Japan's Nonperforming Loan Problem

Released on October 11, 2002

I. Summary

Japan's nonperforming loan (NPL) problem should be regarded as being inextricably linked with structural changes both in the financial sector and corporate sector. While the problem was previously characterized primarily as the negative legacy from the bursting of asset price bubbles, recently it has increasingly become more a question of the disposal[1] of NPLs newly generated in the transformation of industry and individual businesses.

During the past ten years, Japanese banks have made progress in addressing the problem by disposing of more than 90 trillion yen in NPLs. Nevertheless, they now face a more severe challenge than ever, given the decline in their financial strength and earning power against the following background. First, a substantial amount of new NPLs is continuously being generated as structural changes progress. Second, the lending margins of banks remain low. And, third, unrealized gains on bank shareholdings, which used to serve as a buffer, have been exhausted.

A comprehensive approach is required to resolve the NPL problem, the principal components of which should include a more appropriate evaluation of NPLs, the promotion of their quick disposal based on such evaluation, and the enhancement of earning power on the part of both firms and banks. At the same time, the government and the central bank should preemptively seek to prevent a financial crisis from arising, and prepare an environment which is conducive to the steadfast resolution of the NPL problem.

A. Appropriate Evaluation and Quick Disposal of NPLs

An appropriate evaluation of the reduced economic value of NPLs and concomitant provisioning for the potential losses are prerequisites for the quick disposal of NPLs. In light of recent rapid changes in the economic structure and the sophistication of credit risk management, opportunities to improve current provisioning methods should be explored. In this regard, the Bank of Japan, through its on-site examination and off-site monitoring, intends to encourage major banks, in particular, to strengthen their own efforts toward more appropriate provisioning. Furthermore, it is essential to expand the secondary market for loan assets through such measures as the active use of the Resolution and Collection Corporation (RCC), thereby preparing an environment in which NPLs are priced on a market basis, and to urge banks to remove these loans from their balance sheets.

B. Improving the Competitiveness of Both Banks and Firms

From the viewpoint of promoting the efforts of bank management to improve earning power and restore financial soundness, the financial system, banking regulations, and the tax system should be constantly reviewed.

To resolve the NPL problem, we need a comprehensive approach toward improving competitiveness and promoting rehabilitation of the corporate sector by incorporating the viewpoints of both industrial and regional development policy. At the same time, to secure smooth corporate financing activities, we should nurture new markets for securitization, with credit enhancement devices provided by the government as appropriate.

C. Securing Financial System Stability

If faced with the risk of a financial crisis, we should respond to the situation in an appropriate and flexible manner with the government invoking Article 102 of the Deposit Insurance Law and the Bank of Japan acting as lender of last resort.

While staving off a financial crisis, we need to prepare an environment which is conducive to the steadfast resolution of the NPL problem. In this regard, we should encourage banks to reduce their shareholdings. Furthermore, we should consider an option to inject public funds into banks at risk of becoming undercapitalized in the process of the quick disposal of NPLs. Injection should be conducted in such a way as not to undermine the incentives to improve competitiveness.

II. Background to the Generation of NPLs

A. Current Situation of the NPL Problem

Since 1990, Japanese banks have disposed of more than 90 trillion yen in NPLs. Nevertheless, NPLs continue to be the most destabilizing factor in Japan's financial system. If we put the figure in perspective,

1. Disposal of NPLs includes loan write-offs and loan-loss provisions.

90 trillion yen corresponds to about 80 percent of the loan increase during the bubble period of the second half of the 1980s (Chart 1). Furthermore, the ratio of loans outstanding to nominal GDP peaked in 1989 at 1.1 times, declining since then to 0.9 time at present, which is a level observed before the bubble period (Chart 2). These figures suggest that it has become difficult to explain why a substantial amount of new NPLs continues to be generated solely by the bursting of the bubble.

B. NPL Problem and Structural Changes

Under such changes as intensified global competition, Japan's economy is experiencing rapid structural changes, including the creation and weeding out of firms. When looking at the causes behind recent bankruptcies and restructuring of major firms, there are cases stemming from the bursting of asset price bubbles, such as the failure of excessive real estate investment, but recently we are increasingly witnessing cases resulting from other factors, such as a decline in sales due to protracted stagnation and intensified competition from imports. Such a tendency can be broadly observed, from large to small firms, and also from manufacturing to non-manufacturing industry.

As such, the NPL problem in Japan is characterized not only as the negative legacy from the bursting of asset price bubbles but also as the disposal of newly generated NPLs as a result of the structural change in industry and corporate restructuring. Hence, it is not appropriate to narrowly interpret the NPL problem solely as dealing with past excessive lending on the part of banks and related excessive debt on the part of firms. Rather, it should also be regarded as being inextricably linked with Japan's structural changes both in the financial sector and corporate sector.

III. Economic Value of NPLs

A. NPLs and Earning Power of Banks

In general, NPLs are those loans from which banks no longer receive repayments and interest payments as scheduled. Interpreting this definition in terms of the economic value of loan assets, NPLs are loans that cannot generate returns commensurate to the risk involved.[2]

The economic value of a loan is defined theoretically as the discounted value of future cash flows generated from the loan (revenue from principal and interest minus costs) net of expected losses. According to this definition, NPLs are those loans whose economic value has declined below their book value[3] because the expected value of interest income has decreased (waived or reduced interest income), or the risk of principal loss has increased (higher default probability and reduction of collateral value). It is this difference between the reduced economic value and book value of a loan asset which is crucial for appropriate provisioning.

Therefore, the question of whether there are any NPLs to be disposed of is equivalent to the question of whether or not cash flows generated from loans in the future will exceed expected losses. In other words, the NPL problem boils down to the question of whether or not banks will be able to generate sufficient returns to cover credit costs[4] (risks) in the future.

B. Evaluation of NPLs

Dealing with NPLs begins with an appropriate evaluation of their economic value.

It should be noted that outstanding classified assets under the Financial Reconstruction Law,[5] which are often used to express the size of NPLs, include loans which are already provisioned for and a portion of loans that are already covered by

2. In Japan, financial inspection manuals define five categories of borrower classification: normal, needs attention (including special attention), in danger of bankruptcy, effectively bankrupt, and bankrupt. Usually, NPLs roughly correspond to the sum of those loans to borrowers classified under "needs special attention," "in danger of bankruptcy," "effectively bankrupt," and "bankrupt." In this paper, NPLs are defined as those loans with reduced economic value, as explained in the text.
3. The future profit of a loan asset net of credit costs (see Footnote 4) is positive when the economic value (discounted present value) of the loan asset is above book value. When economic value happens to fall below book value, the loan asset becomes an NPL, which needs to be disposed of.
4. "Credit costs" (loan costs) is the generic term for losses (costs) incurred by banks when they dispose of NPLs, such as the losses stemming from the provisioning, write-off, and the sale of assets. The ratio of credit costs to total loans outstanding is the credit cost ratio (the loan cost ratio).
5. There are three statistics regarding the outstanding balance of NPLs: risk managed loans based on the Banking Law, classified assets based on the Financial Reconstruction Law, and aggregate self-assessment by banks. Based on the former two statistics, the outstanding balance of NPLs roughly corresponds to the sum of loans to borrowers that "need special attention," "in danger of bankruptcy," "effectively bankrupt," and "bankrupt."

collateral. At the same time, the economic value of some so-called "other loans needing attention,"[6] not included in outstanding classified assets, might have depreciated. Thus, in assessing the magnitude of the NPL problem, we should evaluate the reduced economic value of the loans, and focus on the portion of such loans which are not provisioned for, i.e., the net amount which needs to be disposed of.

Loan evaluation methods should be studied in a manner consistent with (1) the tide of accounting standards both at home and abroad, such as the introduction of accounting for the impairment of fixed assets; (2) the trend of bank supervision worldwide, such as sound practices regarding accounting and the disclosure of loans as discussed at the Basel Committee on Banking Supervision; and (3) the viewpoint of market participants, such as asset evaluation based on market prices (Chart 3).

IV. Current Situation of the NPL Problem

A. Amount of NPLs to Be Disposed of

As described above, the portion of NPLs to be disposed of depends on the prospects for future profits and credit costs of various loans. Hence, it is closely related with the overall development of the economy. This is one of the reasons why it is extremely difficult to estimate the precise size of NPLs to be disposed of at any particular point in time.

Banks have so far made efforts to achieve stringent provisioning in line with corporate accounting principles and financial inspection manuals. Both the Financial Services Agency and the Bank of Japan have been verifying the appropriateness of such provisioning. Nevertheless, the decline in stock prices and credit ratings of banks seems to suggest that banks have yet to win sufficient credibility at home and abroad in dealing with the NPL problem. Based on the information obtained from on-site examinations and off-site monitoring by the Bank of Japan and taking into account that there are not a few cases in which additional losses unfold in the process of selling loan assets, the current amount of provisioning is unlikely to cover the reduced economic value of NPLs.

B. Credit Costs

If that is the case, it is likely that high credit costs in excess of bank earnings may continue to remain. An estimate using the past probability of changes in borrower classification[7] over time shows that the credit cost ratio will most likely remain at around 1 percent for the time being. In the restructuring process for Japan's economy to become more competitive and efficient, the generation of high credit costs is unavoidable.

It should be noted that the credit cost ratio in Japan is not necessarily conspicuous compared with that in the United States and Europe. For example, in the United States it reached around 0.7 percent between the end of the 1990s and 2000, when the IT boom was at its peak. In Japan, the ratio had been around 0.1 percent until the 1980s, which was unusually low (Chart 4).

C. Earning Power of Banks

The fundamental issue here is that the earning power of Japanese banks is not sufficient to cover credit costs. Furthermore, banks have almost exhausted unrealized gains on their shareholdings, and, as a result, practically no buffer remains. If such a situation continues, banks will find it increasingly difficult to perform sound financial intermediary function, while coping with a continuing deterioration in loan quality. For example, the lending margins of U.S. banks have improved substantially since the end of the 1980s, when they were confronted with an NPL problem. In contrast, the lending margins of Japanese banks have changed little since before and after the bubble (Chart 4).

As mentioned above, Japanese banks have been disposing of a massive amount of NPLs for more than ten years; suffice it to say that past large NPLs have been disposed of to a considerable degree. Nevertheless, they now face a more severe challenge than ever, given the decline in their financial strength and earning power against the following background. First, a substantial amount of new NPLs is being generated as structural changes progress. Second, the lending margins of banks remain low. And, third, unrealized gains on bank shareholdings, which used to serve as a buffer, have been exhausted.

6. "Other loans needing attention" comprises "Loans to borrowers that need attention" minus "Loans requiring special attention."
7. The probability that a firm under a certain borrower classification will be downgraded or upgraded within a certain period of time.

V. Principles in Dealing with the NPL Problem

In light of the current NPL situation in Japan, a comprehensive approach is required to resolve the problem, the principal components of which should include an appropriate evaluation of the economic value of NPLs, the promotion of their quick disposal based on such evaluation, and the enhancement of earning power on the part of both firms and banks. At the same time, the government and the central bank should preemptively seek to prevent a financial crisis from arising, and prepare an environment which is conducive to the steadfast resolution of the NPL problem.

The NPL problem has to be resolved in order to lay and strengthen the financial foundation for sustainable growth. In that process, business activity must be revitalized through tax incentives and appropriate industrial policy, and also by securing a stable economic environment through macroeconomic policy and a social safety net.

Given such recognition, the following principles are necessary in dealing with the NPL problem.

A. Appropriate Evaluation of the Economic Value of NPLs and Their Quick Disposal

An appropriate evaluation of the reduced economic value of NPLs and concomitant provisioning for the potential losses are prerequisites for the quick disposal of NPLs. This is an important condition for encouraging banks to improve profitability as well as win sufficient market confidence in their strategy to deal with NPLs.

1. Improvement in provisioning methods

Taking into account the current trend, both at home and abroad, of accounting standards and bank supervision, internationally active major banks should make an appropriate evaluation of NPLs that properly reflects their reduced economic value and promote the quick disposal of these loans in order to win market confidence at home and abroad. In addition, in light of recent rapid changes in the economic structure and the sophistication of credit risk management, opportunities to improve current provisioning methods should be explored.[8] In this regard, the Bank of Japan, through its on-site examination and off-site monitoring, intends to encourage major banks, in particular, to strengthen their own efforts toward more appropriate provisioning.

2. Expansion of secondary markets for loan assets

In the process of dealing with NPLs, banks should make efforts to remove such loans from their balance sheets after appropriate provisioning is made. In this regard, the expansion of secondary markets for loan assets would promote the off-balancing of NPLs. If diverse investors enter the growing secondary markets, the pricing of these loans would likely reflect the rehabilitated value of businesses. This, in turn, would provide banks with important criteria for appropriate provisioning. In this way, appropriate provisioning and the expansion of secondary markets for loan assets complement each other. The Bank of Japan has already accepted asset-backed securities as eligible collateral for its money market operations, which has contributed to the expansion of secondary markets.

Furthermore, if the RCC devises ways to promote the purchase and sale of NPLs, it would have a significant effect on the off-balancing of NPLs and the expansion of secondary markets for loan assets.

B. Improving the Competitiveness of Both Banks and Firms

In order to resolve the NPL problem and strengthen functioning of the financial system, the quick disposal of past NPLs is a necessary, but not a sufficient condition. Banks must improve their earning power so that they will be able to support sound business activity, while coping with possible future credit costs. At the same time, firms must also improve earning power and promote rehabilitation.

1. Promoting management efforts of banks

To improve earning power, bank management must first make efforts to review business, including restructuring and consolidation, as well as reduce costs. Banks have recently been endeavoring to increase lending margins. This is a move toward

8. Current financial inspection manuals stipulate that provisioning for loans that need attention should be estimated based on expected losses over a certain period of time, which corresponds to the average years left to maturity of aggregate loans. In addition, the manuals clearly state the future agenda by saying that asset evaluation based on discounted present value is subject to review, taking into account future discussions in such fora as the Business Accounting Council and how such evaluation is actually being adopted by banks. Some major banks have already started to adopt the discounted present value method in evaluating NPLs.

the formation of more appropriate lending rates reflecting risks involved, and would contribute to increasing the managerial efficiency of both banks and firms over the medium to long term. Moreover, with a view to improving earning power and restoring soundness, we should constantly review such basic frameworks as the financial system, banking regulations, and the tax system.

2. Working on corporate rehabilitation

The basic source of bank profits comes from the profits of the corporate sector as a whole. Therefore, in addition to improving bank earning power, we need to work on improving corporate competitiveness and rehabilitation. If promotion of the quick disposal of NPLs based on appropriate evaluation prompts firms to come up with effective rehabilitation plans and change their business, it would lead to greater efficiency of corporate management and higher earning power. In addition, if there are firms deemed necessary to support and rehabilitate from the viewpoint of industrial policy, then the government must formulate clear and comprehensive measures while bearing the necessary costs.

3. Securing smooth corporate financing

In the process of resolving the NPL problem, we will see the closure and consolidation of firms as well as a review of the lending rate structure. Over the long term, this will contribute to more efficient credit intermediation. However, in the short term, we need to devise ways to shield sound firms from financial pressure and ensure smooth corporate financing. For example, it would be useful to diversify corporate funding channels such as nurturing new markets that utilize securitization.

Public financial institutions should play a role in areas where private financial institutions cannot provide services, such as guarantees and interest compensation, and assist those firms that need to be supported from the viewpoint of industrial policy, and also small- and medium-sized firms whose survival is considered essential from the viewpoint of regional development policy. In this context, it is useful to take advantage of the credit enhancement measures provided by the government, as appropriate, to securitized products. On the other hand, in areas where private financial institutions can provide services, public financial institutions should terminate or reduce these services, and private financial institutions be encouraged to expand their services.

C. Securing Financial System Stability

If faced with the risk of a financial crisis (the realization of systemic risk), we should respond to the situation in an appropriate and flexible manner with the government invoking Article 102 of the Deposit Insurance Law and the Bank of Japan acting as lender of last resort. We should also be prepared to secure financial system stability, while staving off a financial crisis.

1. Promoting a reduction in bank shareholdings

In the short term, market risk pertaining to the shareholdings of banks has become a significant destabilizing factor for bank management. Reducing such risk is an urgent task from the viewpoint of ensuring financial system stability as well as laying the foundation for banks to steadfastly deal with the NPL problem. Based on such recognition, the Bank of Japan decided today (on October 11) to purchase some of the excessive shareholdings held by banks.

2. Injection of public funds

When aggressively promoting the quick disposal of NPLs, banks might become undercapitalized in some cases. In such a situation, if a bank wins market confidence with respect to the transparency of its financial condition and management strategy, it should be able to raise capital in the market on its own. However, if such finance is not possible immediately for some reason and if it is judged that financial system stability needs to be secured, the injection of public funds should be considered as an option to respond to the situation. Injection should be conducted in such a way as not to undermine incentives to improve competitiveness.

Chart 1

Disposal of NPLs

• The cumulative amount of All Banks' NPL disposal (cost of loan-loss provisioning, loan write-offs, and others) stood at about 90 trillion yen. This is equivalent to about 80 percent of the increase in loans during the late 1980s (1986 through 1990) or about 110 trillion yen (about 40 trillion yen of which is for construction, real estate, and finance companies).

tril. yen

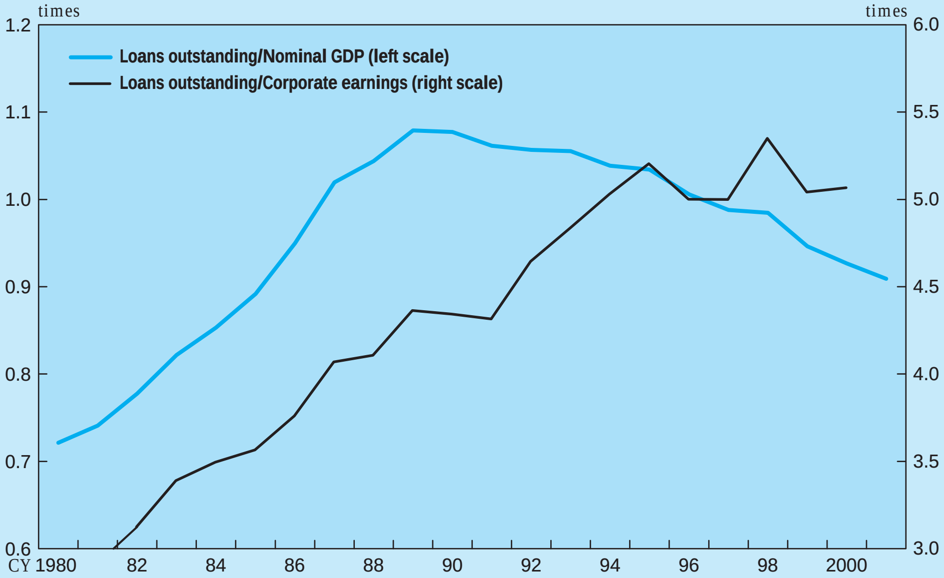
Fiscal year	1992	93	94	95	96	97	98	99	2000	01	Total
All Banks[1]	**1.6**	**3.9**	**5.2**	**13.4**	**7.8**	**13.3**	**13.6**	**6.9**	**6.1**	**9.7**	**81.5[2]**
City banks, long-term credit banks, and trust banks	**1.6**	**3.9**	**5.2**	**11.1**	**6.2**	**10.8**	**10.4**	**5.4**	**4.3**	**7.7**	**66.7**

Notes: *1.* The figures for All Banks from fiscal 1992 through 1994 are only for city banks, long-term credit banks, and trust banks.
2. Including disposal of NPLs by bankrupt banks, disposal of NPLs from fiscal 1992 through 2001 amounted to about 90 trillion yen on a cumulative basis.

Chart 2

Ratio of Loans Outstanding to Nominal GDP

• The ratio of loans outstanding to nominal GDP has already declined to the level observed before the bubble period.
—The ratio of loans outstanding to corporate earnings[1] still remains high.



Note: *1.* "Corporate earnings" is operating surplus in the National Accounts.

Chart 3
Recent Developments in Accounting for Asset Valuation in Japan

- Mark-to-market accounting for financial products was applied in fiscal 2000.
  Mark-to-market accounting for cross-shareholdings for the purpose of long-term investment was applied in fiscal 2001.
- Accounting for impairment of fixed assets will be applied in fiscal 2005.
  Voluntary application will be possible from fiscal 2003.

  (In the U.S. standards, the statement of accounting for impairment of fixed assets was issued and applied in 1995 (SFAS 121 [amended in 2001]).
  In International Accounting Standards (IAS), the statement of accounting for impairment of fixed assets was issued in 1998 (IAS 36).)

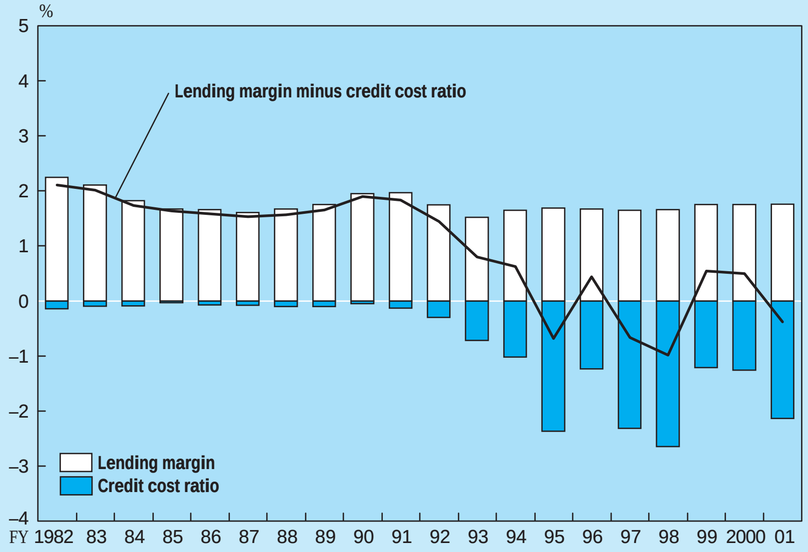
- Accounting for impairment of loans outstanding
  Discounted cash flow method can be applied to part of loans to borrowers “in danger of bankruptcy” and part of loans to borrowers that “need attention.”

  (In the U.S. standards, the statement of accounting for impairment of loans was issued in 1993 (SFAS 114 [amended in 1994]).
  In IAS, the statement of accounting for impairment of loans was issued in 1998 (IAS 39 [amended in 2000]).
  In Sound Practices for Loan Accounting and Disclosure by the Basel Committee on Banking Supervision, the statement of accounting for impairment of loans was issued in 1999.)

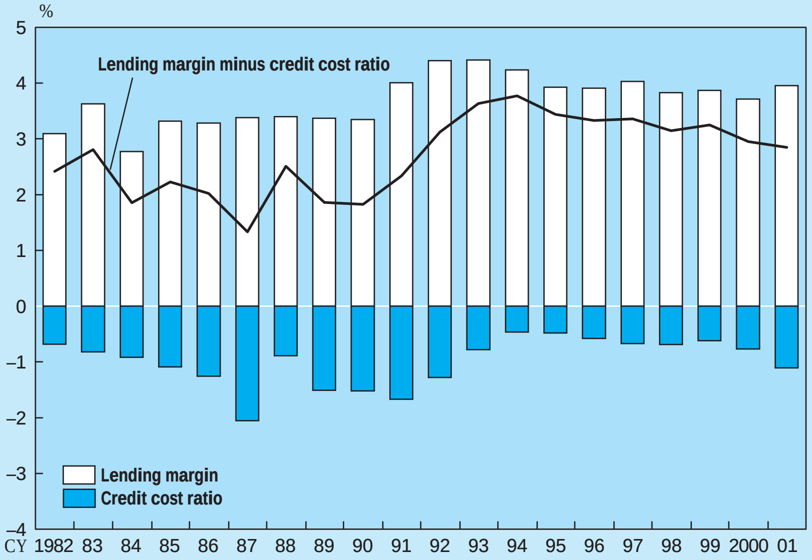
Chart 4

Lending Margin and Credit Cost Ratio: Comparison of Japanese Banks with U.S. Banks

(1) Japanese Banks[1]



(2) U.S. Banks[2]



Notes: *1.* Japanese banks are All Banks.
2. U.S. banks are member banks of the Federal Deposit Insurance Corporation (FDIC).