The Japanese banking crisis in the 1990s*

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Introduction

This short note first provides a brief history of the Japanese bad loans problem. It then discusses the current state and the causes of the problem. It also describes the Japanese government's attempt to address the problem, explaining why the task has not been an easy one.

The crisis which hit the financial system in the 1990s is unprecedented in the postwar period. The ratio of publicly disclosed bad loans to total loans in the banking sector stood at 3.6% as of March 1998. Based on the self-assessment by banks, problem loans amount to 11.0% of total loans. It is now more than seven years since resolution was first officially discussed, but it has still not been possible to completely steer the economy out of the crisis.

In order to analyse the crisis, it may be useful to divide the last decade or two into several sub-periods. First, the period from the late 1970s to the mid 1980s can be characterised as the starting point of the process of financial deregulation in Japan. Second, the mid to late 1980s was a period of rising asset prices supported by massive bank lending. Third, the 1990s have seen falling asset prices, resulting in problems in the banking sector, and the government's slow attempts to address them.

The 1990s may be further divided into three sub-periods. First, the period until 1994 is one in which banks and the regulators started to recognise the seriousness of the bad loans problem. The first troubled banks to be closed, with the injection of deposit insurance funds into rescuing banks, were Toho-Sogo and Toyo-Shinkin in 1992. The Cooperative Credit Purchasing Company (CCPC) was created in 1993. Banks started to disclose bad loan numbers in 1993.

* The views expressed are those of the author and do not represent those of the Bank of Japan. The paper is an abridged and revised version of Ueda (1998).

Second, starting in late 1994, the regulators embarked on serious attempts at resolving banks' problems, which they thought were most serious among the credit cooperatives and housing finance companies (Jusen). Thus, they tried to mobilise public money, but faced serious objections from taxpayers. As a result, the sum of public money mobilised was very small, less than 1 trillion yen. In addition, the implementation of the prompt corrective action (PCA) was decided as a way to make the regulatory approach more transparent and rules-based. Unfortunately, even with these measures, the problems did not disappear.

The third period starts in 1997 when three large banks and securities companies went under, leading to a serious credit crunch. The government finally decided to mobilise a large sum of public money, 30 trillion yen initially, subsequently adjusted upwards to 60 trillion yen, to protect creditors of insolvent banks and to recapitalise some of the solvent ones. At the end of March, the government injected about 7.5 trillion yen in capital into 15 large top banks. The capital injection was considered to be enough to let the banks clear the BIS criterion after writing off the large sum of bad loans.

In the first section, I review the current state of the bad loans problem. In the next section, a brief discussion of the causes of the bad loans problem is presented. The third section takes a look at the role played by public policy towards banks in aggravating the bad loans problem. The section first discusses the relationship between financial deregulation in the 1970s and 1980s and increases in real estate loans during the period. It then goes on to cover the constraints the government had to face in its attempt to resolve the crisis in the 1990s. The final section contains some concluding remarks.

The bad loans problem as of 1998

Let us first briefly look at the current state of the bad loans problem. The definition of bad loans has changed over time and has been a source of confusion. Initially, banks were reporting only Non-accrual Loans and Past Due Loans with Restructured Loans successively added to the list. In addition, starting in fiscal 1997, the definition of Restructured Loans has been extended to make it comparable to the corresponding concept in the US. Separately, the results of the self-assessment of loans, a major

Table 1

The bad loans problem as of March 1998

	Top 20	Regional	Shinkin banks	Credit cooperatives
Number of banks	20	128	401	351
Total assets	747	265	111	23
Problem loans[1]	50.2	21.6	10.1	2.5
As a percentage of loans	11.1	11.0	13.6	16.6
Required loss provisions[2]	11.2	4.3	1.9	0.6
Hidden reserves	2.7	2.6	0.6	0
Capital	13.6	9.4	5.1	0.5
Operating profits[3]	3.6	1.9	0.8	0.2

[1] Category II+III loans by self-assessment. [2] 16.7% of Category II loans+75.3% of Category III loans. [3] In fiscal 1997.

component of PCA, have been made public since March 1998.[1] This approach classifies all loans into four categories: non-classified, i.e. healthy loans; and three types of problem loans depending on the financial health of borrowers. The bad loans based on the official definition stood at 19.5 trillion yen for the top 19 and regional banks as of March 1998, while the problem loans based on the self-assessment totalled 71.8 trillion yen. Apart from technical details, the major reason for the discrepancy is that the latter include a large sum of Category II loans, relatively the healthiest of the three types of problem loans. Category II loans amounted to 65.8 trillion yen in March 1998. Past experience suggests that only a small fraction of Category II loans become non-recoverable.[2] For a while, it seems that we will have to live with many concepts of bad loans.

Table 1 summarises bad loans and related information for major segments of the banking industry. In row 3, we show problem loans, the sum of the three categories, based on the self-assessment by banks.[3] The ratio of problem loans to total loans is highest for credit cooperatives.

[1] The official bad loan figures are disclosed for each bank, while the results of self-assessment are available only at industry aggregate levels.

[2] The bank inspections carried out by the MOF and the BOJ have used roughly the same classification of loans.

[3] Actually, PCA requires that all Category IV loans be written off by the end of a fiscal year. Hence, the figures in the table are the sum of Category II and III loans.

This accords with the fact that many of the resolution attempts so far have involved credit cooperatives.

Row 5 is an estimate of the necessary amounts of loss provisions. Based on data from its past inspections, the BOJ (1997) reports that the probabilities of problem loans becoming non-recoverable within three years are 16.7% for Category II and 75.3% for Category III. I apply the same probabilities to the classified problem loans, not shown in the table, to arrive at row 5.

Such loss provisions can be made out of hidden reserves on banks' securities portfolio (row 6), own capital (row 7), and operating profits (row 8). The sum of the three rows exceeds row 5 for all segments of the industry. Thus, banks have enough capital to make loss provisions. However, credit cooperatives would have almost no capital left once required provisions are made. After loss provisions, the capital ratios of some of the other banks seem to fall short of the BIS criterion. Hence, the current attempts at capital injection using public money.

Even more striking than the figures in the table is the amount of bad loans written off in the last few years.[4] As of March 1993, official bad loans outstanding totalled 12.8 trillion yen for the top 20 banks. Since then, the banks have written off 37.6 trillion yen of loans. As of March 1998, bad loans amounted to 14.5 trillion yen, higher than in 1993. Thus, during the five years, the banks were writing off, on average, 7.5 trillion yen of bad loans per year (42% of average bad loans outstanding during the period), but had to face an even larger increase in bad loans, 7.9 trillion yen, every year. Hence, the net increase in bad loans. This is basically due to two factors: underestimates of bad loans in the past and genuine increases resulting from the stagnant behaviour of the economy. We will come back to this point in the section on public policy.

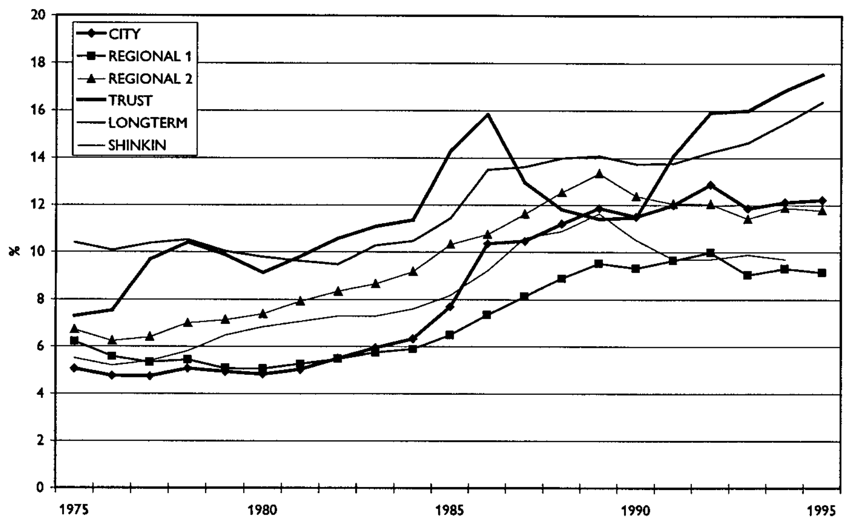
Causes of the bad loans problem

The role real-estate-related loans played in causing the bad loans problem has been widely discussed. At the aggregate level, Figure 1 shows the movements of the ratio of loans to the real estate industry

[4] Data on the problem loans as recognised by self-assessment or by regulators' inspections are only available for fiscal 1997.

Figure 1

Share of real estate loans



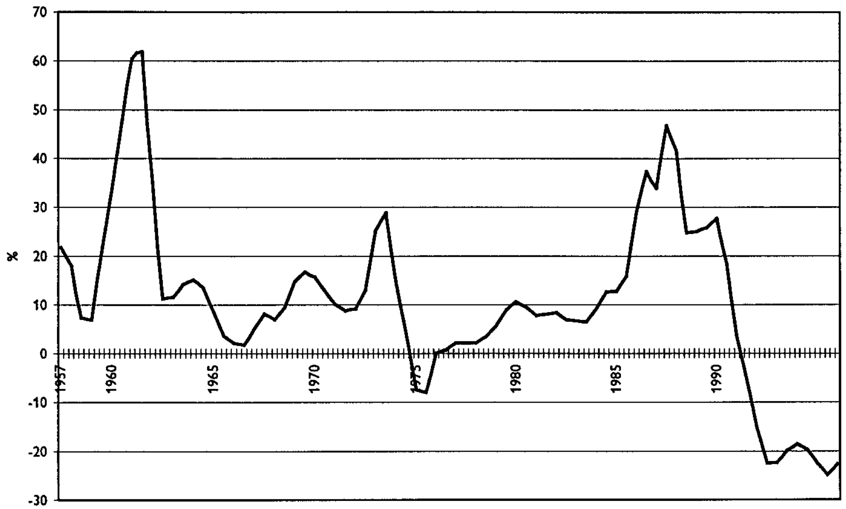
to total loans for six segments of the banking industry. Despite some differences between the sectors, the rough pattern is the same across the industry. The ratio started to go up in the early to mid 1980s, peaked around 1990 and has not declined sharply since then. The exposure to the real estate industry is higher for long-term and trust banks.

The role that real estate loans played in causing the bad loans problem can be easily inferred from Figure 2, which shows the movements of the price index for land for commercial use in six large cities. The increases in real estate loans in the mid to late 1980s, shown in Figure 1, correspond with sharp increases in land prices after the mid 1980s in Figure 2. The long period of large declines in land prices in the 1990s is consistent with the view that this has been the major cause of the bad loans problem. Incidentally, the chart shows that, with the exception of a brief period around 1975, the 1990s have been the only postwar period in which land prices have exhibited major downward tendencies. Thus, there is some truth to the argument that the large land price declines in the 1990s were an unexpected shock.

The next question is what led banks to increase real estate lending so sharply in the 1980s. Financial liberalisation, which has been steadily

Figure 2

The rate of change in Japanese land prices



taking place since the late 1970s, is sometimes claimed as one of the causes. Liberalisation hit the securities markets first. Large non-financial firms that were good customers of major banks started to turn away from banks and use the securities markets. The introduction of CDs in 1979 and the liberalisation in time deposit interest rates that began in 1985 increased the cost of funds for banks and forced them to look for lending opportunities with low screening costs. An easy place to go was real-estate-related loans, where credit analysis was just a matter of estimating the future path of real estate prices. The perceived risk of such loans must have been low, given the movements of real estate prices in the postwar period as discussed above. Large banks also went to look for customers among smaller firms. This meant a loss of customers for smaller banks. Some of them increased real estate loans as well.

Inefficient or lax bank management is sometimes regarded as a cause of bad loans. This is certainly a reasonable argument,[5] but is a bit

[5] Wheelock and Wilson (1995) find that the probability of bankruptcy was higher for inefficient banks in the banking crisis in Kansas during 1910–25.

stretched as a cause of an economy-wide bad loans problem. One must argue that many banks suddenly became inefficient.

Some safety nets have been blamed for contributing to banking instability by generating moral hazard. This view is especially strong in the literature on the US banking crisis in the 1980s. That is, troubled banks chose to get into high-risk investments only to find themselves in even worse situations.[6] The strategy was supported by regulators' forbearance approach. To my knowledge, similar analysis on Japanese banks has not been carried out yet.

Many studies have tried to test some of the above-mentioned hypotheses. In Ueda (1998), for example, I use cross-section data on the top 148 banks to analyse the relationship between real estate loans up to 1990 and the bad loans problem in the 1990s. I find that banks with higher exposure to the real estate industry suffered more from the bad loans problem in the 1990s. I also find that real estate loans in the late 1980s were larger for banks that did not have a good customer base among small firms or non-real estate sectors and for banks that experienced larger increases in their deposit rates than others. These results accord well with the hypothesis that financial deregulation forced some banks to expand real estate loans.

The above discussion inevitably leads to the question of what created the volatile movements in asset prices. Here, there seems to be general agreement that monetary policy played a crucial role. In Ueda (1997), for example, I provide a detailed analysis of the issue. I skip the discussion in this paper.

Public policy towards the financial industry and the bad loans problem

To what extent are the bank regulators to be blamed for the bad loans problem? Below I will proceed along two lines: one, the appropriate pace and scope of deregulation; and two, the appropriate design and the introduction of prudential regulation. To anticipate, public policy seems to have made mistakes on both fronts.

[6] See, for example, Brumbaugh and Carron (1987).

The first two periods: the gradual approach to deregulation

Financial deregulation started in Japan during the late 1970s for a variety of reasons, including large issues of government bonds and the pressure from the US to open Japanese financial markets. The salient feature of Japanese deregulation was gradualism and the maintenance of the segmentation approach to the financial industry. An example of the gradualism is the process of the deregulation of interest rate control on time deposits. The deregulation started in 1985, but was completed nine years later. The segmentation approach has implied that different types of financial services have been provided by different types of financial institutions with fairly strict barriers between segments of the financial industry. Thus, long-term banking and short-term banking have been separated. Trust banking services have been provided by trust banks with only a few exceptions. Smaller banks have been encouraged to lend to small businesses. Needless to say, banking and securities businesses have been strictly separated.

This policy of segmentation, when coupled with liberalisation in other fields such as development of the securities markets, has created serious difficulties for some banks. For example, long-term credit and trust banks were created as financial institutions specialising in loans to large firms. Under deregulation, these banks increasingly lost large borrowers to the bond and equity markets, and expanded real-estate-related loans. With segmentation, they were not able to move aggressively into investment banking. Similarly, smaller banks and Jusen increased commercial real estate loans because large city banks, which were also losing large borrowers, aggressively sought customers among smaller firms and individuals.

Unfortunately, the 1980s were a period when foreign financial institutions started to develop innovative financial techniques. Insufficient lifting of entry regulations prevented Japanese financial institutions from developing similar skills through competition.

With a lag of about a decade, Japan decided to carry out more full-fledged financial deregulation under its own Big Bang. With hindsight, however, it would have been much less painful in terms of the costs of deregulation and much more effective in terms of mitigating speculative real estate booms had it succeeded in carrying out the Big Bang in the 1980s.

Another problem with the prudential policy during this period concerns bank risk management. Tight controls of bank behaviour by regulators had long been a substitute for risk management by banks themselves and for monitoring by shareholders and depositors. But the controls were successively relaxed in the 1970s and 1980s. On the other hand, banks had not yet started using modern risk management techniques.[7] Depositors still had faith in regulators' ability to protect them. Thus, a vacuum emerged in bank risk management. This may have been a factor behind massive lending into real-estate-related activities, as discussed in the previous section.

The 1990s: a struggle with the BIS capital requirement

Without doubt the regulators underestimated the negative effects on the economy of the bad loans problem in the 1990s. As a result, their approach to the problem has been one of forbearance.[8] Below I will discuss some of the backgrounds for the adoption of the forbearance approach.

Since the early 1990s, both banks and regulators have been trying to achieve at least two ends, reducing bad loans and meeting the Basel capital standards,[9] with sometimes only few instruments at hand.

Large Japanese banks had capital ratios of barely above 8% at the start of the 1990s, with about half of the 8% accounted for by unrealised capital gains on their equity positions. Since then, banks have been writing off bad loans by basically using operating profits and realising latent gains on equity positions. This meant that every time equity prices plunged, banks faced the risk of not being able to meet the Basel standards or having to slow down the pace of bad loan write-offs. As of March 1998, latent gains stood at 2.7 trillion yen for the top 20 banks, only 15% of what they were in 1993, almost a negligible portion of their capital base. What has filled the gap is a sharp increase in other components of Tier II capital, mostly subordinate bonds and loans.

For domestic banks, the Basel standards were not a constraint. Aggressive bad loan write-offs, however, were sometimes not possible

[7] Even as of 1996, banks were reluctant to go ahead with self-assessment of their loan portfolio because, in their view, this would involve much preparation on their part.

[8] Early warning against forbearance was issued by a number of people, including Kane (1993).

[9] Of course, the Basel standards apply only to internationally operating banks. But with PCA, capital standards have become important for domestic banks as well. The PCA's strict application, however, was postponed in 1998 due to the prevailing financial instability.

because they may render banks insolvent, leaving regulators at a loss as to what to do for the reason pointed out below.

The difficulties banks and regulators faced along the above lines reflected a few constraints on their behaviour. First, public money for protecting depositors in the event of a bank failure was very difficult to obtain. It required the financial panic of November 1997 to persuade the public and politicians of the necessity of a large sum of public funds for the resolution of the bad loans problem. In the absence of the backing of funds, the regulators were not able to become very aggressive. Second, asset markets were not functioning properly. Despite large price declines, it has been very difficult to issue new shares in the equity market. Some suspect that the so-called Price Keeping Operations resulted in the malfunctioning of the market. Ironically, the PKOs themselves were a reflection of the recognition that large price declines in the stock market would add to the instability of the financial system.

Consequently, provisions for bad loans have been made only gradually. Intentionally, or unintentionally, insufficient loss provisions have been rationalised by insufficient disclosure of bank balance sheets. In a sense, regulators have been forced to adopt the policy of forbearance.

An important lesson one can draw from this experience is the difficulty of designing appropriate regulations and introducing them at the right time. Capital requirements such as the BIS regulation and PCA have had the unfortunate feature of intensifying the effects of negative exogenous shocks on the economy. Introduction of the regulations into the weak banking sector may have aggravated the financial instability.[10] Additionally, the inclusion of hidden reserves in the definition of the capital base has increased the destabilising nature of the regulations. To avoid misunderstandings, let me emphasise that the right remedy was not to get rid of the capital requirements, but to have addressed the bad loans problem seriously at a much earlier stage.

Concluding remarks

As stated in the introduction, the serious credit crunch that started in the fall of 1997 has finally persuaded the public and politicians that the

[10] I fully realise that the international financial community would not have accepted a Japanese decision to introduce a radically different capital standard.

use of taxpayers' money is necessary for the resolution of the bad loans problem. In early 1998, the government passed a law authorising it to spend up to 30 trillion yen on protecting creditors of troubled banks and on recapitalisation. Only a minor portion of the fund, however, had been spent by the summer of 1998. The government also lacked a scheme to continue the loans to healthy borrowers of insolvent banks and to carry out the restructuring of the banks in case no merger could be worked out. Meanwhile, the market attacked the Long-Term Credit Bank of Japan, among others.

In the fall of 1998, the Diet passed a set of laws enabling the government to spend a much larger sum of public money, 60 trillion yen, on the resolution of the bad loans problem and to use the bridge bank idea to handle insolvent banks. The Long-Term Credit Bank of Japan and the Nippon Credit Bank have been declared insolvent and are now controlled by management teams selected by the government under the bridge bank scheme.

The recapitalisation of the top 15 banks was carried out at the end of last March. As a result, the widespread panic psychology against the Japanese financial system seems to have subsided for the moment. The Japanese experience in the 1990s, however, leaves many difficult questions unanswered, some of which are pointed out below.

Finally, I might add that the tough problems regulators have faced in their attempts to address the bad loans problem in the 1990s have had a common element. That is, attempts to adopt a transparent supervisory framework became serious only after the economy stagnated. Thus, regulators had to face the trade-off between achieving a market-friendly regulatory framework and the maintenance of short-run stability in the financial system. A typical example is the appropriate degree of bank creditor protection. On the one hand, a market-friendly regulatory approach would call for imposing some penalty on depositors with insolvent banks. On the other, the requirement to maintain the stability of the financial system favours complete depositor protection. The regulators have respected the second consideration so far. It remains to be seen what they will be able to do in order to balance the two considerations when the current emergency regulatory framework ends in the year 2001.

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