Japanese banks have largely overcome the nonperforming loan problem that constituted their greatest challenge after the mid-1990s. In fiscal 2005, both the major banks and the regional banks registered record levels of net income. Improvements have also been made in capital adequacy ratios. However, the high profit levels of the past few years were attributable to significant but temporary declines in credit costs caused by the reversals of loan-loss allowances. The fiscal 2007 financial statements actually showed that credit costs were returning to expected average levels and that improvements in core profitability slowed. The upward trend in capital adequacy ratios also hit a plateau. Moreover, the quality of capital is not necessarily high enough given the continued high proportion of preferred securities and subordinated debts. In light of these facts, improvements in core profitability and the quality of capital remain crucial challenges for banks. From a macroprudential perspective, these also pose important challenges in ensuring financial system stability.

I. INTRODUCTION

Japanese banks have largely overcome the nonperforming loan problem that constituted their greatest challenge after the mid-1990s. In fiscal 2005, both the major banks and the regional banks registered record levels of net income.1,2 As a result of improved financial performance, capital adequacy ratios have also steadily improved. However, an analysis of the high profit levels of the past few years indicates that significant but temporary declines in credit costs caused by the reversals of loan-loss allowances contributed substantially to high net income. This reversal was made possible by the significant improvements in the financial position of borrowers achieved over the course of economic expansion. During this period, interest and non-interest income, which are core elements of bank profits, were stagnant and core profitability remained sluggish. Fiscal 2007 financial statements actually showed that credit costs were returning to expected average levels and that improvements in core profitability slowed.

A review of banks’ net income based on relatively long-term time series data indicates that profits peaked at the end of the 1980s and gradually decreased thereafter (Chart 1). During the ten-year period beginning in the mid-1990s, banks registered net losses in almost every year. After almost a decade of losses, financial performances began to improve and, for the first time since the bubble period, both the major banks and the regional banks registered record levels of net income in fiscal 2005. However, net income declined in the following two years. In particular, the net income of the major banks declined by half in fiscal 2007 from their peak in fiscal 2005. The financial performance of the regional banks also worsened, although the effects of the U.S. subprime mortgage problem on them were limited. In fiscal
2007, a total of 13 regional banks registered net losses, up from eight banks in fiscal 2006.

At the same time, stock prices of Japanese banks have been weak since the start of fiscal 2006, which appears to reflect the pessimistic market view on banks' long-term profitability (Chart 2).

Given the receding influence of temporary factors, fiscal 2007 financial statements confirmed the weakness in the profitability of Japanese banks. In this report, the financial statements of banks through fiscal 2007 are reviewed and the profitability and soundness of the banking sector are assessed, and also the medium- to long-term business challenges facing Japanese banks are examined.

II. ASSESSMENT OF BANKS' PROFITABILITY

We begin by reviewing the financial statements of Japanese banks through fiscal 2007 to assess their current profitability.

Sluggishness in Core Profitability

An examination of the factors for fluctuations in net income reveals that while core businesses have contributed relatively little to net income, trends in credit costs and net realized securities gains/losses have had a major impact on net income (Chart 3). A review of the factors for fluctuations in operating profits from core business points to weak growth in interest income until around fiscal 2004 and fiscal 2005. At the same time, banks increased their non-interest income by expanding their fee and commission businesses while cutting their general and administrative expenses. This allowed banks to raise the level of operating profits from their core business (Chart 4). Thereafter, operating profits from core business declined in fiscal 2006 and fiscal 2007 as general and administrative expenses increased and non-interest income decreased.

The above is confirmed using "core ROE," which is calculated by excluding the impact of volatile components, such as credit costs, gains/losses on securities, and corporate income tax from net income (Chart 5). Core ROE improved for both the major banks and the regional banks from fiscal 2003 to fiscal 2005. During this period, credit cost ratios declined (movement to the left on the trade-off line between credit cost ratios and ROE), and also core profitability rose (upward shift of the trade-off line). Thereafter, the trade-off line between credit cost ratios and ROE began to shift downward, which suggests that improvements in profitability have become sluggish. This background reveals that changes in bank profits have primarily reflected changes in credit cost ratios.

Sluggishness in core profitability reflects the diminishing growth in core profits. Moreover, it implies that although capital is increasing slowly, the increased capital is not being effectively utilized.
Low Profitability of Lending Businesses

Next, the interest and non-interest income components of operating profits from core business are examined more closely. The net interest income of the major banks was decreasing until recent years, while that of regional banks remained almost flat (Chart 6). Looking at the components of net interest income, net interest income was supported by net interest and dividends on government bonds and other securities. On the other hand, net interest income on loans, the major source of bank profits, started to decrease at the start of 2000 while total loans outstanding began to gradually decrease. Net income on loans steadily declined through fiscal 2006.

On the one hand, interest rate spreads on deposits (deposit rate deducted from market interest rate) remained at low levels in the zero interest rate environment. On the other hand, interest rate spreads on loans (market interest rate deducted from loan rate) narrowed as the financial position of borrowers improved under sustained economic recovery and banks adopted a more accommodative lending attitude.

The quantitative easing policy ended in March 2006 followed by the termination of zero interest rates in July. At about this time, it was expected that loan rates would climb over the medium term and interest rate spreads on loans would widen. In fact, for the major banks, total interest margins on loans bottomed out during the first half of fiscal 2006 when zero interest rates were terminated and thereafter began to improve. However, the degree of improvement was relatively small. In the case of the regional banks, total interest margins on loans continued to diminish and registered a slight narrowing as late as in the second half of fiscal 2007.

In what follows, to analyze the contrast between the total interest margins on loans between the major banks and the regional banks, the changes in total interest margins on loans, for each bank, are divided into changes in interest rate on lending and changes in interest rates on interest-bearing liabilities for the period between the first half of fiscal 2006 and the second half of fiscal 2007 (Chart 8).
liabilities were mostly concentrated in the range from +0.2 to +0.3 percentage points, changes in interest rates on loans varied considerably, ranging from −0.1 to +0.4 percentage points. This contrast indicates that, for each bank, changes in interest rate on loans strongly influence the degree of improvement in the total interest margins on loans. Notably, many of the major banks showed improvements in total interest margins on loans: those above the 45-degree line shown in the chart (on the 45-degree line, changes in interest rates on loans equal interest rates on interest-bearing liabilities, thus changes in total interest margins on loans equal zero). By contrast many of the regional banks showed deteriorating total interest margins on loans.

Non-Interest Income Affected by Financial Market Conditions

As shown above, interest income remained sluggish until recent years. Responding to this sluggishness, the major banks and the regional banks endeavored to boost their income from fees and commissions, which is centered on non-interest income (Chart 9). A review of its main components shows that fees from sales of investment trusts and private pension policies increased significantly. In the case of the major banks, fees from the arrangement of syndicated loans and other investment banking activities also increased considerably (Chart 10).

More recently, however, there was a slowdown in the growth of income from fees and commissions. Sales of investment trusts and private pension policies dropped mainly due to the decline in stock prices. Besides, income from the arrangement of syndicated loans stalled as the average size of syndication packages became smaller.

Because total loans outstanding could not be expected to regain past rates of growth, banks endeavored to expand their fee and commission businesses as a means of improving the allocation of management resources and diversifying their sources of income. Notwithstanding these efforts, fee and commission businesses were not necessarily a stable source of income because sales of investment trusts, for example, could be heavily influenced by economic and financial conditions.

III. ASSESSMENT OF BANKS’ SOUNDNESS

Next, the soundness of Japanese banks is assessed from two perspectives: the profit buffer to absorb increasing credit costs, and the quality of banks’ capital.

Weakness in Profit Buffer to Absorb Increasing Credit Costs

The loan portfolios of Japanese banks improved over
an extended period of economic recovery. Nonperforming loan (NPL) ratios steadily declined, reaching 1.4 percent and 3.8 percent for the major banks and the regional banks, respectively, as of the end of fiscal 2007 (Chart 11).

However, it should also be noted that declines in the NPL ratios of the regional banks came to a halt at somewhat higher levels than the major banks. In addition, the NPLs of the regional banks include higher ratios of doubtful loans and unrecoverable or valueless loans. Furthermore, a review of individual regional banks points to a number of banks with relatively high levels of NPL ratios. Finally, it is notable that smaller regional banks tend to have higher NPL ratios and also tend to lag behind in improving their loan portfolios (Chart 12).

Under the recent developments in monetary and economic conditions, downside risks to the economy have come to the fore and the possibility of higher credit costs warrants attention. Because total interest margins on loans are generally low for Japanese banks, there is concern that some banks may not be able to cover a sharp increase in credit costs.7

Chart 13 shows the distribution of credit cost ratios that make credit costs equal to operating profits from core business (hereafter, breakeven credit cost ratio). The breakeven credit cost ratios improved through fiscal 2005 and thereafter deteriorated somewhat due to the downturn in core profitability. In fiscal 2007, the ratio stood at approximately the same level as in fiscal 2001 and fiscal 2002. For fiscal 2007, the 10th percentile of the distribution was 59 basis points. This suggests that, all factors other than credit cost being constant, approximately 10 percent of all banks would register net losses if credit cost ratios were to rise to around 60 basis points.

In the event of an increase in credit costs it is of course necessary to consider, in addition to current income, the buffer function of capital. However, as shown below, not all banks have achieved sufficiently high levels of capital adequacy. Therefore, it is important to properly evaluate risks and returns on loans and to structure loan portfolios so as to improve the profitability of lending businesses and to contain, as much as possible, the impact of rising credit cost ratios during periods of economic downturn.

Improving the Quality of Capital

In recent years, both the major banks and the regional banks have steadily improved their net income and thereby improved core capital adequacy ratios (Tier I ratios). As a result, their capital adequacy ratios rose. However, this upward trend of capital adequacy ratios hit a plateau at the end of fiscal 2007 (Chart 14), reflecting the following developments. First, the decrease in net income pushed dividend ratios upward and slowed the pace of improvement in Tier I capital. Second, in the case of banks subject to the international standards, which are allowed to include
net unrealized gains on securities in supplementary capital (Tier II capital), the downturn in stock markets reduced Tier II capital ratios. In particular, because many major banks are subject to the international standards, diminished Tier II capital ratios caused by slumping stock prices reduced the capital adequacy ratios of the major banks by nearly 1 percentage point.

Looking at the composition of capital, the proportion of preferred stocks and preferred securities (included in Tier I), as well as subordinated bonds and other forms of subordinated debt (included in Tier II) is larger at the major banks (Chart 15). While capital adequacy ratios of the major banks are higher than those of the regional banks, this is due to their higher Tier II ratios, which reflect the larger proportion of subordinated bonds and other forms of subordinated debt. In a comparison of core capital ratio (Tier I ratio), the major banks actually score lower than the regional banks. Moreover, the major banks have a higher dependence on preferred stocks and preferred securities. At the same time, it should be noted that a review of the regional banks on an individual basis indicates that banks with lower Tier I ratios tend to have a smaller proportion of Tier I capital in total capital (Chart 16).

Turning next to unrealized gains/losses on securities, the following asymmetry should first be noted. For banks subject to the domestic standards, net unrealized gains are not included in Tier II capital. However, net unrealized losses are deducted from Tier I capital for all banks regardless of whether they are subject to the domestic or international standards. Regarding the number of banks facing a Tier I decrease due to net unrealized losses on securities, nearly 50 percent of banks registered net unrealized losses, reflecting a large drop in stock prices toward the end of fiscal 2007 (Chart 17). The current number of banks with net unrealized losses is nearly the same as that registered in fiscal 2001 and fiscal 2002 when the stock market was at its lowest levels in recent years. This indicates that for many banks, unrealized gains on securities cannot function as a buffer for securing banks’ soundness. This points to the importance of properly assessing risk-return balances on the stockholdings of banks.

Note: 1. On a consolidated basis.

Note: 1. Exclude the banks that are subject to international standards and Ashikaga bank whose capital adequacy ratio was minus.

Notes: 1. On a consolidated basis.
2. Issued by consolidated offshore special purpose companies.
3. Only banks subject to the international standard are allowed to include unrealized gains in Tier II capital. The proportion of unrealized gains at the regional banks is smaller than that at the major banks, many of which are subject to the international standard.
The above analysis indicates that capital adequacy ratios can be easily affected by stock market developments. This observation holds for banks subject to the international standards that can include net unrealized gains on securities in Tier II capital, as well as for banks subject to the domestic standards that cannot do so. Thus, for both the major banks and the regional banks, it remains an important challenge to improve the quality of their capital by improving their core profitability and thereby raising the level of Tier I capital through the accumulation of profits.

**IV. CONCLUSION**

This report has examined the profitability and soundness of Japanese banks by analyzing data from the financial statements of the major banks and the regional banks through fiscal 2007. The results indicate that Japanese banks have largely overcome the NPL problem and have been able to bolster their soundness. On the other hand, the analysis shows that banks face the important challenge of further improving their core profitability.

Fiscal 2007 financial statements revealed that credit costs are returning to expected average levels and confirmed the weakness in the core profitability of Japanese banks. The momentum of improvement in total interest margins on loans is being lost, while efforts to develop new sources of income, such as fee and commission businesses, have not created stable sources of income. Interest income and non-interest income, which constitute core profits for banks, are growing at a slow pace and core profitability is sluggish.

In terms of soundness, Japanese banks' capital positions have improved by drawing on improved financial performances to steadily raise capital adequacy ratios. However, given that preferred securities and subordinated debts account for a substantial share of capital, the financial strength of banks is not necessarily high enough. In particular, a review of the core profits and capital of individual banks identifies a number of banks that may not be well prepared to absorb higher credit costs. Regarding unrealized gains/losses on securities, special attention must be paid to the fact that stock market developments can easily affect the Tier I capital ratios and capital adequacy ratios of both the major banks and the regional banks. This applies equally to banks subject to the international standards that are able to include net unrealized gains on securities in Tier II capital, and to banks subject to the domestic standards that are unable to do so, because they both deduct net unrealized losses from Tier I capital.

From a relatively longer perspective, strengthening the profit base of Japan's banking sector is vital to achieving the level of capital adequacy needed for ensuring the sustained stability of the financial system. This highlights the importance, during normal times such as the present, of improving the profitability and financial soundness of banks, while paying due attention to the balance of risks and returns.

The U.S. subprime mortgage crisis has had a significantly smaller impact on Japanese banks compared with U.S. and European financial institutions, and Japan's financial system has maintained its overall stability. Following the recent implementation of new capital adequacy regulations (Basel II), Japanese banks are actively introducing more sophisticated risk management systems. Continued efforts are needed along these lines from a long-term perspective.

---

1 This report covers the 12 major banks and 109 regional banks (comprising the 64 members of the Regional Banks Association of Japan, and the 45 members of the Second Association of Regional Banks) that were in existence as of the end of March 2008. The 12 major banks comprise Mizuho Bank, The Bank of Tokyo-Mitsubishi UFJ, Sumitomo Mitsui Banking Corporation, Resona Bank, Mizuho Corporate Bank, Saitama Resona Bank, Mitsubishi UFJ Trust and Banking Corporation, Mizuho Trust and Banking Company, The Chuo Mitsui Trust and Banking Company, The Sumitomo Trust and Banking Company, Shinsei Bank, and Aozora Bank.

2 Unless otherwise stated, this report is based on non-consolidated financial statements.

3 Credit cost is a net measure and includes loan-loss provisions, loan-loss write-offs, reversal of loan-loss allowances, amounts recovered on assets written off and other amounts recovered.

4 Realized securities gains/losses are comprised of gains/losses realized from the sale, redemption or write-off of stocks, bonds, and other securities, but do not include receipts of interest and dividend that are recorded in interest income.

5 Core profit is a profit indicator derived by taking the following steps. First, credit costs and gains/losses on securities are deducted from pretax income. Second, outstanding loan amounts are multiplied by an assumed credit cost ratio to derive an assumed credit-cost amount.
Finally, adjusted net income is computed by subtracting the assumed credit-cost amount from the adjusted pretax income using a standard corporate income tax rate (40%). A line depicting the relation between the credit cost ratio and the core ROE for each fiscal year can be drawn by repeatedly computing core profit while changing the credit cost ratio. By defining this line, it is possible to decompose time-series changes in core ROE into two factors: changes caused by changes in the credit cost ratio, and changes caused by changes in other sources of profit (see the chart below). For details of method of computing the core ROE of banks, see Hattori, Masazumi, Joji Ide, and Yasuo Miyake, “Bank Profits in Japan from the Perspective of ROE Analysis,” Bank of Japan Review, 2007-E-3.

Fluctuation of Core ROE (Illustration)

For a detailed analysis of factors affecting the interest rate spread on loans, see Mio, Hitoshi, “Saikin no Kashidashi Spread Shukusho no Haiei wo Meguru Bunseki – Jikeiretu Bunseki ni Motozuku Yoin Bunkai” (Analysis of the Recent Narrowing of Interest Rate Spreads on Loans – Time Series Analysis), Bank of Japan Review, 2007-J-6 (available only in Japanese).

For a detailed analysis of the profitability of Japanese banks, see Chapter 4 of the September 2007 issue of the Financial System Report.

Unrealized losses on securities that are deducted from Tier I capital are equivalent to valuation losses of “other securities,” which are deducted from net assets in the balance sheet. Depending on the status of deferred tax assets, either approximately 60 percent or the full amount of these valuation losses is deducted from net assets. This also poses an asymmetry, given that amounts equivalent to 45 percent of unrealized gains are included in capital.


The authors would like to thank Etsuko Kimura and Junko Wase of the Financial Systems and Bank Examination Department for their extensive assistance in data processing, preparation of charts, and the layout of this report.