Review of Japanese Banks' Activities:

Profits and Balance Sheets in Fiscal 2002

August 2003
Bank of Japan

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Executive Summary

1. Major Developments in Profits and Balance Sheets of Japanese Banks in Fiscal 2002

Japanese banks[1] recorded a large net loss of 4.9 trillion yen in fiscal 2002 (April 2002–March 2003), mainly due to large credit costs from disposal of nonperforming loans (NPLs) and a stock-related loss.

(1) Operating profits from core business marked 5.2 trillion yen, a slight decline from the previous fiscal year of 5.6 trillion yen, which was due to a decrease in lending volume and a narrowing of the interest margin on securities.

(2) Credit costs still exceeded operating profits from core business, although the amount declined to 6.6 trillion yen from 9.9 trillion yen in the previous fiscal year.

(3) Net realized stock-related losses recorded 3.9 trillion yen due to a fall in stock prices.

(4) The risk-based capital adequacy ratio fell despite a reduction in assets and capital-raising.

tril. yen, except where noted

FY	2000	01	02
Operating profits from core business[2]	4.8	5.6	5.2
Net realized bond-related gains/losses[3]	0.4	0.4	0.8
Operating profits	4.8	4.7	4.7
Net realized stock-related gains/losses[4]	1.7	-2.4	-3.9
Credit costs[5]	-6.9	-9.9	-6.6
[Credit cost ratio,[6] basis points[7]]	[140]	[204]	[145]
Recurring profits/losses	0.6	-6.6	-4.8
Net income/loss	-0.4	-5.0	-4.9
NPLs disclosed under the Financial Reconstruction Law (FRL)	33.6	43.2	35.3
Consolidated risk-based capital adequacy ratio (%)	10.6	10.2	9.5
Consolidated risk assets	521	481	435

Notes:

1. The number of “all banks” was 156 as of end-March 2003: 14 major banks including Shinsei Bank and Aozora Bank, 64 member banks of the Regional Banks Association of Japan (hereafter regional banks), and 53 member banks of the Second Association of Regional Banks (hereafter regional banks II), 13 trust banks which started business after 1993, 9 foreign trust banks, and 3 other banks. All figures without notes are on a nonconsolidated basis.

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

3. Net realized bond-related gains/losses = gains on sales of bonds + gains on redemption of bonds – losses on sales of bonds – losses on redemption of bonds – losses on devaluation of bonds.

4. Net realized stock-related gains/losses = gains on sales of stocks and other securities – losses on sales of stocks and other securities – losses on devaluation of stocks and other securities.

5. Credit costs = losses from NPL disposal, which includes net transfers to APLL, net transfers to special loan-loss provisions (SLP), loan write-offs, loan write-offs in trust accounts, and NPL disposal in the extraordinary profit/loss account.

6. Credit cost ratio = credit costs/average amount outstanding of loans.

7. One hundred basis points = 1 percent.

2. Japanese Banks’ Efforts to Address Their Management Tasks in Fiscal 2002

Results in fiscal 2002 were unfavorable, but this partly reflected banks’ efforts to address their management tasks such as NPL disposal and reduction of market risk involved in stockholdings. Progress in these areas is described below.

(1) Progress in NPL disposal

In fiscal 2002, major banks and some regional banks and regional banks II started to apply the discounted cash flow (DCF) method to loans to large borrowers classified as “special attention” in order to appropriately reflect the economic value of loans on allowance reserves. The outstanding balance of NPLs disclosed under the Financial Reconstruction Law (FRL) declined by 7.9 trillion yen to 35.3 trillion yen, because banks, especially major banks, accelerated the removal of loans to borrowers classified as “bankrupt,” “effectively bankrupt,” or “in danger of bankruptcy.”

While the aggressive removal of NPLs may increase current credit costs, it also has the positive future effect of diminishing the risk of additional losses such as those caused by price declines in collateralized real estate. Therefore, major banks' aggressive removal of NPLs from their balance sheets in fiscal 2002 is expected to lead to a decline in their credit costs from fiscal 2003.

(2) Securing of sufficient returns on loans to cover credit risk

Banks sought to improve the interest margin on lending in fiscal 2002. Nonetheless, after deducting the realized credit cost ratio and general and administrative expense ratio, the margin continued to be negative, and is much lower than those for U.S. and European banks. Further efforts on credit risk management are needed to improve banks' frameworks for obtaining sufficient returns on loans to cover credit risk. For example, more effective use of financial engineering techniques and functions of credit-related markets would contribute to the appropriate evaluation of credit risk and active management of their loan portfolio.

(3) Reduction of stockholdings and the effective use of capital

Major banks reduced stockholdings by 9.7 trillion yen, to 14.8 trillion yen at end-March 2003, approximately 40 percent lower than a year earlier. This level was roughly equivalent to Tier I capital. Banks allocate their capital as a buffer against risks such as credit risk, stock price risk, and interest rate risk, based on their integrated risk management framework. Given that stocks are highly risky assets with large price volatility, it would be worthwhile for banks to make further efforts to reduce stockholdings from the viewpoint of using their limited capital more effectively for new profit-earning opportunities.

1. Preface

The business environment for Japanese banks remained severe during fiscal 2002. In the first half of fiscal 2002, industrial production turned to an increase, driven by a sharp recovery in exports. However, domestic demand, including business fixed investment and private consumption, remained weak reflecting a decline in employment income and downward pressure from restructuring in the corporate sector with excess capacity and over-employment. In the second half of fiscal 2002, economic activity remained virtually flat due to greater uncertainty regarding the global economy such as that related to the Iraq war and the fragile developments of the U.S. economy. Meanwhile, land prices continued to fall during the fiscal year (Chart 1).

As for the financial environment, stock prices fell due to uncertainty over the outlook for both domestic and overseas economies. At end-March 2003, the Nikkei 225 Stock Average fell to 7,973 yen, down nearly 30 percent from the level at end-March 2002. As for the long-term interest rate, yields on 10-year Japanese government bonds (JGBs) declined to 0.7 percent at end-March 2003 reflecting cautious views on the potential growth of Japan's economy.

Regarding the regulatory environment, the Bank of Japan and the government announced policies and measures to resolve the NPL problem and secure sound financial intermediation. The Bank published "Japan's Nonperforming Loan Problem" in October 2002, which advocated a comprehensive approach to the NPL problem focusing on the "appropriate evaluation of the economic value of NPLs," "their quick disposal," and "enhancement of earning power on the part of both firms and banks." In November 2002, the Bank launched a scheme to purchase stocks held by banks to ensure financial system stability by reducing market risk from banks' portfolios.

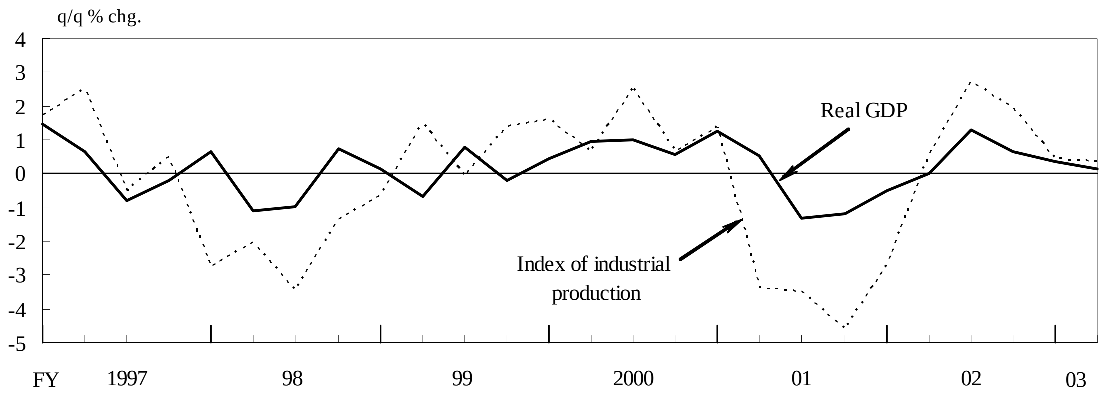
In October 2002, the government announced its "Program for Financial Revival," which included more appropriate assessment of bank assets, enhancement of banks' capital adequacy such as stricter evaluation of the amount of deferred tax assets, reinforcement of bank corporate governance, and the promotion of firms' revitalization.

In this environment, Japanese banks recorded a large aggregate net loss (nearly 5 trillion yen) for the second consecutive year, which reduced their capital at the end of fiscal 2002. The large net loss of Japanese banks, however, partly reflected their accelerated disposal of NPLs and reduction of market risk related to stockholdings.

This paper first examines developments in profits and capital of Japanese banks in fiscal 2002. Then the paper discusses their efforts to address primary management tasks: progress in NPL disposal, securing of sufficient returns on loans to cover credit risk, the reduction of stockholdings, and the effective use of capital.

Chart 1: Major Financial and Economic Indicators

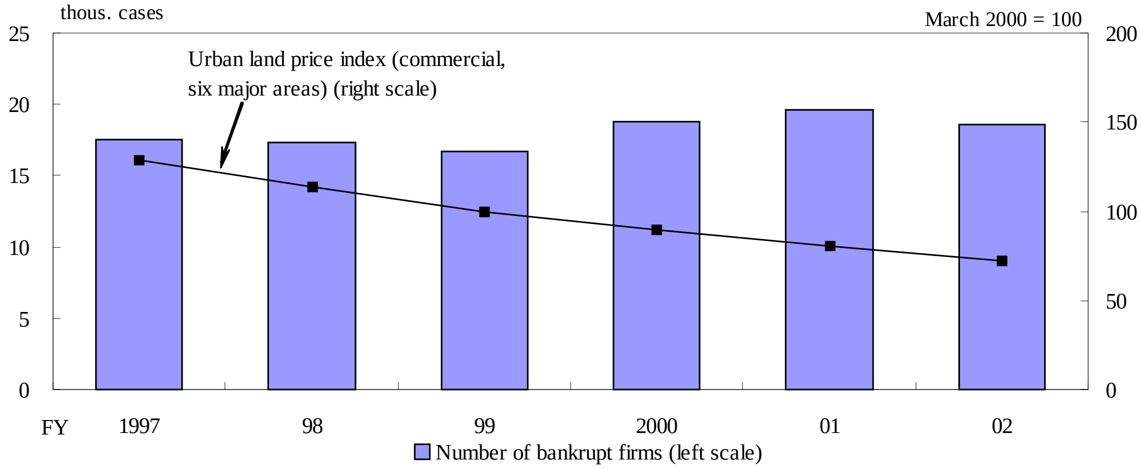
(1) Real GDP and Index of Industrial Production



Note: q/q % chg. stands for quarterly changes with seasonal adjustment.

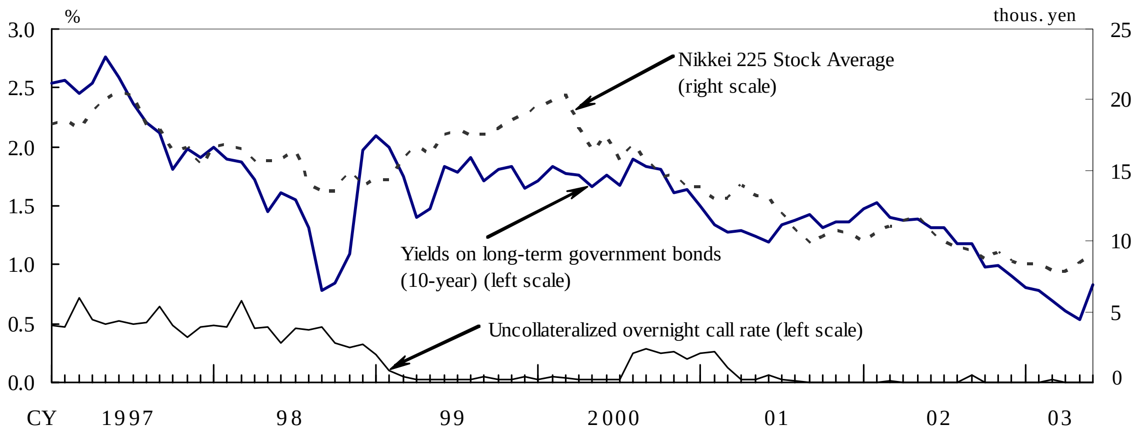
Sources: Cabinet Office; Ministry of Economy, Trade and Industry.

(2) Bankruptcies and Land Prices



Sources: Tokyo Shoko Research; Japan Real Estate Institute.

(3) Stock Prices, Short-Term Interest Rates, and Long-Term Interest Rates



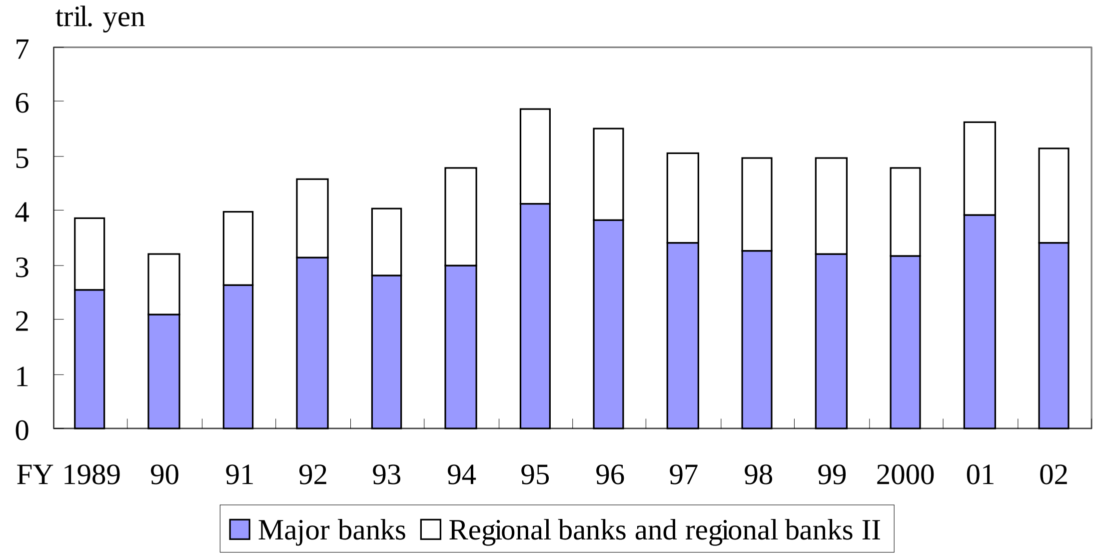
2. Profits

2-1. Operating Profits from Core Business

Operating profits from core business[1] decreased by 0.4 trillion yen from the previous fiscal year, reflecting a decline in lending volume and a narrowing of the interest margin on securities. While major banks marked a decrease of 0.5 trillion yen, regional banks and regional banks II marked an increase of 0.1 trillion yen (Chart 2).

Net fees and commissions increased by 0.1 trillion yen and general and administrative expenses declined by 0.3 trillion yen, while net interest income, the largest component of operating profits, decreased by 0.8 trillion yen (Chart 3).

Chart 2: Operating Profits from Core Business



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

Chart 3: Breakdown of Operating Profits from Core Business

tril. yen; figures in parentheses indicate changes from the previous year

	FY 2002[1]		Domestic operations	International[2] operations	Of which: major banks		Of which: regional banks and regional banks II	
Net interest income	9.7	(-0.8)	(-0.5)	(-0.3)	5.2	(-0.7)	4.5	(-0.1)
Net fees and commissions	1.7	(+0.1)	(+0.1)	(-0.0)	1.1	(-0.0)	0.4	(+0.0)
Profits on specified transactions	0.5	(+0.1)	(+0.1)	(+0.1)	0.5	(+0.1)	0.0	(+0.0)
Other operating profits	0.2	(-0.1)	(-0.0)	(-0.1)	0.2	(-0.1)	0.0	(-0.0)
General and administrative expenses	-6.8	(+0.3)	(+0.2)	(+0.1)	-3.5	(+0.2)	-3.2	(+0.2)
Operating profits from core business	5.2	(-0.4)	(-0.2)	(-0.2)	3.4	(-0.5)	1.8	(+0.1)

Notes:
1. The totals for fiscal 2002 are those for all banks, and thus do not correspond exactly to the total for major banks, regional banks and regional banks II.
2. Profits from international operations are defined as overall profits minus profits on yen transactions in domestic accounts.

(1) Net interest income

Net interest income from domestic operations decreased by 0.5 trillion yen from the previous fiscal year due to a decline in the volume of interest-earning assets and the narrowing interest margin on securities (Chart 4). Operating profits from core business in international operations decreased by 0.3 trillion yen due to a large decline in assets denominated in foreign currencies, particularly at major banks, as well as a decrease in dividends received from overseas subsidiaries.

The decline in loans of major banks was attributable to weak demand in the corporate sector, the acceleration of NPL removal from banks' balance sheets, and the liquidation of loans to reduce assets. The amount outstanding of securities also fell slightly, mainly because banks reduced stockholdings to mitigate stock price risk.

The decline in loans outstanding of regional banks and regional banks II was limited. This was because they faced less constraint on capital compared to major banks, and also aggressive participation in loan syndications and purchasing of loans from major banks contributed to offset the decline in lending volumes (Chart 5). Meanwhile, the outstanding balance of securities at these banks remained almost unchanged.

Chart 4: Breakdown of Interest-Earning Assets for Domestic Operations

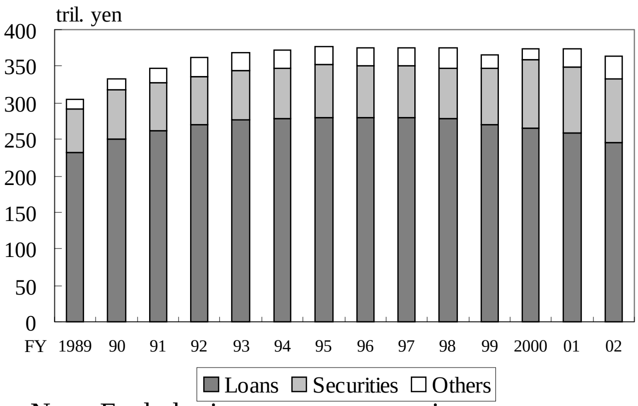
Figures in parentheses indicate changes from the previous year.

	Average balance (tril. yen)	Interest margin (%)	Breakdown of net interest income (tril. yen)
Interest-earning assets for domestic operations	609 (-11)	1.379 (-0.055)	8.4 (-0.5)
Loans	420 (-15)	1.764 (+0.009)	7.4 (-0.3)
Securities	141 (-4)	0.709 (-0.166)	1.0 (-0.3)
Japanese government bonds	75 (+6)	0.428 (-0.060)	0.3 (-0.0)
Stocks	32 (-8)	0.811 (-0.287)	0.3 (-0.2)
Others	48 (+8)	-- (--)	-- (--)

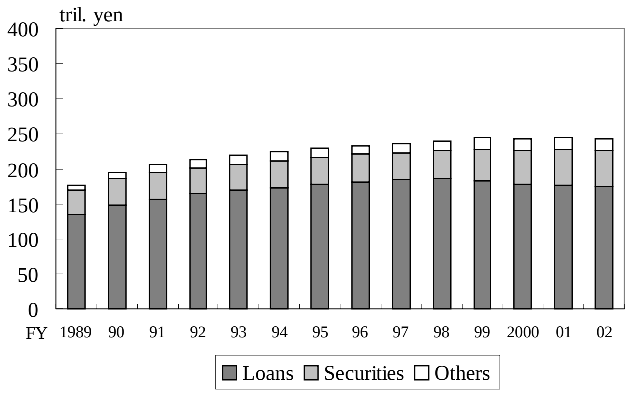
Note: Domestic banking accounts. Excludes interest expense on interest rate swaps.

Chart 5: Annual Average Balance of Interest-Earning Assets for Domestic Operations

Major banks



Regional banks and regional banks II



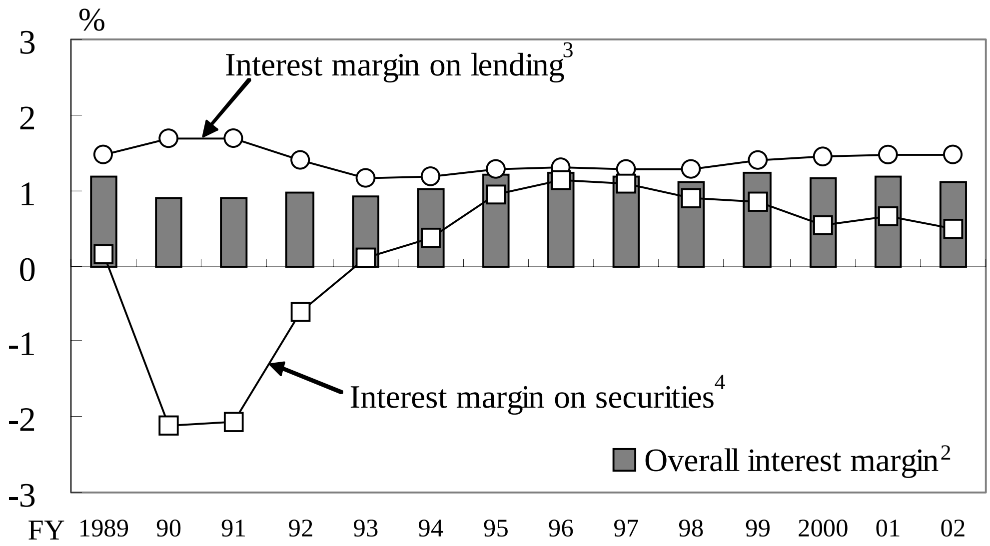
Note: Excludes interest expense on interest rate swaps.

The overall interest margin on domestic operations in banking accounts remained almost flat (Chart 6). Although banks, particularly major banks, attempted to secure appropriate interest rates according to borrowers' credit risk, interest margins on loans did not improve much. Meanwhile, the interest margin on securities fell for all banks because of a decline in bond yields and stock dividends.[2]

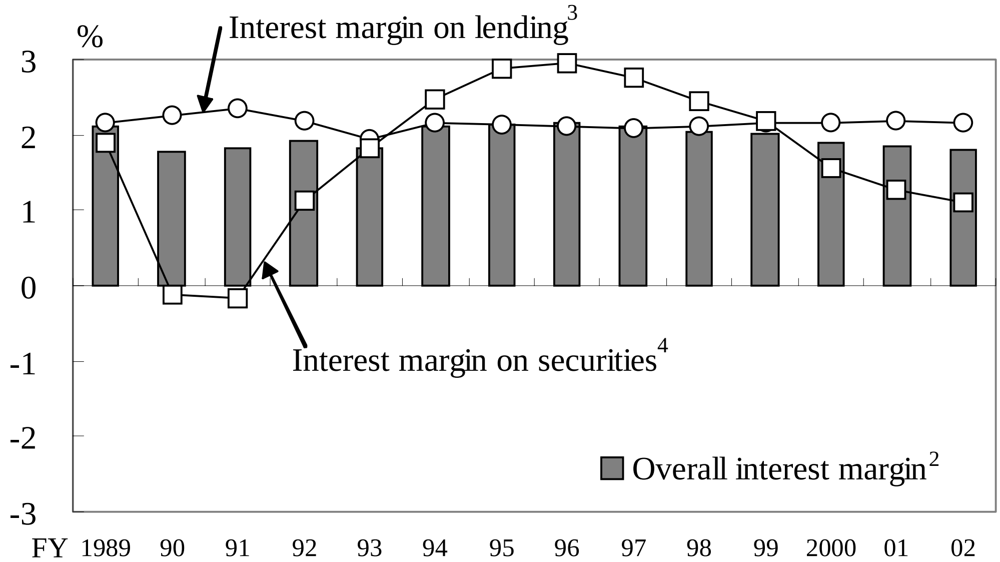
[2] The decline in dividends was mainly in reaction to a change in dividend accounting standards from a cash basis to an accrual basis in fiscal 2001. Most banks posted accrual-basis uncollected dividends in addition to cash-basis received dividends, which temporarily increased profits in fiscal 2001.

Chart 6: Interest Margins [1]

Major banks



Regional banks and regional banks II



Notes:
1. Domestic banking accounts. Excludes interest expense on interest swaps.
2. Overall interest margin = interest rate on interest-earning assets - interest rate on interest-bearing liabilities.
3. Interest margin on lending = interest rate on lending - interest rate on interest-bearing liabilities.
4. Interest margin on securities = interest rate on securities investment - interest rate on interest-bearing liabilities.

(2) Net fees and commissions

Net fees and commissions[3] increased slightly from the previous fiscal year (Chart 7).

Income from trust-related fees decreased due to a contraction in trust accounts stemming from the stock price decline (Chart 8). Income from lending-related fees and securities-related fees improved due to increases in syndicated loans and mutual fund sales (see the Box for details).

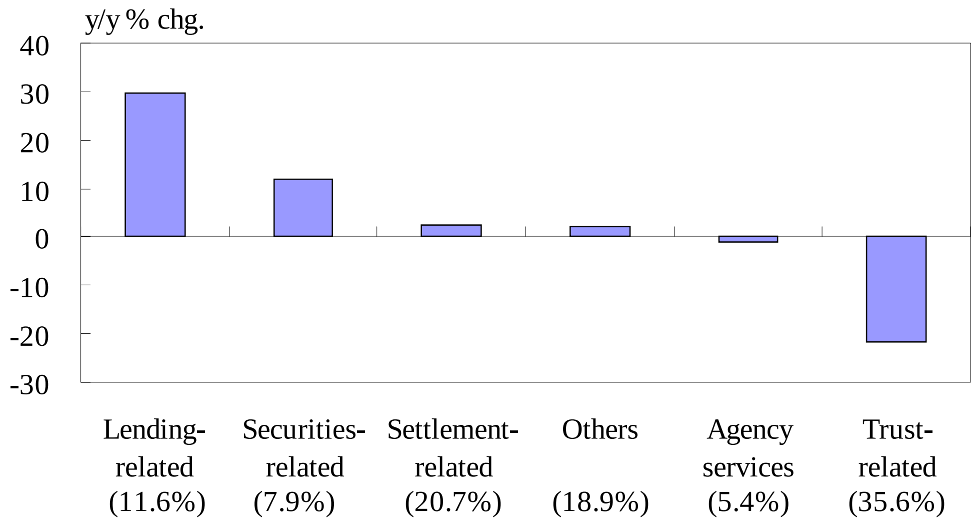
Chart 7: Net Fees and Commissions

tril. yen; figures in parentheses indicate changes from the previous year

		Total	Of which: domestic operations	Major banks	Regional banks and regional banks II
Net fees and commissions		1.7 (+0.1)	1.5 (+0.1)	0.9 (+0.0)	0.4 (+0.0)
	Income	2.4 (+0.1)	2.2 (+0.1)	1.3 (+0.0)	0.7 (+0.0)
	Expenses	0.8 (+0.0)	0.7 (+0.0)	0.4 (+0.0)	0.3 (+0.0)

Note: Totals and of which domestic operations are for all banks, and thus do not correspond exactly to the totals for major banks, and regional banks and regional banks II.

Chart 8: Breakdown of Income from Fees and Commissions (Major Banks)



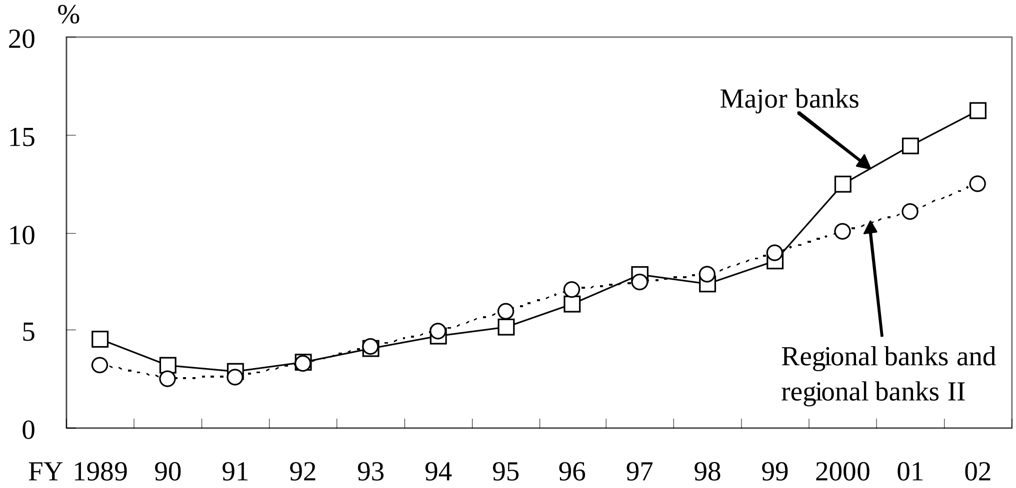
Note: Figures in parentheses are the ratios to income from fees and commissions.

[3] Net interest income from loan trusts and that from jointly-managed money trusts with agreements to compensate for losses on principal are included in net interest income from domestic operations instead of net fees and commissions.

Box: Trends in Fees and Commissions from Domestic Operations

Major banks as well as regional banks and regional banks II have sought aggressively to increase fees and commissions to improve their profitability. Gross fees and commissions as a percentage of operating income have been increasing at all banks.[4]

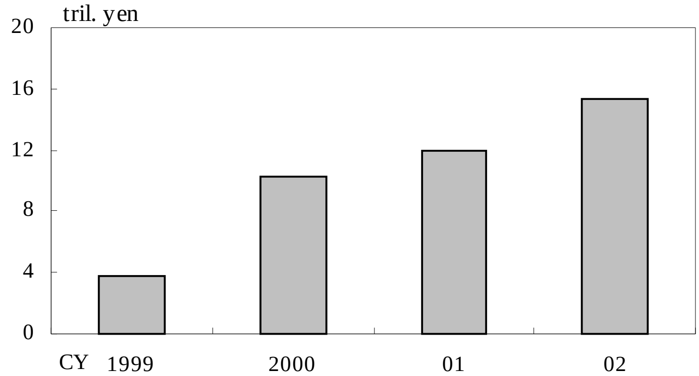
Chart 1 for Box: Fees and Commissions as a Percentage of Operating Income from Domestic Operations



Major contributions to the increase in fees and commissions came from mutual fund and insurance sales, loan liquidation, loan syndication, and commitment lines. At large U.S. and European banks, fees and commissions account for around 30 percent of total income. By developing the markets for the transactions mentioned above, Japanese banks have the potential to further improve income from fees and commissions.

Chart 2 for Box: Fee- and Commission-Related Financial Services

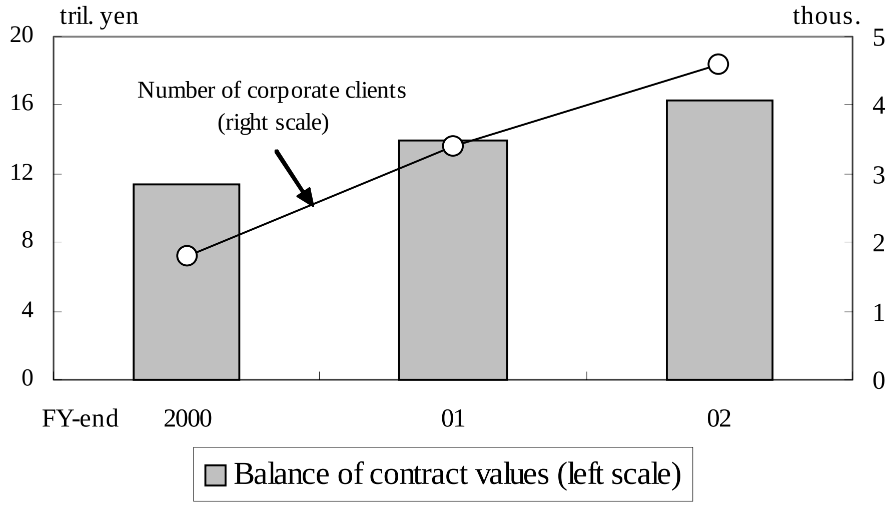
(1) New Syndicated Loans (Domestic)



Source: Bank of Japan, based on data in *International Financing Review*.

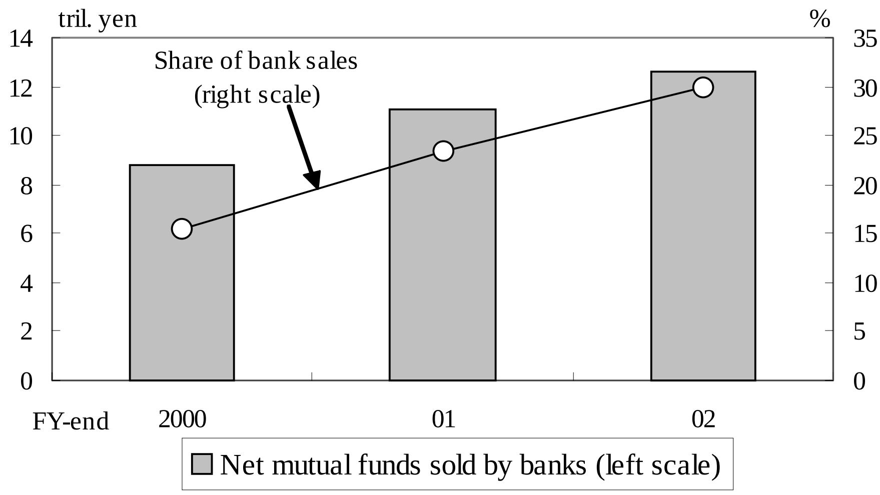
[4] Operating income from domestic operations = interest income + fees and commissions + profits on specified transactions + other operating income. Commissions on trust fees are excluded.

(2) Amount of Commitment Lines Extended, and Corporate Clients



Source: Bank of Japan, "Commitment Lines Extended by Japanese Banks."

(3) Net Mutual Fund Assets Sold by Banks



Source: Bank of Japan, based on data in "Total Net Assets of Investment Trusts of Contractual Type by Distribution Channel (Market Value)," Investment Trusts Association, Japan.

(3) General and administrative expenses

General and administrative expenses continued to decline reflecting banks' efforts to improve the efficiency of their operations (charts 9 and 10).

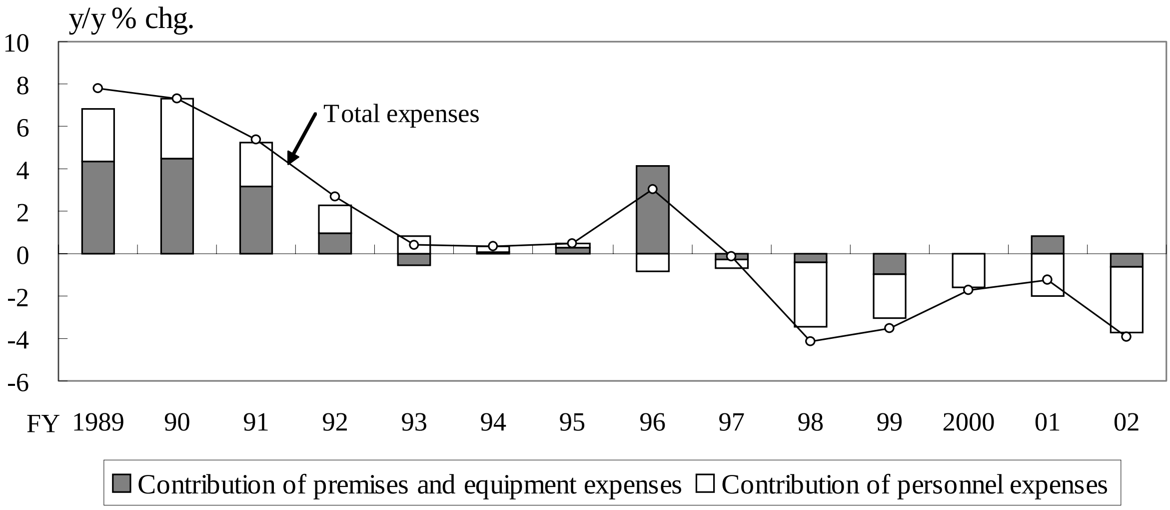
Chart 9: General and Administrative Expenses

tril. yen; figures in parentheses indicate percent changes from the previous year

	Total of general and administrative expenses	Personnel expenses	Premises and equipment expenses
All banks	6.8 (-3.9)	3.0 (-6.8)	3.5 (-1.3)
Major banks	3.5 (-4.3)	1.3 (-8.5)	2.0 (-1.2)
Regional banks and regional banks II	3.2 (-4.8)	1.6 (-6.1)	1.4 (-3.3)

Note: Total of personnel expenses and premises and equipment expenses does not match the total of general and administrative expenses, as taxes are excluded from the former.

Chart 10: Breakdown of Changes in General and Administrative Expenses



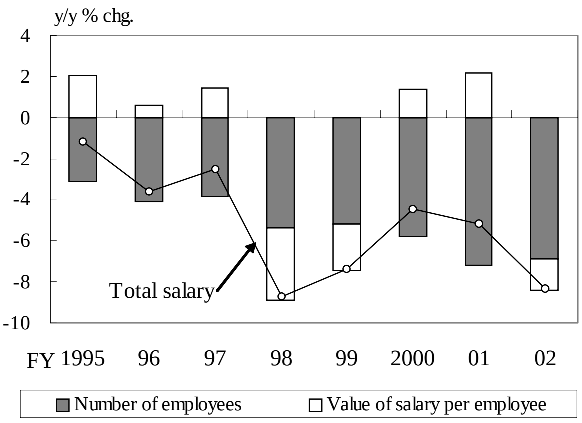
Personnel expenses for all banks declined 6.8 percent in fiscal 2002, the largest decrease during the 1990s and thereafter. This mainly resulted from a reduction in the payroll through the restraint of recruitment of new graduates and the promotion of early retirement as well as a decrease in pay per employee (Chart 11).

Premises and equipment expenses turned to a decrease partly reflecting the emergence of restructuring effects from bank mergers, although it had been difficult to reduce expenses because of increases in outsourcing fees and computer system-related costs immediately after the mergers.

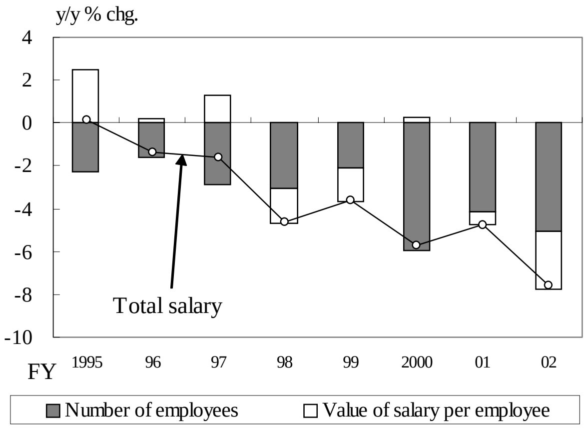
The ratios of general and administrative expenses to gross profits on operations[5] declined for all banks (Chart 12).

Chart 11: Breakdown of Changes in Total Salary

Major banks

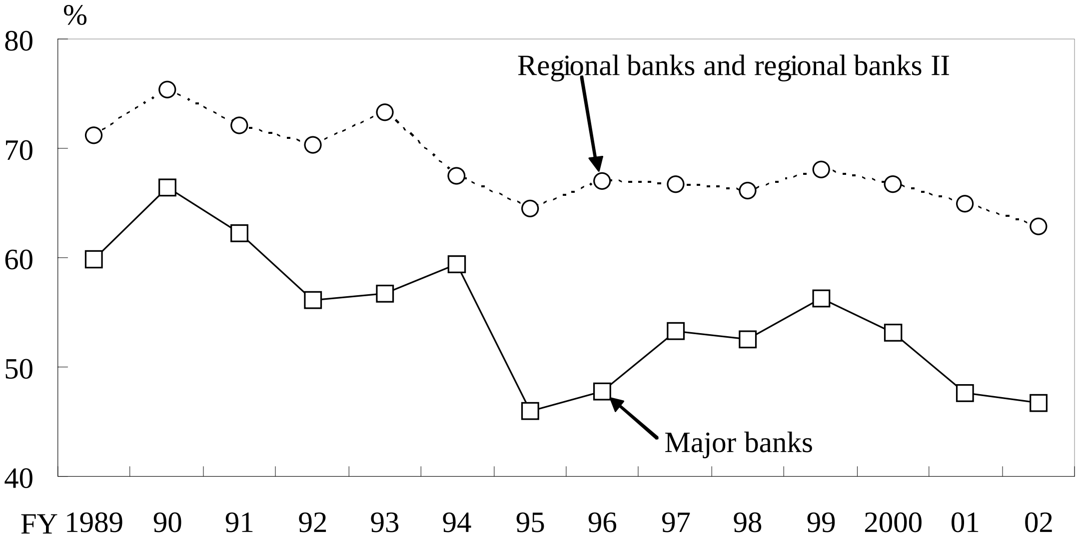


Regional banks and regional banks II



Note: Total salary accounts for approximately 80 percent of personnel expenses.

Chart 12: Expense Ratio



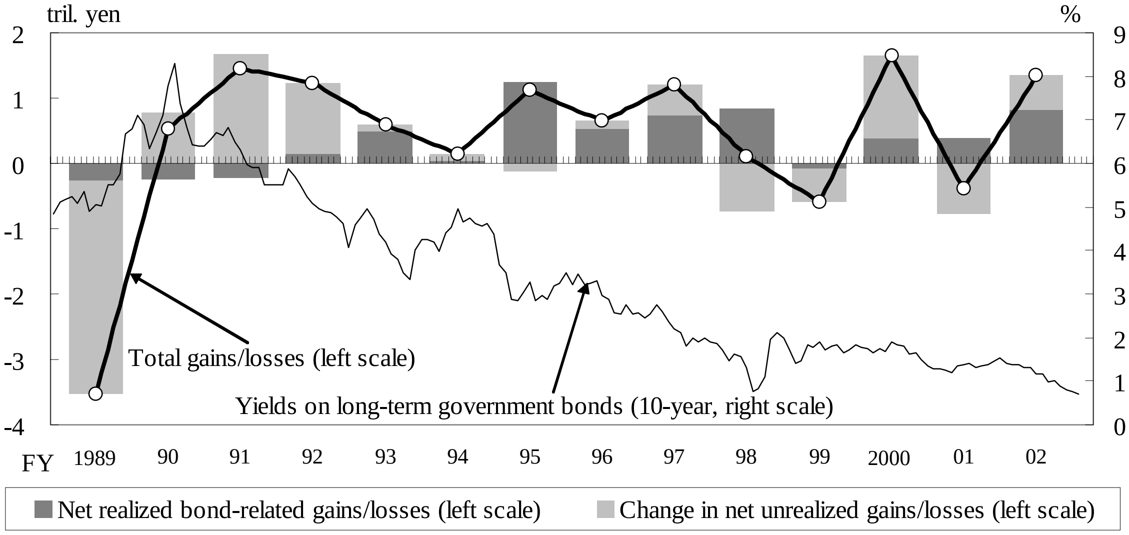
Note: Expense ratio = general and administrative expenses/gross operating profits.

[5] Gross profits on operations = operating profits – net transfers to APLL (-) – general and administrative expenses (-) = net interest income + net fees and commissions + profits on specified transactions + other operating profits.

2-2. Net Bond-Related Gains/Losses

Net realized bond-related gains[6] were boosted to 0.8 trillion yen in fiscal 2002 from 0.4 trillion yen in fiscal 2001 as profits on bond sales increased with lower domestic and overseas interest rates (Chart 13). Total gains/losses, the sum of net realized bond-related gains/losses and changes in net unrealized bond-related gains/losses, also increased by 1.3 trillion yen.

Chart 13: Bond-Related Gains/Losses



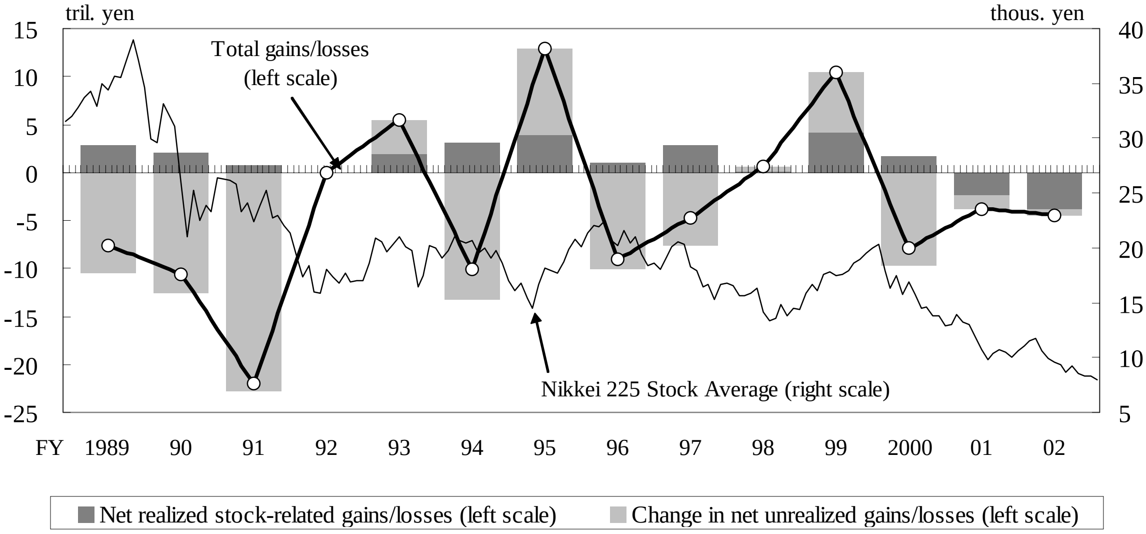
2-3. Net Stock-Related Gains/Losses

Net realized stock-related losses[7] totaled 3.9 trillion yen (a loss for the second consecutive year) due to an increase in losses on stock sales as well as devaluation of stocks under impairment accounting rules (Chart 14).

Total gains/losses, sum of net realized stock-related gains/losses and changes in net unrealized stock-related gains/losses were almost the same as in the previous year.

[6] Net realized bond-related gains/losses = gains on sales of bonds + gains on redemption of bonds – losses on sales of bonds – losses on redemption of bonds – losses on devaluation of bonds.
[7] Net realized stock-related gains/losses = gains on sales of stocks and other securities – losses on sales of stocks and other securities – losses on devaluation of stocks and other securities.

Chart 14: Net Stock-Related Gains/Losses



2-4. Credit Costs (see Chapter 4 for details)

Credit costs at all banks declined to 6.6 trillion yen from 9.9 trillion yen in the previous fiscal year, but continued to exceed operating profits from core business (5.2 trillion yen).

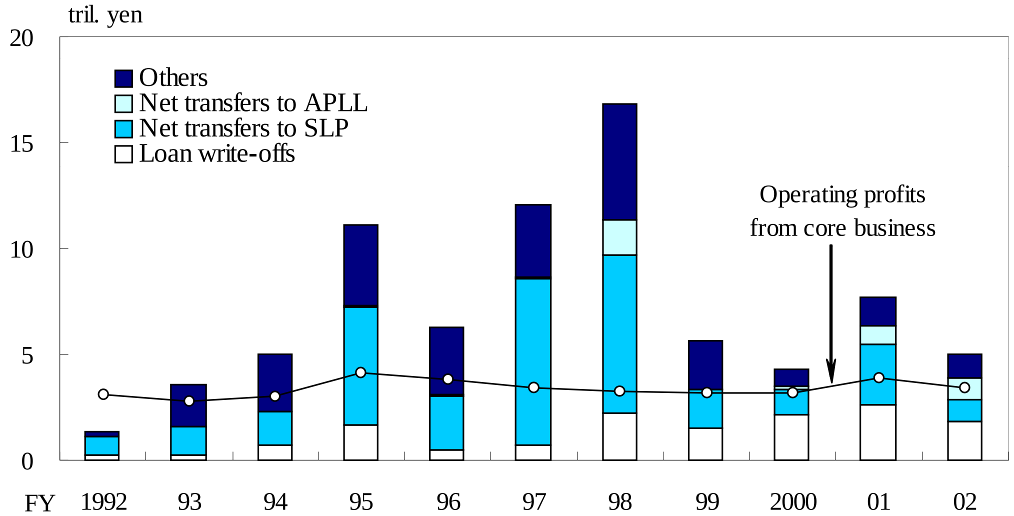
For major banks, credit costs were 5 trillion yen, down from 7.7 trillion yen in the previous fiscal year, but still larger than operating profits from core business (3.4 trillion yen) (Chart 15). Net transfers to APLL remained at the high level of the previous fiscal year, partly reflecting the fact that major banks started to apply the DCF method[8] for provisioning against loans to large borrowers classified as “special attention” with credit of 10 billion yen or more. Losses on loan sales, losses from extension of financial assistance, and loan write-offs remained almost equivalent to the previous fiscal year because major banks continued to remove their NPLs from their balance sheets and revitalize their large borrowers. Net transfers to special loan-loss provisions (SLP) declined due to a slowdown in the emergence of new loans to borrowers in the categories of “in danger of bankruptcy,” “bankrupt,” and “effectively bankrupt.”

For regional banks and regional banks II, credit costs were 1.6 trillion yen, which were below operating profits from core business (1.8 trillion yen) for the first time since fiscal 1996. Net transfers to SLP continued to be the largest component of credit costs in fiscal 2002.

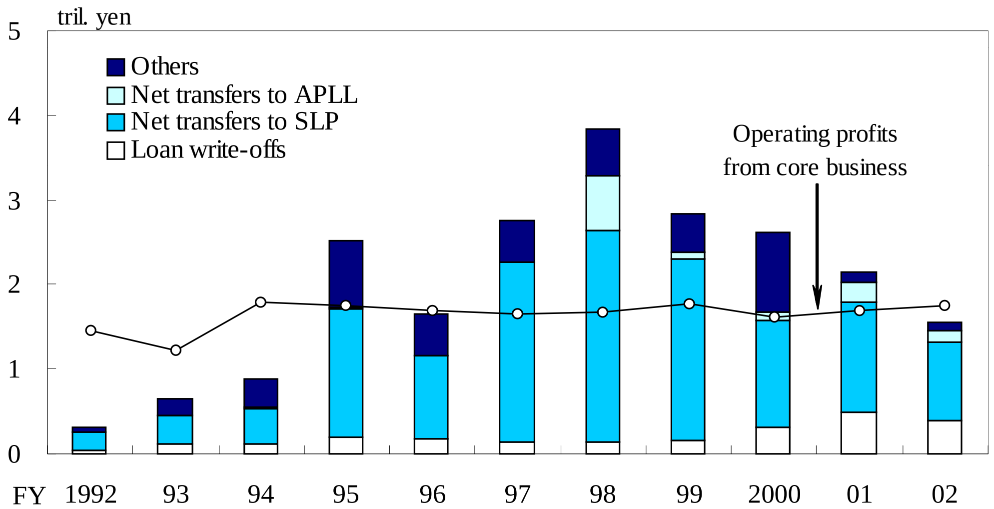
[8] The DCF method is used to calculate the economic value of loans based on the borrower’s future cash flow. For details, see Chapter 4.

Chart 15: NPL Disposal: Breakdown by Type of Disposal

Major banks



Regional banks and regional banks II



Note: "Others" includes losses from (1) sales of loans, (2) extension of financial assistance, and (3) sales to the Cooperative Credit Purchasing Company (CCPC).

2-5. Recurring Profits/Losses and Net Income/Loss

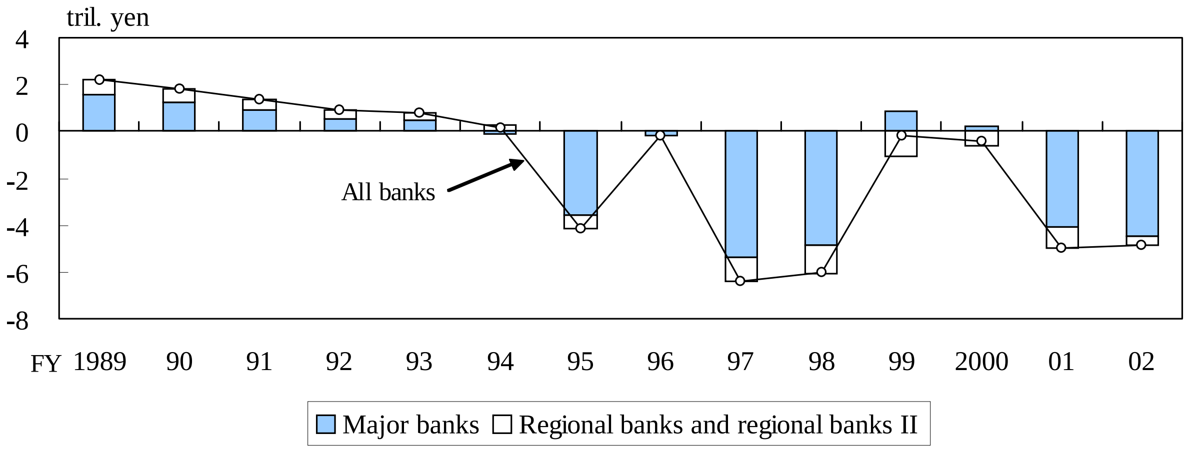
Large recurring losses and net loss were posted in fiscal 2002, attributable not only to a decrease in operating profits from core business but also to large credit costs and stock-related losses (charts 16 and 17).

Chart 16: Recurring Profits/Losses, Net Income/Loss

tril. yen, number of banks; figures in parentheses indicate changes from the previous year

FY	2001	2002	Of which: major banks	Of which: regional banks and regional banks II
Recurring profits/losses	-6.6	-4.8 (+1.8)	-4.5 (+1.1)	-0.3 (+0.6)
Net income/loss	-5.0	-4.9 (+0.1)	-4.5 (-0.4)	-0.4 (+0.5)
Of which: number of banks reporting net income	91	100	3	81
Of which: number of banks reporting net Loss	69	56	11	36

Chart 17: Net Income/Loss



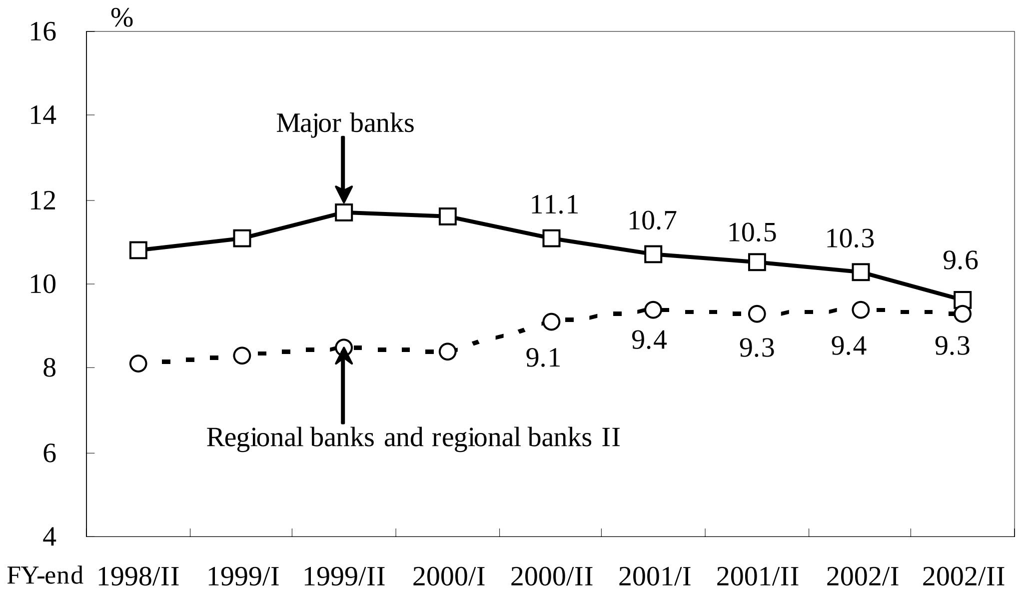
3. Capital

3-1. Consolidated Risk-Based Capital Adequacy Ratios

Major banks raised new capital of 2.1 trillion yen and reduced risk assets by 43 trillion yen (charts 18, 19, and 20). However, due to significant net losses, the risk-based capital adequacy ratio of major banks declined to 9.6 percent at end-March 2003.

Meanwhile, the ratio for regional banks and regional banks II was almost unchanged at 9.3 percent.

Chart 18: Risk-Based Capital Adequacy Ratios



Note: Figures include banks subject to the international standard and domestic standard.

Chart 19: Breakdown of Tier I Capital

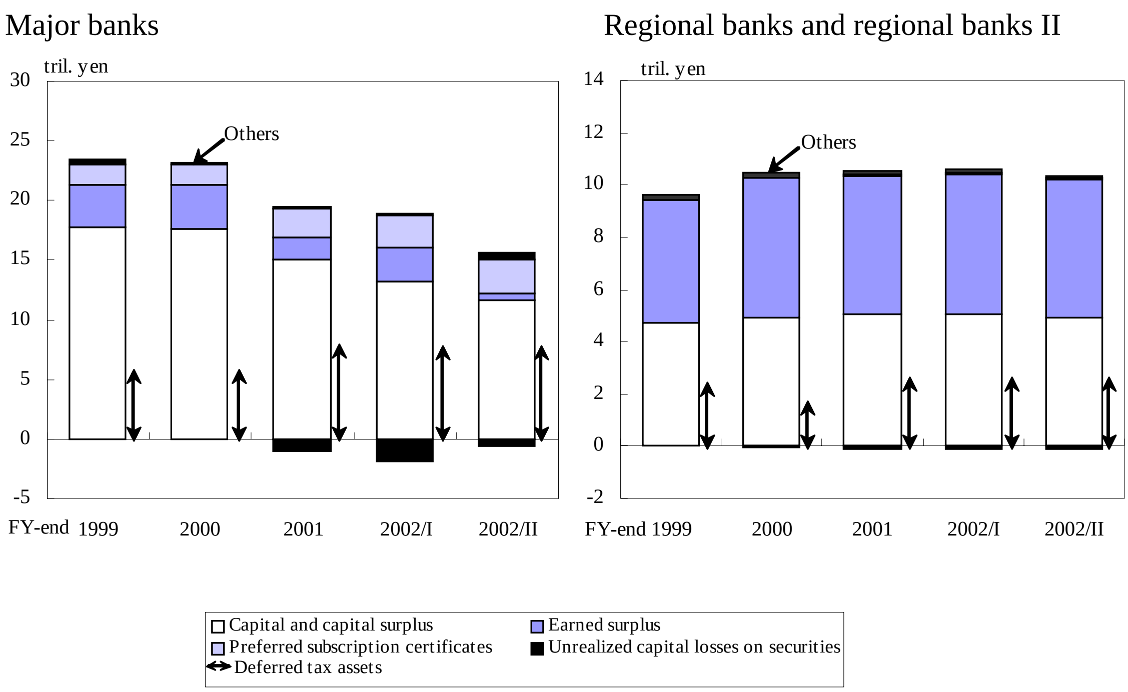
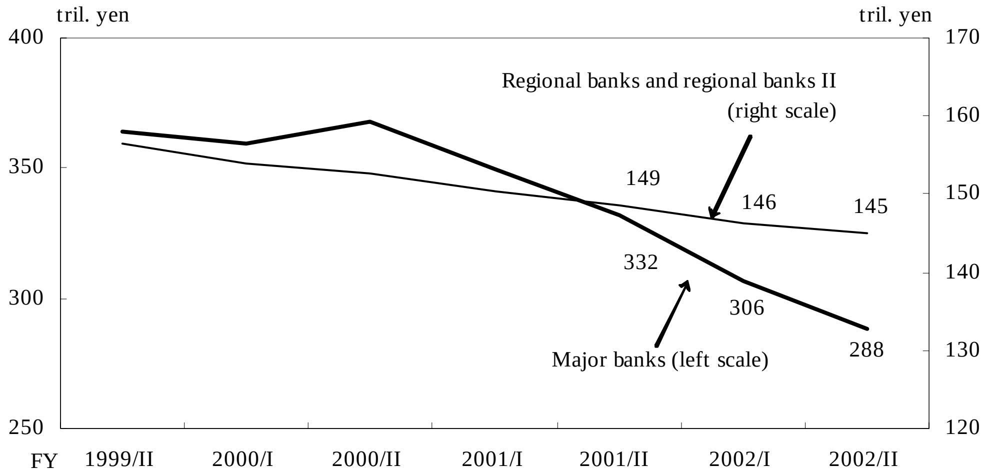


Chart 20: Risk-Adjusted Assets



3-2. Deferred Tax Assets

Deferred tax assets for major banks, and regional banks and regional banks II remained flat compared to the previous fiscal year[9] (Chart 21).

For major banks, potential deferred tax assets increased to 12.5 trillion yen at end-March 2003 from 9.7 trillion yen at end-March 2002 due to a large increase in non-deductible loan-loss provisioning and unrealized losses on stocks and other securities. However, the actual deferred tax assets posted on the balance sheets were 7.8 trillion yen, almost equivalent to the previous fiscal year, partly because of stricter evaluation of future taxable income by the banks. For regional banks and regional banks II, potential and actual amounts of deferred tax assets were almost unchanged.

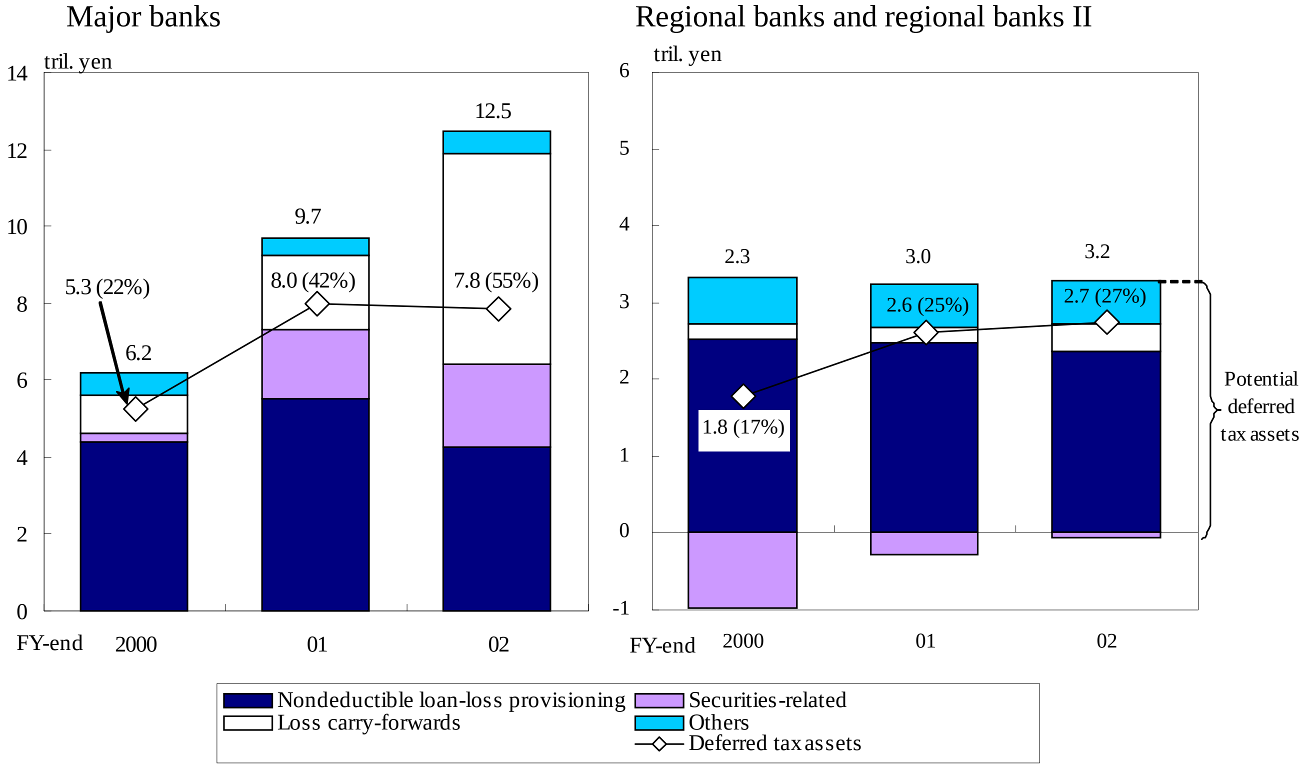
Looking at the breakdown of potential deferred tax assets at major banks, nondeductible loan-loss provisioning decreased because the acceleration of removal of NPLs from balance sheets turned some of the provisioning into deductible losses. On the other hand, loss carry-forwards increased substantially since deductible losses exceeded taxable income in fiscal 2002. For regional banks and regional banks II, components of potential deferred tax assets were almost unchanged.

The ratio of deferred tax assets to Tier I capital at major banks increased from 42

[9] The "Program for Financial Revival," announced by the government in October 2002, proposed that the FSA would "strictly evaluate the treatment of deferred tax assets according to the accounting guidelines." This led to the publication of a practical guideline by the president of the Japanese Institute of Certified Public Accountants in February 2003.

percent at end-March 2002 to 55 percent at end-March 2003 due to a large decline in Tier I capital. For regional banks and regional banks II, the ratio was 27 percent at end-March 2003, close to the ratio of 25 percent at end-March 2002.

Chart 21: Deferred Tax Assets



Note: Figures in parentheses are the ratio of deferred tax assets to Tier I capital.

4. Japanese Banks' Efforts to Address Their Management Tasks in Fiscal 2002

Results in fiscal 2002 were unfavorable, recording a large net loss, but this partly reflected the fact that banks proceeded in dealing with the management tasks they face such as the NPL problem. This section will discuss three key related issues: (1) progress in NPL disposal; (2) securing sufficient returns on loans to cover credit risk; and (3) reduction of stockholdings and the effective use of capital.

4-1. Progress in NPL Disposal

(1) Appropriate provisioning reflecting the economic value of loans

On an all-banks basis, the loan-loss provision ratio for loans to "normal" borrowers and "need attention" borrowers rose to 1.4 percent at end-March 2003 from 1.1 percent at end-March 2002. For major banks, the ratio for loans to large borrowers classified as "special attention" increased substantially to 20.8 percent from 14.2 percent a year earlier due to adoption of the DCF method[10] (Chart 22).

Up to the previous year, the majority of the banks used historical data on the default probability and loan-loss ratios to calculate loan-loss provisions, and few banks had adopted the DCF method. In fiscal 2002, all major banks[11] started to adopt the DCF method, though this was limited to the borrowers classified as "special attention" with credit of 10 billion yen or more. The DCF method was strongly recommended in the publication "Japan's Nonperforming Loan Problem" by the Bank of Japan and in the "Program for Financial Revival" by the government in October 2002. Some regional banks and regional banks II also began to apply the DCF method to calculate provisions for loans to borrowers classified as "special attention." These movements to adopt the DCF method are regarded as positive steps to build a framework for more appropriate evaluation of loans.

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[10] The loan-loss provision ratio at major banks here is the ratio for loans to borrowers classified as "special attention" including small borrowers to which the DCF method was not applied.

[11] These banks correspond to 11 major banks requested to introduce the DCF method for borrowers classified as "special attention" with credit of 10 billion yen or more.

Chart 22: Loan-Loss Provision Ratio

%; at end-March 2003; figures in parentheses are at end-March 2002

	All banks	Major banks (excluding Shinsei Bank and Aozora Bank)
Assets to "normal" borrowers and borrowers that "need attention"	1.4 (1.1)	1.7 (1.2)
Excluding loans requiring "special attention"	0.8 (n.a.)	0.8 (0.7)
Loans requiring "special attention"	19.1 (n.a.)	20.8 (14.2)
Assets to borrowers "in danger of bankruptcy"	33.6 (n.a.)	39.4 (37.0)

Note: Ratio of provisions to total loans.
Sources: Data released by the Financial Services Agency for all banks;
data released by each bank for major banks.

(2) Progress in NPL Removal

1) Progress in the removal of loans to borrowers classified as "bankrupt," "effectively bankrupt," and "in danger of bankruptcy"

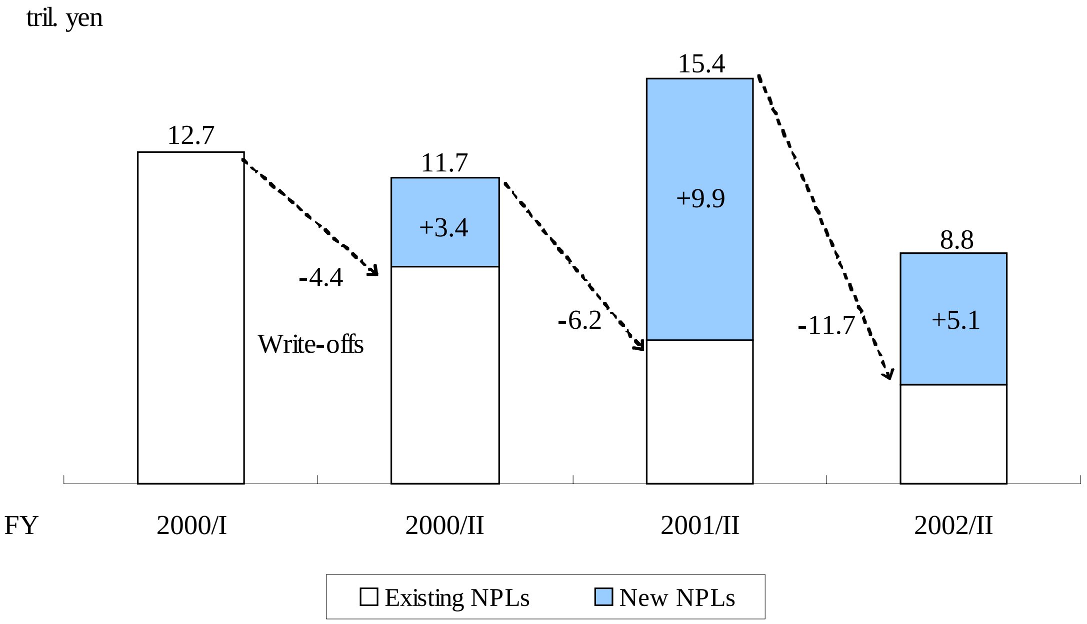
For major banks excluding Shinsei Bank and Aozora Bank, loans to borrowers classified as "bankrupt," "effectively bankrupt," and "in danger of bankruptcy" decreased to 8.8 trillion yen at end-March 2003, down by 6.6 trillion yen from end-March 2002.

New NPLs classified in the categories above amounted 5.1 trillion yen in fiscal 2002, while amount of NPL removal in the categories reached 11.7 trillion yen. The level of NPLs removed by major banks was historically high, and the pace of removal was faster than that set by the government[12] (charts 23 and 24).

Sales of loans increased to 4.5 trillion yen in fiscal 2002 from 2.1 trillion yen in fiscal 2001, partly due to an acceleration of the sales to the Resolution and Collection Corporation (RCC) (Chart 25). Banks also increased loan forgiveness to firms to 3.2 trillion yen from 0.8 trillion yen in the previous year according to the firms' reconstruction plans.

[12] The "Emergency Economic Package" released in April 2001 introduced a framework to complete the removal of loans to "bankrupt" borrowers, "effectively bankrupt" borrowers, and borrowers "in danger of bankruptcy" from banks' balance sheets within three years in principle. In April 2002, the schedule of removal was specified as follows: "in principle, 50 percent within a year and the vast majority (around 80 percent) within two years."

Chart 23: Removal of NPLs from Balance Sheets
(Major Banks, excluding Shinsei Bank and Aozora Bank)



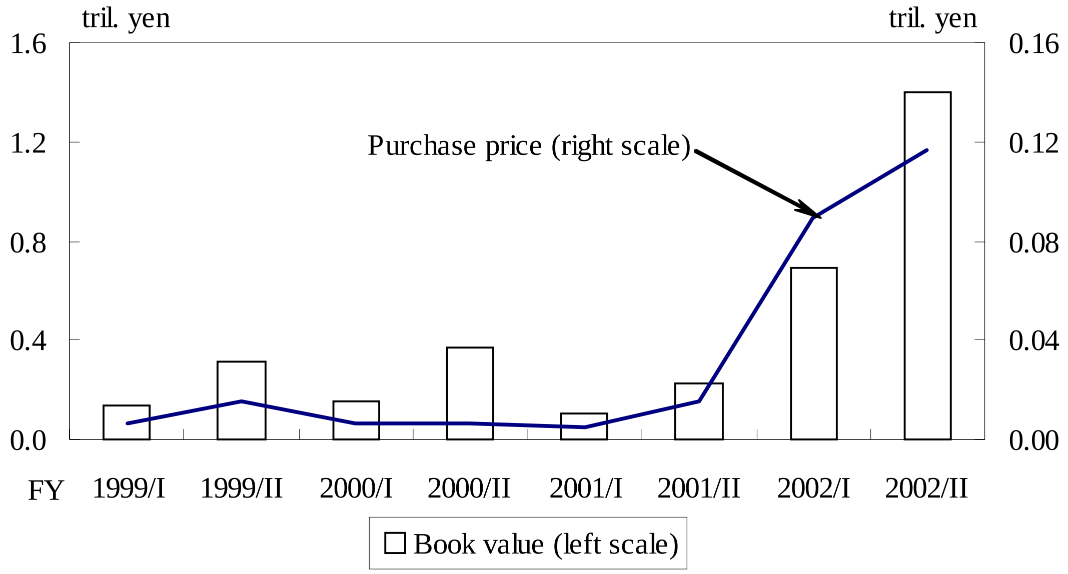
Note: NPLs are loans to borrowers classified as "bankrupt," "effectively bankrupt," or "in danger of bankruptcy."

Chart 24: Progress in Removal of NPLs from Balance Sheets
(Major Banks, excluding Shinsei Bank and Aozora Bank)

Periods of newly generated NPLs	NPLs to be removed from balance sheets (initially, tril. yen)	Ratio of the removal of NPLs from balance sheets (%)	Scheduled removal ratio by the government (%)
2000/I	12.7	96	100
2000/II	3.4	86	80
2001/I	3.0	82	50
2001/II	6.9	74	50
2002/I	2.0	60	-
2002/II	3.0	-	-

Note: NPLs are loans to borrowers classified as "bankrupt," "effectively bankrupt," or "in danger of bankruptcy."

Chart 25: Purchases of Loans by the Resolution and Collection Corporation



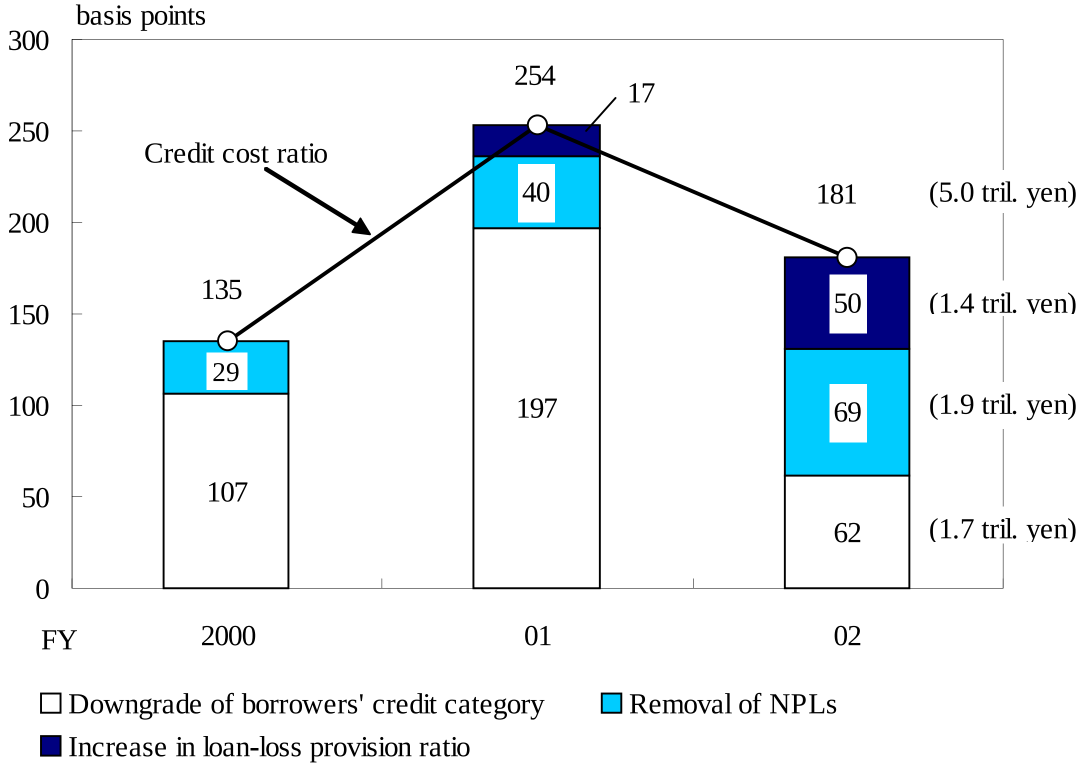
Source: Resolution and Collection Corporation (RCC).

While the aggressive removal of NPLs may increase current credit costs, it also has the positive future effect of diminishing the risk of additional losses such as losses caused by price declines in collateralized real estate.

With several assumptions, credit costs, which totaled 5 trillion yen in fiscal 2002, can be broken down into three factors: losses incurred by (1) increase in the loan-loss provision ratio; (2) the removal of NPLs; and (3) the downgrade of borrowers' credit category. For major banks, the largest factor was (2), which amounted to 1.9 trillion yen. This reflects the increase in NPL removal from 6.2 trillion yen in fiscal 2001 to 11.7 trillion yen in fiscal 2002 (Chart 26).

If the banks follow the schedule set by the government (see Footnote 12), the amount of NPL removal in fiscal 2003 would be much smaller than that in fiscal 2002 because loans to the borrowers classified as "bankrupt," "effectively bankrupt," and "in danger of bankruptcy" decreased significantly by the end of fiscal 2002. Losses accompanied by NPL removal in fiscal 2003 would be much smaller as well.

Chart 26: Estimation of Credit Costs by Factor[1, 2, 3]



Estimation method of the factors

(1) Increase in loan-loss provision ratio:

Additional provision caused by an increase in loan-loss provisioning rates.

(2) Removal of NPLs:

Losses accompanied by the removal of loans into "bankrupt" borrowers, "effectively bankrupt" borrowers, and borrowers "in danger of bankruptcy." The amount of removal of NPLs in fiscal 2002 excluding those for the purpose of firms' reconstruction is calculated assuming that the uncollateralized part is expected to be fully lost, while 10 percent of the collateralized part is lost; this refers to the rate of decline in the urban land price index for commercial land in six large urban areas.

(3) Downgrade of borrowers' credit category:

Additional provision caused by the downgrade of "normal" borrowers and borrowers that "need attention" to "bankrupt" borrowers, "effectively bankrupt" borrowers, and borrowers "in danger of bankruptcy." The figure is calculated by subtracting the costs of the above two factors from the credit costs in fiscal 2002.

Notes: 1. Figures in parentheses are the amount of credit costs.
2. Credit cost ratio = credit costs/average amount outstanding of loans.
3. One hundred basis points = 1 percent.

2) The amount of NPLs disclosed under the Financial Reconstruction Law (FRL)

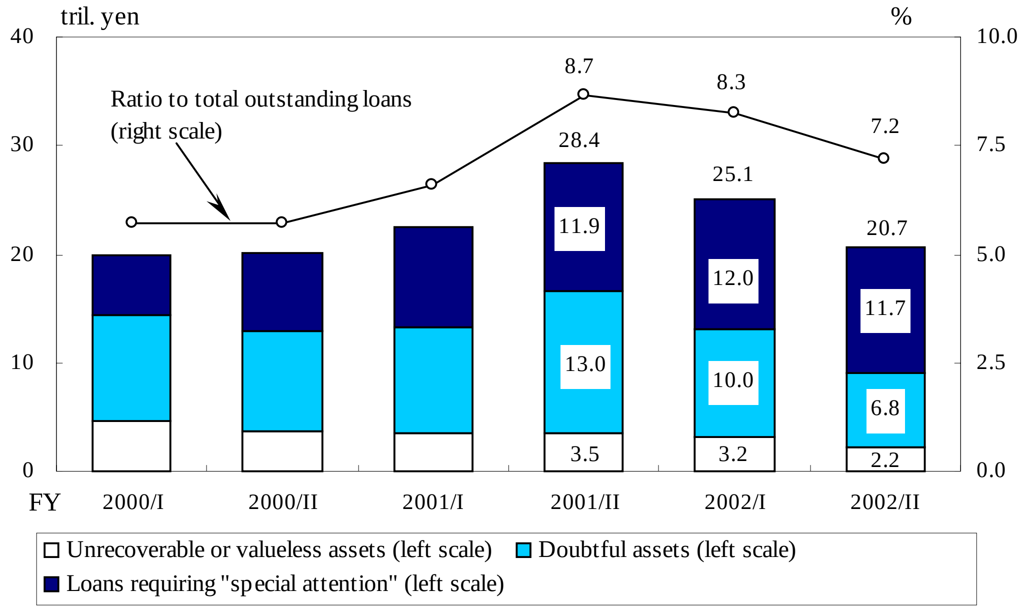
The progress in the reduction of NPLs can be confirmed using statistics with broader coverage. The NPL figures disclosed under the FRL include loans to borrowers classified as “special attention” in addition to the three previous categories, “in danger of bankruptcy,” “effectively bankrupt,” and “bankrupt.” The amount for all banks was 35.3 trillion yen at end-March 2003, a decrease of 7.9 trillion yen from end-March 2002.

For major banks, the amount at end-March 2003 declined by 7.7 trillion yen to 20.7 trillion yen from the previous fiscal year (Chart 27). This was due to a significant reduction of loans to borrowers classified as “in danger of bankruptcy,” “effectively bankrupt,” and “bankrupt” (these loans are categorized as “doubtful” assets or “unrecoverable or valueless” assets under the FRL). The ratio of the disclosed NPLs to total loans decreased to 7.2 percent at end-March 2003 from 8.7 percent at end-March 2002. Under the “Program for Financial Revival” released in October 2002, the government is asking major banks to reduce the above ratio to around 4 percent.

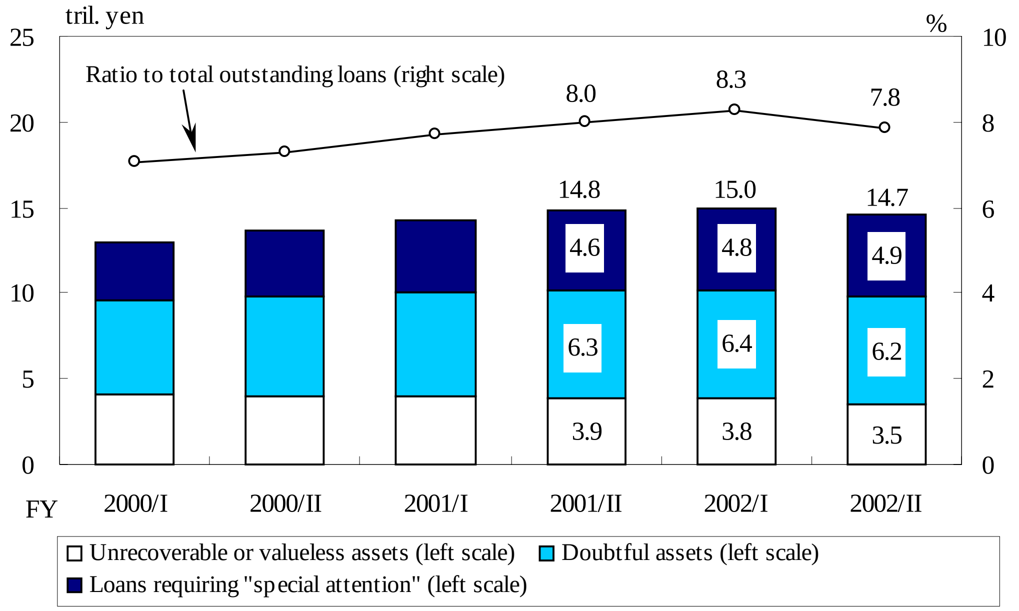
The amount of NPLs for regional banks and regional banks II remained almost flat at 14.7 trillion yen at end-March 2003. The differences between the two groups may be attributed to the following: (1) the schedule for the removal of NPLs set by the government applies only to major banks; and (2) most of the regional banks and regional banks II tend to have lending policies that put more emphasis on long-term relationships with borrowers.

Chart 27: NPLs Disclosed under the FRL

Major banks



Regional banks and regional banks II

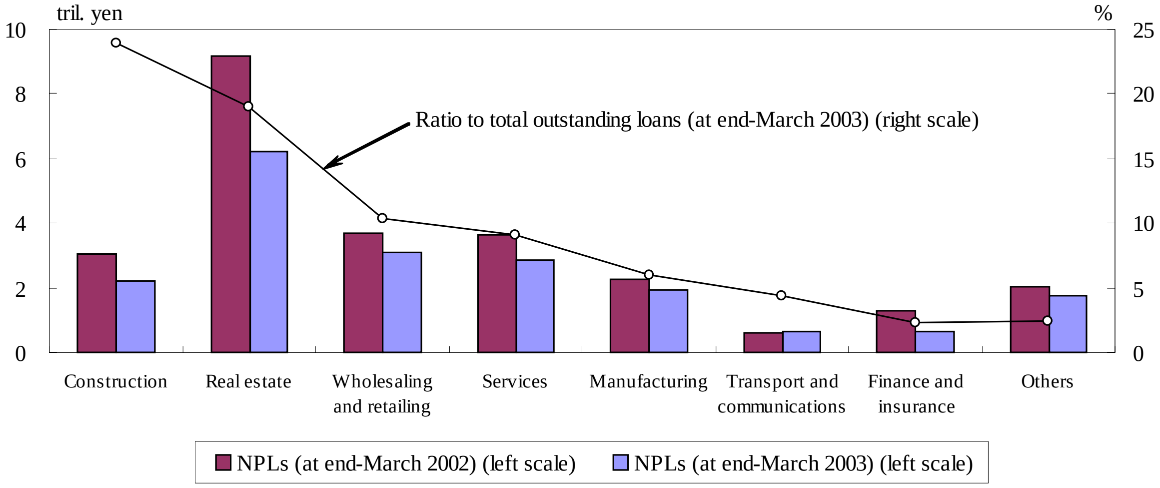


Looking at the breakdown of NPLs at major banks by industry, the amount of NPLs[13] decreased in almost all industries, especially in real estate (Chart 28). Meanwhile, the ratio of NPLs to total loans in construction, real estate, wholesaling and retailing, and services remained around 10-25 percent, higher than those in other industries.

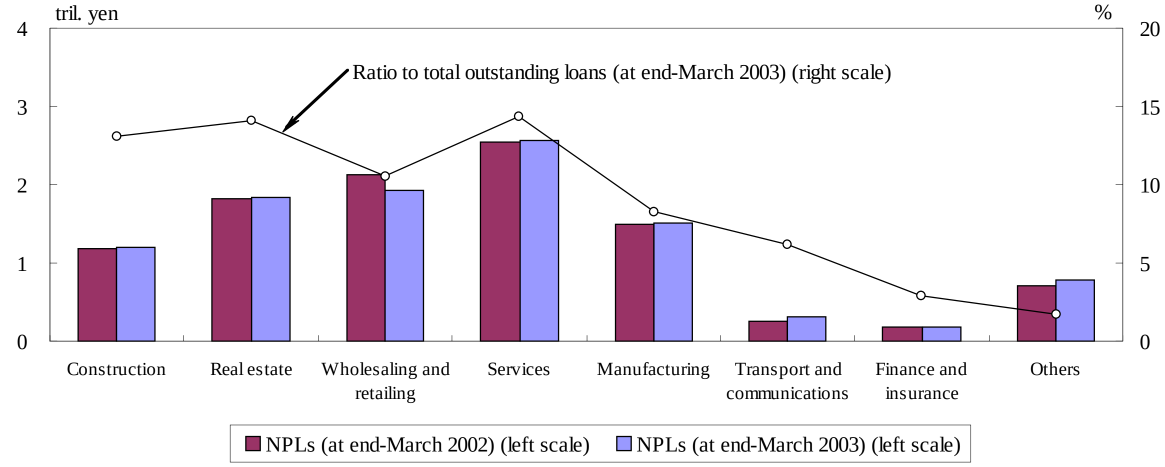
For regional banks and regional banks II, the amount of NPLs remained almost unchanged in all industries. The ratio of NPLs to total loans in real estate and construction was lower compared to major banks, while the ratio in services was higher.

Chart 28: NPLs by Industry

Major banks (13 banks, except Shinsei Bank)



Regional banks and regional banks II (71 banks)



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[13] This is based on risk management loans by industry disclosed by individual banks (13 large banks, and 71 regional banks and regional banks II). Risk management loans cover a slightly narrower range than loans disclosed under the FRL, since risk management loans do not include quasi-loans. However, the difference in the amount is negligible (at end-March 2003, the loans for all banks disclosed under the FRL amounted to 35.3 trillion yen, while the risk management loans amounted to 34.8 trillion yen).

4-2. Securing of Sufficient Returns on Loans to Cover Credit Risk

Banks sought to improve their interest margins on loans in fiscal 2002. As a result, the interest margin between lending and funding rates ("nominal margin" hereafter) at major banks increased slightly from the previous year. However, credit costs still exceeded the nominal margin.

In the 1980s and the early 1990s, the credit cost ratio[14] was below 0.2 percent and the interest margin on lending after deducting credit costs and general and administrative expenses ("effective margin" hereafter) was positive. In fiscal 1993, however, the effective margin turned negative due to an increase in credit costs. Although credit costs and the nominal margin improved somewhat, the effective margin remained negative in fiscal 2002 (Chart 29).

Compared with the United States and Germany, the lending margin in Japan is fairly smaller. In the United States, although the credit cost ratio has occasionally risen above 1 percent, U.S. banks have achieved adequate profits owing to their efforts to improve their lending margin after the financial recession in the early 1990s. In Germany, the nominal margin has been somewhat small, but it still exceeds the credit cost ratio.

Japanese banks need to further enhance their credit risk management and improve their frameworks for obtaining appropriate returns on loans, by more effective use of financial engineering techniques and functions in credit-related markets. The DCF method is not only effective in calculating adequate loan-loss provisions, but also useful in assessing the appropriate lending rates based on quantitative evaluation of credit risk.[15] Active control of the loan portfolio is also effective for banks to secure an appropriate return on loans. For example, banks can diversify their loan portfolio into small loans and avoid concentration of credit risk to large borrowers. Banks also can reconstruct their loan portfolios dynamically by using the loan trading market and credit derivatives.

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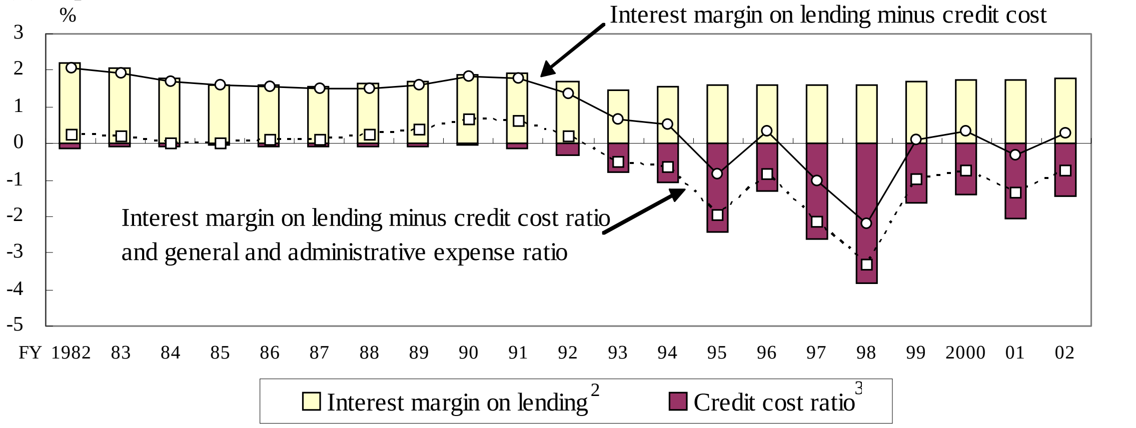
[14] In principle, the credit cost ratio based on the expected loss calculated by risk management methods should be used. This paper, however, uses the realized credit cost ratio in each fiscal year for simplicity.

[15] For details of the DCF method, see "Evaluating the Economic Value of Loans and the Implications: Toward Transformation of the Business Model of Banks and Nonbank Firms" by the Bank of Japan (April 2003).

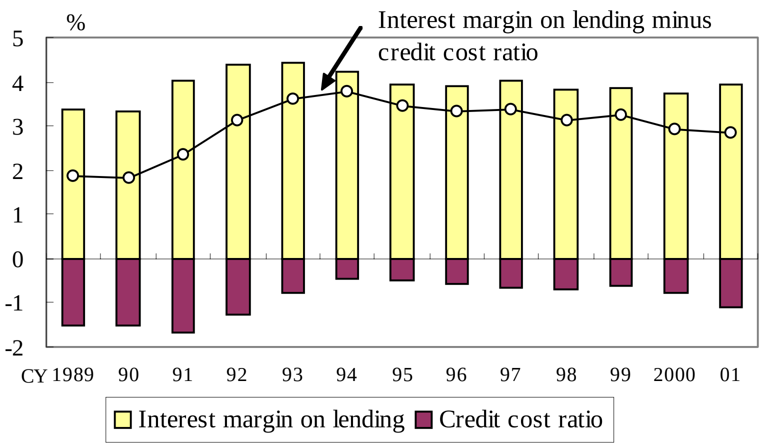
Chart 29: Comparison of Interest Margin on Lending and Credit Cost Ratio in Japan, the United States, and Germany

(1) Japan[1]



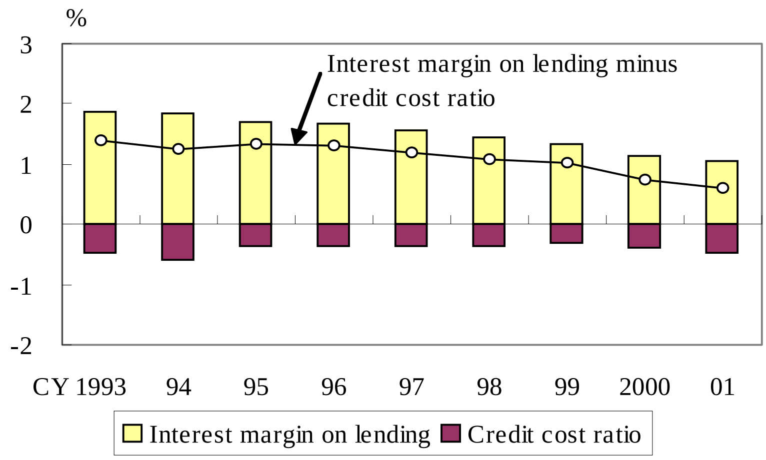
Notes: 1. Data are for all banks.
2. Interest margin on lending = interest rate on lending – overall interest rate on banks' interest-bearing liabilities.
3. Credit cost ratio = credit costs/amount outstanding of total loans.

(2) United States



Source: Federal Deposit Insurance Corporation (FDIC).

(3) Germany



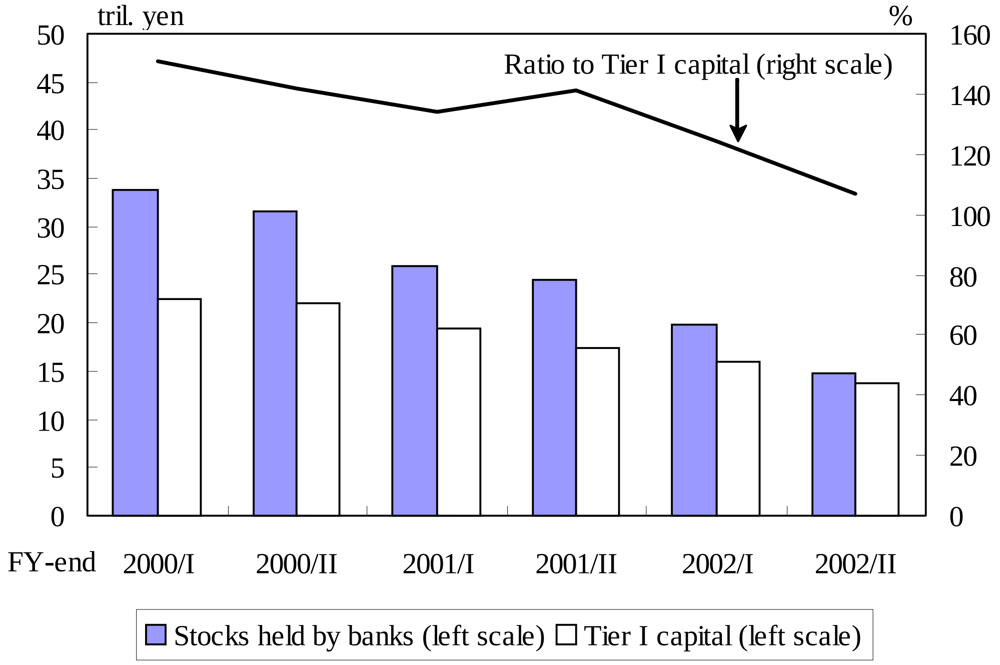
Source: Deutsche Bundesbank.

4-3. Reduction of Stockholdings and the Effective Use of Capital

The outstanding amount of stocks held by major banks declined to 14.8 trillion yen at end-March 2003, a decrease of 9.7 trillion yen in a year[16] due to banks' acceleration of stock sales. The amount of their stockholdings was roughly equivalent to Tier I capital (Chart 30).[17]

In November 2002, the Bank of Japan launched a scheme to purchase stocks held by banks in order to mitigate negative effects of stock price fluctuations on banks, and hence to maintain and strengthen banks' function to support the economy. At end-March 2003, the total amount of the stocks purchased by the Bank amounted to 1.2 trillion yen.

Chart 30: Stock Portfolio Balance and Tier I Capital



Notes: 1. Twelve major banks except Shinsei Bank and Aozora Bank.
2. Figures correspond to "balance of stock held for other purposes" (consolidated basis).

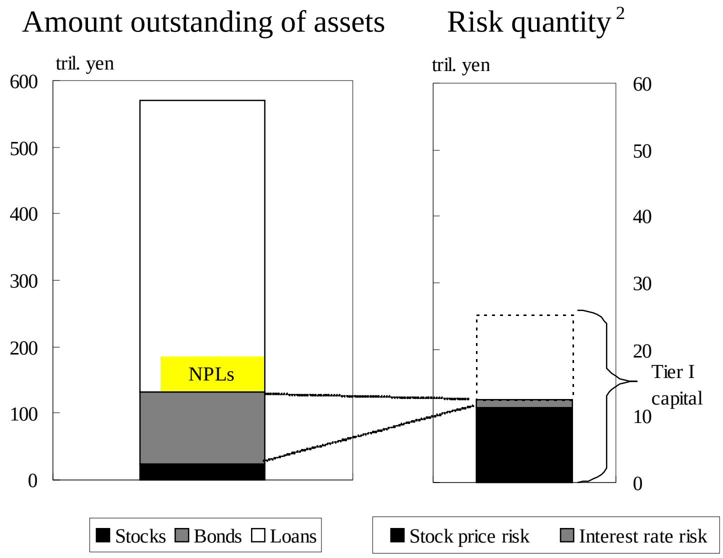
[16] The figures are the "balance of stocks held for other purposes" for which market prices are available (on a consolidated basis, excluding net unrealized profits). They differ slightly from stocks "subject to stockholding restrictions", in that the former, for example, includes unlisted preferred shares with observable market values.

[17] While banks and bank holding companies were originally obligated to reduce their stock portfolio to no more than Tier I capital by September 2004, the obligation time limit was postponed until September 2006 in July 2003.

Despite banks' acceleration of stock reduction, the risk related to their stockholdings is relatively large compared to their capital. A quantitative analysis also suggests the excessiveness of their stock-related risk. Banks allocate their capital as a buffer against risks such as credit risk, stock price risk, and interest rate risk, based on their integrated risk management framework. With several assumptions using all banks' data at end-March 2003, it can be estimated that 40 percent of Tier I capital is allocated for stockholdings, while the amount of stockholdings is only equivalent to 3 percent of banks' total assets (Chart 31).

The appropriate level of stockholdings should be determined according to the banks' risk management of their total portfolios. For example, debt equity swaps can be a key measure for reconstruction of firms and also an important component of banks' portfolios. However, the disadvantage of cross-shareholding between banks and firms has grown to outweigh the initial advantage. Given the large price volatility of stocks, cross-shareholdings need to be reconsidered. It would thus be worthwhile for banks to make further efforts to reduce their stockholdings, from the viewpoint of utilizing their limited capital more effectively for new profit-earning opportunities.

Chart 31: Capital Allocation for Each Risk[1]



Notes: 1. Amount outstanding of assets and Tier I capital are for all banks (figures as of end-March 2003).
2. Risk quantity is measured by VaR (Value-at-Risk: probable maximum loss under some probability) based on the following. Stock price risk is measured with a confidence interval of 99 percent on a 250-day evaluation period. Interest rate risk is measured with a confidence interval of 99 percent on a ten-day evaluation period, and a 4.9-year average duration of existing JGBs.

Reference: Profits and Balance Sheets of *Shinkin* Banks[18] That Held Current Accounts at the Bank of Japan in Fiscal 2002

Chart 1: Financial Highlights

bil. yen, except where noted

FY	2000	01	02
Operating profits from core business[1]	581	520	518
Net interest income	2,088	1,977	1,910
General and administrative expenses	-1,611	-1,568	-1,495
Net realized bond-related gains/losses[2]	54	4	72
Operating profits	644	501	584
Net realized stock-related gains/losses[3]	28	-21	-91
Credit costs[4] [Credit cost ratio[5], basis points[6]]	-426 [66]	-629 [100]	-509 [84]
Recurring profits/losses	202	-159	-34
Net income/loss	95	-254	-91
NPLs disclosed under the FRL	7,030	7,466	7,265
Risk-based capital adequacy ratio (%)	10.0	10.0	10.5
Risk assets	59,596	56,542	55,177

Notes:
1. Operating profits from core business
   = operating profits – net realized bond-related gains/losses + net transfers to allowance for possible loan losses (APLL).
2. Net realized bond-related gains/losses
   = gains on sales of bonds + gains on redemption of bonds – losses on sales of bonds – losses on redemption of bonds – losses on devaluation of bonds.
3. Net realized stock-related gains/losses
   = gains on sales of stocks and other securities – losses on sales of stocks and other securities – losses on devaluation of stocks and other securities.
4. Credit costs
   = losses from NPL disposal, which includes net transfers to APLL, loan write-offs, net transfers to special loan-loss provisions, and others.
5. Credit cost ratio = credit costs/average amount outstanding of loans.
6. One hundred basis points = 1 percent.

[18] These figures cover 300 *shinkin* banks that held current accounts at the Bank of Japan (as of end-March 2003, nonconsolidated basis). This includes 99 percent of all *shinkin* banks (326 banks) in terms of deposit amount. Figures in preceding years cover all *shinkin* banks that had held the accounts at each period. *Shinkin* banks that went bankrupt are included in the figures.

1. Profits

Operating profits from core business amounted to 518 billion yen, remaining almost equivalent to the level of the previous fiscal year. Net interest income and general and administrative expenses declined by 66 billion yen and 74 billion yen, respectively (charts 1 and 2).

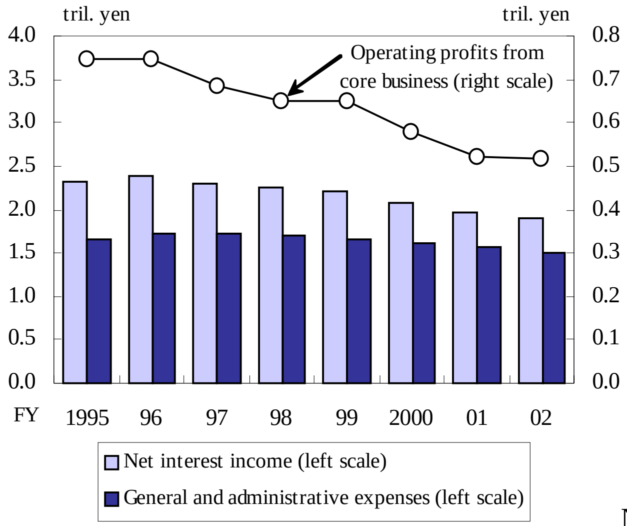
Net interest income declined by 3.4 percent due to a fall in lending volume and narrowing of the interest margin on securities. The amount of loans to individuals remained unchanged, while that to corporations decreased due to weak demand for loans.

General and administrative expenses declined due to efforts to improve the efficiency of operations. Personnel expenses and premises/equipment expenses decreased by 5.2 percent and 4.1 percent, respectively.

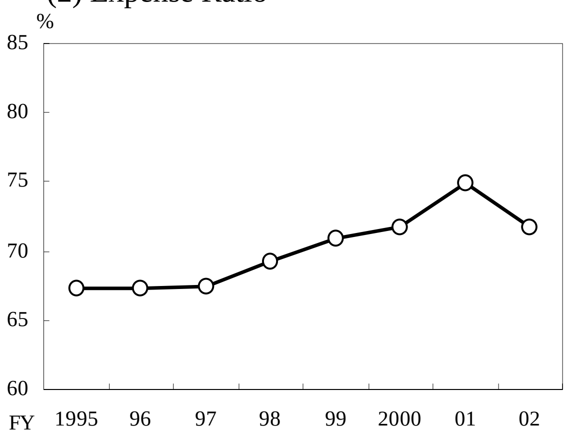
From a longer-term perspective, net operating profits from core business are on a declining trend, stemming from a contraction in net interest income due to a decline in loan amounts and a narrowing interest margin on securities. While the expense ratio had been on an uptrend for the past few years, efforts to reduce costs led to a decline in fiscal 2002.

Chart 2: Operations Data

(1) Operating Profits from Core Business

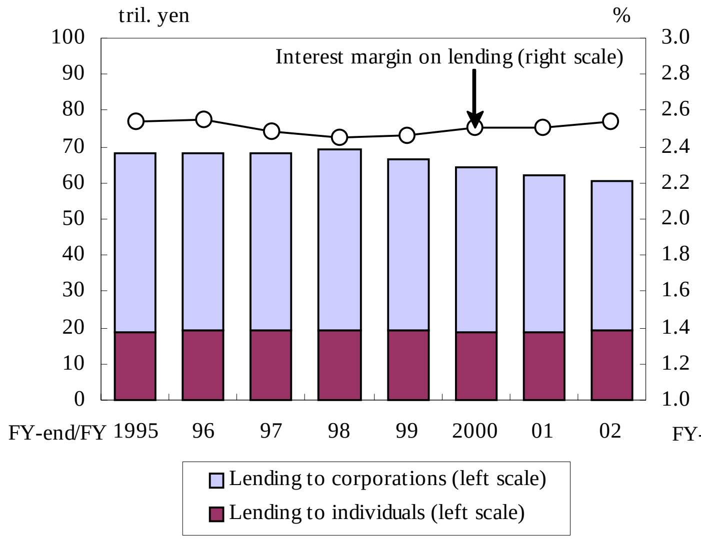


(2) Expense Ratio

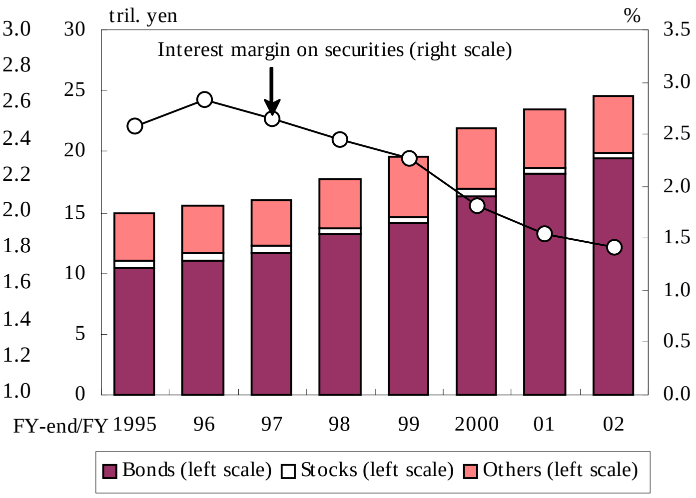


Note: Expense ratio= general and administrative expenses/gross operating profits.

(3) Lending Balance and Interest Margin on Lending



(4) Security Balance and Interest Margin on Securities

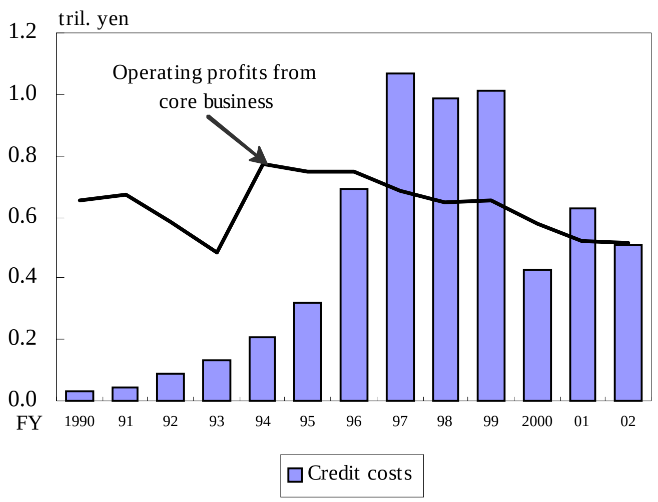


2. Credit Costs

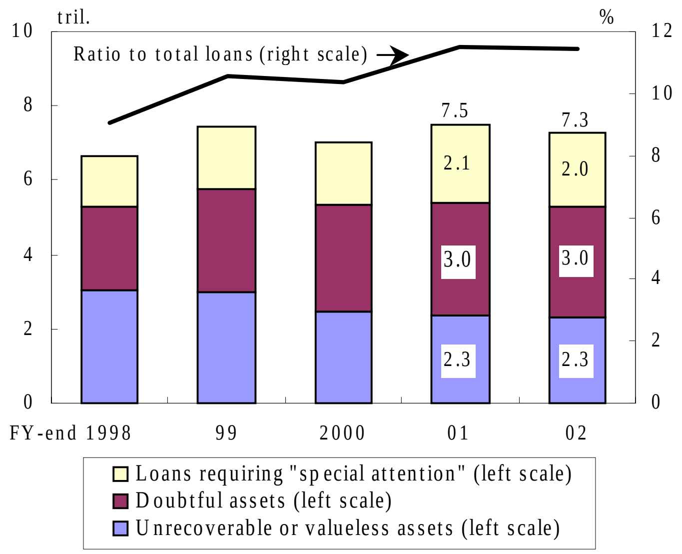
Credit costs in fiscal 2002 declined about 20 percent from the previous fiscal year to 509 billion yen. This is still equivalent to the net operating profits from core business. NPLs disclosed under the FRL remained almost flat at 7.3 trillion yen, and the ratio of NPLs to total loans was 11.4 percent (Chart 3).

Chart 3: Credit Quality Data

(1) Credit Costs



(2) NPLs Disclosed under the FRL

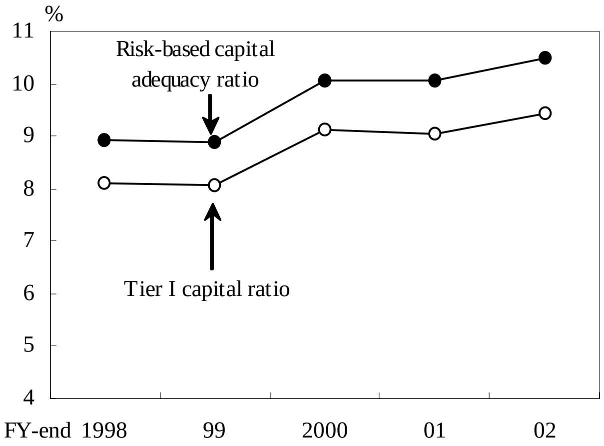


3. Capital

The net loss was 91 billion yen, the second consecutive year in the red, due to a significant amount of credit costs and the stock-related loss. The risk-based capital adequacy ratio, however, rose to 10.5 percent owing to issuance of subscription certificates, a decrease in the unrealized loss on securities, and reduction of risk-adjusted assets (Chart 4).

Chart 4: Risk-Based Capital Adequacy Data

(1) Risk-Based Capital Adequacy Ratios and Tier I Capital Ratio



(2) Breakdown of Tier I Capital