ROA: net operating profits from core business/total assets) in the past three years for regional banks and regional banks II, and *shinkin* banks, grouped according to their financial strength (risk-based capital adequacy ratio)—with the end of fiscal 1997 as a benchmark—showed a decrease for all groups. For *shinkin* banks, in particular, the size of the fall in ROA was smaller for banks with weaker financial strength (Chart 29; this difference was not observed for regional banks and regional banks II). At *shinkin* banks with weak financial strength, the negative contribution to changes in ROA from net interest income was smaller and the positive contribution from reduction in general and administrative expenses was larger. This was probably because there was relatively large scope for cuts in general and administrative expenses, as expense management efficiency tended to be low. At any rate, it is hoped that they will realize further improvements in cost efficiency. It is also hoped that *shinkin* banks with greater financial strength will take further steps in cutting general and administrative expenses and manage assets more efficiently to increase their competitiveness.

The results of the Bank's on-site examinations show that not many financial institutions plan to pursue further cost efficiency despite the pessimistic view of many of them concerning developments in net interest income. To cope with the unfavorable environment for raising profits, it is hoped that they will continue to make efforts to reduce general and administrative expenses.

4. Feasibility of expanding noninterest income

Financial institutions are taking various measures to increase noninterest income, which they view as a new source of profits, and as a result, the ratio of noninterest income to total profits is increasing gradually. The ratio for regional banks, regional banks II, and *shinkin* banks, however, remains very low at the current stage compared with U.S. banks (Chart 30).

The majority of net fees and commissions, which are the largest source of noninterest income, comes from traditional funds transfer operations for regional banks and regional banks II, and "other" operations for city banks, long-term credit banks, and trust banks. The large contribution made by "others," which includes a wide range of operations such as giving of guarantees, safekeeping of securities, and investment banking, shows diversification of banking operations for city banks, long-term credit banks, and trust banks (Chart 31). Further expansion in banking business is likely in the future as seen by the increasing number of patent applications submitted by these banks (Chart 32). It is hoped that financial institutions will conduct their business with originality, reflecting customers' needs and making the most of their areas of superiority, while carefully controlling the balance between risks and costs.

C O N C L U S I O N

In order to overcome the NPL problem and thereby improve profitability, financial institutions should strive to deal with management tasks. It is also essential that, in parallel with financial institutions' efforts, borrower firms also reconstruct their business. Although financial institutions should provide efficient financial intermediary services at lower cost as in the case of other goods and services, they should set interest rates at levels that balance risks and returns to maintain sound management.

For financial institutions' risk management, they should have an adequate grasp of the risks attached to each transaction and establish in a timely manner systems that manage and control the risk profiles of their balance sheets as a whole. Improved risk management is likely to bring an appropriate level of return. For customers to accept such pricing of services, however, financial institutions' risk

assessment must win credibility. The flow of funds in Japan is currently changing at the macroeconomic level, with the corporate sector, which has traditionally been a borrower of funds, possessing surplus funds and firms gradually leaning more toward direct financing. Given this structural change, indirect financing requires that financial institutions provide added value by performing their role as intermediaries efficiently through a close monitoring of risks, which is an information production function. This function is the very basis of financial institutions' competitiveness in the funds-intermediary market. An improvement in this function will lead to (1) appropriate pricing of financial services and an improvement in financial institutions' profitability and soundness of management; and (2) an improvement in their risk-intermediary function of indirect financing, not only at individual financial institutions but also in the indirect financing sector as a whole.

Chart 1
Net Income/Losses

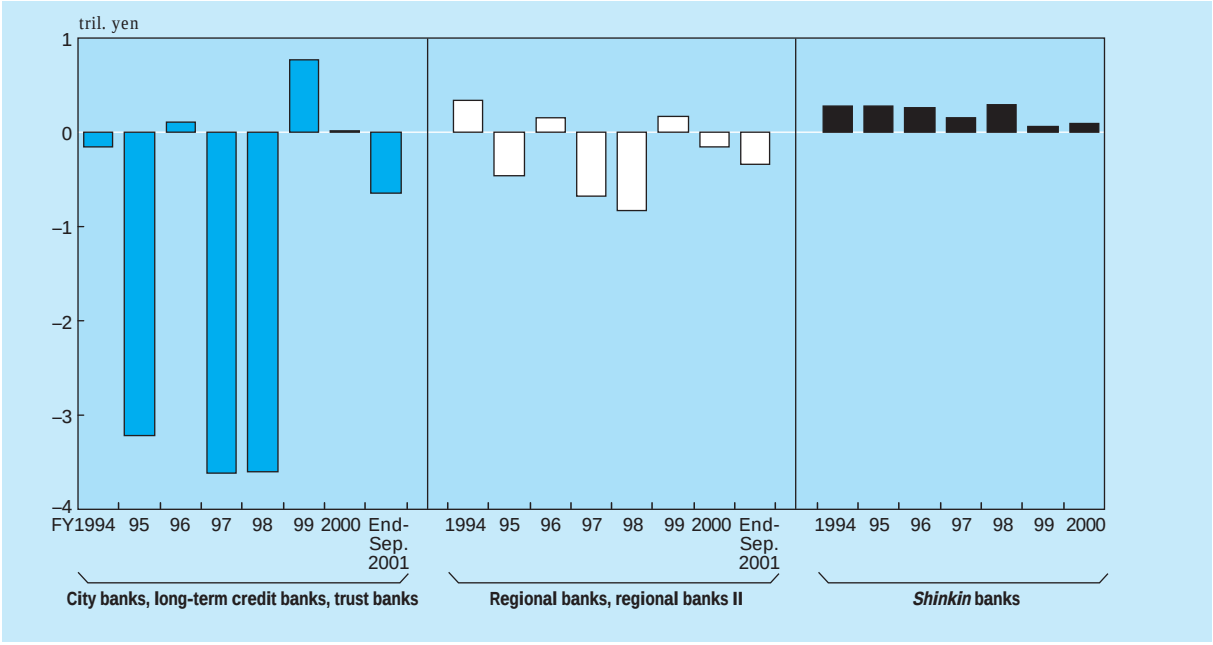


Chart 2
Operating Profits from Core Business and NPL Disposal

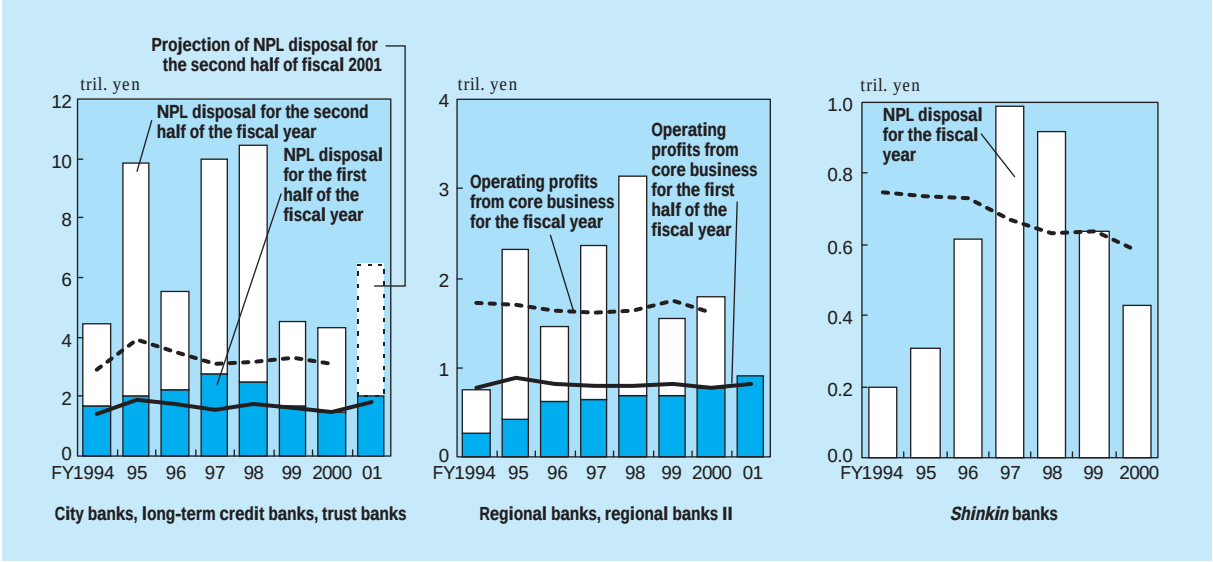
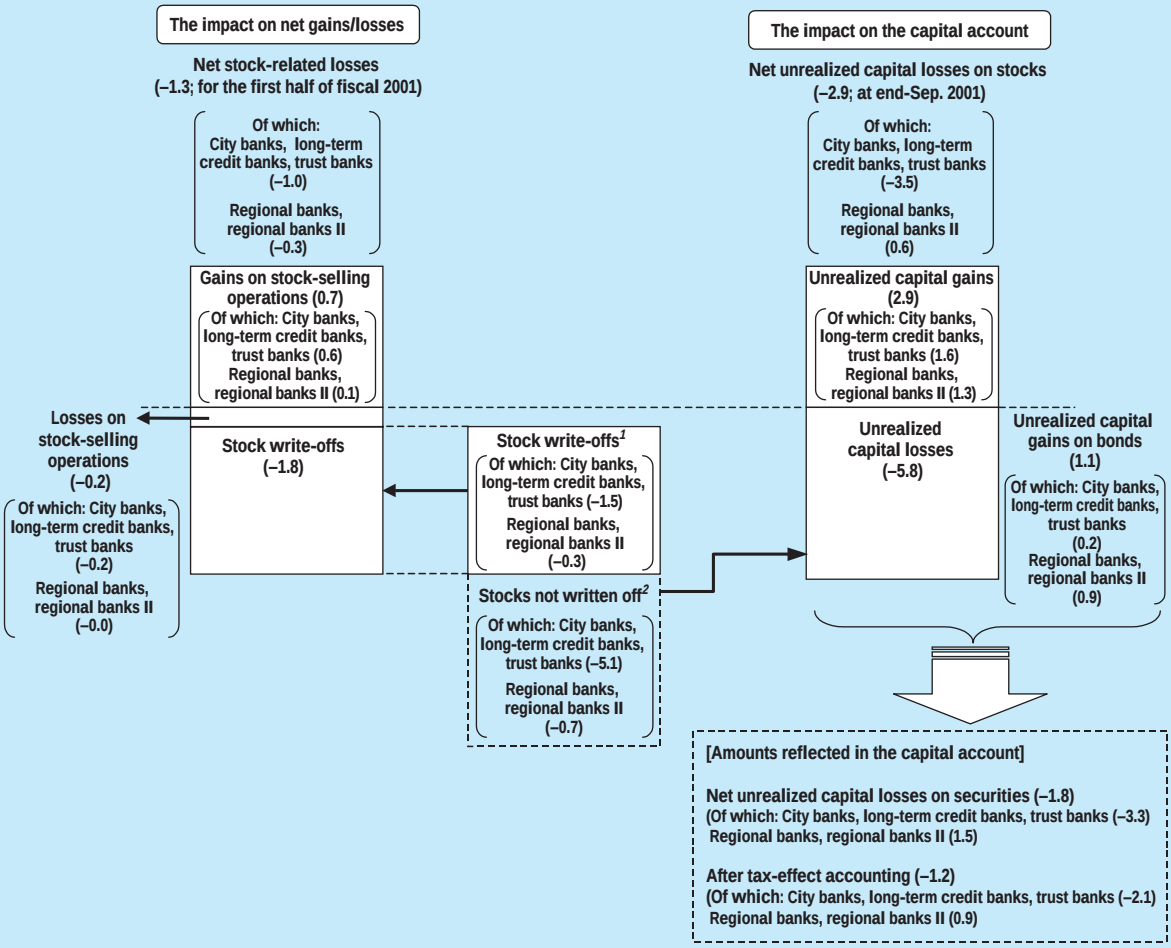


Chart 3

The Effects of Stock Price Falls under Mark-to-Market Accounting

tril. yen



Notes: *1.* Unrealized capital losses are written off for stocks whose price recovery is unlikely.
2. Unrealized capital losses are not written off for stocks whose price recovery is likely.

Chart 4

Stock-Related Gains/Losses in Comparison with Operating Profits from Core Business

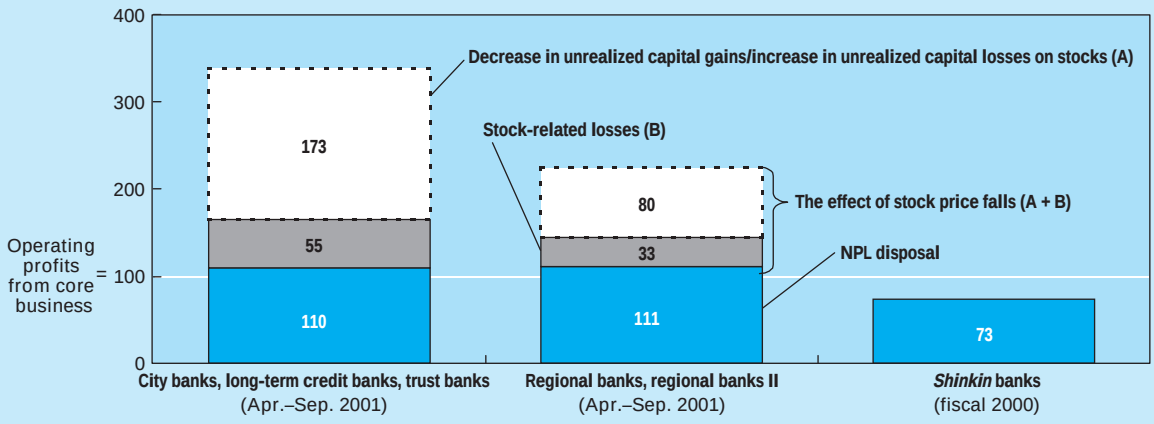


Chart 5
Financial Strength

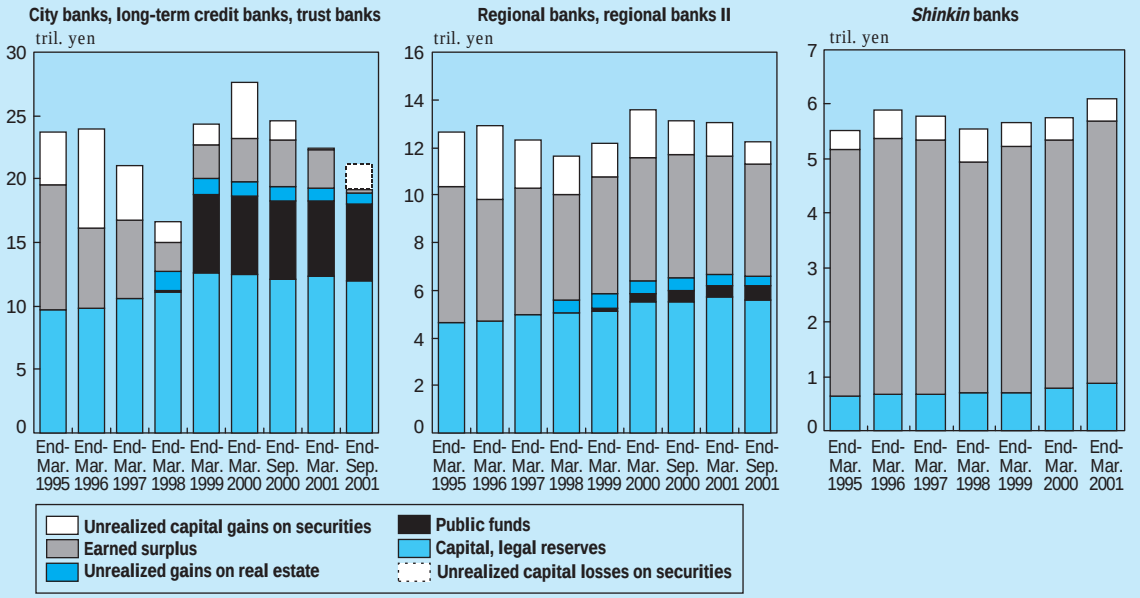


Chart 6
Unrealized Capital Gains/Losses on Securities in Comparison with Earned Surplus

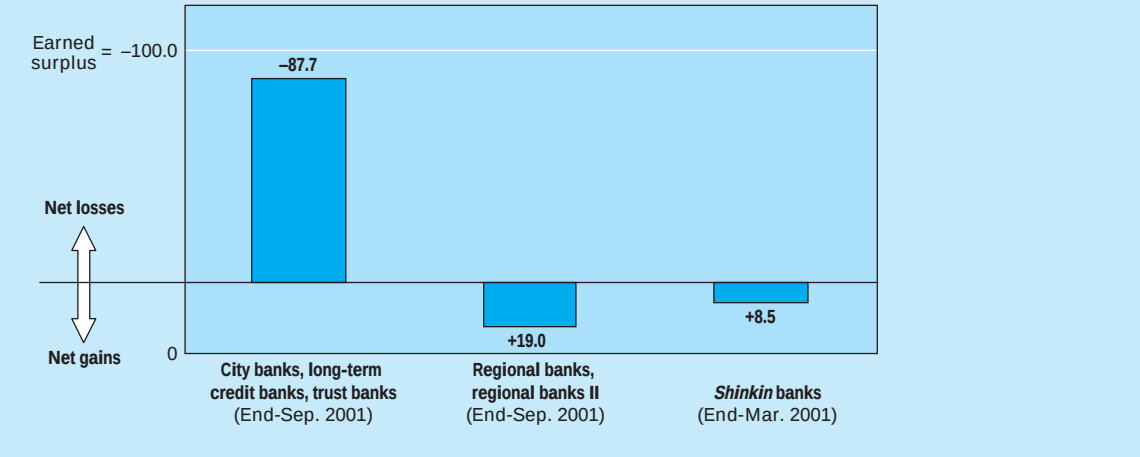
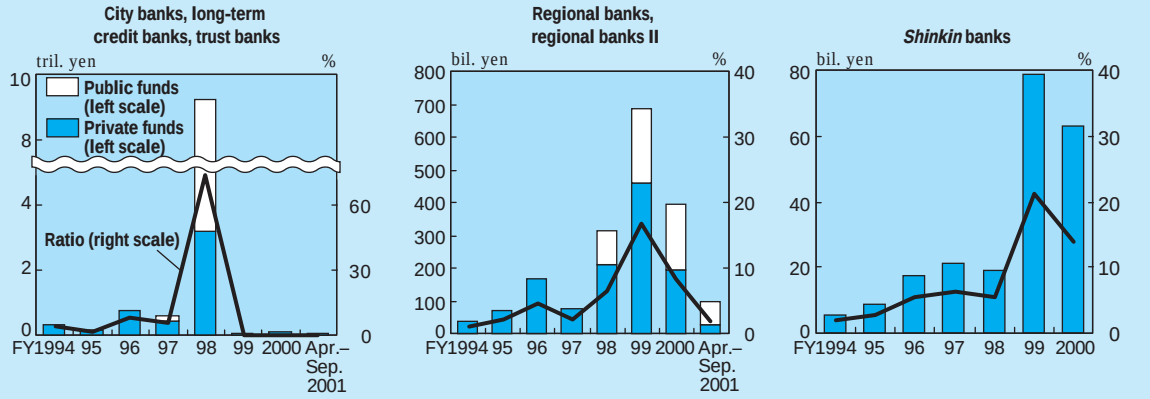


Chart 7
Capital Increase[1]



Note: *1*. Bar graphs show the increase in the capital base. Line graphs show the ratio of the increment of the capital base to capital account balances (the sum of capital [capital subscription for *shinkin* banks] and capital reserves) as of the fiscal year-end of the previous year.

Chart 8
Risk-Based Capital Adequacy Ratio (Consolidated Basis)

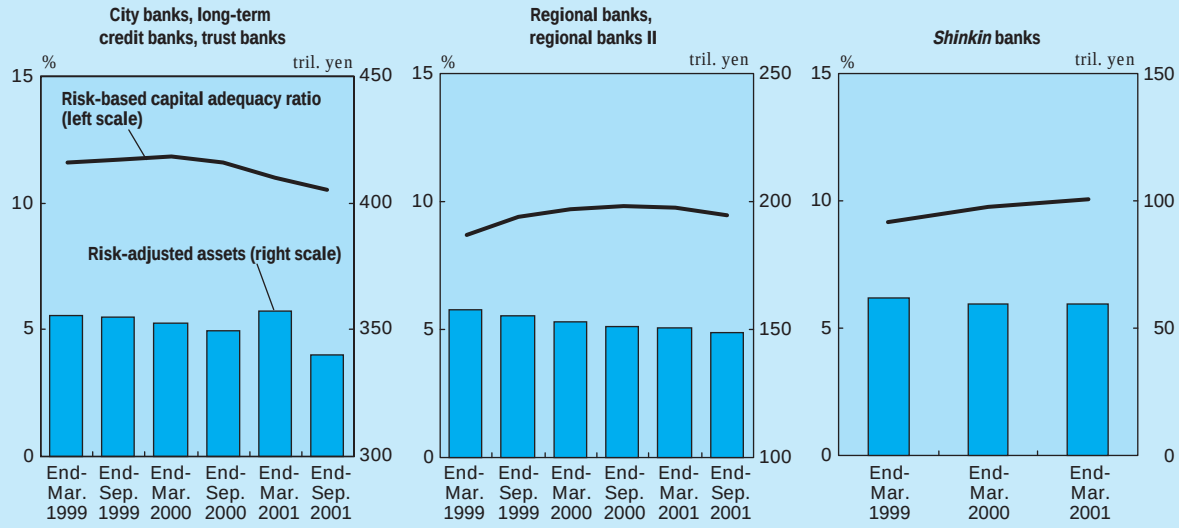
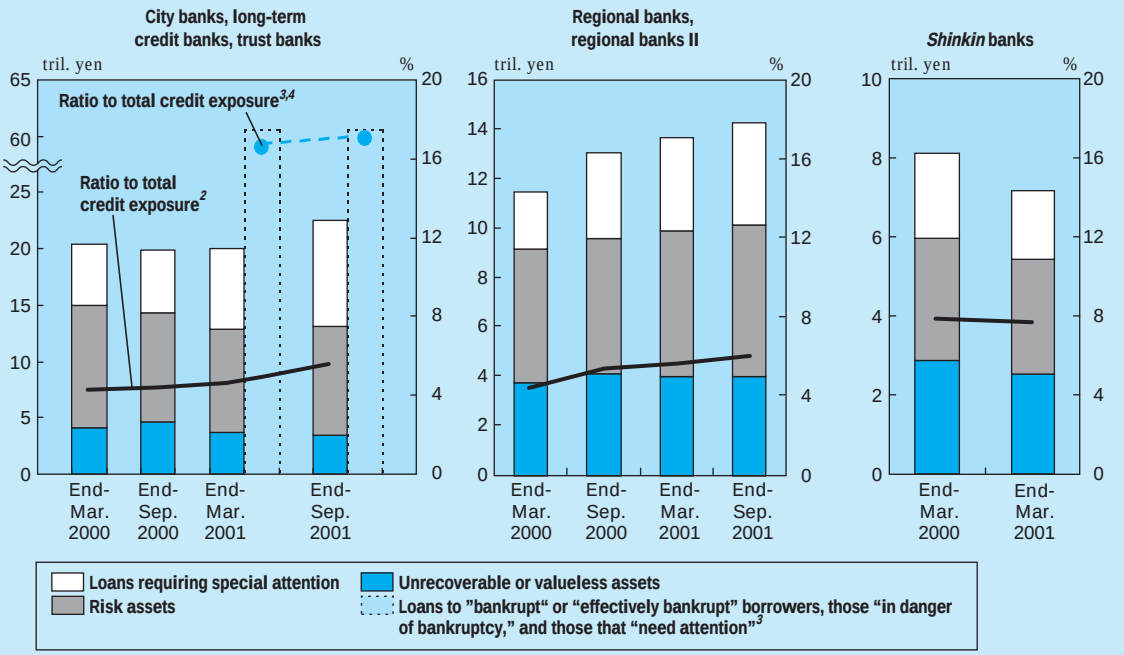


Chart 9

Assets Disclosed under the Financial Reconstruction Law (FRL) and Ratio to Total Credit Exposure[1]

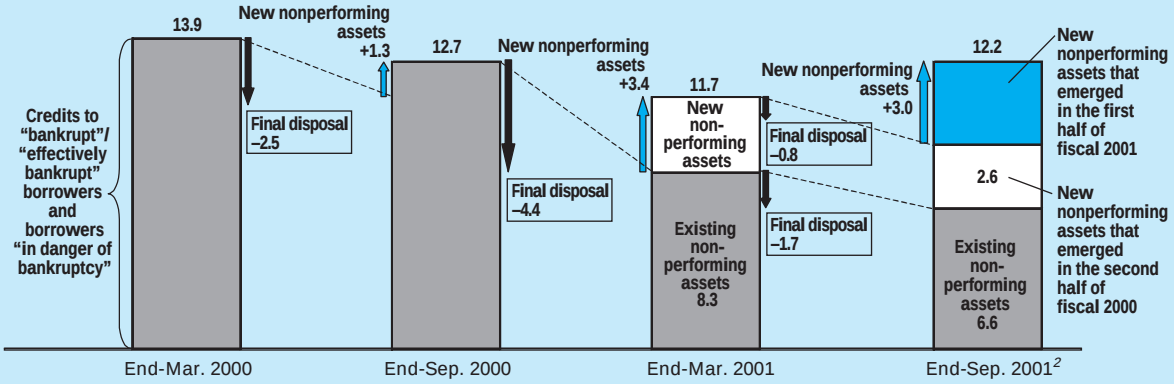


Notes: *1.* FRL is short for "Law concerning Emergency Measures for the Reconstruction of the Functions of the Financial System."
Figures are the accumulated total for financial institutions operating at each end-term.
2. The amount of loans disclosed under the FRL (after deducting special loan-loss provisions [SLP]) divided by total credit exposure.
3. Figures are for the total of 15 city banks, long-term credit banks, and trust banks.
4. Amount of loans to "bankrupt" or "effectively bankrupt" borrowers, those "in danger of bankruptcy," and those that "need attention" under the self-assessment framework (after deducting allowance for possible loan losses [APLL] and SLP) divided by total credit exposure.

Chart 10

Credits to "Bankrupt"/"Effectively Bankrupt" Borrowers and Borrowers "in Danger of Bankruptcy"[1]

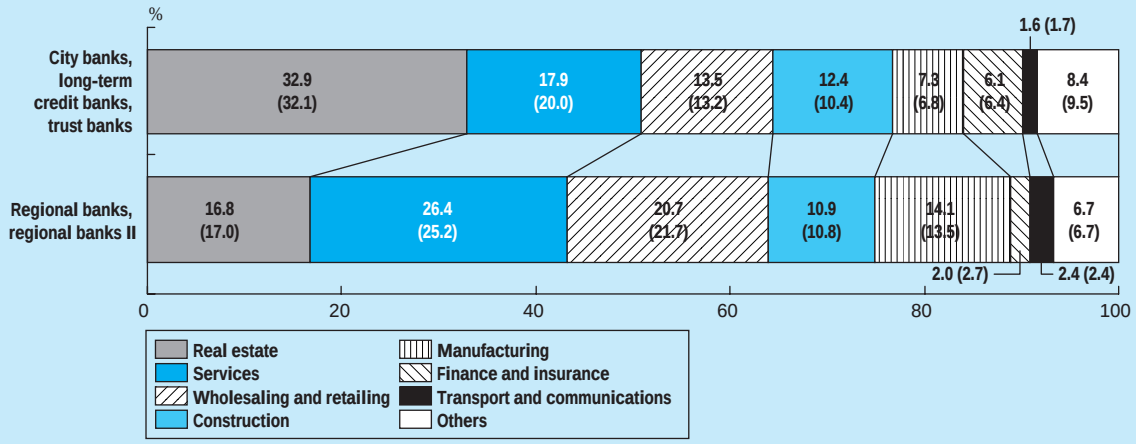
tril. yen



Notes: *1.* Total of assets held by city banks, long-term credit banks, and trust banks.
2. Credits to "bankrupt"/"effectively bankrupt" borrowers and borrowers "in danger of bankruptcy" are subject to removal from balance sheets in the emergency economic package announced by the Government in April 2001. The deadlines for the disposal are as follows: (1) end-fiscal 2002 for new nonperforming assets that emerged until end-September 2000 (disposal over two business years); (2) end-fiscal 2003 for new nonperforming assets that emerged in the second half of fiscal 2000 (disposal over three business years); and (3) end-fiscal 2004 for new nonperforming assets that emerged in fiscal 2001(disposal over three business years). See Box 3 on page 31 for policy measures concerning the disposal of NPLs.

Chart 11

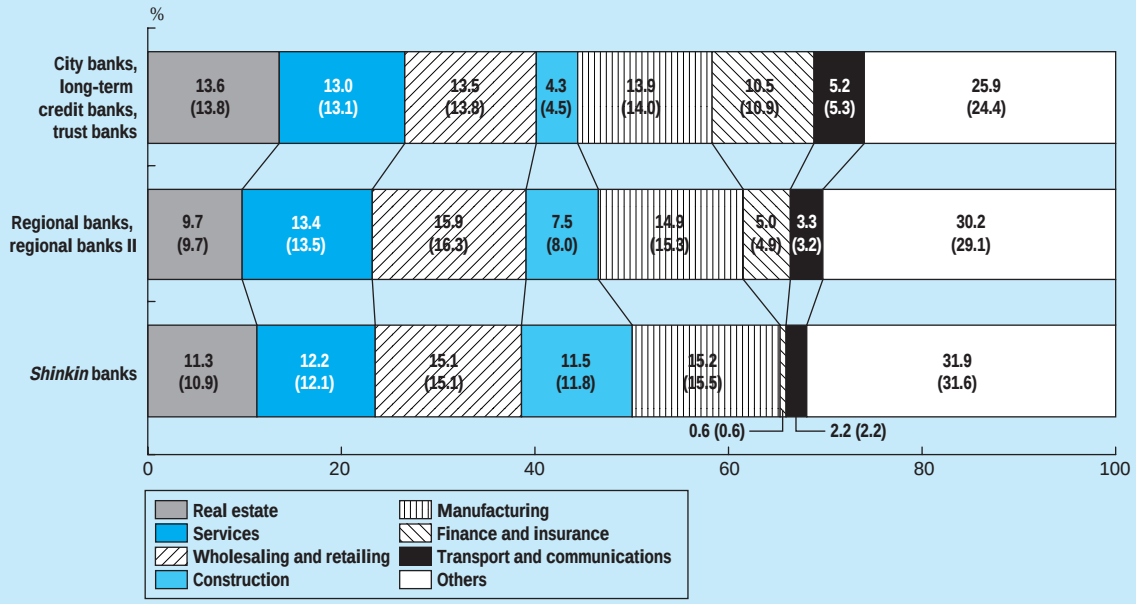
Risk Management Loans by Industry[1]



Note: *1*. Data for banks disclosing their risk management loans (12 city banks, long-term credit banks, and trust banks; and 64 regional banks and regional banks II). "Others" includes agriculture, forestry, and fisheries; electricity and gas; and local governments.
As of end-September 2001; figures in parentheses are as of end-March 2001.

Chart 12

Lending by Industry[1]



Note: *1*. Data for banks disclosing their risk management loans (12 city banks, long-term credit banks, and trust banks; and 64 regional banks and regional banks II). Data for *shinkin* banks are taken from *Financial and Economic Statistics Monthly* issued by the Bank of Japan. "Others" includes agriculture, forestry, and fisheries; electricity and gas; and local governments.
As of end-September 2001; figures in parentheses are as of end-March 2001.

Chart 13
Ratio of Interest-Bearing Liabilities to the Sum of Operating Profits and Depreciation

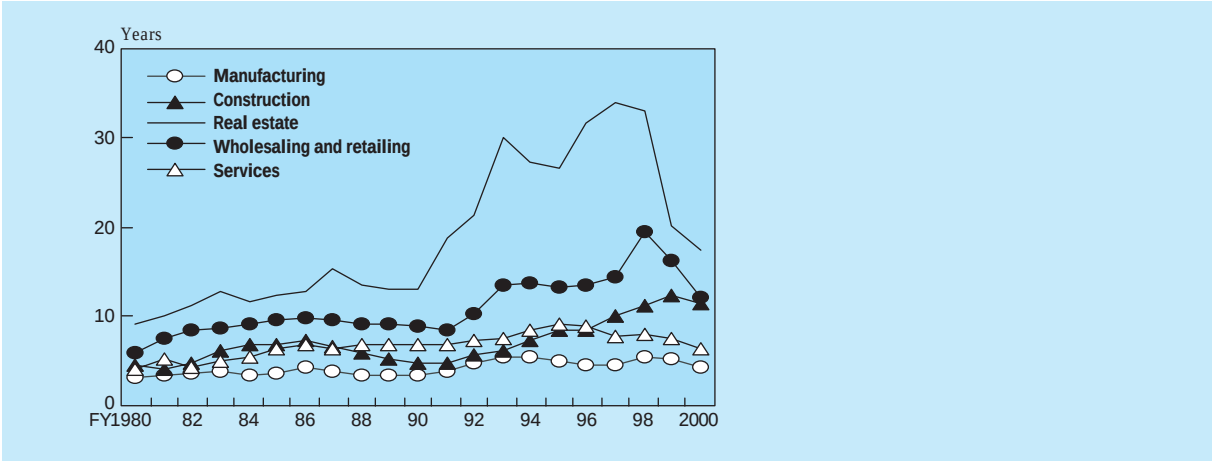


Chart 14
Percent Changes in Operating Profits/Losses from a Year Earlier
%

	Actual result for fiscal 2000	Forecast for fiscal 2001		
		September 2001 survey	December 2001 survey	March 2002 survey
All industries	**8.9**	**–3.4**	**–12.1**	**–16.8**
Manufacturing	**20.0**	**–13.6**	**–30.9**	**–38.1**
Nonmanufacturing	**3.1**	**2.8**	**–0.6**	**–3.7**

Source: Bank of Japan, "Short-Term Economic Survey of All Enterprises in Japan (*Tankan*)."

Chart 15
Conceptual Framework of Credit Risk Management

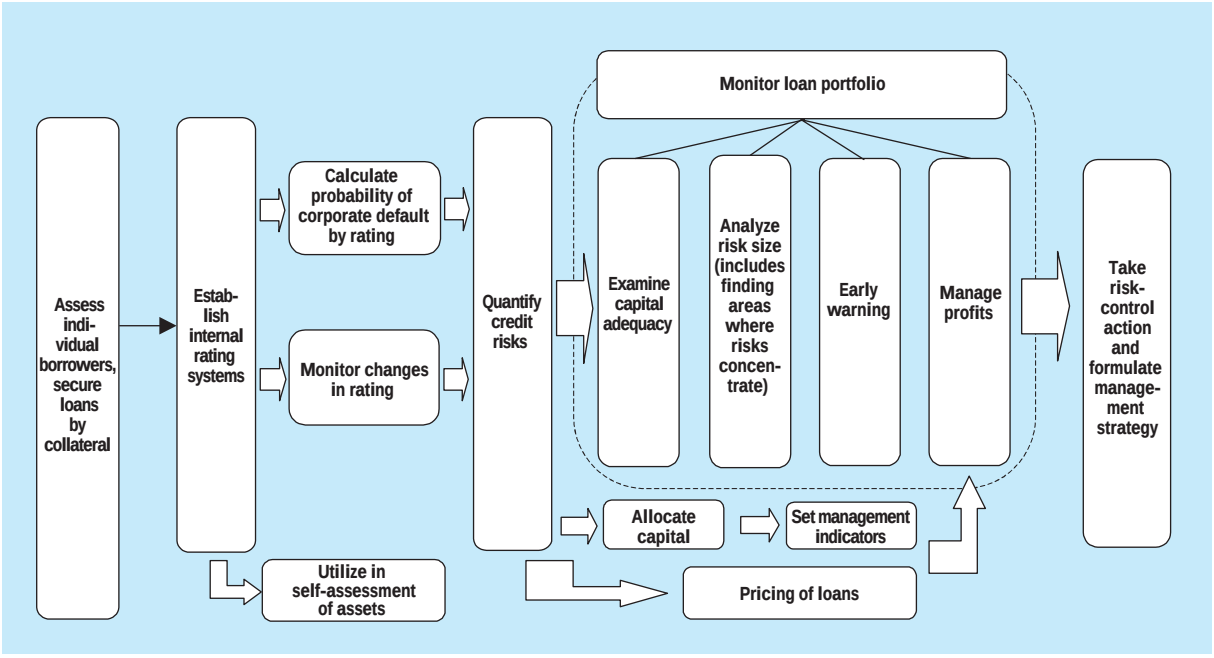


Chart 16

Classification under the Self-Assessment of Loans Corrected in On-Site Examinations[1]

		Number of financial institutions examined	Number of borrowers assessed (a)[2]	Number of classifications corrected (b)[2]	Correction ratio (b/a; %)
All banks + *Shinkin* banks	Fiscal 1999[3]	39	213	29	13.6
	Fiscal 2000	87	335	33	9.9
	Fiscal 2001[4]	97	213	19	8.9
	Total	223	761	80	10.5

Notes: *1.* The correction ratio does not indicate the condition of all the loan assets of institutions examined. This is because the Bank selects loans for assessment with an emphasis on the coverage of credit risk exposure.
2. Numbers are rounded into hundreds.
3. Results of on-site examinations conducted in August 1999–March 2000.
4. Results of on-site examinations conducted in April–December 2001.

Chart 17

Ratio of Secondary Losses to the Cost of NPL Disposal[1]

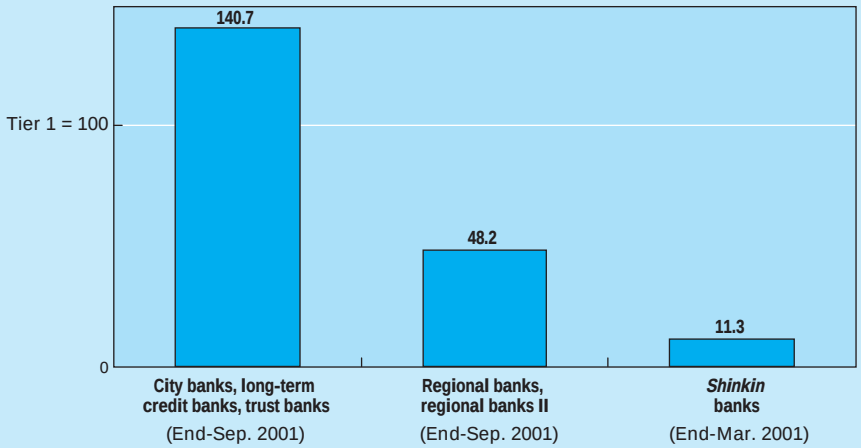
tril. yen

		October 2000–March 2001	April–September 2001
City banks, long-term credit banks, trust banks	Estimated secondary losses (a)	0.2	0.2
	Amount of NPL disposal (b)	2.8	2.0
	(a/b)	9%	11%
Regional banks, regional banks II + *Shinkin* banks	Estimated secondary losses (c)	0.2	0.3
	Amount of NPL disposal (d)[2]	1.3	1.1
	(c/d)	19%	22%

Notes: *1.* Estimated amount of secondary losses = amount outstanding of loans to borrowers that are "bankrupt" and "effectively bankrupt," and "in danger of bankruptcy" belonging to category II at the beginning of the term × rate of land price fluctuation.
Land prices are based on "representative locations" by prefecture (commercial land; the average land price for the three main metropolitan areas [Tokyo, Osaka, and Nagoya] is used for city banks, long-term credit banks, and trust banks; average of land prices nationwide is used for regional banks, regional banks II, and *shinkin* banks). The rate of fluctuations in land prices is the decline for July 1, 2000–01.
2. The amount of NPLs disposed of by *shinkin* banks in each term is presumed to be half of that in fiscal 2000.

Chart 18

Size of Stocks Held Relative to Tier I Capital[1]



Note: *1.* The amount of stocks held at book value on balance sheets on a consolidated basis (acquisition cost if there are unrealized capital gains). Excludes equity interest in subsidiaries.
Banks other than *shinkin* banks are required by law to scale down their stockholdings within Tier I capital by the end of September 2004. Figures are estimated by simplifying the coverage of stocks.

Chart 19
Flow Chart for Enhancing Operational Risk Management

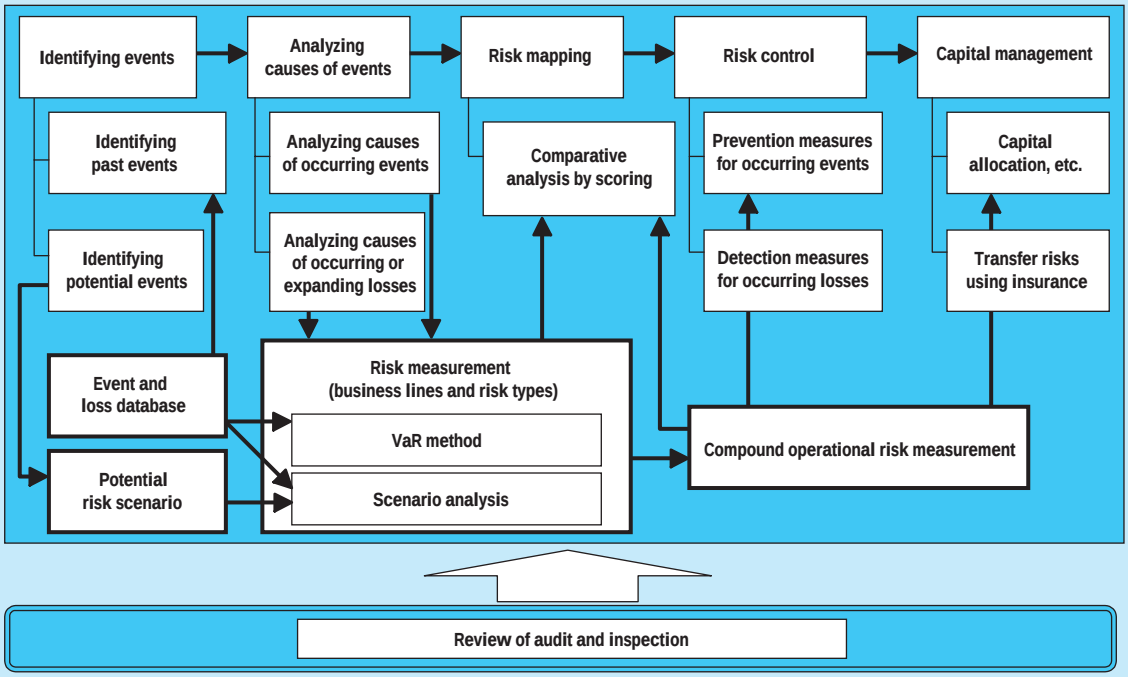
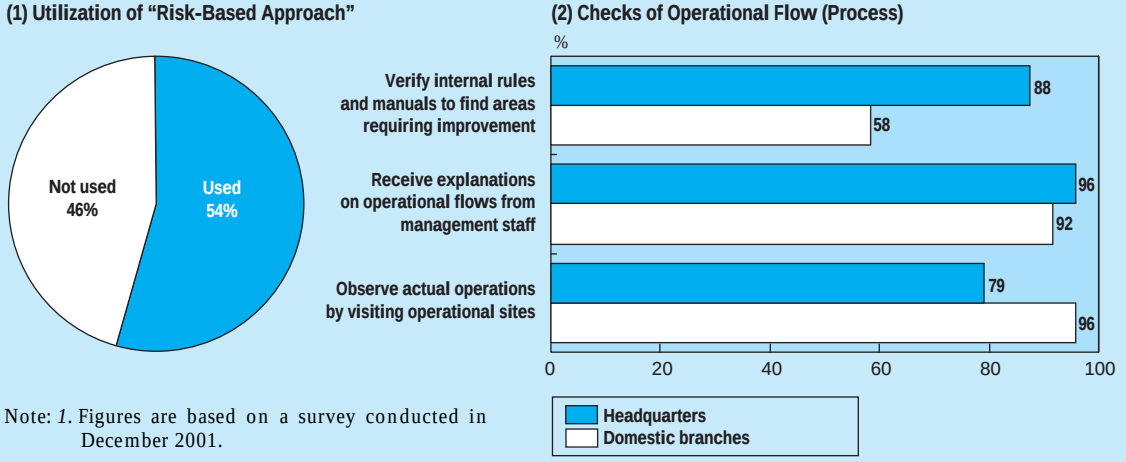


Chart 20
Internal Audit Systems of 24 Major Banks[1]



Note: *1.* Figures are based on a survey conducted in December 2001.

Chart 21
Suggested Preparations for Disasters

A. Identify potential threat.

B. Evaluate the possible impact of disasters and list operations of priority.

C. Consider ways of continuing operations (including establishing backup centers).

D. Prepare manuals specifying line of instructions, procedures for communication, and steps to be taken; and conduct drills on a regular basis.

Chart 22
Conceptual Framework of Integrated Risk Management

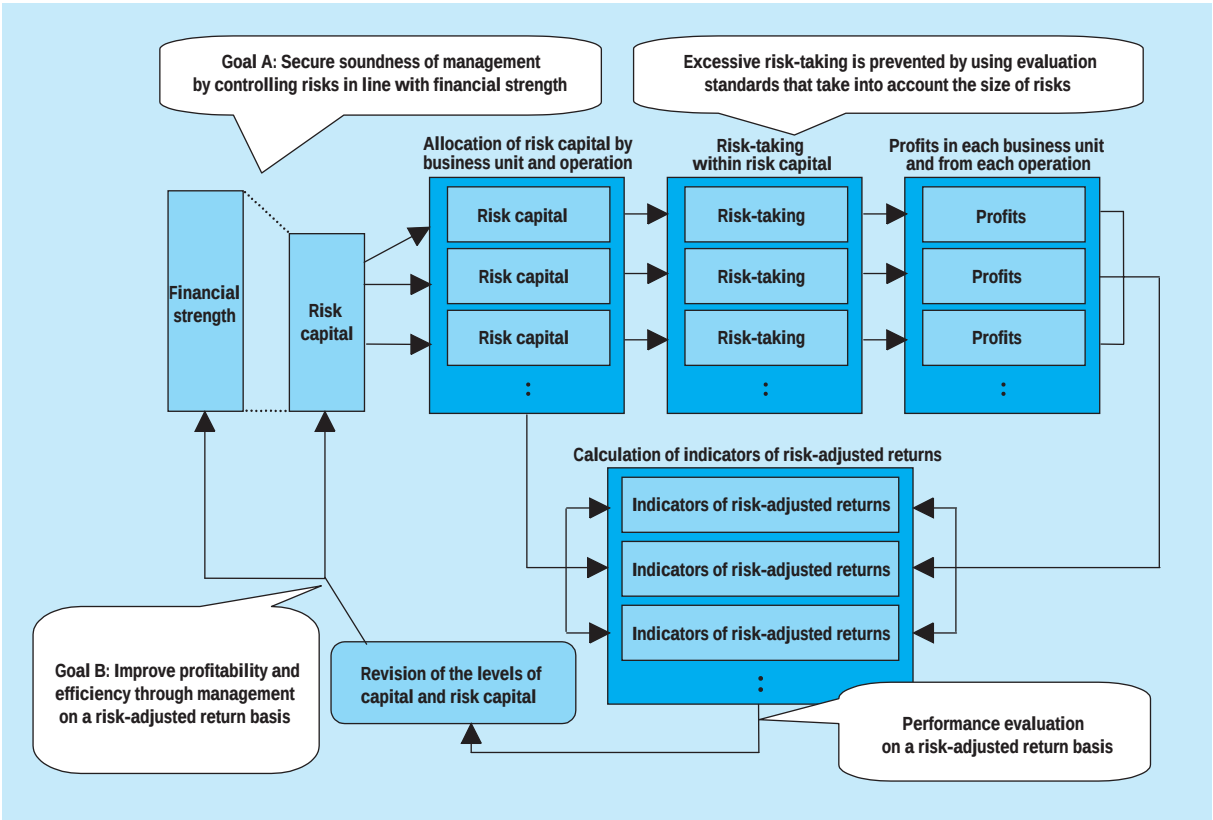


Chart 23
Interest Margin by Type of Financial Institution

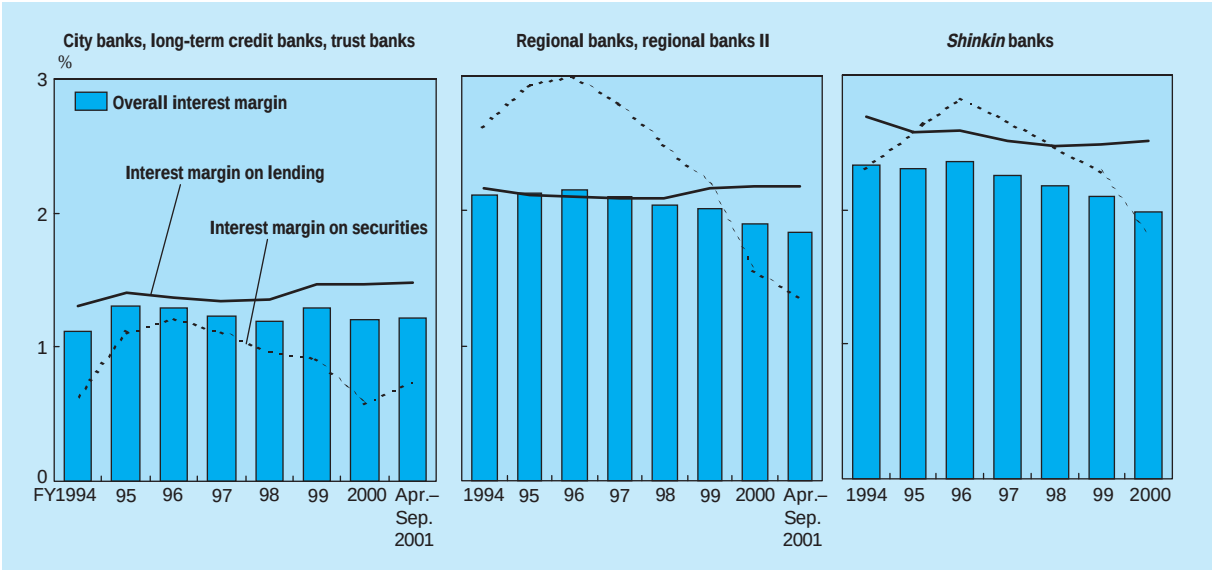


Chart 24

Profit Structure by Type of Financial Institution[1]

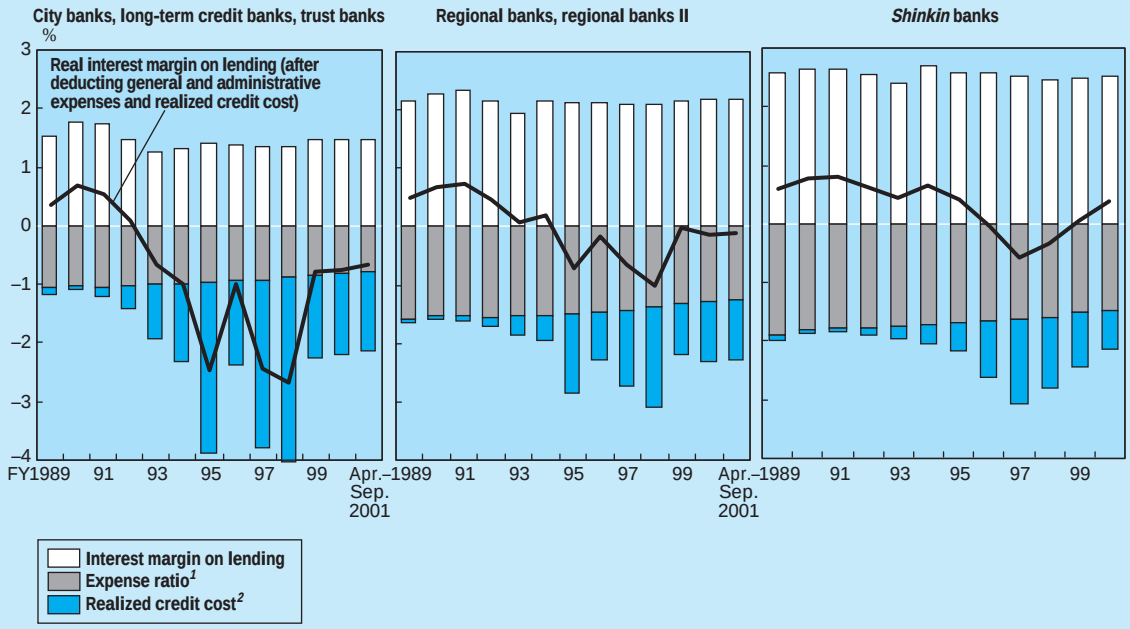
%

	City banks, long-term credit banks, trust banks		Regional banks, regional banks II		*Shinkin* banks	
	April–September 2001	Fiscal 1999	April–September 2001	Fiscal 1999	Fiscal 2000	Fiscal 1999
Interest margin on lending[2]	**1.48**	**1.47**	**2.18**	**2.16**	**2.51**	**2.48**
Interest margin on securities[3]	**0.74**	**0.91**	**1.36**	**2.19**	**1.82**	**2.28**
Overall interest margin[4]	**1.22**	**1.29**	**1.85**	**2.02**	**1.99**	**2.10**
Expense ratio[5]	**0.84**	**0.90**	**1.34**	**1.39**	**1.54**	**1.59**
Overall interest margin minus expenses	**0.36**	**0.34**	**0.46**	**0.58**	**0.37**	**0.43**
Lending-deposits ratio[6]	**100.4**	**101.2**	**76.3**	**79.0**	**65.1**	**68.6**
Securities-deposits ratio[6]	**38.9**	**29.9**	**22.3**	**19.7**	**20.6**	**19.4**
Of which: Bonds	**22.6**	**13.8**	**17.9**	**15.7**	**14.6**	**13.6**
Of which: Stocks	**14.0**	**14.7**	**2.6**	**2.8**	**0.6**	**0.6**

Notes: *1.* Domestic yen transaction.
2. Interest margin on lending = yields on lending – average rate on banks' interest-bearing liabilities (excluding interest expense on interest swaps).
3. Interest margin on securities = yields on securities – average rate on banks' interest-bearing liabilities (excluding interest expense on interest swaps).
4. Overall interest margin = yields on investment (excluding interest income on interest swaps) – interest rate on funds raised (excluding interest expense on interest swaps).
5. Expense ratio = general and administrative expenses/average annual balance of interest-earning assets.
6. The denominator is the sum of deposits and securities.

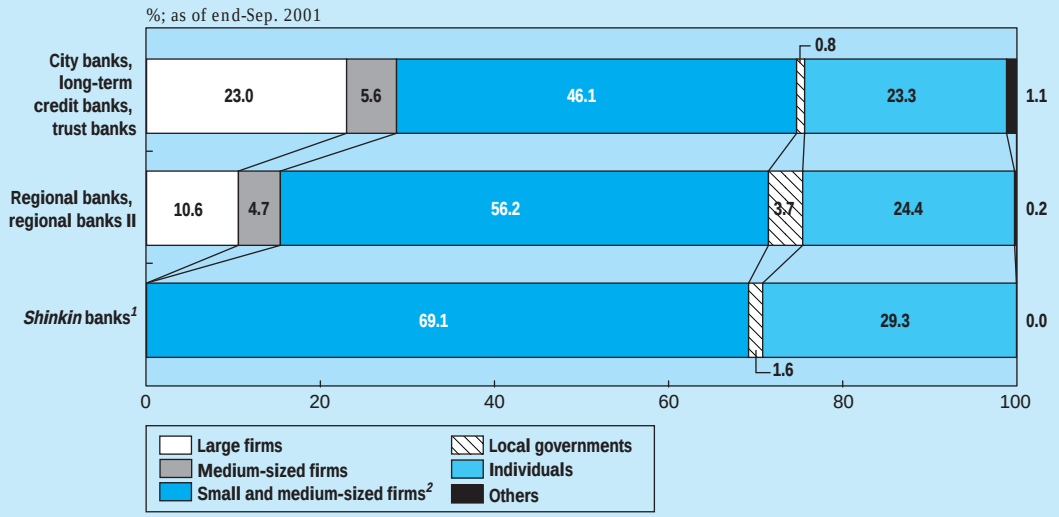
Chart 25

Interest Margin on Lending



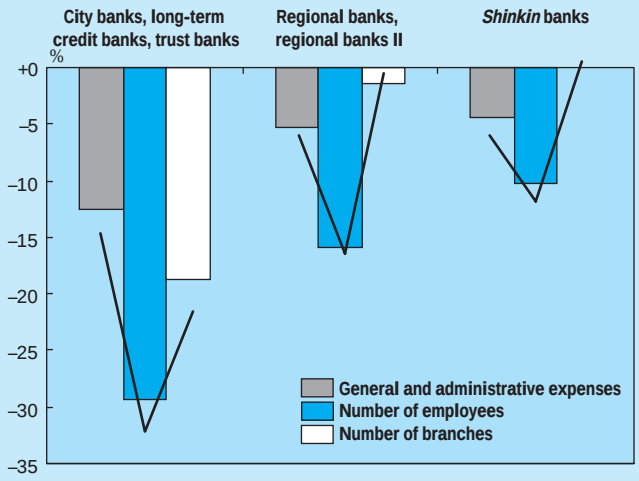
Notes: *1.* Expense ratio by business section of financial institutions is not available, thus the following calculation is used: Expense ratio = general and administrative expenses/average annual balance of interest-earning assets.
2. The percentage of disposal of NPLs (banking account) to the average amount outstanding of loans. It differs from expected losses calculated from the loan-loss ratio.

Chart 26
Loans by Size of Firms



Notes: *1.* Figures are based on the assumption that all lending to corporations is lending to small and medium-sized firms.
2. Figures include lending to privately owned firms.
Source: Bank of Japan, "Economic and Financial Statistics Monthly."

Chart 27
Cuts in General and Administrative Expenses, Number of Employees, and Number of Branches from the Recent Peaks[1]



Note: *1.* Comparison between the recent peak and the latest data available at the time of financial institutions' book closings, which differ by type of financial institution (for details, see Footnote 2 to the main text on page 3).
Data for line graphs include failed financial institutions.

Chart 28
Expense Ratio by Type of Financial Institution
(General and Administrative Expenses/Gross Profits)

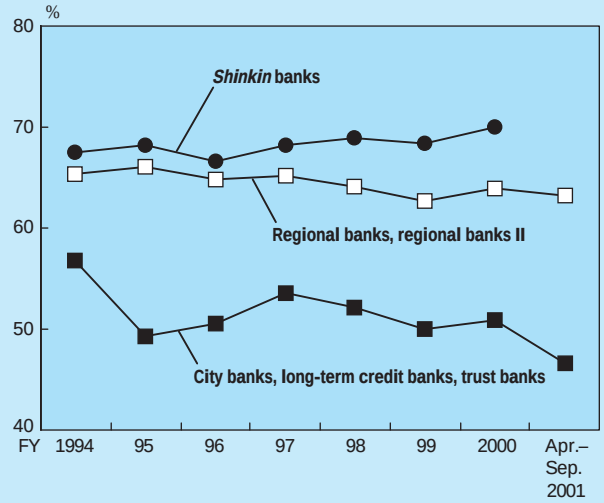
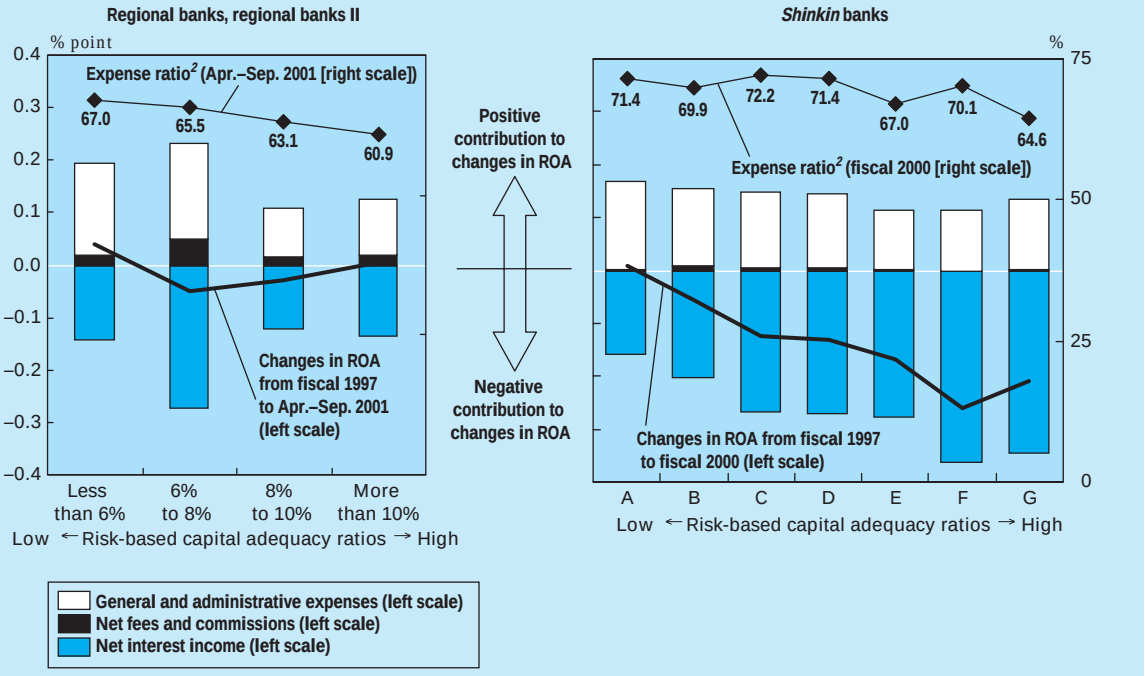


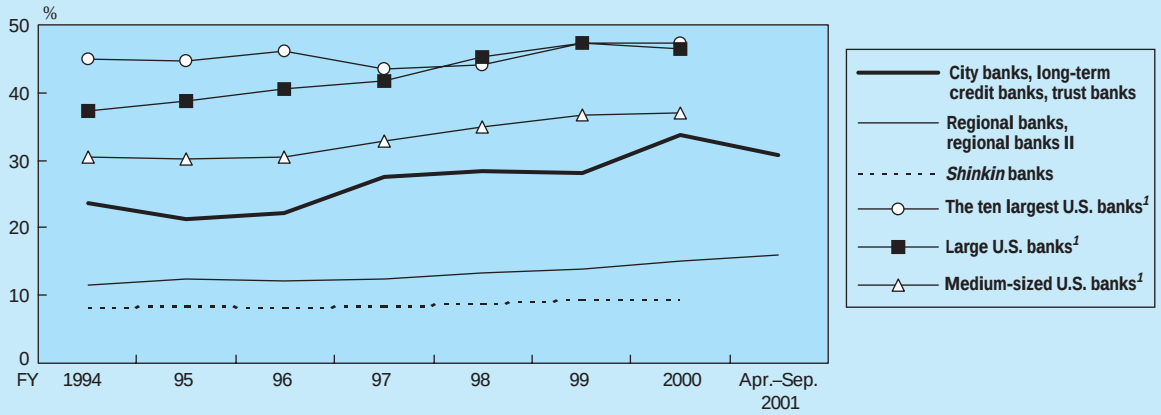
Chart 29
Changes in ROA at Regional Financial Institutions by Size of Their Capital, and Contribution of Major Components[1]



Notes: *1.* Regional banks and regional banks II are categorized into four groups (less than 6%, 6%–8%, 8%–10%, and more than 10%) according to risk-based capital adequacy ratios as of the end of fiscal 1997. *Shinkin* banks are categorized into seven groups as of the end of fiscal 1997 so that the number of *shinkin* banks in each category becomes more or less the same.
Bar graphs show contribution in percentage points to the changes in ROA.
2. Expense ratio = general and administrative expenses/gross profits.

Chart 30

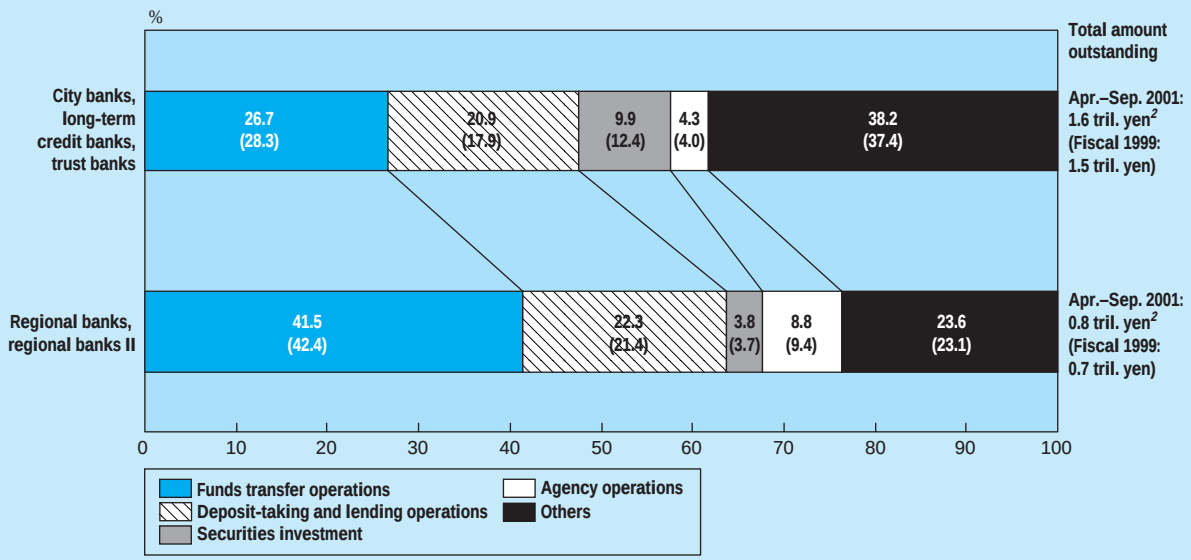
Weight of Noninterest Income to Gross Profits



Note: *1*. Data for U.S. banks are taken from *Profits and Balance Sheet Developments at U.S. Commercial Banks*, issued by the Board of Governors of the Federal Reserve System. U.S. banks are divided into three size categories, based on asset size. The ten largest banks refer to those ranked 1 to 10, large banks to 11 to 100, and medium-sized banks to 101 to 1,000.

Chart 31

Net Fees and Commissions[1]

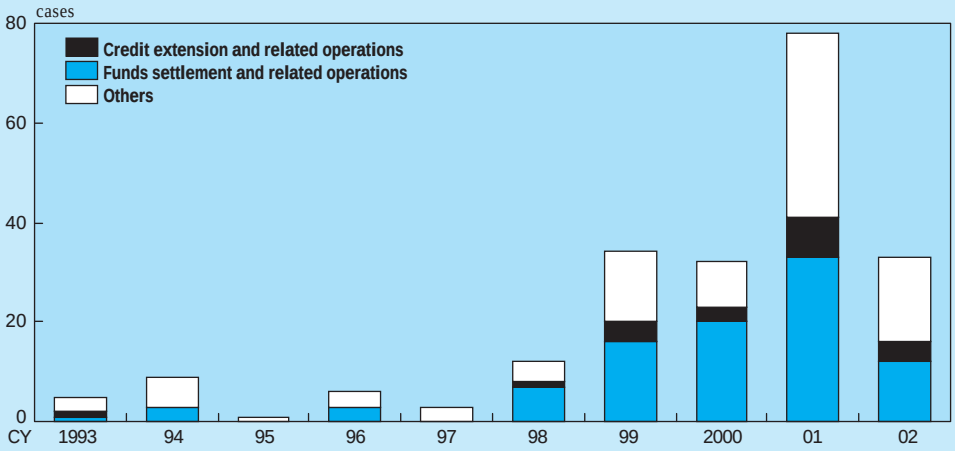


Notes: *1*. Figures are contributions to and the total of net fees and commissions as of the end of the first half of fiscal 2001 in September 2001 on a consolidated basis. Figures in parentheses are those for fiscal 1999.

2. The figure is converted to a fiscal-year basis.

Chart 32

Number of Patent Applications by City Banks, Long-Term Credit Banks, and Trust Banks[1]



Note: *1.* Total number of patent applications submitted by 15 banks. Data are based on the number of patent applications released after a year and a half from the time of application (a number of years are required to obtain a patent). Patent types are classification by the Bank Examination and Surveillance Department of the Bank according to the information available regarding patent applications. Data for 2002 are as of mid-February.

Box 1 Stricter Impairment Procedure for Securities

Impairment procedure (writing off) is applied to securities excluding those held for trading. When the market value falls substantially and its recovery is unlikely or uncertain, securities for which market value exists are recorded at the market value which is appropriate from the viewpoint of financial soundness. Thus, valuation losses are recorded as losses for the term.

Chart 1 for Box 1 Changes in Impairment Procedure[1]

<table>
<tr><th></th><th>Deposit-taking financial institutions</th><th>Nonfinancial companies</th></tr>
<tr><td>Until March 2000</td><td colspan="2">When the market value falls by 50 percent or more from the acquisition cost.
Stipulated by business accounting principles, commercial law, tax law, etc.</td></tr>
<tr><td rowspan="2">From April 2000</td><td>When the market value falls by 50 percent or more from the acquisition cost (unchanged from the previous accounting rule as an exceptional arrangement).
Stipulated by the Financial Services Agency's (FSA's) Financial Inspection Manual and the Japanese Institute of Certified Public Accountants' (JICPA's) Practical Guidelines Concerning Accounting for Financial Instruments.</td><td rowspan="2">When the market value falls by 30 percent or more from the acquisition cost.
Stipulated by the JICPA's Practical Guidelines Concerning Accounting for Financial Instruments.</td></tr>
<tr><td rowspan="2">From April 2001</td><td>When the market value falls by 30 percent or more from the acquisition cost.
Stipulated by the revisions in the FSA's Financial Inspection Manual and the JICPA's Practical Guidelines Concerning Accounting for Financial Instruments.</td></tr>
<tr><td colspan="2">Taking into consideration the assessment of credit risk of the issuer.
Stipulated by the JICPA's revised Practical Guidelines Concerning Accounting for Financial Instruments.</td></tr>
</table>

Note: *1.* A fall in the market value of a stock or share by 50 percent or more from its acquisition price is considered a "significant decline." In this case, financial institutions are required to write off the stock or share unless there is reasonable counter-evidence to support recoverability of market value. When the price fall is 30 percent or more but less than 50 percent, the stock or share should be written off if price recovery is unlikely.

Chart 2 for Box 1 Application of Impairment Procedures at Banks[1]

<table>
<tr><th colspan="2" rowspan="2"></th><th colspan="3">Percentage of decline in market value compared with acquisition cost</th></tr>
<tr><th>Less than 30 percent</th><th>Thirty percent or more but less than 50 percent</th><th>Fifty percent or more</th></tr>
<tr><td rowspan="5">Debtor category under the self-assessment framework</td><td rowspan="2">Borrowers "in danger of bankruptcy"</td><td colspan="2">Not applied.</td><td>Applied when price recovery is unlikely or uncertain.</td></tr>
<tr><td colspan="3">Applied regardless of the possibility of price recovery.</td></tr>
<tr><td rowspan="2">Borrowers that "need attention"</td><td rowspan="2">Not applied.</td><td>Not applied.</td><td>Applied when price recovery is unlikely or uncertain.</td></tr>
<tr><td colspan="2">Applied regardless of the possibility of price recovery.</td></tr>
<tr><td rowspan="2">"Normal" borrowers</td><td colspan="2" rowspan="2">Not applied.</td><td>Applied when price recovery is unlikely or uncertain.</td></tr>
<tr><td>Applied regardless of the possibility of price recovery.</td></tr>
</table>

Note: *1.* Shaded areas show impairment procedures in the first half of fiscal 2001.

Box 2 Recoverability of Deferred Tax Assets

1. Definition of Deferred Tax Assets

A reduction in tax is expected when the following are recorded as tax-deductible losses in the future: an increase in nondeductible loan-loss provisioning, impairment of securities, and losses from asset revaluation in line with the introduction of mark-to-market accounting. In tax-effect accounting, the virtually prepaid corporate tax is capitalized in the financial statements as deferred tax assets.

2. Adequacy as Deferred Tax Assets

A certain amount of taxable income is necessary in order to realize a tax deduction in the future (to recover deferred tax assets). In 1999, the JICPA released practical guidelines[1] on determining recoverability based on historical earnings performance (see reference below). Deferred tax assets currently registered in financial statements are audited by accountants in accordance with these guidelines.

In recent years, the amount of deferred tax assets has surged, causing an increase in Tier I. Given this, some question the registration of deferred tax assets from the perspective of ensuring financial soundness (refer to the text for the size of deferred tax assets registered in recent years). This is also attributable to the fact that a high degree of uncertainty is attached to the recoverability of deferred tax assets, as they cannot be exchanged for currency, unlike tangible assets, and their recoverability depends greatly on future taxable income.

3. Points for Consideration

It should be carefully examined whether the following factors will result in an increase in the amount of recognition that reaches the maximum amount allowed: (1) an expansion in the nondeductible nonperforming-loan (NPL) disposal and valuation losses on securities, which are subject to registration as deferred tax assets; and (2) the possibility of downward revision of future taxable income amid the promotion of NPL disposal.

[Reference] Guidelines for Determining the Recoverability of Deferred Tax Assets Based on Estimated Future Taxable Income

	Earnings performance of the firms	Guideline
A	**Firms recording taxable income each term (four consecutive years or more including the term concerned) that fully covers temporary differences—differences in revenues and expenses reported for financial and tax purposes.**	**Deferred tax assets can be registered in full** (no time limit is set on the period for estimating taxable income).
B	**Firms with stable business performance (recording profits for four consecutive years or more including the term concerned) but without sufficient taxable income to cover temporary differences.**	**Deferred tax assets can be recorded in amounts based on the registration schedule for temporary differences** (no time limit is set on the period for estimating taxable income).
C	**Firms with unstable performance (large fluctuations in annual current profits/losses in the past) and without sufficient taxable income to cover temporary losses.**	**Deferred tax assets can be recorded in amounts based on the registration schedule for temporary differences within the amount of estimated taxable income over a period in which rational estimation is possible** (generally five years).
D	**Firms recording large loss carryforwards at the end of the term.**	**Deferred tax assets, in principle, can be recorded** within **the amount of taxable income that can definitely be expected in** the next term, **in amounts based on the registration schedule for temporary differences.**
	Firms that have recorded taxable income each term, excluding loss carryforwards due to extraordinary factors (i.e., business restructuring and amendments to ordinances).	**See the guideline for case C.**
E	**Firms that have recorded loss carryforwards consecutively in the past (for three years or more) and are expected to record significant loss carryforwards in the term concerned.**	**Deferred tax assets, in principal,** cannot be recorded.

1. The JICPA released "Judgment on Recoverability of Deferred Tax Assets" on November 9, 1999.

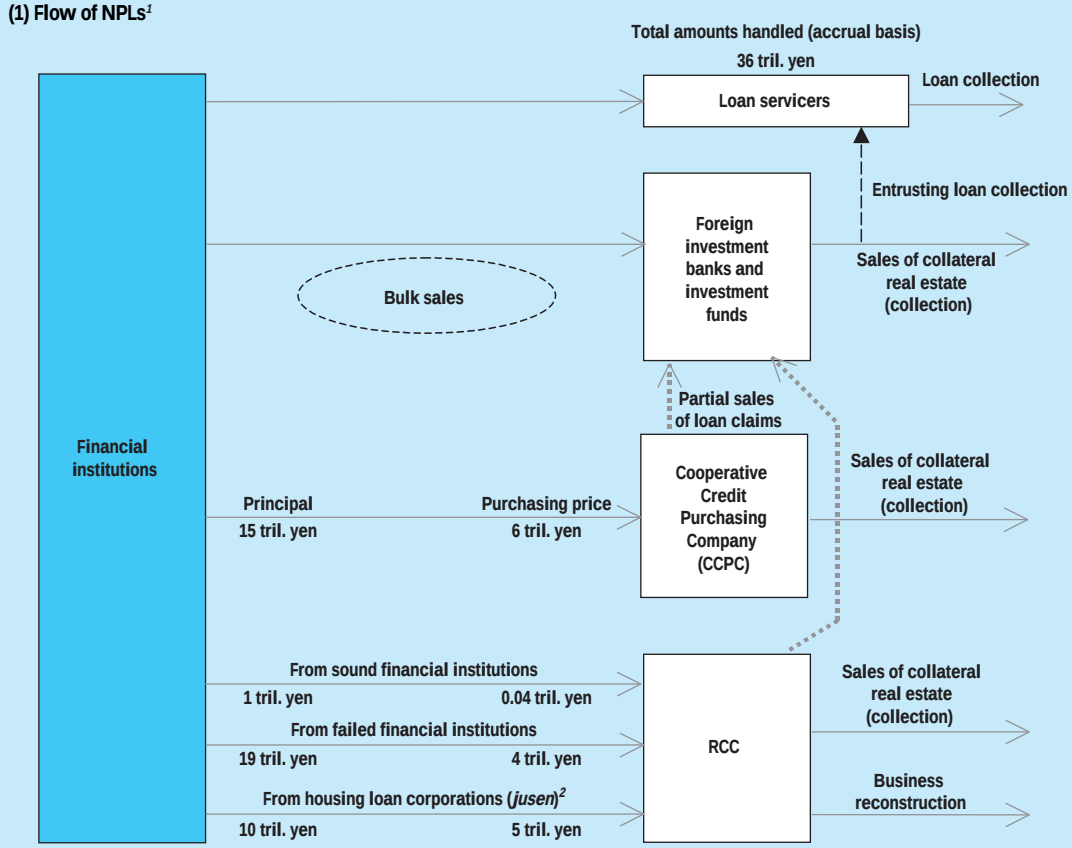
Box 3 Policy Measures and Actions Taken concerning the Disposal of NPLs in Fiscal 2001

		Major policy measures taken by the Government[1]	Related actions taken by the private sector[1]
2001	Apr.	***Emergency economic package (April 6)*** • Promote removal of NPLs from the balance sheets of major banks within the next two to three years. • Establish guidelines for the process of reorganization of companies in financial difficulty and debt forgiveness accompanying the reorganization process through private-sector consultations in which the authorities participate (the guideline on multi-creditor out-of-court workouts in the private sector). • Enhance debtor-in-possession (DIP) finance. Revision of the *Financial Inspection Manual* (June 28). • Clarify implementation standards for the so-called "5 percent rule" limiting the shareholding of banks with regard to shares acquired through debt-equity swaps (DES). Revision of the *Financial Inspection Manual* (June 19). • Extension of the period in which NPLs are disposed of through selling the assets to the Resolution and Collection Corporation (RCC) to three years. Amendments to the Financial Reconstruction Law (FRL)[2] (June 27). • Standardize contracts and transaction procedures for loan trading. • Enlarge the scope of business of debt collection companies (servicers). Amendments to the Servicer Law[3] (September 1).	—
	June	***Basic Policies[4] (June 21)*** • Promote definite and final disposal of NPLs and disclosure of the financial condition of companies burdened with excessive debts. • Strictly monitor the progress in the disposal of NPLs by major banks. • Introduce indicators that help gauge the size of NPLs relative to total assets and efficiency in credit extension according to costs incurred. • Expeditiously establish the guideline on multi-creditor out-of-court workouts in the private sector. • Permit the RCC to enter the trust business. Amendments to the FRL (January 11).	***Set up a study group on multi-creditor out-of-court workouts in the private sector (June 7)*** Mapped out the guideline that includes the following points (September 19). (a) Firms must meet certain conditions in applying for multi-creditor out-of-court workouts in the private sector. (b) Firms' top management must take responsibility for its bad management. (c) Within three years, firms must solve the problem of their excessive debts and climb back into the black, achieving current profitability.
	July	—	***Japan Syndication and Loan-Trading Association (JSLA) drew up and announced a standardized contract to be used for loan trading (July 30 and December 17)***
	Sep.	***Reform Schedule (September 21)*** Conduct comprehensive inspections of major banks on an annual basis (previously every two years) and follow-up inspections on a semiannual basis.	—
	Oct.	***Front-Loaded Reform Program (October 26)*** • Conduct special inspections of the categorization of borrowers under the self-assessment framework, focusing on debtors whose business condition is likely to have deteriorated significantly. • Request major banks to revise internal credit ratings in a timely manner so that the ratings more precisely reflect developments in the market. • Request major banks to disclose their financial condition on a quarterly basis. • Allow the RCC to purchase NPLs at market value and facilitate diversification of ways to dispose of NPLs including active involvement in the restructuring of companies under reconstruction and sales to the corporate reconstruction funds that will be established. Amendments to the FRL (January 11).	—
2002	Jan.	—	***Japanese Bankers Association announced items to be disclosed in the quarterly reports of banks (January 22)*** (a) Disclosure to start from the April–June quarter of 2002. (b) Disclosure is required for assets classified under the FRL, risk-based capital adequacy ratios, and market value of assets.
	Feb.	***Emergency Countermeasures against Deflation (February 27)*** • Rigorously implement special inspections. • Further accelerate NPL disposals. • Active purchase of NPLs by the RCC. • Promote the establishment of a corporate reconstruction fund.	***Establishment of a corporate reconstruction fund*** The fund was set up by major banks, the Japan Policy Investment Bank (DBJ), and public investors.

Notes: *1.* Figures in parentheses are dates of announcement or dates on which amended laws came into effect.
2. "Financial Reconstruction Law" is short for "Law concerning Emergency Measures for the Reconstruction of the Functions of the Financial System."
3. "Servicer Law" is short for "The Servicer Law Allowing Asset-Collection Companies to Manage and Collect Financial Assets."
4. "Basic Policies" is short for "Basic Policies for Macroeconomic Management and Structural Reform of the Japanese Economy."

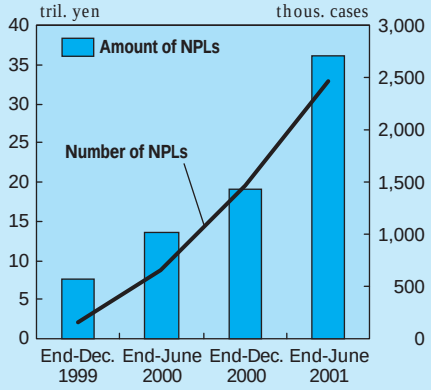
Box 4 Secondary Market Structure for NPLs

(1) Flow of NPLs[1]

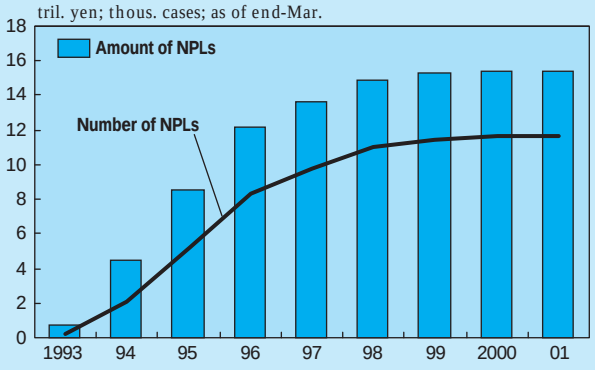


(2) NPLs Handled on an Accrual Basis

(a) Debt collection companies (loan servicers)



(b) CCPC



Notes: *1*. The time of loans differs according to flows.
2. Amounts of NPLs handed over by the Housing Loan Administration Corporation.

REFERENCE: DOCUMENTS RELEASED BY THE BANK EXAMINATION AND SURVEILLANCE DEPARTMENT OF THE BANK OF JAPAN

Title	Date of release on the Bank's Internet Web site	Available in printed form
On-Site Examination Policy in Fiscal 2001[11]	April 3, 2001	May 2001 issue of the *Bank of Japan Quarterly Bulletin*
Kin'yuukikan Gyoumu no Autosoushingu ni Kanshite no Risuku Kanri (Risk Management and Outsourcing of Banking Operations)[12]	April 17, 2001	May 2001 issue of the *Nippon Ginko Chousa Geppo* (Bank of Japan Monthly Bulletin)
Kin'yuukikan ni Okeru Tougouteki na Risuku Kanri (Integrated Risk Management at Financial Institutions)[12]	June 8, 2001	June 2001 issue of the *Nippon Ginko Chousa Geppo* (Bank of Japan Monthly Bulletin)
Wagakuni Kin'yuukikan ni Okeru Shisutemu Risuku no Kanrijoukyou to Ryuuiten—Jouhou Sekyuritimen eno Taiou wo Chuushin toshite (Management of Systemic Risk at Financial Institutions and Points Requiring Attention—With a Focus on Information Security)[12]	September 12, 2001	October 2001 issue of the *Nippon Ginko Chousa Geppo* (Bank of Japan Monthly Bulletin)
Shin'youkakuzuke wo Katsuyou shita Shin'yourisuku Kanritaisei no Seibi (Internal Credit Rating and Credit Risk Management)[12]	October 3, 2001	October 2001 issue of the *Nippon Ginko Chousa Geppo* (Bank of Japan Monthly Bulletin)
Developments in Profits and Balance Sheets of Japanese Banks in Fiscal 2000 and Banks' Management Tasks[13]	November 30, 2001	November 2001 issue of the *Bank of Japan Quarterly Bulletin*
Kin'yuukikan no Kyoten Hisai wo Soutei shita Gyoumu Keizoku Keikaku no Arikata (Contingency Plans for Banking Operations at the Time of a Disaster)[12]	March 12, 2002	April 2002 issue of the *Nippon Ginko Chousa Geppo* (Bank of Japan Monthly Bulletin)
On-Site Examination Policy in Fiscal 2002[11]	April 8, 2002	May 2002 issue of the *Bank of Japan Quarterly Bulletin*

11. Available in English on the Bank's Internet Web site at http://www.boj.or.jp/en/index.htm.
12. Available only in Japanese on the Bank's Internet Web site at http://www.boj.or.jp.
13. Available in English on the Bank's Internet Web site at http://www.boj.or.jp/en/index.htm. The original Japanese text was released on the Bank's Internet Web site on August 10, 2001.

Symbols and Abbreviations Used in This Article

%	Percent	thous.	Thousands
% point	Percentage point	bil.	Billions
FY	Fiscal year	tril.	Trillions
CY	Calendar year		