The deteriorating Japanese financial system

Summary

Due to the losses incurred from bad debts and the decline in value of its shareholdings, the banking sector has exhausted most of its capital. This is the major reason that the lifting of the “payoff” ban was postponed. As in the case of banks, life insurers also appear to have lost their real capital. The Financial Services Agency (FSA) needs to conduct a full review of the calculation methods used to find the capital adequacy ratios for banks and the solvency margin ratios of life insurers as these are the basis for the Early Corrective Measures.

The government determined that the implementation of the “payoff” scheme (i.e., the measure that would limit the guarantee on deposits to 10 million yen principal plus interest) should be postponed in a move to avoid any additional anxiety to the financial system. The financial system is already debilitated by a continuously detrimental environment such as the sinking stock market, where post-bubble lows have repeatedly been recorded. The important factor behind this postponement is the very feeble Japanese financial system.

In this report on the Japanese financial system, we focused on the deteriorating Japanese banks and life insurers, and through detailed analysis of disclosed financial data, we examined the basis for the postponement of the payoff scheme, and considered what conditions would have to be met for the financial system to be revived.

Real capital deficiency for most major banks

The capital adequacy of financial institutions has fallen to dangerously low levels. At the end of September of this year, the capital of all banks in Japan has all but dried up once we deduct the deficit in bad loan reserves, and deferred tax assets that are difficult to collect upon liquidation. The capital that remains is smaller than the amount that was publicly injected, and so we could even say that the banks have actually been nationalized.

The situation is most crucial for the major banks, and many banks are estimated to be capital deficient, even when the publicly injected capital is counted as their own capital. Moreover, it is estimated that some of the major life insurers’ capital has all but disappeared on a real basis, as they have been burdened by negative spreads (where the interest rate they pay out is higher than the interest they earn) they have been carrying, and the fact that they are large-scale stockholders.

To offer some relief, the Bank of Japan has come up with a scheme whereby it would directly buy some shares owned by the banks. Although this initiative is not expected to lessen the banks’ risk of holding the stocks since only a small amount is being bought, we can say that the government appears to have become serious about resolving the bad loan issue.
As for the capital adequacy rates of the banks based on the BIS requirements, although the banks have been continuing to record losses in their financial statements, their capital ratios continue to be at the 10-11% level and the FSA has stated “banks have maintained adequate capital”.

However, the March 2002 financial statements reveal that of the core capital, the share of deferred tax assets – that have no liquidation value – has become higher for the four major banking groups, signifying that the capital base has become weaker. The share of deferred tax assets is lowest for the Mitsubishi Tokyo Financial Group but still at 32%, and for the three other banking groups, it is about 50%.

In the US, deferred tax assets can make up no more than 10% of core capital for the purpose of calculating capital ratios. Furthermore, to realize deferred tax assets, the bank must record profits from the following accounting year. However, since 1983 it has become very difficult to realize profits in Japan as loan losses have limited the profit flow year after year and with the economy continues to experience deflation. In addition, the three banking groups other than the Mitsubishi Tokyo Banking Group use preferred equity issued by special purpose companies overseas, and cross share and subordinated debt holdings with life insurance companies to inflate their BIS ratios by almost 2%.

Turning to all banks, we see in Table 1 that once adjusted for deficient loan loss reserves, deferred tax assets, and the change in the accounting standard, the total amount of real capital has fallen to less than half in two years -- from 26 trillion yen in March of 2000 to 11 trillion in March 2002. This is because banks were not able to increase their revenues from lending margins and banking fees to offset the losses from bad loans and declining stock prices.

The core capital of 11 trillion yen amounts to only 1.4% of the total assets that are about 800 trillion yen. Furthermore, since the banks held 31 trillion yen in stocks as of March of this year, the decline of the Nikkei stock index from 11,025 yen by 20% alone results in a loss of over 6 trillion yen. Considering all of these factors, in an environment where the stock index is under 9000 yen, the capital of banks will shrink to about 4 trillion yen, and will be smaller than the public capital injected into them.

The major banks hold about 80% of the total shares held by all banks and are expected to be in even direr straits. If we take their capital at the end of March as a starting point and then consider the stock prices marked in September, all indications are that if we exclude the publicly injected capital, they are capital deficient by over 6 trillion yen.
<table>
<thead>
<tr>
<th></th>
<th>Total Capital (A)</th>
<th>Estimated Deficit (B)</th>
<th>Deferred (C)</th>
<th>Other (D)</th>
<th>Real Capital (A-B-C+D) (E)</th>
<th>Public Capital</th>
<th>Real Capital Injected less Public Capital</th>
<th>Stock Holdings (market value)</th>
<th>Nikkei Stock Index (yen)</th>
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<tr>
<td>March-1998</td>
<td>24.3</td>
<td>4.9</td>
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<td>0.3</td>
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<td>8.9</td>
<td>0.4</td>
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<td>6.3</td>
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<td>5.8</td>
<td>8.2</td>
<td>4.1</td>
<td>25.7</td>
<td>6.9</td>
<td>18.9</td>
<td>54.5</td>
<td>20,337</td>
</tr>
<tr>
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<td>37.6</td>
<td>7.5</td>
<td>7.3</td>
<td>-3.5</td>
<td>19.3</td>
<td>7.1</td>
<td>12.2</td>
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<td>30.2</td>
<td>6.8</td>
<td>10.7</td>
<td>-2.0</td>
<td>10.8</td>
<td>7.2</td>
<td>3.6</td>
<td>31.3</td>
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</tr>
<tr>
<td>Estimate Sep 2002</td>
<td>24.9</td>
<td>6.8</td>
<td>10.7</td>
<td>-2.0</td>
<td>5.4</td>
<td>7.2</td>
<td>-1.8</td>
<td>26.0</td>
<td>9,383</td>
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</table>

**Notes:**

1. Estimated Deficit of Loan Loss Reserves = Loans to be written off – Loan Loss Reserves  
   Loans to be written off = 1% of type I + 20% of type II + 70% of type III + 100% of type IV  
   Others = (Profit or loss from revaluation of securities – equivalent of deferred tax liabilities) + Profit or loss from revaluation of derivatives  
   – Difference in land price due to revaluation

2. For the September 2002 estimated figure, only the profit or loss from valuation of domestic stocks was changed to reflect trends in the stock market.
   All other indicators were estimated using figures from end of fiscal 2001.

3. Figures for Stock Holdings after March 2002 are holdings that are assessed at market value.

4. In reflecting changes in stock prices, for major banks that use monthly averages for stock valuation,  
   we used monthly averages of the Nikkei Stock Index.
**“Cut” rate in deposits of failed financial institutions at 25%**

To assess whether the Early Corrective Measures implemented in April 1998 have been effective, we took all of the cases of failed financial institutions in the past, and under a hypothetical “payoff” scenario, we calculated how much of the deposits of over 10 million yen would be “cut” (i.e., would not be returned). As a result, looking at just the 132 cases of failed financial institutions since the Early Corrective Measures were implemented in April of 1998, the average rate the deposits were “cut” was 25.1% (Figure 1), and there were 13 cases where the rate was over 40%. In other words, if the payoff were implemented, about 20-30% of deposits of over 10 million yen, would not be returned to the depositor.

**Figure 1. Distribution of deposit “cut” rates when payoff system is used to resolve failed financial institutions**

(For institutions that failed from April 1998)

![Graph showing distribution of deposit cut rates](image)

**Notes**

1. Deposit “cut” rate = Amount capital is deficient/Total liabilities * 100
2. For capital deficiency, we used financial assistance figures from the Deposit Insurance Corporation for banks other than Long-Term Credit Bank and Nippon Credit Bank

This “cut” rate has hardly improved from before the Early Corrective Measures were introduced when the rate was 27.0%, and this shows that measures based on current capital ratios are not adequately effective in protecting deposits. The objective of the Early Corrective Measures was to reduce the financing burden of the Deposit Insurance Corporation while minimizing the losses of large-scale depositors. It was to promptly deal with weak financial institutions before their capital deficiency rates grew too large. The fact that most of the failed banks of the past would have had cut rates of 20 and 30% show that there is a fundamental flaw in the way that capital is currently being calculated. Specifically, the following changes are needed.

First, tax deferred assets should be excluded from the definition of capital since there is no liquidation value to it. Second, the share of loan loss reserves required for bad loans should be greatly increased from what is stipulated in the FSA Inspection Manual. Third, thorough assessment should be made of loan guarantees issued by weak companies. Fourth, cross share holdings and subordinated debts with weak borrowers and life insurance companies should be excluded from the definition of capital. Fifth, the system should be amended so that, as in the US, when the capital falls, it does not have to fall to 0% before the
institution is resolved as a failed one. It is imperative that these reforms be carried out so that the Early Corrective Measures can function to protect the depositors.

The current decline in the stock market is having grave effects on also the life insurance industry that has been supporting the banks through their cross shareholding. The Japan Center for Economic Research has been calculating the solvency margin ratios of the major life insurers from two years ago. Because the standard used to calculate the solvency margin ratios in Japan is very lax compared with that of the US, both Chiyoda Life and Kyoei Life that were considered to have solvency margins of above 200% (the demarcation point between a healthy and unhealthy life insurer) were found to be capital deficient by 20 to almost 30% after they were resolved.

**Closer monitoring of major life insurers also needed**

We then found the solvency margin ratios of the major life insurance companies in Japan, using disclosed information and standards that are as close as possible to US standards. (See Table 2)

Based on their disclosed information, the solvency margin ratios as at March of 2002 were above 400% for all of the life insurers. However, the adjusted figures using US standards were all below 400%. Moreover, there were three companies whose solvency margin ratios fell below 200% -- that would call for early corrective measures, and two whose ratios were 200-250%, that would make them also subject to corrective measures if these ratios were on a declining trend.

<table>
<thead>
<tr>
<th>Less than 0%</th>
<th>0~70%</th>
<th>70~100%</th>
<th>100~150%</th>
<th>150~200%</th>
<th>200~250%</th>
<th>250~400%</th>
<th>400% ~</th>
<th>Nikkei Stock Index(yen)</th>
</tr>
</thead>
<tbody>
<tr>
<td>March-2000</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>3</td>
<td>6</td>
<td>1</td>
<td>20,337</td>
</tr>
<tr>
<td>March-2001</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>1</td>
<td>2</td>
<td>1</td>
<td>5</td>
<td>13,000</td>
</tr>
<tr>
<td>March-2002</td>
<td>0</td>
<td>0</td>
<td>1</td>
<td>2</td>
<td>0</td>
<td>2</td>
<td>5</td>
<td>11,025</td>
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<tr>
<td>Estimate for September 2002</td>
<td>2</td>
<td>1</td>
<td>0</td>
<td>2</td>
<td>1</td>
<td>1</td>
<td>3</td>
<td>0</td>
</tr>
</tbody>
</table>

Notes:

1. For the September 2002 estimate, only the profit or loss from valuation of domestic stocks was changed to reflect trends in the stock market. All other indicators were estimated using figures from end of fiscal 2001.
2. The US standard stipulates that for those companies whose solvency margin ratios are between 200 and 250%, those that are on a downward trend are subject to corrective measures. For those companies under 70%, resolution for a failed institution or its equivalent may be implemented.

This shows that some of these insurers that appear healthy from their disclosed ratios are actually in very serious conditions. Using their shareholdings at the end of March, and assuming that they had declined at the same rate as the Nikkei Stock Average, we estimated their solvency margin ratios at the end of September 2002. We found that of the ten life insurers, not only do seven have ratios of under 250%, a few have ratios that are below 0%.

As in the case of banks, the FSA needs to tighten up the calculation methods for solvency margin
ratios for life insurers so that the Early Corrective Measures can be more effective at protecting policyholders. In particular, the practice of banks and life insurers cross holding each other’s shares is hazardous as the failure of one can cause the failure of the other. This kind of false reinforcement of capital should be strictly controlled.