Japan's Banking: The Darkest Hour Before Dawn
The Future is in the Hands of MoF

Yukiko Ohara

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Yukiko Ohara
UBS Securities Tokyo Research

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Abstract

Public funds essential to solving the crisis

The current crisis in the financial system can only be solved quickly, and relatively easily, if the Ministry of Finance (MoF) acknowledged the need for injecting public funds into the system. MoF, however, also needs a political consensus on the issue. Any alternative, which relies heavily or exclusively on the strong banks, will be vehemently opposed by the healthy faction of the financial system. Any delay in solving the crisis through public funds will lead to a more expensive solution, with more casualties. A crisis feeling, therefore, seems to have developed recognizing that the status quo is untenable. As such, change, good or bad, is inevitable, and the next year will present the system with a very critical challenge, that may well prove to be the last opportunity for positive action. Again, positive action can only mean the use of public funds alongside private funds. The deflationary pressure on the economy continues to cause complications in resolving the banking crisis. Therefore, reversing deflation quickly is essential to helping the financial system deal with its problems. There are signs that the authorities are starting to act in the right direction, although the scope, size and timeliness of intervention remains to be seen.

Main points: cost of rescue, timing and participants

(1) Outline:

The Ministry of Finance' s (MoF) estimate for financial institutions' overall bad debt stood at ¥40 trillion as of March 1995. At this level, UBS Securities considers that the bad debt problem can be solved by private financial institutions' own resources and would probably not need the injection of public funds in order to dispose of bankruptcies and absorb bad debt. However, one should note that there are many problem borrowers not currently included in the MoF's definition of bad debts that have received strong financial support by lender banks. The bad debt and bankruptcy disposal process will take several years, during which time disposal costs will continue to increase. In the meantime, the future of the banking crisis lies in the hands of the MoF: public funds will be needed to avert a full blown crisis through aiding the private banking sector in absorbing bad debt and the cost of bankruptcies. Inaction will have the opposite effect, so that any resolution to the problem will not only be more difficult, but prohibitively expensive, too.

(2) Five different bad debt simulations :

UBS Securities has estimated the capital deficits of Japanese financial institutions under five different bad debt scenarios ranging from ¥40 trillion to ¥95 trillion. In the ¥40 trillion scenario, hardly any capital deficit (under-capitalisation) would be seen. However, it is likely that in a ¥75 trillion scenario (UBS standard scenario) the capital deficit would expand rapidly and some of the 21 major banks would face solvency problems.

(3) Postponing the disposal process by one year:

A new formula for disposing of bankruptcies which the Financial System Research Committee (FSRC, advisory council to the Minister of Finance) has been discussing for the last few months is unlikely to be implemented for about a year. In the meantime, the Deposit Insurance Corporation of Japan (DICJ) does not have adequate funds available for disposal costs. Therefore, the authorities will have no choice but to postpone the disposal process by

around one year. As has already been experienced, postponing disposals will be the primary factor that turns potential bad debts into actual bad debts that finally need to be written off.

(4) A disposal procedure that relies heavily on private sector earnings will not succeed:
Can the funds for the disposal of bankrupt institutions be collected within one year? According to the FSRC's interim report, private-sector financial institutions should, in theory, bear as much as is feasible of the costs of disposing of bankruptcies. In our ¥75 trillion scenario, private-sector financial institutions would have to bear about ¥7 trillion on the disposal of bankrupt institutions, about twice as much as in the ¥40 trillion scenario. Despite higher profits, it is expected that the earnings of the 21 major banks will be weakened for the next several years due to the disposal costs of their own bad debts as well as supporting other institutions through the Deposit Insurance Corporation's increased premia. Therefore, few banks will ignore their own shareholders and willingly pay out for the disposal of bankrupted institutions. As a result, it would be very difficult to start the disposal procedures that are due to begin in one year without injecting enough public funds. Regulators should commit the use of ample public funds as soon as possible in order to minimize increasing costs. UBS Securities considers that strong banks that are able to manage disposals on bad debts within one to two years will benefit most from such a reinforced banking policy, such as Mitsubishi Bank and Sanwa Bank.

1. Calculating bad debts on a wider definition

(1) Difference between UBS and MoF definitions

MoF estimate of ¥40–50 trillion:

The MoF's estimate for financial institutions' overall bad debt stood at ¥40 trillion as of March 1995. Bad debt, as defined by the MoF, include all loans outstanding to bankrupt borrowers, those where payments have not been received for six months or more, and those where interest payments have been reduced to less than the level of the ODR at the major 21 banks, regional banks, second-tier banks, shinkin banks, credit cooperatives, Rodo Kinko, Shoko

Chukin Bank and Agricultural cooperatives-related financial institutions. According to the MoF, if we add loans where payments have stalled for over three months but less than six months (¥1–2 trillion), loans from agricultural cooperatives-related financial institutions to the housing loan companies (around ¥5.5 trillion) and loans where interest rates have been reduced but still exceed the ODR (¥1–2 trillion), the total comes to just under ¥50 trillion. The MoF also mentioned that in the near future bad debt at affiliated non-banks might become either loans with reduced interest payments or loans where payments have stalled at parent banks.

UBS Securities estimate of ¥75 trillion:

According to UBS Securities, however, bad debt stands at ¥75 trillion. (note1). The ¥20-30 trillion difference lies principally in the definition of bad debt. In addition to the MoF's definition, UBS also includes:

i) Subsidized loans where interest payments are still being made, or loans where interest payments have been reduced to not less than the level of ODR.

ii) Loans to CCPC (Cooperative Credit Purchasing Company). This is an organisation set up by the banks themselves to purchase real estate-backed loans from those banks. It has effectively operated as a tax shelter since its inception.

iii) Bad debts at affiliated non-banks that are financed by sources other than the parent banks.

Of this ¥75 trillion, around ¥41 trillion is estimated to be at the major 21 banks (note2).

(Table 1: Bad debt at the 21 major banks)

Note 1. For financial institutions other than the 21 major banks, bad debts has been calculated by estimating the bad debt ratio per institution type (such as regional banks, credit cooperatives).

Note 2. Bad debt at the 21 major banks has been calculated by adding up all estimated problem loans.

(2) Japan's financial system is short of ¥18 trillion in capital

If bad debt stands at ¥75 trillion, then the real capital at Japanese financial institutions is around ¥28 trillion, about 2.4% of total assets (note 3). If we calculate that financial institutions need capital of around 4% to assets to run their businesses, this implies a required

capital as of March 1995 of ¥46 trillion. In order to close the gap between real capital and required capital, a further ¥18 trillion in funds needs to be injected in form of external capital. A number of financial institutions with funds shortages may already face solvency problems. In the above calculation, the real capital of financial institutions that have no problems with their balance sheets, and that do not need external funding, has also been included. **In other words, real capital is the capital left after insolvent institutions have been taken over and absorbed by sound financial institutions.** Taking the example given by the New Hyogo Bank (Midori Bank), the capital adequacy ratio has to be brought up to around the 4% level in order to continue operations after a bankruptcy. However, it is unrealistic to expect the problem of bankruptcies to be resolved by the healthy banks merging with their failed counterparts, as the bad debt problem is spread nationwide. Therefore, external funds other than the real capital of the healthy banks could be required, possibly far exceeding ¥18 trillion if mergers would not be prove to be as popular a solution with the banks as is ideally the case. (Table 2: Japanese financial system short of ¥18 trillion in capital)

Note 3. Real capital = equity capital + bad debt reserves + (unrealized profits on equities - losses on bad debts) x 45% (BIS-based ratio).

(Real capital does not include subordinated debts. Losses on bad debts is the amount not covered by collateralized assets, and is taken as 60% of the book value of bad debts)

2. Major 21 banks — Several more years needed to clear their own existing bad loans

UBS Securities estimate of ¥40 trillion in bad loans for the major 21 banks includes a large number of potential bad debts. The MoF has set the time-frame for disposing of bad loans at five years, but it seems extremely likely that loans where interest payments are only being met through subsidies will turn into proper bad debts within the next five years. Furthermore, it seems inevitable that parent banks will ultimately have to take the responsibility for affiliated non-banks' bad debts, even if these non-banks are financed by funds raised from other banks. As a result, restructured loans stand at around ¥24 trillion, far above the MoF's estimate of ¥ 10 trillion. Our figure of restructured loans is calculated by taking 1) the value of problem

loans by the banks to the 30 or so major troubled non-banks; 2) the estimated value of problem loans to major companies other than the non-banks; 3) 50% of the loan assets at affiliated non-banks. It would take the 21 major banks several years to dispose of the bad loans as yet to be written off from or to be provisioned for this ¥41 trillion, using core earnings over time and unrealized profits on equities (note 4).

It would take strong banks, such as Mitsubishi, Sanwa, Fuji and Sumitomo around three years to write off their bad debts using profits alone, and if they were to use unrealized profits as well, this would fall to 2.1 years. However, this scenario assumes that they use all the unrealized profits on TOPIX at 1,150, and does not take into account the possible fall in the value of collateralized real estate and the disposal cost of the bankruptcies of defunct financial institutions. In reality, the time taken to dispose of all the bad debts is probably longer than shown by the calculation. It is also impossible to ascribe a fair value to unpredicted liabilities at affiliated non-banks or related companies, so there may be banks in our calculation for which our time-frame is too short.

(Please see Table 3: Speed of bad debt disposition at 21 major banks and Table 4: Affiliated financial institutions at 21 major banks)

Note 4: Usable profit = (FY1995 estimated net operating profit - FY1995 estimated recurring profit) x 80% (20% represents various costs, eg, Tokkin, taxes etc).

(P.s. FY1994 disposal costs of bad debts at trust accounts may be added for trust banks)

3. Financial System Reform Council: Disposal procedure that relies heavily on private sector earnings

(1) Private sector financial institutions to foot the bill for disposing of bankruptcies

In Japan there is no set formula for dealing with bankruptcies. As is clear from looking at the recently failed Cosmo, Kizu and Hyogo Bank, under the current system the regulators have to rush out to ask the related financial institutions to absorb the bankrupted banks and drum up the necessary funds everytime a bankruptcy occurs. Apart from the Deposit Insurance Corporation, there is no structure that happily provides the funds needed to dispose of the bad

debts of a bankrupt financial institution. It therefore takes a very long time to put together a framework for dealing with bankruptcies. A method of dealing with sudden failures is needed, as more bankruptcies are expected. The FSRC's interim report studies increasing deposit insurance premiums, reinforcing private sector financial institutions' obligations to offer support, and using public funds. A new formula for dealing with bankruptcies is likely to give administrators more freedom in terms of costs. At the same time, however, the FSRC stresses that "the use of public funds will be kept to a minimum", so it seems to be aiming to force through a structure whereby more of the burden of the costs of bankruptcies falls on the shoulders of private sector financial institutions. Disposal support from private sector financial institutions includes financial assistance from the Deposit Insurance Corporation, earnings support from related financial institutions, waiver of loan principals by related financial institutions or direct investment in failed financial institutions. Hitherto, even if a failing financial institution is not necessarily affiliated, but where there is the slightest connection in terms of personnel, specified financial institutions have had to take on a considerable burden of the costs of disposal. Major financial institutions have become increasingly dissatisfied with these inexplicable demands for support. In the final report, therefore, the need for increasing the deposit insurance premium is likely to be stressed, a relatively easy pill to swallow.

Outline of the FSRC's formula for disposing of a financial bankruptcy

i) Institute a system which allows disposal to begin rapidly.

Use objective yardsticks (such as the real equity capital ratio) to allow appropriate measures to be taken early. This would mean that when a financial institution's liabilities exceeded its assets in real terms, the Deposit Insurance Corporation could institute bankruptcy proceedings. The Deposit Insurance Corporation could be given jurisdiction over the wind-up of the financial institution in question as the administrator, allowing the process to go forward smoothly. This would stop the increase in costs that postponing the disposal entails.

ii) Increase the deposit insurance premium as a source of funds for the disposal cost of bankrupt financial institutions.

In order to provide a source of fund for disposing of bad debts, the deposit insurance premium should be substantially increased. It should also be possible to levy an additional premium (special premiums) as and when necessary.

iii) When financial support from Deposit Insurance Corporation is used, related financial institutions will be required to contribute funds for support

Conditions for using financial support system at Deposit Insurance Corporation should be firstly that a financial institution needs to be formed as a designated recipient for funds (e.g., Tokyo Kyodo Bank), and secondly that related financial institutions should contribute as much as possible in terms of financial support.

iv) The use of public funds is inevitable in order to protect the depositors, but in this case, the financial institution should be wound up and cease to exist

When the use of public funds is unavoidable in order to protect the depositors, then so be it. However, no effort should be made to rescue the financial institution, shareholders, capital participants, management or employees. Therefore the financial institution is to be wound up. It should be noted that the use of public funds prior to bankruptcy is to be considered.

Note. according to MoF's schedule, the FSRC's Financial System Stability Committee is to conclude its deliberations on disposals on bankruptcies (as well as on the housing loan companies) by the end of CY1995. This is to be used as a material basis for the relevant laws (Commercial Law, Civil Code, Bankruptcy Law) to be revised at the ordinary session of the Diet next year. The MoF expects it to take until around August 1996 to complete the necessary groundwork to put this formula into effect.

(2) The MoF and financial institutions are considering raising the insurance deposit premium by 3–5 times from its current level of 0.012%. This 3–5 level was reached by working out how much is needed to return the ever-dwindling deposit insurance funds to the March 1995 level. In the US, this premium stands at 0.25%, over 20 times the rate in Japan. The MoF repeatedly

returns to the point that there is plenty of room for raising the insurance premium in Japan, and so it is hard to believe that the increase will be a mere 3–5 fold. Table 5 shows the amount of annual payments that would be made in deposit insurance premiums if the rate were increased from 3 times to 20 times. This shows that many financial institutions are paying ¥150 billion to ¥1.5 trillion in deposit insurance premiums. In addition, the system allows a special premium payment to be levied if and when required. (Table 5: Increased burdens due to the premium hike at DICJ)

(3) The burden on private sector financial institutions from recent bankruptcies

The diagram shows the proportion of the costs that private sector financial institutions have had to bear in recent bankruptcies. Taking the average of Cosmo Credit, Kizu Credit and Hyogo Bank, private sector financial institutions are estimated to have had to carry over 90% of the burden. The necessity for using public funds has not yet gained full national consensus covering all financial institutions (with the exception of few categories), and private sector financial institutions are likely to continue to have to shoulder a high proportion of the burden. (Table 6: Cost distribution in disposal procedure of bankruptcies)

4. The burden of support on private sector financial institutions: enough to soak up five times FY1995's increase in earnings

The MoF is also considering withholding public funds if financial institutions do not contribute a sufficient portion of the disposal costs of bankruptcies. Whether private sector financial institutions would agree to take on such a burden in order to restore stability to the financial system depends to what extent the costs of disposing of bankruptcies expands. Depending on whether we use MoF's informal estimate of ¥50 trillion (note5), or UBS Securities' ¥75 trillion, the cost over the coming five years works out at between ¥4–7 trillion, even assuming merger rescues. If this burden were taken on entirely by the 21 major banks, this would soak up 20–30% of their net operating profits over the next five years. Put another way, virtually all of the increase in net business profits at 21 major banks provided in FY1995 by the fall in

interest rates would flow back out of the companies for the next 5 years. If take-over and absorption by administrating banks could not proceed smoothly, then the equity capital of a healthy financial institution could not be used to dispose of a bankruptcy, and the burden on the major banks is likely to be far above this ¥4–7 trillion. (Table 7: Estimated cost of disposal procedure)

Note 5. This figure was explained by the MoF at the conference for foreign financial institutions in July 27th.

(1) Scenario 1: bad debts at ¥50 trillion

- Burden on private sector financial institutions is about ¥4 trillion at least.
- Deposit insurance premium hiked 10-fold.
- Maximum of ¥7 trillion of public funds needed for the agricultural-cooperative related financial institutions.

At the MoF's estimates bad debts at ¥50 trillion, small and medium-sized financial institutions have a capital shortage to the tune of ¥12 trillion. If we exclude financial institutions related to the agricultural cooperatives, this falls to ¥4.5 trillion. In reality, if these small and medium financial institutions do not merge with each other, this shortage would swell substantially, but we shall ignore this for the purposes of this report. If we also subtract the amount of external funds that are going to be required for Cosmo, Kizu and Hyogo bank (¥1 trillion), we are left with ¥3.5 trillion.

If we assume that the private sector is going to have to provide 90% of the funds, as has been the case on recent bankruptcies, this gives a figure of ¥3.1 trillion in support from private sector financial institutions and from sources such as the Deposit Insurance Corporation. In order to keep the deposit insurance funds at the same level as at the end of March 1995, (around ¥870 billion) the private sector would have to provide around ¥3.8 trillion. In order to cover this from deposit insurance payments over five years, the insurance premium would have to be raised by something over 10-fold. This would soak up around 20% of the major 21 banks' FY1996 net operating profits every year. This will all-too-quickly eat up the addition to net operating profits provided by the decline in interest rates in the first half of FY1995 (¥1.3

trillion). On the other hand, the use of public funds would be restricted to around ¥400 billion in infusions into small- and medium-sized financial institutions (excluding those related to the agricultural cooperatives).

The above argument does not include the financial institutions related to the agricultural cooperatives. We exclude special cases such as the housing loan companies, because we assume that private sector financial institutions have no obligation to dispose of the financial institutions related to the agricultural cooperatives. This group of financial institutions' liabilities exceed its assets by around ¥2 trillion. If the "responsibility of the ownership of housing loan companies(Jusen)" is played up in disposing of the housing loan companies, and parent banks have to take on ¥2 trillion more in extra losses than applied in the "lenders liability principle", then this excess of liabilities over assets would be wiped out. If these are not all to be wound up, sufficient public or external funding would be required in order to keep some of their operations alive. This would amount to a maximum of ¥7 trillion, depending to a certain extent on how they are reorganized and rebuilt.

(2) Scenario 2: bad debts at ¥75 trillion

- Private sector burden at least ¥6.5 trillion
- Deposit insurance premium increased 18-fold
- ¥8 trillion in public funds needed for the agricultural cooperative-related financial institutions.

If bad debts reach ¥75 trillion, the shortage of funds at medium and small financial institutions will rise to ¥15 trillion. However, this will rise to around ¥7 trillion if we exclude the financial institutions related to the agricultural cooperatives. Private sector financial institutions will have to bear 90% of the burden, and if the deposit insurance liability reserve is to be maintained at March 1995 levels, then the burden at the private sector financial institutions will reach ¥7 trillion (assuming the rescues are carried out through mergers). This would mean the deposit insurance premium would rise 18-fold, i.e., that around 30% of the 21 major banks' net operating profits would be soaked up for five years on write-offs on bankruptcies. A

maximum ¥8 trillion in external or public funds would be needed for the ¥10 trillion capital shortage at the financial institutions related to the agricultural cooperatives.

(3) Under the ¥75 trillion scenario, what does the capital shortage of the 21 major banks imply?

Both of the above simulations take the optimistic underlying assumption that rescue mergers will take place. As long as we stick to the ¥40 trillion bad debt scenario, then there is no capital shortage for the 21 major banks, as has been often confirmed by the MoF. However, at ¥75 trillion, even assuming unrealized hidden profits on equity holdings at ¥11 trillion, the capital shortage rises to around ¥2 trillion for the 21 major banks in total. Bearing in mind that the major 21 banks hold as little capital as possible, this implies that if bad debts reach ¥75 trillion, several of this group will in reality have liabilities in excess of assets. If share prices start to fall across the board once more, then this capital shortage will probably rise.

5. MoF's thinking examined: changing slowly

According to the MoF, bad debts have reached around ¥40 trillion, and financial institutions with the exception of agricultural financial institutions, credit cooperatives and the second-tier banks will need less than 5 years to write off bad debts under their own steam. Public funds will have to be used for disposing of insolvent financial institutions in these latter three categories (presumably with funds from private sector financial institutions as well), but the MoF stresses that this amount will be small, in spite of what the market expects. We analyze the MoF's comments below, and expound on the risks to this scenario for disposing of bankruptcies in the immediate future.

(1) Liquidate bankrupt financial institutions

The only thing that the regulatory authorities in the government's policy-making framework have made clear is the rule that "bankrupt financial institutions will be liquidated and cease to exist, therefore share certificates will be waste paper". The FSRC's interim report stresses that financial institutions where liabilities exceed assets should be wound up as early as possible,

and suggests at the same time that the use of public funds could be considered before making an ailing financial institution bankrupt. In other words, where it would prove difficult to wind up and eradicate a financial institution, steps could be taken that would not lead to bankruptcy, even if liabilities exceeded assets.

(2) Hyogo Bank was too important to fail

The Hyogo Bank has been allowed to continue its banking operation because the regulator judged that disposition costs would exceed the cost of recapitalization due to the large operating franchise value in terms of the number of borrowers and deposit accounts. It is expected that banks with considerable share in their own markets are unlikely to be liquidated in case of failure. However, even in this case, such banks would be considered to have technically disappeared (liquidated). Shareholders would lose their investments and the management would have to take responsibility for the failure.

(3) Finance Minister said there would be no big failures for a while

After the press conference following the bankruptcies of Hyogo Bank and Kizu Credit Cooperative, Finance Minister Takemura announced that "there would be no major bankruptcies for the time being". This can be interpreted as "for the time being, no major financial institutions will be driven into bankruptcy". This is because the Deposit Insurance Company's liability reserves have already been drained. As things stand at present, even if a large financial institution were to go bankrupt, it would be virtually impossible to put together the funds to cover the losses of the bankrupt company. If a major bankruptcy were to occur, it would further shake confidence in the financial system. We believe that no bankruptcies will happen for the next six months to a year. This is also related to the completion of a new formula for dealing with bankruptcies. Again according to the Ministry of Finance, the FSRC is to announce the framework for dealing with bankruptcies in its final report, due in December 1995. Revisions to relevant laws (Bankruptcy Law, Civil Code etc.) are to be determined in the ordinary session of the Diet in 1996. The revisions will probably be passed by April at the earliest, and if everything proceeds according to plan, preparations should be

complete by summer 1996. According to the relevant authorities, large-scale ailing financial institutions will therefore start to be wound up in six months to a year from now. However, the possibility of one of the 21 leading banks going under is still not considered in the authorities' scenario. Of course the mechanism of liquidity injection (eg, buying preferred stocks) under Art.25 of the Bank of Japan Act is still in force, and has been used by the authorities in their policy pronouncements supporting the financial system.

(4) The threat inherent in postponing bankruptcies for a further year

If clearing up potential bankruptcies is postponed by a year, this means that increasingly creditors that are currently only potential defaulters will become full-blown bad debts. In the current weak economy, the banks must be supporting many other creditors in ways other than lowering or foregoing interest payments, and in addition to their official restructured loans. Many of these subsidized creditors are related to the real estate market. If land prices do not stop falling and deflation reversed (among other things through landholding and capital gains tax reductions, both of which are now in the report of the tax commission due December 15), and moreover if transactions in the real estate market do not pick up, cash flow at these subsidized creditors is likely to deteriorate further. The banks would have to grant additional funds in order to avoid the borrowers' bankruptcies, and this would increase the restructured loans at banks. If banks cannot continue supporting those borrowers, their loans would have to be classified as bad debts. As a result, the number of insolvent banks would increase. Postponing disposal would raise the number of bankruptcies at banks as well as the cost of disposing of insolvent banks. In a year's time, most of the major financial institutions will be under pressure from their own bad loans. The asset quality problem of several banks' affiliated non-banks will worsen. As a result, restructured loans at banks are likely to increase sharply. Under these circumstances, shareholders are unlikely to allow banks to sacrifice profits in order to help wind up other financial institutions. If this is the case, then the newly perfected method of winding up and disposing of a defunct financial institution is unlikely to proceed smoothly without the injection of sufficient public funds.

(5) The real meaning of "we will not cause the bankruptcy of one of the 21 leading banks"

The MoF has made a number of official announcements emphasizing that it will not cause the bankruptcy of any of the 21 leading banks, claiming that "the principle of 'too big to fail' will be applied to the 21 major banks", or "as regards the 21 major banks, we will not cause problems for related parties, such as market participants". The MoF repeatedly emphasizes the principle of "too big to fail" firstly because it believes that under its ¥40 trillion bad loan scenario, there is no reason for any of the 21 major banks to fail. Secondly, because the economic costs of one of the leading 21 banks going under would be so great, any failure would need to be bailed out before it actually occurred. Thirdly, the head of the MoF's banking division has declared before the world that none of the major 21 banks will be driven into bankruptcy. For these reasons, a bankruptcy in this group is not permissible. If one of these had failed months ago, the market would have been able to deal with it calmly. This has now completely changed. If, in spite of the MoF's assurances, one of the 21 majors were to fail, the market would inevitably totter. However, it must also be recognized that the MoF has not guaranteed that it would never bankrupt one of the 21 majors. We consider that the MoF does not genuinely believe in its ¥40 trn scenario and is presumably also simulating a variety of bankruptcy scenarios of 21 major banks. The MoF's current position should be seen as expressing nothing more than that the failure of one of the major 21 banks is the scenario least likely to take place in the near future, and the authorities should do everything possible to avoid it. However, we should bear in mind that postponing disposal procedures would cause a bigger bad debt scenario as well as insolvency even among the 21 major banks. In addition, we should note that existing share holders would not be completely protected if public funds were used to purchase preferred stocks to bail-out the distressed banks. The potentially very harmful outcome of such a scenario is causing a sense of crisis to develop.

(6) The possibility of rescuing affiliates through mergers

The recent commitment by the MoF carries far greater significance than the comment a few months ago that "Hyogo Bank cannot fail", and it should mean that over the next year or so, the MoF wants to avoid a bankruptcy among the major 21 banks if at all possible. If its best

efforts fail, and a bankruptcy is inevitable, then the authorities' last line of defense is probably a rescue through a merger. As an improvement in efficiency cannot be anticipated through mergers of Japanese banks, the most likely outcome is that grouped financial institutions would bail each other out, while the second most probable scenario would be a merger aimed at deriving the merits of complementary business structures.

(7) A disposal procedure that ignores fundamental rules will leave a bad taste

The abrogation of responsibility and the protection of political interests have done much to prevent the *jusen* problem from being addressed sooner. Regulators will now probably try to solve the *jusen* problem through various procedures that will have to be tested for their effectiveness. Although it is important to try to find answers to the problem as quickly as possible, should procedures that neglect basic disposal rules (by providing the agricultural co-operatives with undue political support) be adopted the effects could do more than simply increase the unease surrounding the Japanese financial system. Importantly, such procedures could force the tacit acceptance of similarly "exceptional" cases in the future. A window of opportunity is beckoning: through removing insolvent financial institutions from the market, a rational approach to the problem could be a vital step towards creating a stronger and more stable financial system.

Table 1: Bad debts at 21 Major Banks

¥billion as of March 95	Total Bad Debt	% loans	Reported Bad Debt	% loans	Restructured Loans	Loans to CCPC
Mitsubishi	1,922	6.2%	527	1.7%	926	469
Sumitomo	2,948	8.7%	946	2.8%	1,594	408
Fuji	2,916	9.4%	1,162	3.8%	1,445	309
Sanwa	2,461	7.4%	735	2.2%	1,340	386
Dai-Ichi Kangyo	2,807	8.3%	1,193	3.5%	1,299	314
Sakura	3,538	9.9%	1,411	3.9%	1,813	314
Asahi	2,111	10.4%	448	2.2%	1,352	310
Tokai	2,256	11.5%	724	3.7%	1,138	393
Daiwa	1,318	12.4%	299	2.8%	802	217
Bank of Tokyo	1,141	10.6%	159	1.5%	961	22
Hokkaido Takushoku	1,320	18.1%	479	6.6%	804	36
City Bank Total	24,737	9.3%	8,081	3.0%	13,477	3,179

¥billion	Total Bad Debt	% loans	Reported Bad Debt	% loans	Restructured Loans	Loans to CCPC
Industrial Bank of Japan	2,267	9.8%	520	2.2%	1,642	106
Long-term Credit Bank of Japan	2,407	12.7%	784	4.2%	1,483	140
Nippon Credit Bank	1,944	18.8%	612	5.9%	1,172	160
LTCBs Total	6,618	12.5%	1,916	3.6%	4,297	405
Sumitomo Trust	2,098	16.2%	497	3.8%	1,536	66
Mitsubishi Trust	2,091	15.8%	442	3.3%	1,561	88
Mitsui Trust	1,933	17.3%	577	5.2%	1,279	77
Yasuda Trust	1,687	18.0%	418	4.4%	1,202	67
Toyo Trust	947	11.5%	283	3.4%	625	39
Chuo Trust	708	15.9%	174	3.9%	493	42
Nippon Trust	365	24.0%	109	7.2%	177	79
Trust Total	9,830	16.1%	2,499	4.1%	6,872	458

21 bank total	41,184	10.8%	12,496	3.3%	24,646	4,042

Note 1: The above figures are estimated by UBS except for reported bad debts.
Note 2: Reported bad debts = Loans to bankrupted borrowers + Loans more than 6 months over due
Note 3: The definition of restructured loans are shown in the text.

Table 2: Japanese Financial System Short of ¥18 trillion in Capital

As of March 95, ¥trillion	Total assets	Loan	A) Bad debts Case 1	Case 2	Case 3	Case 4	Case 5	B) Real Capital Case 1	Case 2	Case 3	Case 4	Case 5	C) Needed capital	D) Needed external capital Case 1	Case 2	Case 3	Case 4	Case 5
City	327	218	33	26	22	14	14	11	14	16	19	19	*13*	2.2	-1.2	-2.9	-5.9	-5.9
Regional	192	131	10	8	7	5	4	8	9	9	10	10	*8*	-0.1	-1.3	-1.5	-1.9	-2.2
Long-term credit	74	47	8	7	6	5	4	2	3	3	4	4	*3*	1.1	0.3	-0.1	-0.6	-0.8
Trust	123	61	12	10	9	7	6	1	2	3	4	4	*5*	3.4	2.5	1.8	1.2	0.6
Agricultural	190	53	10	9	8	7	3	-3	-2	-2	-2	1	*8*	10.9	10.0	9.5	9.3	6.7
Credit unions	31	21	3	3	2	2	1	-1	0	0	0	0	*1*	2.1	1.7	1.5	1.2	1.0
Regional 2	72	53	9	7	6	5	4	-2	-1	0	0	1	*3*	4.9	3.8	3.3	2.5	1.9
Shinkin	120	71	7	6	4	4	3	2	3	4	4	5	*5*	3.0	2.0	1.1	0.7	0.3
Others	31	17	2	1	1	1	1	0	1	1	1	1	*1*	1.0	0.7	0.6	0.5	0.4
Total	1,160	672	95	75	65	50	40	18	28	33	39	44	*46*	28.5	18.5	13.3	7.0	1.9
Major	785	490	67	53	46	34	30	22	28	32	36	38	*31*	9.9	3.0	-0.2	-5.0	-6.5
Smaller	374	182	27	22	19	16	10	-4	-1	1	3	7	*15*	18.7	15.5	13.6	12.0	8.3
Smaller excluding Agricultural	223	145	19	15	13	10	8	-1	1	3	4	6	*9*	10.0	7.5	5.9	4.5	3.1

Source: BOJ. UBS Securities.

Table 3: Speed of Bad Debt Disposition

¥billion, as of March 1995	1 Required disposal cost	2 Usable profit for disposition	3 **Required years 1**	4 **Required years 2**	5 Hidden reserves at Topix of 1400	6 Hidden reserves at Topix of 1150	7 Special reserves at trust accounts
Industrial Bank of Japan	1,082	130	**8.3**	**2.2**	1,466	794	0
Long-Term Credit Bank of Japan	923	90	**10.3**	**9.3**	559	81	0
Nippon Credit Bank	847	80	**10.6**	**10.6**	222	0	0
Dai-Ichi Kangyo	1,169	250	**4.7**	**3.7**	855	237	0
Hokkaido Takushoku	549	35	**15.7**	**15.7**	80	0	0
Bank of Tokyo	453	105	**4.3**	**3.5**	381	90	0
Sakura	1,488	185	**8.0**	**6.5**	1,039	291	0
Mitsubishi	603	245	**2.5**	**0.5**	1,117	471	0
Fuji	688	300	**2.3**	**2.3**	564	0	0
Sumitomo	767	200	**3.8**	**3.6**	617	47	0
Daiwa	668	105	**6.4**	**6.3**	309	9	0
Sanwa	1,074	305	**3.5**	**2.2**	1,019	413	0
Tokai	785	128	**6.1**	**4.8**	590	169	0
Asahi	876	128	**6.8**	**4.8**	623	257	0
Mitsui Trust	914	75	**12.2**	**6.6**	505	182	236
Mitsubishi Trust	905	150	**6.0**	**3.2**	509	172	253
Sumitomo Trust	914	140	**6.5**	**3.7**	421	140	260
Yasuda Trust	905	60	**15.1**	**12.0**	212	0	183
Nippon Trust	152	5	**30.4**	**30.4**	25	0	0
Toyo Trust	556	40	**13.9**	**9.2**	221	44	145
Chuo Trust	403	30	**13.4**	**10.3**	41	0	94
Total / Average	16,720	2,786	**9.1**	**7.2**	11,373	3,395	1,171

Note 1: Years 1 = Required disposal cost / Usable profit

Years 2 = (Required disposal costs - hidden reserves on equities - Special reserves) / Usable profit

Note 2: 5 and 6 shows hidden reserves on listed equities holdings.

Table 4: Affiliated Financial Institutions at Major Banks

Long-Term Credit Banks / City banks

	Industrial Bank of Japan	Long-term Credit Bank of Japan	Nippon Credit Bank	Dai-Ichi Kangyo	Hokkaido Takushoku	Bank of Tokyo	Sakura
1	IBJ Leasing	LTCB Internationa l Leasing	Crown Leasing	Dai-Ichi Kangin Factoring	Takugin Mortgage	BOT Lease	Sakura Mortgage
2	IBJ Finance		Nippon Total Finance	DKB Leasing	Takugin Finance	BOT Factoring	Sakura Finance Service
3				Tokyo Leasing			Mitsui Finance Service
4				Orient Corporation			

Note: Nippon Credit Bank's nonbanks have been financially supported by lender banks.

City Banks

	Mitsubishi	Fuji	Sumitomo	Daiwa	Sanwa	Tokai	Asahi
1	Diamond Factors	Fuyo General Lease	Sumitomo Bank General	Daiwa Factor & Leasing	Sanwa Business Credit	Central Leasing	Asahi Bank Factoring
2	Diamond Mortgage	Fuyo Developmen t & Finance	Sumigin General Finance	Daiwa Mortgage	Aplus	Central Finance	Asahi Bank Finance
3		Fuji Factoring		Cosmo Securities		Central Mortgage	Asahi Bank Leasing
4		Japan Mortgage					Kyodou Mortgage Acceptance
5							Shutoken Group
6							Showa Leasing

Trust Banks

	Mitsui	Mitsubishi	Sumitomo	Yasuda	Nippon	Toyo	Chuo
1	Unknown	Marunouchi Finance	Sumishin Lease	YTB Leasing	Nippon Trust Mortgage	Unknown	Unknown
2		Mitsubishi Trust Mortgage		Anshin Total Finance			
3							

Source: Kinyu Business, Nikkei Financial, Kanpo, Nikkin , UBS Estimate

Table 5: Increased Burdens on Banks due to the Premium Hike at Deposit Insurance Corporation

¥billion	City	Regional	Regional 2	Trust	Trust accounts	LTCBs	Shinkin	Credit unions	Total premiums
Deposits & Loan trusts	194,206	167,018	61,461	10,123	54,229	5,768	93,870	24,341	611,016
Premiums at US rate	486	418	154	25	136	14	235	61	1,528
Cost over next 5 years	2,428	2,088	768	127	678	72	1,173	304	**7,638**
20X Premiums	466	401	148	24	130	14	225	58	1,466
Cost over next 5 years	2,330	2,004	738	121	651	69	1,126	292	**7,332**
15X Premiums	350	301	111	18	98	10	169	44	1,100
Cost for the next 5 years	1,748	1,503	553	91	488	52	845	219	**5,499**
10X Premiums	233	200	74	12	65	7	113	29	733
Cost for the next 5 years	1,165	1,002	369	61	325	35	563	146	**3,666**
5X Premiums	117	100	37	6	33	3	56	15	367
Cost for the next 5 years	583	501	184	30	163	17	282	73	1,833
3X Premiums	70	60	22	4	20	2	34	9	220
Cost for the next 5 years	350	301	111	18	98	10	169	44	1,100
Premiums at current rate	23	20	7	1	7	1	11	3	73
Cost for the next 5 years	117	100	37	6	33	3	56	15	**367**

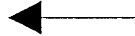
Note: Japanese current rate is 0.012%. US rate is about 0.25% on average.

Source: Bank of Japan, UBS Securities

Table 6: Cost distribution in disposal procedure of bankruptcies

Cost Distribution

Private banks	Public funds
92%	8%
91%	9%
84%	16%



Costs of disposal procedure

¥billion	Private banks	Public sector	Total cost
Cosmo, Hyogo, Kizu	1,406	120	1,526
Cosmo, Hyogo	856	80	936
Cosmo	216	40	256

Source: Nikkei, Kinyu Business, Kinzai, etc.

Note: The figures are estimated by UBS based on the above source.

Table 7: Simulation of Disposal Costs of Bankruptcies

¥trillion	Case1	Case2	Case 3	Case4	Case5
Bad debts	95	75	65	50	40
Disposal costs of small financial institutions	**10.0**	**7.5**	**5.9**	**4.5**	**3.1**
Costs imposed on private banks	8.8	6.5	5.1	3.8	2.8
Deposit insurance premium rate hike (x)	**24**	**18**	**14**	**10**	**8**
Capital deficit at 21 major	6.7	1.6	-1.2	-5.3	-6.2

Source: UBS