# Bank Management and Financial Order in the Phase of Liberalization and Internationalization of Financial Markets

MASATOSHI KINOSHITA*

## I. Introduction

The institutional framework supporting Japan's financial system is characterized by various regulations which restrict competition. These include (1) restrictions on various interest rates, notably deposit rates; (2) restrictions on the range of activity, such as segregation of banks and securities companies; (3) restrictions on the international capital flow; and (4) market practices, such as collateral requirement. Most of these restrictions were introduced as a result of the financial crisis of the 1920s and were consolidated as part of the financial reforms carried out after the end of World War II. However, the general framework has remained almost unchanged to this day.

At present, however, this institutional framework is being pressured to reform. The publication in May 1984 of the "Report of the Japan-U.S. Ad Hoc Committee on Yen and Dollar Rates" (which approved the deregulation of deposit rates, the easing of the restriction on Euro-yen transactions, and other measures) and of the Ministry of Finance (MOF)'s "Present State and Future Prospects of Financial Market Liberalization and Internationalization of the Yen" were momentous events; they were an indication of Japan's future program for financial reform. It is undeniable that Japan's decision to liberalize and internationalize its financial markets was in part a response to foreign demand. But it is also indisputable that these changes are taking place as part of an inevitable trend that involves factors unique to the Japanese situation. These factors include the sharp alteration in the money-flow structure caused by the slow-down in economic growth resulting from the First Oil

* Assistant Adviser, Institute for Monetary and Economic Studies, Bank of Japan.

Crisis in 1973; the growth of open financial markets with deregulated interest rates centered on the government bond market under the impact of the shift in the money-flow structure; and the increased tendency of businesses and households to favor financial instruments with higher rates of return as a result of the same impact.

The liberalization of the financial markets, however, cannot be discussed without a consideration of the question of maintaining the financial order; this is the shadowy part of the liberalization question. The liberalization of Japanese financial markets will necessitate the deregulation of restrictions that have ceased to match the demands of the times; but it will also involve an assessment of which restrictions are necessary to maintain the financial order and which are not. Based on these considerations, the present paper will discuss future changes in Japanese banking as a result of increasing liberalization and internationalization and evaluate ways in which the financial order can be maintained in the face of these changes.

The liberalization and internationalization of financial markets in Japan will probably accelerate in the near future for three reasons: (1) the acceleration of liberalizing interest rates on deposits against the background of, among other things, the increased tendency among businesses and households to prefer financial instruments with higher rates of return; (2) a reexamination of restrictions on internationalization and competition, such as the segregation of various types of business areas within Japan and collateral requirements; and (3) the entrance of banking institutions into international business in the atmosphere of heightened competition touched off by liberalization of Japanese financial markets. This liberalization and internationalization of Japanese banking will occur simultaneously.

Banking will undergo significant changes as a result of liberalization and internationalization, but the most important changes will involve the profitability of banks under the deregulation of interest rates on deposits and the manner in which banks respond to this deregulation.

The bank's responses to the increased cost of raising funds caused by the deregulation of interest rates on deposits will include: (1) increasing their capabilities to absorb funds by taking advantage of liberalized deposit rates (rollback of disintermediation); (2) reducing the various forms of non-interest expenses that emerged when interest rates were restricted, and correcting organizational inefficiency; (3) securing a stable profit margin through spread banking; and (4) expanding earning opportunities and reducing costs by enlarging or diversifying businesses (the so-called economies of scope). As a reflection of these changes in the banking environment and the varying abilities of individual banks to respond to them, the differential among banks in their performances will increase.

As a result of these changes, it can be assumed that some banks will fail because of their inability to respond to the new banking environment. Although the banking system as a whole will certainly become more solid as a result of the weeding-out of unsound or inefficient financial institutions, there is also the danger that the failure of a number of banks will cause the entire financial system to become unstable. It will therefore be very important to provide measures to maintain the financial order.

Lessons learned from the credit crisis at home and abroad suggest that future measures to maintain the financial order in Japan should be carried out according to the following four broad rules.

The first concerns the macroeconomic stability. The financial order cannot be maintained independent of the state of the economy. Therefore, the proper implementation of measures aimed at stabilizing the economy is a precondition for maintaining the financial order.

The second concerns the promotion of sound banking practices through the application of market functions. Increased prudentiality in banking practices can be expected if the ability of depositors and other market participants to audit and select the banks is strengthened by making public more detailed information about individual banks.

The third concerns the implementation of precautionary measures. As regulatory measures to promote sound banking, balance-sheet regulations and investigations will become important, but these measures should not interfere with market functions.

The fourth concerns the implementation of ex post facto measures. If the soundness of a bank cannot be maintained by the above precautionary measures, and a bank fails, a deposit insurance system and a loan program from the central bank will have to be implemented to prevent the effects of that bank failure from spreading to the banking system as a whole. It is important, however, to recognize that these measures may create moral hazard problems for banks. The challenge will be to implement an appropriate combination of the above measures.

## II. Effects of Financial Market Liberalization and Internationalization on Banking

### 1. Outlook for Liberalization and Internationalization

The future direction of the liberalization and internationalization of Japan's financial markets was delineated in the MOF's "Present State and Future Prospects of Financial Market Liberalization and Internationalization of the Yen" and the "Report of the Japan-U.S. (MOF/Treasury Department) Ad Hoc Committee on Yen and Dollar Rates." The recommendations of these two reports include (1) liberalization of deposit rates; (2) expansion of short-term money markets such as the creation of yen-denominated Bankers' Acceptances (BAs) market; (3) promoting further development of capital markets by more flexible issuance of private bonds, and so forth; (4) approval of the participation of foreign banks in trust business; and (5) easing of restrictions on Euro-yen transactions (loans, certificates of deposit (CDs), bonds).

These recommendations have already been implemented according to a planned time schedule, and they will continue to be implemented. But the liberalization of Japanese financial markets will probably proceed even faster than these two reports indicate. And, as a result, the internationalization of these markets will correspondingly accelerate.

### A. Acceleration of the Liberalization of Deposit Rates

The reports referred above indicate that measures to ease the restrictions on interest rates for large deposits will be implemented within two or three years and that studies to examine the feasibility of liberalizing interest rates on small deposits will also be undertaken. Since Money Market Certificates (MMCs) were introduced according to schedule in March 1985, it is only a matter of time before the interest rates on large deposits worth over 50 million yen, the smallest amount of MMCs issues, will be liberalized. Pressure toward liberalization will grow because of expectations of further increases in liberated interest-rate assets (including increases in the amount of bonds close to maturity and short-term bonds) and of the establishment of yen-denominated BAs. If the 50 million-yen ceiling were to remain, the increased pressure would heighten the sense of unfairness among small- and medium-sized businesses. This ceiling will therefore probably be lowered at a fairly early stage. The problem concerns deposits of less than 3 million yen. Since it is assumed that the rules that apply to interest rates on small deposits will also be applied to postal savings, the liberalization of interest rates on deposits worth less than 3 million yen will not proceed smoothly. Nevertheless, because competitive products with liberated interest rates are expected to increase as a result of the development of various types of investment trusts and similar instruments, pressure toward the liberalization of interest rates on small savings and deposits is also quite likely to increase. The impact of this liberalization of deposit rates is likely to change the practice of offering lending rates to one that is based on market interest rates.

### B. Acceleration of the Liberalization of Japanese Financial Markets as a Result of Internationalization

The internationalization of Japanese financial markets will inevitably result in a serious conflict with a number of regulations and practices unique to Japan. The most important of these will be (1) banks' practice of offering lending rates based on long- and short-term prime rates; (2) the segregation of various financial activities from each other, such as long-term banking from short-term banking, trust business from other banking activities, and banking activities from securities business; and (3) the principle of requiring collateral for loans and bonds.

(a) Long- and Short-Term Prime Rates

As a combined result of the more intensive arbitrage with Euro-yen loans, and of recent liberalization measures, the long- and short-term prime rate will lose their meaning as a base rate.

(b) Restrictions on Range of Business

As a result of the abolition of restrictions on the conversion of foreign funds into yen, commercial banks have acquired a method of raising long-term funds, since long-term foreign currency deposits combined with forward cover offer an instrument similar to bank debentures, which are now permitted only for the long-term credit banks. Furthermore, if restrictions on the issuance of long- and medium-term Euro-yen CDs or Euro-yen bonds undergo liberalization in the future as is recommended in the joint Japan-U.S. report and the Foreign Exchange Council report of May 1985, the separation of long- and short-term banking will become even more blurred. Moreover, the recent measure of allowing foreign banks to participate in Japanese trust businesses is expected to increase pressure on the side of domestic banks for the abolition of the segregation of trust business from other banking activities. Since business pension funds have developed into a very lucrative area, the segragation of banks and trust businesses, if allowed to continue, will amplify oligopolistic tendencies of the financial sector. Furthermore, the segregation of banks and securities companies has already lost its meanings as far as the handling of government bonds is concerned. In addition, it is expected that banks and securities companies will move further into business with "consolidated accounts for government bonds" at banks (by which bonds holders can receive interests of bonds automatically on their deposit accounts and also get loan facilities with collateral of bonds), and loan facilities at securities companies up to a given amount with collateral of government bonds. Also, the success of combining banking and securities businesses operated among the overseas subsidiaries (of both banks and securities companies) is spurring this tendency.

(c) Financial practices

Many financial practices, such as collateral requirements for loans and coordination of bond-issuance, are not compatible with international banking practices. These practices are likely to be reexamined closely from now on. Furthermore, the growth in Euro-yen loans to residents will force to change the traditional lending practices, such as compensating balances on loans, short-term rolling-over lending, and long- and short-term combined lending. This change will be commensurate with the change in the practice of offering lending rates discussed above.

Since the internationalization of financial markets is inherent to the liberalization of financial markets discussed above, the two processes will go hand in hand. The profit margin is expected to become smaller as a result of the intensifying competition among financial institutions caused by the liberalization of money markets and the elimination of restrictions on competition. Under these circumstances, financial institutions may intensify their effort to secure earnings by expanding their business. In particular, if there is a perception that additional business opportunities at home are limited because of the downward shift in the economic growth, financial institutions will inevitably continue to seek opportunities in overseas financial markets.

## 2. Effects of Liberalization and Internationalization on Banking Management

### A. Recent Developments in Bank Assets, Liabilities and Profits

Before analyzing the effects of the liberalization and internationalization of financial markets on banking, it might be useful to examine briefly recent changes in assets, liabilities and profits of Japanese banks.

(a) Assets and Liabilities

As shown in Table 1, a marked change has occurred in the proportion of assets and liabilities to the total. Whereas the proportion of long-term loans has increased in assets (due mainly to increase in variable interest rate loans), the proportion of liabilities that bear non-regulated interest rate has increased on the liability side.[1]

In assets, the proportion of loans moved steadily at over the 80% level between the end of 1960 and 1975. Then, it declined substantially from 80.3% recorded at the end of 1975 to 74.2% by the end of 1980, reflecting mainly the increase in the volume of securities holdings, with the bulk being government bonds. The proportion of loans recovered slightly by the end of 1984. It must be noted, however, that whereas the proportion of fixed interest rate loans by the long-term credit banks declined, the medium- to long-term loans with variable interest rates by ordinary banks and other financal institutions (term exceeding one year) increased significantly. Variable interest rate loans accounted for 31.0% of total loans by the end of March 1985, compared

1. Although accurate statistics on variable interest rate loans are not available in Japan, loans for less than one year may be regarded as variable interest rate loans because interest on these loans may change each time the due date arrives (normally, every three months or every six months). In addition, the long-term loan without those of long-term credit banks whose rates are fixed may be regarded as loans with variable interest rates because interest rates may change with each due date (every three or six months) for term payment.

## Table 1-1 Changes in Assets and Liabilities Among All Banks in Japan

(Percentage (%) of total assets outstanding)

| | | | End of 1960 | 65 | 70 | 75 | 80 | 84 |
|---|---|---|---|---|---|---|---|---|
| Liabilities | Deposits and Bank debentures | | 84.7 | 83.9 | 86.0 | 85.8 | 83.7 | 76.8 |
| | Demand deposits | | 28.0 | 29.5 | 28.6 | 28.5 | 22.7 | 18.6 |
| | Time deposits and Bank debentures | | 56.7 | 54.4 | 57.4 | 57.3 | 61.0 | 58.2 |
| | Negotiable certificate of deposits (a) | | – | – | – | – | 1.0 | 2.6 |
| | Non-resident yen deposits and Foreign currency deposits (b) | | – | 1.3 | 0.7 | 2.4 | 4.3 | 5.9 |
| | Borrowings from banks | | 1.1 | 1.9 | 1.2 | 0.3 | 0.2 | 0.2 |
| | Borrowings from the Bank of Japan | | 5.6 | 5.0 | 4.6 | 1.5 | 1.1 | 1.0 |
| | Call money and Bills sold (c) | | 1.8 | 4.1 | 4.3 | 6.1 | 5.6 | 7.3 |
| | (a) + (b) + (c) | | 1.8 | 5.4 | 5.0 | 8.5 | 10.9 | 15.8 |
| Assets | Loan | | 81.4 | 80.2 | 81.8 | 80.3 | 74.2 | 76.3 |
| | Distribution percentage (end of fiscal year) | Term: less than 1 year | | 79.7 | 74.9 | 61.8 | 58.9 | 60.1 |
| | | 1 year or more | | 20.3 | 25.1 | 38.2 | 41.1 | 39.9 |
| | | Long-term credit banks | | 10.8 | 11.2 | 11.4 | 10.4 | 8.9 |
| | Negotiable securities | | 15.3 | 16.0 | 14.5 | 15.5 | 21.0 | 17.7 |
| | Bonds | | 12.8 | 13.4 | 11.4 | 12.3 | 17.2 | 13.7 |
| | Stocks | | 2.3 | 2.6 | 3.1 | 3.1 | 3.6 | 4.0 |
| | Call loans and Bills bought | | 1.1 | 1.4 | 1.6 | 1.5 | 2.0 | 3.7 |
| | Cash and Deposits | | 2.1 | 1.7 | 1.8 | 2.5 | 2.5 | 2.0 |

Source: Bank of Japan, "Application Table of Flow of Funds Accounts," etc.

## Table 1-2 Changes in Assets and Liabilities

(Percentage (%) of total assets outstanding)

| | | | City Banks | | | | Other Banks | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| | | | End of 1970 | 75 | 80 | 84 | End of 1970 | 75 | 80 | 84 |
| Liabilities | Deposits and Bank debentures | | 79.9 | 80.4 | 78.3 | 72.5 | 94.0 | 91.9 | 89.4 | 81.1 |
| | Demand deposits | | 29.9 | 28.5 | 22.5 | 19.5 | 27.0 | 28.5 | 22.9 | 17.6 |
| | Time deposits and Bank debentures | | 50.0 | 51.9 | 55.8 | 53.0 | 67.0 | 63.4 | 66.5 | 63.5 |
| | Negotiable certificate of deposits (a) | | – | – | 1.1 | 3.2 | – | – | 1.0 | 1.9 |
| | Non-resident yen deposits and Foreign currency deposits (b) | | 1.2 | 4.2 | 7.4 | 7.7 | 0.1 | 0.4 | 0.9 | 4.1 |
| | Borrowings from banks | | 2.0 | 0.5 | 0.3 | 0.2 | 0.2 | 0.0 | 0.1 | 0.1 |
| | Borrowings from the Bank of Japan | | 7.8 | 2.6 | 1.9 | 1.8 | 0.5 | 0.4 | 0.2 | 0.2 |
| | Call money and Bills sold (c) | | 7.5 | 11.1 | 9.9 | 11.2 | 0.2 | 0.5 | 0.9 | 3.4 |
| | (a) + (b) + (c) | | 8.8 | 15.3 | 18.5 | 22.1 | 0.2 | 0.9 | 2.8 | 9.4 |
| Assets | Loan | | 79.7 | 81.6 | 75.6 | 78.3 | 84.6 | 78.9 | 72.7 | 74.4 |
| | Distribution percentage (end of fiscal year) | Term: less than 1 year | 86.4 | 70.7 | 66.5 | 65.4 | 59.9 | 50.8 | 50.8 | 54.7 |
| | | 1 year or more | 13.6 | 29.3 | 33.5 | 34.6 | 40.1 | 49.2 | 49.2 | 45.3 |
| | Negotiable securities | | 14.4 | 14.5 | 17.4 | 13.8 | 14.7 | 16.6 | 24.8 | 21.7 |
| | Bonds | | 11.1 | 11.0 | 13.4 | 9.4 | 11.9 | 13.9 | 21.5 | 18.2 |
| | Stocks | | 3.3 | 3.4 | 4.0 | 4.4 | 2.8 | 2.7 | 3.3 | 3.5 |
| | Call loans and Bills bought | | 0.0 | 0.3 | 2.3 | 3.7 | 3.6 | 2.8 | 1.7 | 3.7 |
| | Cash and Deposits | | 1.8 | 2.2 | 2.8 | 2.2 | 1.8 | 2.8 | 2.2 | 1.7 |

Source: Bank of Japan, "Application Table of Flow of Funds Accounts," etc.

with 9.5% at the end of March 1966.

In contrast to these loan trends, the proportion of securities to be compared with total assets increased from 15.5% at the end of 1975 to 21.0% at the close of 1980. This proportion dropped to 17.7% at the end of 1984, partially because the over-the-counter sales of government bonds underwritten by banks was approved in April 1983. Although loans and securities have tended to move in opposite directions, their combined proportions have steady at around 95%. On the other hand, the ratio of call loans and bills purchased was low; nevertheless it jumped from 2.0% at the close of 1980 to 3.7% by the end of 1984, partially because city banks were allowed to release call loans in April 1981.

As noted above, there is a tendency for the proportion of medium- to long-term loans with variable interest rates to increase significantly and, conversely, for the proportion of loans with fixed interest rates issued by long-term credit banks to decline. This tendency can basically be interpreted as a reflection of a widespread expectation among borrowers' that the easy monetary situation will continue for some time. But the increase of medium- to long-term loans with variable interest rates might indicate that the so-called "spread banking activities" began to appear in order to respond to the increases in free interest rate liabilities, as will be discussed later.

On the liability side, after moving steadily at around the 85% level since the end of 1960, the combined proportion of deposits and bank debentures declined to 76.8% by the end of 1984. This decline was entirely the result of a large reduction in demand deposits which dropped from 28.5% (at the end of 1975) to 18.6% (by the end of 1984), caused by, among other factors, the increased sensitivity of households and businesses to rates of return. Meanwhile, time deposits and bank debentures increased from 54.4% (at the end of 1965) to 61.0% (by the end of 1980) and have stayed at around the same level since then. In addition to these changes, the proportion of liabilities based on free interest rates, which consists of CDs, foreign currency deposits, call money, and bills sold, rose to as high as 15.8% by the end of 1984. CDs were introduced in May 1979, and the restriction on the amount of foreign-currency deposits was abolished in December 1980.

(b) Profits

The ratio of current profits of all banks in Japan to total assets outstanding (see Table 2) has remained steady at around 0.5% since fiscal 1977. However, if current revenues and current expenditures are examined separately, it will be obvious that significant change has occurred—especially in current expenditures.

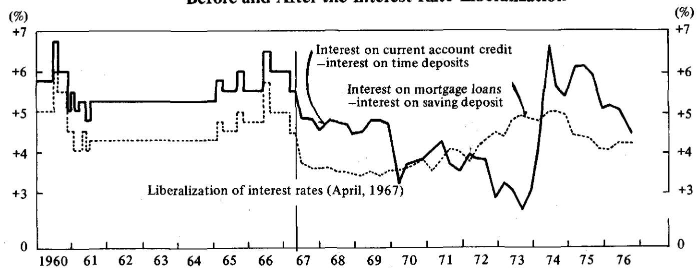
If one looks first at the ratio of the major components of current profit to total, one notices that there was an almost continuous decline in the interest receipts on loans, from 67.3% in fiscal 1977 to 53.2% in fiscal 1984, reflecting, among other things, the sluggish demand for funds. Interest and dividents on securities have also

## Table 2 Changes in Profits of All Banks in Japan

(Current revenues, current expenditures and current profit are shown as fiscal year-end percentage (%) of total assets outstanding)

| | Current revenues | Distribution percentage of current revenues | | | | Current expenditures | Distribution percentage of current expenditures | | | | | | | | Current profit | Yield on loan – Yield on deposits, bonds, etc. | Margin of profit on deposits and loans | Margin of profit on all funds |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | Interests of loans | Dividends and interests on negotiable securities | Other interests received | Commission | | Interests on deposits | Interests on bank debentures | Interests on CDs | Interests on call money/ bills sold | Transferred to reserve for possible loan losses | Operating expenses | Personnel expenses | Non-personnel expenses | | | | |
| Fiscal 1977 | 6.0 | 67.3 | 17.6 | 6.6 | 3.5 | 5.4 | 48.6 | 10.9 | – | 4.9 | 1.0 | 28.2 | 16.9 | 9.2 | 0.6 | | | |
| Fiscal 1978 | 5.5 | 61.7 | 19.6* | 8.3 | 4.2 | 5.0 | 45.6 | 10.9 | – | 4.5 | 1.1 | 28.7 | 17.4 | 9.3 | 0.6 | 2nd half 1.95 | △0.11 | 0.13 |
| Fiscal 1979 | 6.2 | 58.8 | 16.4 | 14.1 | 3.8 | 5.9 | 44.3 | 8.5 | 3.0 | 6.1 | 0.4 | 21.9 | 13.3 | 7.1 | 0.3 | 1st half 1.89<br>2nd half 1.99 | △0.17<br>0.08 | 0.04<br>0.06 |
| Fiscal 1980 | 7.5 | 61.5 | 13.8 | 17.1 | 2.9 | 7.1 | 52.6 | 7.3 | 3.9 | 7.4 | 0.2 | 18.0 | 10.8 | 6.0 | 0.4 | 1st half 2.51<br>2nd half 1.70 | 0.52<br>△0.16 | 0.07<br>△0.27 |
| Fiscal 1981 | 7.7 | 54.7 | 13.0 | 25.1 | 3.1 | 7.3 | 56.0 | 6.2 | 5.0 | 7.5 | 0.1 | 15.9 | 9.4 | 5.3 | 0.4 | 1.09 | △0.71 | △0.31 |
| Fiscal 1982 | 7.2 | 54.5 | 13.8 | 24.9 | 3.1 | 6.7 | 54.4 | 6.6 | 4.6 | 8.0 | 0.9 | 16.8 | 9.7 | 5.4 | 0.5 | 1.28 | △0.34 | 0.21 |
| Fiscal 1983 | 6.5 | 56.7 | 14.6 | 21.7 | 3.2 | 6.0 | 53.6 | 7.7 | 4.9 | 7.4 | 0.6 | 17.8 | 10.3 | 5.8 | 0.5 | 1.39 | △0.14 | 0.19 |
| Fiscal 1984 | 6.8 | 53.2 | 14.0 | 25.7 | 3.0 | 6.3 | 55.2 | 7.0 | 5.9 | 7.3 | 0.6 | 15.5 | 8.8 | 5.2 | 0.5 | 0.83 | △0.56 | 0.07 |

### (Reference) Changes in Interest Differentials of Deposits and Loans in West Germany Before and After the Interest Rate Liberalization




Notes: 1. Interest on current account credit after liberalization of interest rates is for the average interest on less than 1 million DMs. The figure before liberalization is the maximum limit of regulated interest rates on loans within agreed limits.
2. Interest on time deposits after liberalization of interest rates is for the average interest on less than 1 million DMs with a terms of 3 months. The figure before liberalization is the maximum limit of regulated interest rate with a term of 90-179 days.
3. Interest on mortgage loans after liberalization is for the average interest rate. The figure before liberalization is the same as that for the interest on current account credit.
4. Interest on savings deposits after liberalization is for the average interest at statutory notice. The figure for pre-liberalization is the maximum limit of regulated interest rate at statutory notice.

Source: Monatsberichte der Deutschen Bundesbank.

shown similar trends. The decline in these items was covered by increases in interest on call loans, deposits, and other forms of interest received. As a result, the total amount of interest received has held steady at between 90% and 93%. On the other hand, the amount of commission earned has remained consistently low around 3%.

On the current expenditure side, interest payments on deposits, CDs, call money and bills sold have increased considerably since fiscal 1980. The proportion of interest expenses including interest on bank debentures has risen from 64.4% in 1977 to 75.4% in fiscal 1984. These increases in interest expenses have been covered by cutting operating expenses—including both personnel- and nonpersonnel-related expenses—from 28.2% in fiscal 1977 to 15.5% in fiscal 1984.

(c) International Banking

The above discussion has been confined to developments in domestic banking. A glance at the overall banking scene, including the foreign sectors, however, reveals that foreign business has expanded significantly since the mid-1970s. In other words, the proportion of international business done by all Japanese banks has increased considerably; the share of foreign currency-denominated investment accounts in the balance-sheet of "All banks" increased from little over 10% in fiscal 1977 to approximately 30% in fiscal 1983; foreign currency-denominated gross operating profits increased from 8% to 12% during the same period (see Table 3).

### B. Future Impacts of Liberalization and Internationalization on Assets, Liabilities and Profits

How will bank assets, liabilities and profits change in the future as a result of the progressive liberalization and internationalization of Japan's financial markets?

There is no doubt that the tendency for the proportion of free interest rate liabilities to rise will become even more pronounced. In addition to the introduction of MMCs in March 1985, and lowering of the unit of issue for CDs and the shortening of its minimal maturity in April 1985, restrictions on large deposit rates are expected to be relaxed or eliminated in a very near future. Thus, the liberalization of interest rates on savings and deposits is progressing faster than generally anticipated. If interest rates were liberalized for deposits of more than 10 million yen, the proportion of free interest rate liabilities for All Banks would immediately jump to around 50%, (to around 30% if liberalized only for deposits of more than 100 million yen). Needless to say, this ratio will rise sharply if small deposit rates are also liberalized.

It is more difficult to make an outlook on the asset side, because, among other factors, it will be greatly influenced by business trends at home and abroad. However, it seems to be safe to argue that possibilities for diversifying investment of assets at home and abroad, brought about by liberalization and internationalization,

**Table 3 Changes in the Proportion of International Business for All Banks in Japan**

.(%)

| | | Fiscal 1975 | 1976 | 1977 | 1978 | 1979 | 1980 | 1981 | 1982 | 1983 |
|---|---|---|---|---|---|---|---|---|---|---|
| Invest-ment (See Note 1) | All banks in Japan | 13.1 | 11.9 | 11.0 | 11.7 | 15.2 | 18.8 | 23.9 | 28.3 | 29.4 |
| | City banks | 20.1 | 18.4 | 16.8 | 17.5 | 22.4 | 26.9 | 33.4 | 37.7 | 38.4 |
| | Regional banks | 0.0 | 0.0 | 0.4 | 1.0 | 1.3 | 1.7 | 2.3 | 3.3 | 4.8 |
| | Long-term credit banks | 8.9 | 8.0 | 7.7 | 8.7 | 12.0 | 15.9 | 20.0 | 25.9 | 26.9 |
| | Trust banks | 15.7 | 15.3 | 15.1 | 16.6 | 19.4 | 27.7 | 38.4 | 45.9 | 46.8 |
| Opera-ting gross profit | All banks in Japan | 8.1 | 8.3 | 7.8 | 7.7 | 8.0 | 8.7 | 10.6 | 11.8 | 12.1 |
| | City banks | 14.6 | 14.6 | 14.0 | 13.3 | 13.5 | 14.2 | 16.7 | 18.1 | 18.1 |
| | Regional banks | 0.0 | 0.0 | 0.0 | 0.7 | 1.0 | 1.3 | 1.6 | 1.9 | 2.1 |
| | Long-term credit banks | 5.1 | 6.0 | 6.5 | 7.7 | 8.9 | 10.4 | 13.5 | 15.4 | 19.7 |
| | Trust banks | 4.2 | 5.0 | 5.2 | 4.8 | 5.6 | 7.5 | 9.7 | 13.0 | 13.3 |

Notes: 1. $\dfrac{\text{Average foreign currency-denominated working account balance}}{\text{Average working account balance}}$ (Fiscal 1975-1981),

$\dfrac{\text{International business section working account balance}}{\text{Average working account balance}}$ (Fiscal 1982-1983).

2. $\dfrac{\text{Foreign currency-denominated operating gross profit}}{\text{Operating gross profit}}$ (Fiscal 1975-1981),

$\dfrac{\text{International business section operating gross profit}}{\text{Operating gross profit}}$ (Fiscal 1982-1983).

will motivate Japanese banks to direct their main efforts toward increasing loans that have high rates of return. It is also likely that because of the interest rate risk caused by increases on the liability of free interest rates noted above, the proportion of variable interest rate loans will increase further.

It is inevitable that the liberalization of interest rates on savings and deposits will cause an increase in the payment of interest on deposits. However, we should not overlook the following positive impacts:

1) Increases in the amount of deposits accompanying the inflow of funds from non-banking instruments carrying free interest rates, which is likely to occur as a result of liberalizing interest rates on savings and deposits
2) Stabilization of profit margins due to "spread banking"
3) Reduction in the various types of implicit interest rates practices (for instance, increases in commissions, fees and decreases in personnel- and nonpersonnel-related expenses)
4) Increased profit opportunities, to reduce costs, and to diversify risks as a result of liberalization and internationalization of banking activities (economies of scope)

On the other hand, there are certainly negative factors in addition to the above-mentioned increases in interest payments on deposits. For example, the possibility of squeezing profits, due to various types of management risks and losses. Furthermore, as described previously, up to the present, banks have responded to increases in the payment of interests on deposits by cutting back on personnel- and nonpersonnel business expenses. But how much more will banks be able to cut back on these types of expenses?

It is extremely difficult to foresee whether the positive or the negative factors will dominate. No definite conclusion has yet been drawn even in the United States, where deregulation of interest rates has progressed much further than in Japan.[2] Nevertheless, as can be inferred from the reduction of the margin between interest rates on loans and deposits in West Germany since that country liberated its interest rates, there is no doubt that liberalization and internationalization will intensify competition at home and abroad, creating a much more severe business environment for banks. Under these circumstances, it is reasonable to conclude that the management skill of each individual bank will be reflected in its profitability more clearly than in the past, and that this will increase the difference in profitability among banks.

### C. Future Effects of Liberalization and Internationalization on Management Risks

The effects of liberalization and internationalization on management risks are the other side of the coin of the effects on bank profits mentioned above. Management risks can be regarded as latent factors holding down profits. Whether or not their effect on profits actually realizes will depend largely upon the actual economic situation, the measures adopted by the monetary authorities, bank's countermeasures, and many other factors.

Bank-management risks include interest-rate risk, liquidity risk, credit risk, and foreign-exchange risk.[3] Furthermore, in view of the recent expansion of international banking, it would be appropriate to expand liquidity risk and credit risk to include availability risk and country risk, respectively.

It is very likely that these various types of banking risks will increase as a result of the liberalization and internationalization of Japanese financial markets. Credit risk is greatly influenced by business trends at home and abroad, and banks have always been exposed to this risk, (except for country risk, which has come to the fore only recently). Also, foreign-exchange risk does not constitute a completely new type of risk. In contrast, interest rate risk and liquidity risk are virtually new risks which are expected to increase in an unprecedented manner.

With major interest rates being regulated, the yield curve has always been

2. The following conflicting views on the effects of the liberalization of interest rates for savings and deposits on bank profits also exist in the United States.
According to a study by the Federal Reserve Bank of Philadelphia, as a result of increased interest rates for savings and deposits spurred by liberalization, the profits of commercial banks will fall by 80 percent and even cutbacks in various expenditures will not be able to prevent a 40 percent decrease. (*Business Review* 1983).
In contrast, a research by the Federal Reserve Bank of San Francisco suggests that liberalization will lead to improve bank profits, because (1) the cost of attracting deposits will decline as a result of a shift toward interest-rate competition accompanying the liberalization of interest rates (reduction in implicit interest rates and services); (2) reliance on CDs with interest rates higher than those of deposits will decline; and (3) the amount of deposits will increase reflecting the shift into deposits from MMMF (*Weekly Report,* July 13, 1984).
President Isoda of Sumitomo Bank describes the experiences of the Sumitomo Bank of California in these words: "The average interest rates on deposits increased somewhat by the introduction of MMDA. But as a result of the fresh inflow of funds from MMMF, we were able to appropriate the increased amount of deposits for settling external liabilities. On balance, the introduction of MMDA turned out to have a positive effect on our profits, as supported by the fact that the total amount of interest payments declined, albeit only slightly" (Isoda 1984).

3. According to Cooper, J. (1984), the following risks are involved in bank management:
   (1) Interest-rate risk, which involves instability of profits caused by fluctuating interest rates
   (2) Liquidity risk, which involves reduced profits caused by the undesired liquidation of asset holdings and the unavoidable procurement of funds at relatively high cost, necessitated by a shortage of funds for deposit repayment, lending, and other services
   (3) Credit risk, which involves a failure of total asset value to be realized at maturity
   (4) Foreign-exchange risk, which arises as a result of fluctuations in the exchange rate

positive in Japan. As a result, mismatching caused by short-term funding and long-term investment has had a continually positive effect on bank profits; in other words, so far there has actually been no serious interest-rate risk. However, the liberalization of interest rates is likely to increase the interest-rate fluctuations and amplify the unpredictability; it cannot be precluded that the yield curve may become negative. If so, bank profits may be substantially reduced by the mismatching of short-term funding and long-term investment noted above.

Maturity transformation is one of the essential functions of banks; thus liquidity risk is a risk inherent to banking. Because Japanese banks have always raised the bulk of their funds by absorbing stable domestic deposits, however, to date they have only had to direct their attention to maintaining the liquidity of their asset holdings. The extent of liquidity risk in Japan has therefore remained comparatively small. But, as noted earlier, the proportion of marketable funds has gradually increased and this trend is expected to become more pronounced as a result of the greater flexibility in the issuance of CDs and of the establishment of the BAs market. Fund-raising from the Euro-dollar market is also expected to increase. As banks rely more heavily on unstable marketable funds that are very sensitive to interest rates changes, the liquidity risk would increase further. Overseas funds are particularly subject to liquidity risk; the relationship between banks is not as close as in the domestic case. Moreover, the central bank's function as the lender of last resort is ambiguous one in Euro-markets. Thus, liquidity risk for overseas funds may increase in the form of availability risk.

The seriousness of the increase in interest-rate risk and liquidity risk would be further intensified if interest rates on savings and deposits were liberalized while the restriction on the maximum maturity of deposits as currently imposed on commercial banks remained in effect. Such a situation would make it harder for banks to manage independently their interest-rate risk and liquidity risk. Loans with variable interest rates, which are already widely accepted in the United States and which are expected to increase in Japan, constitute one effective means of avoiding interest-rate risk. These loans, however, transfer the interest-rate risk to the borrower and they may aggravate credit risk if the borrower is not able to respond adequately to fluctuating interest rates by, for instance, flexibly adjusting his investment schedule.

## 3. Bank's Responses

How should banks respond to these future changes in the banking conditions? This subject will be divided to the discussion concerning; i) responses of individual banks, and ii) responses of all banks as a whole, or a combination of several banks.

A. Responses for Individual Banks

The process of liberalization and internationalization of financial markets has diverse perspectives. For banking, these include restoring stability to financial systems under new economic conditions and increasing the efficiency of the allocation of funds by relying on the price mechanism in a more open and competitive market. It can be argued, however, that a situation could very well result in a situation, in which the financial system as a whole becomes stable but individual financial institutions are thrown against one another, resulting in the elimination of those that are less efficient.

The basic managerial policy under these changing conditions must therefore be one that maintains and improves the soundness of banking, based on the principle of individual responsibility. The only feasible response for individual banks is, to rid themselves of the easy "attitude of lateral alignment", a characteristic of banks in the past, and concentrate instead on how to achieve a balance between the two goals of risk-management and increased profits. Specifically, this involves (1) strengthening risk-control, (2) strengthening the profit base, and (3) promoting computerization in a way that will ensure that these two goals are met. In somewhat more concrete terms, the following responses deserve serious consideration.

(a) Strengthening Risk Management

There are no novel measures that can be devised against credit risk and foreign-exchange risk. It is obvious that the basis of any measure against credit risk should include a strengthening of the capacity for credit analysis and requirements for collateral as the need arises. Measures against foreign-exchange risk should include a strengthening of the ability to handle foreign exchange dealings and to manage the foreign-exchange position. Since areas not covered by these measures may expand as international banking activity progresses, however, it is assumed that other measures, such as establishing a limit for overseas loans, and managing the foreign-exchange position on a consolidated basis including overseas branches and subsidiaries, will increase in importance.

In contrast, it is imperative that new measures be implemented to deal with increasing interest-rate risk and liquidity risk. For the increase in interest-rate risk caused by maturity mismatching, the possible measures include (1) increasing loans with variable interest rates, (2) shortening the maturity of loans and other investments, (3) flexible setting of liability maturity(elimination of the restriction on maximum-maturity), and (4) use of interest-rate futures. The first two measures could be adopted within the framework of the existing financial system, but their effectiveness would be limited because they cannot really be employed without the consent of the borrowers. Furthermore, as previously noted, the problem with variable interest-rate loans is that, although such loans can avoid interest-rate risk, they may lead to an increase in credit risk.

The last two measures would require a revision of the existing system. But they would be effective as a means of reducing interest-rate risk because, by flexibly setting the maturities on their liabilities, banks would be able to adjust independently their degree of maturity mismatch not only for assets but also for liabilities. In the United States, transactions in interest-rate futures have already been recognized as an effective means of hedging interest-rate risk in general. It would therefore be worthwhile to consider applying them in attempts to reduce interest-rate risk in Japan. These transactions, however, should not be allowed to exceed the limits of hedging transactions.

Securing a certain degree of maturity matching and maintaining liquid assets constitute the most effective measures against liquidity risk. As measures to counter interest-rate risk, it is desirable that flexible adjustment of matching is made not only on the asset side but also on the liability side. Moreover, it is necessary to exercise moderation when raising marketable funds that are unstable and highly sensitive to interest rates, because that would substantially increase the degree of mismatching. Special care is necessary in the field of international banking, where reliance on the Euro-dollar borrowing and other marketable funds is especially high. To deal with the accompanying increase in availability risk, it is important to maintain a proper degree of matching of liabilities and investments and to strengthen the ability to raise stable foreign-exchange deposits. In addition, banks should also seriously consider to secure credit lines as a measure against emergency situations.

For the above risk-control measures to have any significant effect, it is necessary that similar measures be thoroughly applied to the whole spectrum of banking activities. Incidents involving large-amount defaults and foreign-exchange losses capable of jolting the very foundations of banking tend to occur when such risk control measures are inadequate. The task of postering a system of internal inspection and audit is far more important now than in the past. Moreover, to cope with a situation in which risks may actually occur, it is also important to improve the net worth position.

(b) Strengthening the Profit Base of Banks

Strengthening the profit base of banks is equally as important as strengthening risk management. Assuming that interest payments will increase in the future as a result of the liberalization of interest rates, it will become necessary to (1) improve opportunities for new earnings and (2) reduce expenses. To improve opportunities for new earnings, appropriate amounts of commission should be demanded for the various forms of non-interest-rate services that have existed under conditions of restricted interest rates on savings and deposits. In addition, totally new forms of commission business must be developed. Moreover, because room for expansion or diversification of asset investments will increase as a result of future liberalization and internationalization, banks should seek a managerial policy that emphasizes the active exploration of new earning opportunities. Particularly under conditions of low economic growth, economies of scope will have an important role to play in attempts to increase management efficiency or expand business earnings. Expansion of peripheral business and advancement into securities business are examples of this. Of course, if handled carelessly, such attempts to expand earning opportunitis may result in increased risk. The important point, therefore, is to find the optimal combination of these two types of opportunities.

There are no easy means of reducing expenses. Nevertheless, a first step might be to reduce the kind of expenses that accrued due to competition for deposits under the restricted interest rates. As discussed above, a partial solution to the problem would be to request commissions commensurate to cost. In the process of liberalization, financial institutions may be divided into those specializing in wholesale banking and those specializing in retail banking. If this happens, it may be realistically assumed that wholesale financial institutions will increasingly need to reduce expenses by reexamining personnel and by adjusting, integrating and closing down offices.

(c) Promoting Computerization

Future computerization will not be limited simply to reducing costs; it will also actively contribute to the expansion of banking business and earnings by providing customers with new instruments and services. Computerization will also be used for risk-control.

B. Response for Banking as a Whole

The foregoing discussion concerned responses for individual banks. However, more satisfactory results might be achieved if banks were to tackle collectively—bilaterally and multi-laterally—the problems of strengthening their management bases and automating their operations. There is no established theory on whether or not the benefits of economies of scale apply to the world of banking. If it can be assumed that banking in Japan will undergo large-scale computerization, however, banking may very well be moving toward economies of scale. It cannot be denied that economies of scale will be effective at least for certain types of banking activities or functions. The provision of settlement services is a case in point; in particular, it is believed that economies of scale will increase as computerization progresses. Therefore, by broadening their network through cooperative services, banks would be able both to promote computerization and to expand their earning opportunities and increase their management efficiency. Moreover, a business tie-up that would allow banks to use jointly the credit evaluation information and know-how accumulated by individual banks could have many positive results. Cooperation among financial institutions of different types are one other possibility. There is no doubt that it would also become increasingly important to increase management efficiency by promoting cooperation among various banking services, both within banks and between banks and other financial institutions. Under such circumstances, however, the potential danger of oligopolistic market control should not be overlooked.

## III. Progress in Financial Market Liberalization and Internationalization and Maintenance of Financial Order

### 1. What is Financial Order?

There has been a tendency for the term "financial order", like the term "depositor protection," to be used in various ways and with ambiguous connotations. This tendency has resulted in confused discussions of the subject. In this paper, the meaning of the term and its relations to the terms, "depositor protection" and "sound banking" will be clarified.

#### A. Definition of "Financial Order"

The term "Financial Order" literally refers to the "issue of the reliability of currencies and financial assets in general" (Japan Economic Research Council 1984). In other words, it denotes the smooth and reliable fulfillment of financial obligations. Although this definition is an useful one, it is so broad that it can easily result in imprecise discussion. Therefore, in order to clarify the focus of this discussion, the scope of the term "financial order" will here be limited to "the very core, the collapse of which would cause enormous cost."[4] Specifically, "financial order" is defined as "that which secures the smooth and safe settlement of transactions through demand

4. In terms of efficiency, safety, and acceptability by a third party, bank deposits are considered to be most adequate instrument for settlements. Bank deposits are therefore widely used either to complement cash or as a cash substitute. But "theoretically viewed, it is far from clear why only deposits should function as a mechanism that complements cash for settlements" (Higano, Royama et al. 1984). Indeed, even in Japan, investment trust is beginning to be used as a method for settlements. Under present conditions, however, it is unlikely that this practice will become widespread, because it fails on two accounts: in safety and in acceptability to a third party. But if these shortcomings are corrected, the new method of settlement may become widely used. Therefore, the present discussion of "financial order" must include the institutions that provide these new settlement methods.

deposits."[5]

Financial order is therefore established on the basis of public confidence in the settlement services supplied by deposit banks. The most important point to be stressed here is that user-confidence in these settlement services should not be limited only to the depositors who draw on them; direct and indirect recipients of these services should also have confidence in them. That the confidence of the recipient would actually be more important than that of the depositor becomes obvious if one just assumed that the settlement of accounts based on demand deposits were replaced by a settlement method based on cash. It is therefore understandable that the efficiency and safety of settlements has been safe-guarded by the provision of adequate legal protection to the recipients of bills, checks, and other settlement instruments.

B. Maintenance of Financial Order and Its Relationship to Depositor Protection and Sound Banking

The term "depositor protection," like the term "financial order," is used in several different ways. This is because various definitions become possible by the inclusion of different factors, ranging from the size of deposits (only small depositors or both small and large depositors), to the types of deposits (only those that have a settlement function or including savings deposits), and to the degree of protection (should the depositors' own responsibilities be questioned or not). A fairly common view is that the rationale for depositor protection is simple social justice and that the safety of the deposits of all small depositors should be unconditionally guaranteed. In other words, because small depositors cannot occupy positions on an equal footing with their banks, and also because they have neither the means nor the ability to confirm the safety of their deposits, they must be protected.

The author believes that an even more essential rationale for providing depositor protection is that depositor protection is very closely related to financial order. In

5. Even academic discussions often contain definitions lacking in clarity. The following definitions of "financial order", however, are suggesting that the definition employed in this paper is essentially not different from them: "Demand deposits are used as currency because they command confidence, and if this confidence were lost, the financial order of the entire country would collapse, touching off a sharp drop on the amount of currency. In short, the 'maintenance of financial order' has a meaning of its own beyond protection of small depositors" (Tachi 1982); "Maintenance of financial order is an issue of the distribution of resources involving the adequate provision of a public service known as the settlement of payments within the market mechanism" (Royama 1982); Maintenance of financial order, that is, maintenance of the public's confidence in deposit bank organizations" (Iwata and Horiuchi 1982).

other words, depositors must be protected because public confidence in deposits—particularly demand deposits—will otherwise be lost, entailing a disruption of the financial order. According to this thinkings, depositor protection ensures that the public's faith in demand deposits will be just as unlikely to be jeopardized as its faith in cash currency. Leaving the feasibility aside, the professed argument for depositor protection is that "the safety of settlement deposits—whether large or small—should be unconditionally guaranteed." With "settlement deposit", it is meant the actual function—not the form of deposit.

In contrast, some observers advocate limiting the degree of protection given to large depositors, citing the principle of individual responsibility. However, in the case of disruptions in the settlement system, a fierce movement of funds poses a serious problem especially in the development of electronic banking. So it seems to be inappropriate to exclude large deposits from consideration.

Finally, how is financial order related to "sound banking"? If sound banking is maintained, depositors will be protected and the financial order will be maintained. Sound banking is therefore an extremely important precondition for depositor protection and the maintenance of financial order. Nevertheless, sound banking is not necessarily indispensable; even if banks were unsound, depositors might be protected and the financial order would be maintained by means of deposit insurance and other measures (discussed later). The relationship between these three factors is shown in Figure 1.

## 2. Evaluation of Various Means of Maintaining Financial Order and Prescriptions for the Future

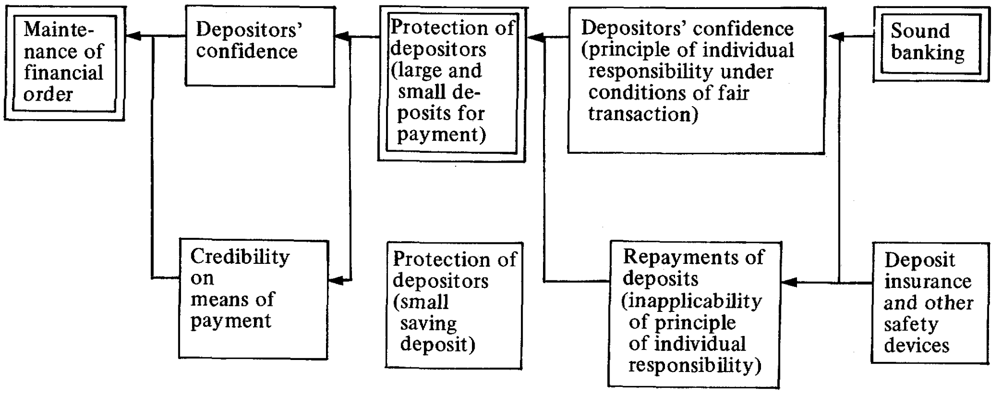
As a preliminary step in this discussion of the maintenance of financial order, it will be useful to clarify the ways in which financial order can be disrupted and to evaluate the lessons learned from past experiences of disruptions in the financial order.

### A. Mechanism of Collapses of Financial Order

Figure 2 is a rough illustration of the process by which certain factors disrupt the financial order and eventually cause its collapse. As can be seen, collapse in financial order occurs in four stages: (1) destabilization of the banking system triggered by changes in business conditions at home and abroad; (2) business deterioration and the failure of individual banks; (3) diffusion of these developments throughout the entire banking system; and (4) absence of effective measures to cope with problems at each of these three stages.

The first stage involves changes in business conditions at home and abroad.

**Figure 1 Sound Banking and Financial Order**



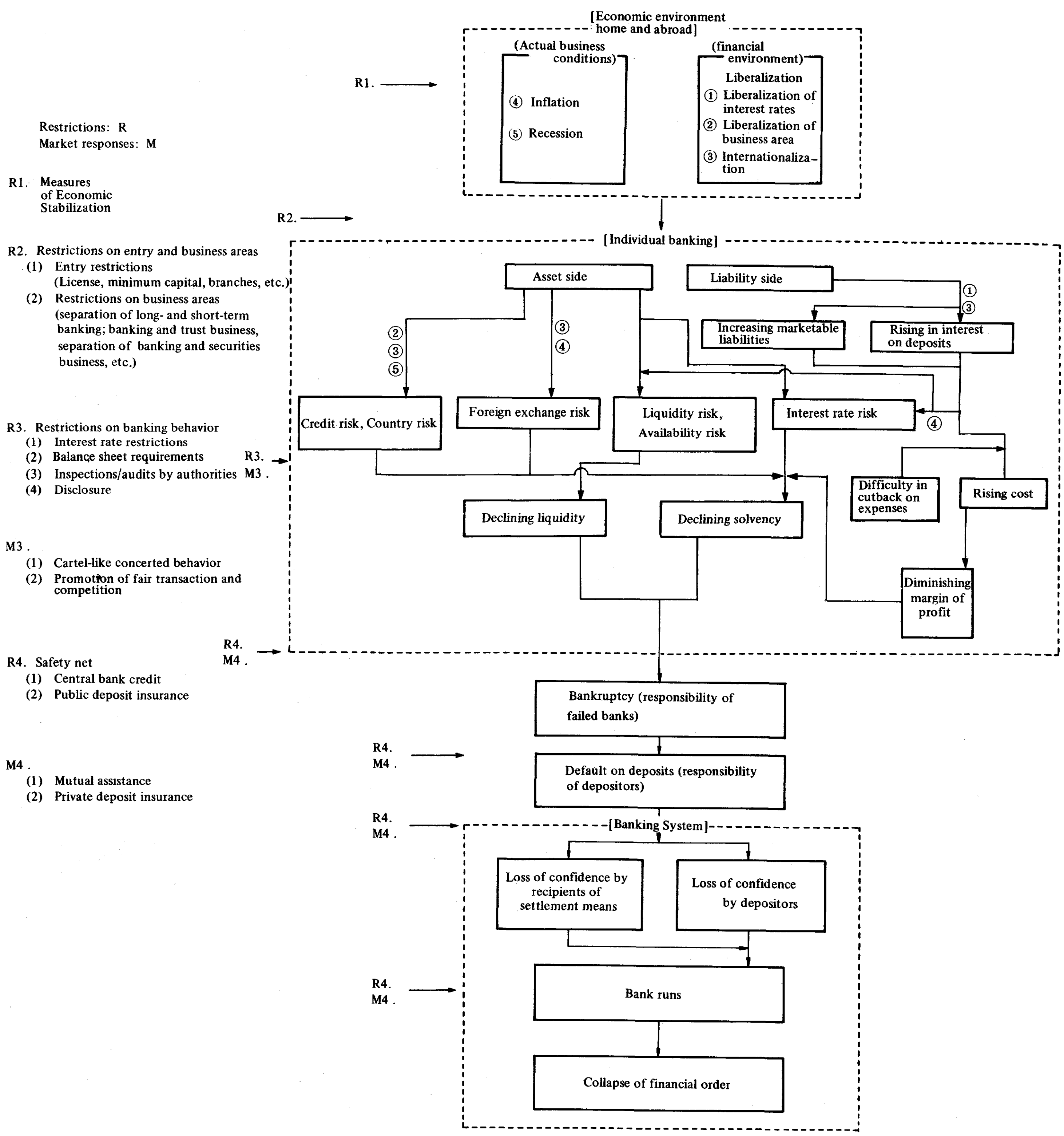

These changes include (1) changes in the financial environment, including liberalization and internationalization of financial markets and (2) changes in real economic conditions, like inflation and recession. As will be noted later, these environmental changes can affect bank profits and risks, thereby aggravating or destabilizing banking conditions.

The second stage consists of the aggravation of banking conditions and incidences of bank failure that occur under these adverse economic conditions. Bank failures occur when liquidity dries out and it is no longer possible to settle daily transactions. But the lack of solvency is believed to be the fundamental cause of bank failures. Two factors have a negative impact on bank solvency: (1) chronic deterioration of bank profits, caused by a reduction in the profit margins of fund-raising and investment; and (2) losses caused by the realization of various risks, especially credit and foreign-exchange risks. Of these, the second factor is generally most directly responsible for damages to bank solvency.

In the third stage, the effects of individual bank failures become diffused throughout the entire banking system. This happens by way of (1) failures in the interbank transactions and (2) the loss of public confidence in deposits. Loss of public confidence triggers a widespread run on banks, which has an enormous impact on the banking system as a whole.

The foregoing discussion describes the collapse of financial order within the banking system. It is not inevitable that the collapse proceeds as illustrated there; it is possible to devise safety measures at various stages to keep the financial order from collapsing. For instance, changes in the economic environment can be absorbed by monetary and fiscal policies. Sound management of individual banks could be maintained by various restrictions, and by market mechanisms. Furthermore, even if individual bank failures occur, it is possible to prevent the effects of these failures from spreading throughout the entire banking system by providing safety nets in the form of deposit insurance and central bank credit. It is only if these safety devices are

## Figure 2 Financial Order Collapse Mechanism



not used at various stages, or if their functions are inadequate that the financial order will eventually collapse.

## B. Lessons Learned from Past Experiences of Financial Order Disruptions

The financial crisis that took place in the United States, Germany, Japan, and elsewhere at the end of the 1920s was a typical example of financial order collapse. But less-serious disruptions of financial order have taken place several times since then. The recent failure of the Continental Illinois National Bank in the United States is an example worthy of special mention. The credit uncertainty that broke out in the United Kingdom, the United States, West Germany and elsewhere before and after 1974—the so-called Secondary Banking Crisis in the U.K., the collapse of the Franklin National Bank in the United States, and the series of private bank failures touched off by the failure of Herstatt Bank in West Germany— is still fresh in the minds of many. Additionally, the collapses of the First Pennsylvania Bank (1980), the Savings and Loan Associations (1982), and the Penn Square Bank (1983) in the United States, and the collapse of the SMH Bank (1983) in West Germany, were incidents that significantly affected the financial order.

Table 4 briefly outlines the causes of these disruptions in terms of (1) economic background, (2) banking, (3) precautious measures, and (4) measures taken in response to the cases. The financial panic that broke out at the end of the 1920s is represented by Japan's Showa Financial Crisis. The following factors may be cited as causes of these examples of disruption or collapse of the financial order.

First, in all these cases, disruption or collapse occurred under unstable economic conditions. The Showa Financial Crisis in Japan occurred during the period of reactionary panic that immediately followed World War I and the subsequent period of chronic recession. The other incidents took place against economic backgrounds that included (1) Shift to floating rate system—volatility of exchange rate and inflation and recession before and after the First Oil Crisis (Franklin National Bank, the Secondary Banking Crisis, and Herstatt Bank); and (2) Inflation and recession after the Second Oil Crisis (First Pennsylvania Bank, Savings and Loan Associations, and Penn Square Bank), the prolonged business recession, and the intensification of the accumulated LDC—debt problem (SMH Bank, Continental Illinois National Bank).

Second, the banks in question were managed incautiously during these periods of economic instability, which made them vulnerable to various forms of risk. In every case cited above, bank failure was touched off by the emergence of either credit risk, foreign-exchange risk, interest-rate risk, or combinations of these risks, which negatively effected solvency. In certain cases, however, the banks failed because they became bogged down by a lack of liquidity triggered by management uncertainty. These problems had, in turn, resulted from excessive dependence on

## Table 4 Bank Failures and Financial Order Disturbances in the Past

| | Japan | U.K. | West Germany | |
|---|---|---|---|---|
| | 1927: Showa Financial Crisis (Failure of Bank of Taiwan, etc.) | 1973-75: Secondary Banking Crisis | 1974: Failure of Herstatt Bank, (private bank, assets (as of the end of 1973) worth about 2 billion DMs) | 1983: Failure of SMH Bank (private bank, assets (as of the end of 1982) worth about 2.2 billion DMs) |
| 1. Economic Background | . Post-WWI depression | . Shift to floating rate system–Volatility of exchange rate<br>. Inflation and recession after the First Oil Crisis | . Shift to floating rate system–Volatility of exchange rate<br>. Inflation and recession after the First Oil Crisis | . Business recession after the Second Oil Crisis |
| 2. Banking (management, accompanying risks, etc.) | . Deterioration of large borrowers' managerial conditions–Credit risk<br>. Excessive dependency upon unsecured call and other markets–Liquidity risk<br>. Overreliance upon authorities' assistance–Moral Hazard | . Failures in real estate and stock investments<br>. Overdependency upon market borrowing–Liquidity risk | . Failures in foreign exchange speculations–Foreign exchange risk<br>. Dressing of financial statements | . Unprudential financing to specified companies–Credit risk<br>. False reporting on large loans<br>. Financing through affiliated banks abroad–Circumvention of regulations |
| 3. Precautious Measures | . Insufficient | . Not under the BOE supervision | . Delay in grasping the business conditions owing to the dressed statements | . Insufficient restrictions–Delay in recognizing the business conditions owing to the false information and the circumvention of regulations |
| 4. Measures Taken in Response to the Cases | . Lack of deposit insurance system<br>. Overreliance on central bank credit : Subsequent discontinuation | . The "life-boat operation" by BOE and other major banks<br>. Bailout loans by BOE<br>. BOE takeover of some banks | . License revoked<br>. Bundesbank relaxed monetary and credit condition to prevent contagion of bank failure | . Loans by deposit insurance system<br>. Bailout loans by Liko-bank and other large banks |
| 5. (Reference) Further Changes in Measures | . Promotion of bank merger<br>. Introduction of the Banking Law (January 1928): Bank License system, bank supervision and inspection rules, separation of banking business<br>. Bank of Japan supervision started (March 1928) | . Banking Law enacted (April 1979) : Introduction of licensing system; revision of bank auditing system; and a system to protect depositors introduced (February 1982)<br>. Guidelines for sound banking settled by BOE (1980-1982) | . Liko-bank founded (September 1974)<br>. Introduction of the regulation on foreign currency position (October 1974)<br>. Extention of deposit insurance system (1976)<br>. Banking Law revised (May 1976): Restrictions on large-scale financing tightened; Strengthening of bank supervision; and prohibition of the establishment of new private banks | . Reports on overseas subsidiaries (its activities) obliged (December 1983)<br>. Banking Law revised (January 1985): Consolidated balance sheet obliged; Restrictions on large-scale financing |

## — Major Crises and the Causes

| U.S.A. | | | | |
|---|---|---|---|---|
| 1974: Failure of Franklin National Bank (national bank, assets worth about $3.9 billion) | 1980: Failure of First Pennsylvania Bank (national bank, amount of deposit (as of 1980) worth about $5.3 billion) | 1980-1981: Savings and Loan Associations' Crisis | 1982: Failure of Penn Square Bank (national bank, assets (as of the end of 1981) worth about $440 million) | 1984: Failure of Continental Illinois Bank (national bank, assets (as of the end of 1983) worth about $42 billion) |
| . Shift to floating rate system–Volatility of exchange rate<br>. Inflation and recession before and after the First Oil Crisis | . Inflation and recession after the Second Oil Crisis | . Inflation and recession after the Second Oil Crisis | . Inflation and recession after the Second Oil Crisis | . Inflation and recession after the Second Oil Crisis<br>. Overexposure to LDC loans |
| . Failure in exchange speculations–Foreign exchange risk<br>. Investment failures in local bonds, government securities–Interest-rate risk<br>. Overdependency on market borrowing–Liquidity risk | . Failure in bond investment–Interest rate risk | . Deposit outflow into MMF, etc–Liquidity risk<br>. Increase in funding costs accompanying the introduction of MMC, SSC, etc.: Investments, on the other hand, mainly in fixed-rate long-term loans–Interest-rate risk | . Overexposure to energy-development companies and their default –Credit risk | . Default of loans mainly (1) in loans to energy-development and (2) loans to Central and South American countries: the Penn Square related loans–Credit risk<br>. Overdependence on market borrowing (particularly on overseas funds) –Liquidity risk |
| . No Major problem | . No Major problem | . No Major problem | . No Major problem | ----- |
| . Bailout loans by FRB<br>. Credit line (collateralized) provided by large banks<br>. Takeover by European American Bank | . Bailout loans by FDIC and private banks<br>. Bailout loans by FRB<br>. Credit line set by private banks | . Arrangement of mergers by FSLIC | . Bailout loans by FRB<br>. Pay-off of deposit insurance by FDIC (excluding large deposits)<br>. Settlement of new national banks | . Bailout loans by FDIC and private banks<br>. Bad assets taken over by FDIC<br>. Capital participation by FDIC |
| . Upper limit on deposit insurance raised from $20 thousand to $40 thousand (inacted in 1974) | . Upper limit on deposit insurance raised from $40 thousand to $100 thousand (enacted in 1980) | . Extention of the range of business allowed to savings and loan associations (enacted in 1980 and in 1982)<br>. FRB authorized to extend credit to a wider spectrum of financial institutions (1980) | . FDIC control strengthened (enacted in 1982) | . The measures below examined: tightening of capital asset ratio control; extensive disclosure system; and revision of the deposit insurance system (introduction of risk-related premium) |

unstable marketable funds (among others, the Showa Financial Crisis, the Secondary Banking Crisis, and the Failure of Continental Illinois National Bank)

Third, in many cases the regulations and controls to check in advance unsound banking practices were non-existant or did not function properly. For instance, banking laws were not complete in Japan at the time of the Showa Financial Crisis, and Japanese banks were not subject to sufficient inspection. The secondary banks in the U.K. were not subject to the regulations and controls by the Bank of England before the U.K.'s secondary banking crisis. There was a long delay before the monetary authorities in West Germany finally became aware of the situations of the Herstatt Bank and the SMH Bank; these banks had either falsified their financial statements or expanded their banking activities overseas, where they were not subject to the regulations of German banking laws. And some observers insist that steps taken by official monetary authorities could have prevented the failure of the Continental Illinois National Bank.

Fourth, whether or not an individual bank failure triggered a breakdown in the financial order depended on the response to the failure. In the case of Showa Financial Crisis, non-existence of deposit insurance forced central bank credit to cope with the aftermath of the panic, but ultimately resulted in the collapse of the financial order. A reason why financial order was maintained in the other cases was that the impact of bank failure was relatively minor to start with; expost facto measures, such as deposit insurance system, central bank credit, and mutual cooperation within the banking system contributed significantly to avoiding the collapse of financial order.[6]

Based on the lessons learned from these financial order disruptions, measures have been adopted in various countries, to strengthen the regulations and controls imposed on banks—both to prevent them from failure and to deal with the effects of failures should they occur. (For further details, see reference in Table 4.)

## C. Effects of Liberalization and Internationalization on Financial Order

Future advances in electronic banking, the liberalization and internationalization of Japanese financial markets promise to have both positive and negative effects on the financial order. On the positive side, liberalization and internationalization of Japanese financial markets would encourage the expansion and diversification of banking activities. Because of the expansion of earning opportunities and the dispersion of risk for individual banks, banking would become more sound. This would in

6. At the time of the U.K.'s Secondary Banking Crisis, there was no deposit insurance system, so in the aftermath of the crisis the secondary banks had to rely heavily on credit extended by the Bank of England.

turn increase the stability of the financial order. Also, liberalization of the financial markets would probably accelerate the elimination of unsound banks. Although this process might at first destabilize the financial order, it would serve to stabilize it in the long run.

Various negative effects may also be expected (see Figure 2). It is not clear whether profits of the banking system as a whole will be affected. However, the intensified competition is likely to make the differences in the performance of individual banks more pronounced and the number of banks suffering from a deterioration in the earning position may increase. As noted earlier, various forms of risks may increase, and they may become more difficult to control than before. It may reasonably be concluded that the possibility of bank failure may increase as these changes in bank profits and risks take place.

Moreover, the rapid progress in electronic banking that is taking place in conjunction with the liberalization and internationalization of Japanese financial markets is complicating the problem. There is the possibility that a new form of financial crisis may replace the classic types of financial order disruption. Specifically, system risk, a credit risk that exists between banks as a result of a time-lag between the settlement of funds for customers and the settlement of funds between banks, may increase. Also, the possibility that a negative change in the confidence of depositors could result in a drastic movement, such as the "invisible" quick withdrawal or conversion of a large proportion of deposits by the use of credit cards at nearby stores, may increase. Coping with these risks will be extremely difficult.

Regulation and supervision of banking activities by monetary authorities have played an important role in regulating banking activities in Japan. But, it is not certain that they will be able to maintain the efficiency of their monitoring in a period where a rapid change in banking behavior is expected.

It is not possible to draw a general conclusion about whether the positive or the negative effects of liberalization and internationalization would prevail, since the answer would depend on whether one focuses on long-term or short-term effects. But as far as the transition period is concerned, it is hard to deny that problems are likely to become much more acute than in the past. It would be well advised to devise measures to guard against such a situation, recognizing that the links in the settlement system (or the financial order) will become, at least partly, more vulnerable.

## D. Basic Mechanism for Maintaining Financial Order

How, then, can financial order be maintained? In this section, we examine the basic mechanism for maintaining the financial order and consider the options available within that mechanism.

As noted earlier, the essence of the financial order lies in the safe and smooth operation of the settlement system by means of demand deposits. The maintenance of the financial order increases both the efficiency and volume of economic transactions and thus enhances economic welfare of a country. In other words, financial order is a public good. This provides good grounds for arguing for intervention by monetary authorities—or at least some form of regulation.[7] Of course, regulation is not the only viable means of maintaining the financial order; voluntary measures governed by the market mechanism also constitute an effective method. Moreover, regulations and voluntary measures are in a complementary relationship to each other and can be mutually substituted; regulations can even be used to promote measures based on the market mechanism.

In summary, the mechanism for maintaining the financial order involves determining at what stage and by what means the collapse in the financial order should be stopped (see figure 2). Should prevention of individual banks failures more emphasizes (stage 1), or the contagion of individual bank failures to the whole banking system (stage 2)? What are the most adequate means in each of these stages? For the sake of convenience, those measures that mainly apply to stage 1 will be hereafter referred to as individual measures, and those that mainly apply to stage 2 will be referred to as comprehensive measures. Regulations and voluntary measures taken by market participants may be either individual or comprehensive measures. Table 5 is a rough summary of these measures. The pros and cons of these measures are shown in Table 6.

Since the end of World War II, Japan has emphasized the prevention of the failure of individual banks (the so-called "bank-administration-in-convoy" , and has achieved success by applying measures I -a, b1, c, and d, in Table 5. Japan has not actually had to deal with a stage 2 situation, but it has been operating within a framework that would rely mainly on measures II - g and i if a stage 2 should become reality. As noted earlier, the prevention of individual bank failures is not necessarily an indispensable precondition for maintaining the financial order. The financial order could be maintained simply by adopting measures designed to deal with the stage 2 situation; it is possible to devise a framework for maintaining the financial order by emphasizing measures II - g, h, and i. These are the measures the United States has been employing. It should be noted, however, that a tendency to strengthen measures at stage 1 (within a basic framework that emphasizes stage 2) by adopting measures I -b2 and e (particularly e) has recently appeared in the United States.

7. "Regulation is a form of state intervention in activities independently engaged in by the private sector. It has both stimulative ad restrictive aspects and involves both authoritative and nonauthoritative forms of intervention" (Kanazawa 1980). Following this definition, we will consider public safety nets and deposit insurance system as a sort of regulations.

**Table 5 Classification of Means of Financial Order Maintenance**

| | Individual measures | Comprehensive measures |
|---|---|---|
| | I. Prevention of individual bank failures | II. Prevention of disturbances in banking system as a whole |
| Regulations | a. Entry restriction/Business area restriction<br>b. Banking behavior restrictions<br>b1. Interest-rate restrictions<br>b2. Balance sheet restrictions, inspection, audit<br>c. Central bank credit | g. Central bank credit<br>h. Public deposit insurance |
| Market responses | d. Cartel-like concerted behavior<br>e. Promotion of fair trade and competition<br>f. Mutual assistance | i. Mutual assistance<br>(j. Private deposit insurance) |

## E. Maintaining Financial Order in the Future

We shall conclude this paper with an analysis of how the financial order should be maintained in the phase of the future liberalization and internationalization of Japanese financial markets. We shall focus on two issues, (a) the most appropriate framework to maintain the financial order, and (b) measures for establishing that framework.

(a) The Desirable Mechanism for Maintaining the Financial Order of the Future

First, a mechanism for maintaining the financial order must be one that will not conflict with the aims of liberalization and internationalization of financial markets—namely, promoting the effective distribution of funds and improving the fair distribution of income. Second, although various restrictions such as restrictions on interest rates on competition among financial institutions were originally designed to maintain the financial order, to maintain these restrictions as the financial market opens up internationally would actually destabilize the financial system. Liberalization of Japanese financial markets certainly does not imply the lifting of all restrictions; it will be desirable, however, to try to avoid those restrictions that may impede the market mechanism. (A shift from a, b1 to b2 is desirable (see Table 5)). Third, whereas the role of individual measures that restrict competition will decline, the importance of comprehensive measures is expected to increase. But because individual measures (that is, b2, e, and f) and comprehensive measures are complements, it will be important to maintain an adequate balance between these two types of measures. Otherwise, the burden on the comprehensive measures will become excessive.

(b) The desirable measures to maintain the financial order in the future would include: (1) enhanced reliance on market mechanism; (2) a strengthening of the role played by comprehensive measures; (3) critical reassessment of individual measures;

## Table 6 Pros and Cons of Financial Order Maintenance Measures

| | Pros | Con |
|---|---|---|
| Entry restrictions | · Prevent excessive competition | · Obstruct the efficiency of fund allocation<br>Inequity-excess profit of the banking sector |
| Business area restrictions | · Prevent excessive competition<br>· Maintain sound banking practices by prohibiting high-risk business activities | · Obstruct the efficiency of fund allocation<br>· Limit new opportunities for earnings and risk dispersion |
| Restrictions on interest rates | · Secure earning for banks by maintaining a certain profit margin | · Obstruct the efficiency of fund distribution<br>· Precipitate disintermediation |
| Balance-sheet requirements (e.g., restrictions on large loans and restrictions on the ratio of net worth) | · Provide incentives to disperse risks and maintain sound banking practices<br>· Not competition restrictive | · Difficulty of setting an appropriate requirement level of restrictions; mechanical application of restriction<br>· Entail possibility that financial institutions would continue to lean toward high-risk lending, even under a fixed ratio<br>· Ineffective against increases in off-balance-sheet transactions (reinforcement of inspection and supervision in imperative) |
| System of mutual assistance among various types of financial institutions | · Promotes the maintenance of the financial order by encouraging the responsibility of banks | · Cost increase due to fund contributions |
| Deposit insurance (uniform insurance premium at present) | · Prevents bank runs by maintaining the confidence of depositors | · Induces moral hazard (decline in the discipline of banks and depositors) |
| System of risk-related insurance premium | · Promotes self-descipline in banking<br>· Strengthens the disciplinary function of the market | · Difficulty of assessing the riskiness of individual banks<br>· Public perception of differences in premium rates may trigger mass withdrawals |
| Central bank function (as the lender of last resort) | · Ultimate means of maintaining the financial order<br>· Flexibility and maneuverability | · Moral hazard (decline in the discipline of banks and depositors)<br>· Negative impact on the effectiveness of monetary policies and monetary adjustments<br>· Deterioration of central bank assets |

(4) adaptation to internationalization; and (5) stabilization of the economy. These measures are examined in detail below.

(1) Enhanced reliance on Market Mechanism

First, measures should be taken by the market participants themselves, based on the principle of individual responsibility. The strengthening of the banking disclosure in accordance with the deregulation of interest rates for savings and deposits result in a situation where the evaluation by depositors of banking performance would be reflected, in the formation of interest rates at least on large deposits. Subsequently, the promotion of sound banking practices would become imperative under such situation if banks hope to raise their funds at low interest rates; thus a favorable effect could be expected on the financial order.

However, it may not be appropriate to rely on market functions in the case of transaction deposits and small deposits. As discussed earlier, the safe and smooth operation of a settlement system would only be possible if it was accompanied by the confidence not only of depositors but also of all market participants, including the direct and indirect recipients the means of settlement. If the principle of individual responsibility were to be applied to all participants of a settlement system, not only depositors would be forced to decide with which bank he should open the account, recipients of the means of settlement would also be forced to select a bank at which he should receive the payments. Thus, the externality involved in transaction deposits is tremendous. In other words, to enhance sound banking practices solely upon monitoring by market participants could incur enormous costs.

Furthermore, the willingness and capabilities of small depositors to make judgements about disclosed information remains a problem. That is, there is a certain fixed cost to securing disclosed information and assessing its contents. If small depositors have to bear the burden of this cost themselves, they may not be encouraged to exercise caution about the safety of their limited deposits. In this case, a more solid disclosure system will not contribute much to the monitoring by the market.

(2) Greater Role Played by Comprehensive Measures

As discussed above, market functions alone would not be sufficient to maintain financial order. Furthermore, it is natural that unsound banks should be eliminated in the phase of liberalization and internationalization. The increased likelihood of elimination of unsound banks will call for a more important role to be played by comprehensive measures, which include central bank loans and public deposit insurance. Market responses include private deposit insurance and mutual assistance among various banks. The ultimate role of maintaining the financial order should be assumed by the central bank. It is inevitable that the central bank should assume this role, because the basis of the financial order lies in the smooth and safe operation of the settlement system, and it is only the central bank that is able to supply the ultimate liquidity required to assure the smooth functioning of the payment system especially by means of demand deposits. The forte of the central bank loan is its flexibility and speediness. Nevertheless, if central bank loan is extended beyond a minimum to prevent the diffusion of insufficient liquidity to other banks, even banks whose solvency is questionable may end up being protected. Moreover, the negative impact on the effectiveness of monetary policies would be serious. Nevertheless, in a situation in which there is acute fear for the collapse of the financial order, the central bank may have to decide to rescue banks whose solvency may be suspected. (This kind of rescue operation does not necessarily mean that these banks would be ultimately bailed out.) Thus, to decide whether the central bank should exercise or suspend its function as the lender of last resort is an extremely difficult decision to make. The issue of the moral hazard of banks is also involved. The difficulty of this problem is demonstrated by the conflicting evaluations of the role played by the central bank during the Showa Financial Crisis.[8]

(3) Complementary Measures

The problems associated with central bank credit is suggesting that it is worth considering complementary measures such as public deposit insurance or a system of mutual assistance among banks. A public deposit insurance system could not replace cental bank credit since repayments were made only after the bank failure and thus is not able to guarantee the smooth operation of the settlemet system on its own. However, deposit insurance prevents unnecessary runs on banks by ultimately guaranteeing the value of the deposits, and thus indirectly helps reduce the burden on central bank credits. An added advantage of deposit insurance is that the conditions necessary to its implementation are more transparent than those relating to central bank credits.

Mutual assistance within the banking industry is another important means of complementing central bank credits. Because banks enjoy the external benefits of a

8. "The Bank of Japan's decision to abandon the Omi Bank was the source of the aggravated confusion" (Yuki 1970); "After the panic occurred, the proper thing to do would have been to block the diffusion of panic through emergency loans, and help the market to regain its stability. But the Bank of Japan in those days was totally unprepared to implement such measures" (Horie 1927); "As time passed, . . . the people began to expect more and more from the Bank of Japan, and some people even went so far as to argue that the Bank of Japan should assume complete responsibility as the sole body to rescue the financial world" (Fukai 1944); "To change the expectations, it was necessary to make people realize that the relief was not easily available" (ibid.); "Banks lack the good faith to improve their management, because they are confident that the authorities will come to their rescue in emergencies even if they are suffering from poor management" (Osaka Asahi Shimbun 1970).

financial order, it is only natural that they should bear the costs of its maintenance.[9] One of these costs would consist of payments for deposit insurance; another would consist of contributions of funds for mutual assistance among banks. The system of mutual assistance is currently in place among smaller banks, but it would be worthwhile to consider establishing similar systems to cover a broader range of financial institutions, including the largest banks.

In the United States, an increasing number of mergers or "purchase and assumption" has recently been managed by the FDIC as a means of coping with bank failures. There is much that Japan can learn from these examples. However, it should be borne in mind that these decisions should in principle be made by the managers of individual banks. And even if it might be appropriate to provide an institutional framework to facilitate such decisions, there is no reason that this framework should be regarded as a function of a deposit insurance system, as it is the case in the United States. In Japan, bank mergers have historically been most successful when they have enjoyed the support both of the central bank, the lender of last resort, and of the government, the natural middleman.

(4) Preventing Moral Hazards

In the future, it will become increasingly necessary to strengthen the role played by comprehensive measures. But it should be realized that the more comprehensive these measures become, the more lax will be the management of banks. As a result, banks may begin to take excessive risks; the so-called "moral hazard" problem for banks. Therefore, in addition to implementing more effective comprehensive measures, it is also necessary to draw up measures aimed at preventing unnecessary risk-taking.

Measures designed to prevent moral hazard problems may be grouped into (1) supervision and control of assets and liabilities management, and (2) those designed to improve comprehensive measures, by introducing market mechanism. The former measures have been in force for some time, and will probably continue to be important although individual measures may have to be reexamined. The improvement of comprehensive measures may involve incorporating elements of the market mechamism into the comprehensive framework. For instance penalty rates may be imposed on central bank credits and mutual bank-assistance loans. In addition, the following steps may be taken with regard to deposit insurance: (1) differentiating the premiums paid by banks according to the degree of risk attributed to each bank (the so-called risk-related premium system); (2) requiring depositors to bear a portion of the losses

9. In reference to the Showa Financial Crisis, Inoue (1970) states, "Since banks are very closely related, it was a great mistake for bankers to believe that there was nothing to worry about as long as their own banks were sound, regardless of how unsound other banks were."

resulting from the failure of a bank (reduction of insurance coverage); and (3) a combination of (1) and (2) (Ohta (1985) offers details on recent plans of deposit insurance reform in the US.)

All these methods would constitute effective ways of using the market mechanism to force banks to adopt sound banking practices. It should be noted, however, that aside from the technical problem of how to measure bank risk accurately, the introduction of a deposit insurance system with risk-related premium system carry inherent risks to the stability of the financial order. To induce unsound banks to improve their management practices, it would be necessary to raise their insurance premiums to a level equal or above the opportunity cost of investments in high-risk and high-earnings assets, which is not very realistic.

A possible method of improving the management of unsound banks without imposing an excessively high insurance premium might be to announce officially the insurance premium for each bank and rely on pressures that result from the market assessment. However, disclosure alone, would not be sufficient; for this method being effective, the depositors have to be forced to assume themselves part of the responsibility.

A method that requires the disclosure of insurance premiums and the application of the principle of individual responsibility to large depositors, however, may disrupt the financial order. This method burdens depositors with excessive responsibility and as a result not only are depositors forced to select a correspondent bank, but the recipients of the means of settlement are required to select a bank at which the payments should be settled, thus greatly increasing the costs of implementing this method. Moreover, if depositors select their own banks according to their own rating, transfers of deposits will occur with increasing frequency, and may lead to further disruption of the settlement system. On the other hand, if depositors are unable to bear the cost of auditing and neglect to choose their own banks, the settlement system will still suffer another form of instability.

The above discussion was conducted on the assumption that insurance premiums would be officially disclosed; however, differential insurance premiums would be revealed even without official disclosure. Banks with below-average insurance premiums will naturally make efforts to raise funds at the lowest interet rates available by publicly announcing their own low insurance premiums; it is then obvious that banks which do not publicly announce their insurance premiums are not very sound.

(5) Reexamination of Individual Measures

The foregoing discussion shows that there is a limit to how much one can rely on market functions as a means of preventing moral hazard problems associated with comprehensive measures. Therefore, individual measures would have to continue to play a large role in the safeguarding mechanism. Of course, as noted before, it would not be appropriate merely to retain past individual measures. The ultimate objective of liberalization and internationalization of the financial market is to distribute funds more effectively and fairly. Extreme care should therefore be taken to avoid restrictions that would interfere with the market mechanism. It would be more appropriate to devise ways to make use of balance-sheet restrictions than to impose controls designed to limit competition, such as restrictions on the type of business operations allowed to banks.

a. Application of Balance-Sheet Requirements and Strengthening of Supervision

At present, broad range of balance-sheet requirements are in force in Japan. These include restrictions on the ratio of net worth, the ratio of loans to deposits, the share of large loans, and foreign-exchange positions. Some of these restrictions, however, have become so out of touch with reality and are only of nominal meaning.

It is not possible to discuss in this paper in details the various forms of balance-sheet requirements. But restrictions on large loans, foreign-exchange positions, and ratio of net worth would prove very effective in avoiding moral hazard problems in Japan and in helping banks cope with the increasing risks that threaten the basis of banking in a changing financial environment. It is therefore important to explore how these measures could be applied most effectively.

These balance-sheet restrictions are fair objective and effective means of compelling banks to practice sound banking. Nevertheless, it is also important to keep in mind of their limitations: (1) it is difficult to set an appropriate requirement level, and (2) it is impossible to achieve sound banking practices by implementing balance-sheet requirements alone. Therefore, supervision is necessary—not only to check the extent to which balance-sheet requirements are met but also to monitor more closely the actual condition of each individual bank. The importance of official monitoring by way of inspection and supervision will probably increase, especially when major changes in banking practices are expected to accompany the liberalization and internationalization of Japanese financial markets. The inspection and supervision system should be fostered in order to cope with these changes in banking practices. Moreover, as the banking business diversifies, it is possible that off-balance-sheet transactions—such as credit-lines that US banks are offering to back up CPs—may increase. It is important to monitor carefully to prevent that banking business of this type are conducted too laxly.

b. Reexamination of Restrictions of Banking Activities

In Japan there are restrictions on banking activities, which include the separation of long- and short-term banking, the separation of banks and trust businesses, and the separation of banks and securities companies. As noted earlier, these restrictions are expected to become obsolete or at least much more blurred as they are undermined by the increasing internationalization of Japanese financial markets. But, even so, it is important to evaluate these restrictions in terms of (1) their objectives (that is, the rationale behind them); (2) their negative effects; and (3) the negative effects of abolishing them and ways to cope with these effects (see Table 7).

The main objectives of the segregation of long- and short-term banking and of banks and trust businesses were, respectively, to provide a steady supply of long-term funds by protecting the development of banks specializing in long-term funds and to provide trust assets. However, the need for these objectives has declined significantly. Furthermore, even if it were true that specialized financial institutions like long-term credit banks or trust banks are able to supply long-term funds more effectively than ordinary banks, this would not be a legitimate reason to impose restrictions on the participation of other financial institutions in long-term banking and trust activities.

The negative effects of these restrictions, which include increases in the interest-rate and liquidity risks of ordinary banks as a result of the segregation of long- and short-term banking, and the possible generation of oligopolistic profits as a result of the segregation of banks and trust businesses, will become increasingly serious. It is appropriate to reexamine the segregation of long- and short-term banking and of banks and trust businesses. But if these segregation rules are abolished, it will be imperative to devise ways to achieve equal footing in terms of competition with ordinary banks regarding other factors, most notably number of branch offices. In this regard, one should bear in mind that the number of branches etc., which traditionally constituted a handicap for those specialized banks which have relatively small number of branches, would not necessarily continue to be important as electronic banking and interest-rate liberation progresses.

The main objective of the segregation of banks and securities companies was to promote the development of securities companies. This objective has now been realized. The only two aims of this restrictions that still continue to have meaning are (1) the maintenance of sound banking, and (2) the prevention of conflicts of interest. Individual securities businesses are subject to large risks of price fluctuations and default. However, if the function of these securities companies were integrated with that of banks would not necessarily increase the total management risk. In fact, banking may be more effectively stabilized by dispersing risks (see Toyama 1983). Of course, if banks engage in risky activities, they should and could be checked closely by means of portfolio restrictions, inspections, and so forth. Therefore, even the argument for the maintenance of sound banking loses its persuasiveness as a reason for segregating banks and securities companies.

Next, what about conflicts of interest? Two typical examples of conflicts of interest caused by the integration of banking and securities business can be cited: (1) giving preferential treatment to banking customers at the expense of securities busi-

## Table 7 Evaluation of Main Restrictions of Business Areas

| | Separation of long- and short-term banking | Separation of banks and trust businesses | Separation of banks and securities companies |
|---|---|---|---|
| Initial objectives of restrictions (rationale for adopting them) | (1) Steady supply of long-term funds by stabilizing the management position of financial institutions specializing in long-term financial<br>(2) Restraints on exploiting economies of scope | (1) Steady supply of long-term funds by protecting and promoting institutions specializing in trust; supply of sound trust assets<br>(2) Same as left (2) | (1) Protecting and promoting securities companies<br>(2) Maintaining sound banking practices<br>(3) Preventing conflicts of interest |
| Negative effects of restrictions | (1) Reduction in the cost of financial intermediation because of increased competition<br>(2) Restraints on exploiting economies of scale<br>(3) Increases in interest-rate risk and liquidity risk among ordinary banks | Same as left | (1) Possibility of emerging oligopolistic profits |
| Positive aspects of abolishing restrictions | (1) Reduction in the cost of financial intermediation because of increased competition<br>(2) Increased economies of scope<br>(3) Greater flexibility in responding to fund-raising and investment period of ordinary banks | Same as left | (1) Reduction in financial intermediation costs because of increased competition<br>(2) Increased economies of scope |
| Negative aspects of abolishing restrictions | (1) Reducing earning levels of long-term credit banks (loss of oligopolistic profit-making opportunities) | Same as left | (1) Possibility of reduction of sound banking practices<br>(2) Conflicts of interest |

ness customers, and vice versa—the so-called "intrasectional assistance" problems, and (2) exploit information obtained in one section for transactions in some other section, the so-called "insider transaction" problem. First, it should be remembered that conflicts of interest could not only arise in the process of integrating banks and securities business, but could also in other present set-up of financial activities; for instance, in the banking and trust businesses of trust banks, and in the underwriting and broker businesses of securities companies, which are already integrated.

It is possible to deal with the problem of intrasectional assistance by separating accounting. This is the method used to in the case of banking business by trust banks, and in the case of dealings in government bonds by banks. In addition, if banks can become competitive enough with each other, and if customers are able to shop around various financial institutions, losses to customers resulting from conflicting interests should not pose a major problem.

The existing Securities and Exchange Law has various stipulations that prevent unfair insider transaction based on the abuse of inside information. There are, of course, conflicting views on the actual effectiveness of these regulations, and some observers have pointed out that clandestine unfair transactions are, in fact, rampant. It may be worthwhile to examine this problem separately as a matter of restriction policy. In principle, conflicts of interest stemming from the integration of different types of businesses should be dealt with by providing rules to restrict the abuse of information, and by encouraging competition. Restrictions on the types of business that one institution can engage in should be strictly limited to cases where other regulations fail to prevent these conflicts of interest.

### c. Role of Market Practices

In addition to the balance-sheet restrictions and the inspection and audit activities noted earlier, market responses themselves can force banks to exercise more prudence and can reduce the necessity for comprehensive measures. But if market responses take the form of excessive bank disclosures and increased monitoring requirements and responsibilities for depositors, it may trigger disturbances in the financial order. On the contrary, these market responses may take the form of cartels. In this case, market forces may contribute toward banking stability, but would undermine the effective and fair allocation of funds, since they have effects similar to restrictive regulations on competition. Thus there are not many cases where market responses could contribute to the financial order with minimal negative effects. The market practices of requiring collateral and providing credit lines, however, are examples of measures that help to increase the stability of transactions. As long as they do not unreasonably and excessively restrict transactions, these practices would help to reduce the necessity for comprehensive measures and will therefore remain useful market practices even after liberalization of Japanese financial markets.

d. Response toward Internationalization

The liberalization and internationalization of Japanese financial markets, as well as the expansion of international business by Japanese financial institutions is requiring a restructuring of the measures to maintain the financial order. The following three measures will be extremely important in maintaining the financial order in the phase of internationalization.

First, as the lender of last resort, it is obvious that the central bank in each country plays an indispensable role in maintaining the financial order. With respect to central bank credit, however, it will be necessary to establish a flexible cooperation system by clearly defining the rules concerning international burden-sharing. Second, because of the expanding international activity of Japanese financial institutions, the balance-sheet requirements designed to maintain sound banking practices must be applied on a consolidated financial statement that includes affiliated banks abroad. Third, because of the expanding activities of Japanese financial institutions, the supervisory network of the monetary authorities must be enlarged to include periodic inspections. Moreover, it is important to create an international supervisory system based on the cooperation of the monetary authorities in various countries.

As is widely known, Basel Concordat outlines the supervisory responsibilities with regard to Euro-banks, in order to maintain international financial order.[10] This is a successful example of international banking cooperation and further efforts in this direction should be made in the future.

e. Promotion of Economic Stabilization Measures

As has been illustrated, financial order cannot be maintained independent of the actual economic conditions at home and abroad. Because of this, economic stabilization measures are also important in the maintenance of the financial order. As liberalization and internationalization of Japanese financial markets progresses, and

10. This agreement was concluded at the BIS Meeting of Central Bank Governors held in December 1975. It stipulated that the auditing responsibilities for the liquidity of Euro-banks would be assumed by the monetary authorities of the countries in which they were located. It also stipulated that responsibility for the solvency of subsidiary banks would be assumed by the authorities of the their home countries. For affiliated and joint-venture banks, primary responsibility for solvency would be assumed by the authorities of the countries in which the banks were located, but secondary responsibility would fall on the shoulders of their home countries. The agreement was revised in June 1983, based on the experience gained from the failure of the Banco Ambrosiano. The revised agreement strengthens the responsibilities of the home countries by requiring the monetary authorities of these countries to assume secondary responsibility for liquidity of the subsidiary banks, and by requiring the monetary authorities of both the countries in concern the joint responsibility for solvency.

the danger of destabilization of the banking system mounts, it will become increasingly important to implement monetary and fiscal policies successfully, and prevent both inflation and recession which may lead to further destabilization of the banking system.

## REFERENCES


[1] Isoda, Ichiro, "Banking from Now On", (in Japanese), *Sogo Banks,* October 1984.

[2] Inoue, Junnosuke, "1927 Panic and Money World After", (in Japanese), *Material of Financial History of Japan,* Showa Edition, Vol. 26, Research Department, Bank of Japan, 1970.

[3] Iwata, Kikuo, and Horiuchi, Akiyoshi, "Public Restrictions in Japanese Banking Business", (in Japanese), *Discussion Paper Series,* No. 61, Institute for Economic Research, Hitotsubashi University, July 1982.

[4] Uchigome, Shigeko, "Asset and Liability Management of American Commercial Banks", (in Japanese), *Bank of Tokyo Monthly Report,* December 1981.

[5] Osaka Asahi Shimbun, "Secret Story of the Financial Crisis", (in Japanese), *Material of Financial History of Japan,* Showa Edition, Vol. 26, Research Department, Bank of Japan, 1970.

[6] Ohta, Tsutomu, "Stability of Monetary System and the Transition to the Regime of Deregulated Interest Rates", (in Japanese), *Kinyu Kenkyu* Vol. 3 No. 1, Institute for Monetary and Economic Studies, Bank of Japan, March 1984.

[7] ———, "Present State of Deposit Insurance Systems in Major Foreign Countries and Arguments for Reform", (in Japanese), *Kinyu Kenkyu* Vol. 4 No. 1, Institute for Monetary and Economic Studies, Bank of Japan, March 1985.

[8] Okumura, Hirohiko, *et al,* "Financial Market Liberalization Advances" (Monthry Economic Debate), (in Japanese), *Report of Japan Economic Research Center,* August 1984.

[9] Kanazawa, Yoshio, *Economic Law,* (in Japanese), Yuhikaku, 1980.

[10] Kinoshita, Masatoshi, "The Principle of Bond Collateral Requirements in Japan : A Current Appraisal and Future Prospects", (in Japanese), *Kinyu Kenkyu* Vol. 3 No. 3, Institute for Monetary and Economic Studies, Bank of Japan, October 1984.

[11] Kinyū Kenkyūkai, "Symposium on Financial Innovation and Changes in the Financial System", (in Japanese), *Kinyu Kenkyu* Vol. 3 No. 3, Institute for Monetary and Economic Studies, Bank of Japan, October 1984.

[12] Kusaba, Toshiro, "Financial Innovation and the Course for City Bank Management", (in Japanese), *Kinyu Zaisei Zijo,* September 3, 1984.

[13] Kure, Bunji, and Shima, Kinzo, *Interest Rate Deregulation,* (in Japanese), Yuhikaku, 1984.

[14] Kure, Bunji, *et al,* "Three More Years to Interest Rate Deregulation, Preparing for Bank Failures" (Discussion), (in Japanese), *Money and Banks,* April 13, 1984.

[15] Koike, Hajime, "Collateral Requirements in Interbank Monetary Transactions", (in Japanese), *Kinyu Kenkyu* Vol. 3 No. 3, Institute for Monetary and Economic Studies, Bank of Japan, October 1984.

[16] Study Group on Public and Private Financing as They Ought to Be, *Public and Private Financing as They Ought to Be,* (in Japanese), October 1983.

[17] Gotoh, Shinichi, *et al,* "It's up to Business to Decide Long- and Short-term Financing and Decide Whether to Allow the Boundaries between Them to Disappear Naturally" (Discussion), (in Japanese), *Money and Banks,* August 16, 1984.

[18] Saitoh, Takeshi, "Return of Sound Banking Days", (in Japanese), *Toyo Business Weekly,* June 30, 1984.

[19] ————, *et al,* "Distinctions Among Long- and Short-term Banking, Trusts, and Banking and Securities Business Need Reexamining" (Discussion), (in Japanese), *Kinyu Zaisei Zijo,* October 29, 1984.

[20] Suzuki, Takeo, and Kawamoto, Ichiro, *Securities and Exchange Law,* (in Japanese), Yuhikaku, 1984.

[21] Suzuki, Yoshio, "Financial Innovation and Monetary Policies in Japan", (in Japanese), *Kinyu Kenkyu* Vol. 3 No. 3, Institute for Monetary and Economic Studies, Bank of Japan, October 1984.

[22] ————, "Financial Liberalization in Japan: Its Political Economics", (in Japanese), *Money and Banks,* December 12, 1984.

[23] Takahashi, Kamekichi, *History of the Showa Financial Crisis,* (in Japanese), Seimeikai Publishing Section, 1968.

[24] Tachi, Ryuichiro, *Theory of Monetary Policies,* (in Japanese), Tokyo University Press, 1982.

[25] ————, "A Study of Financial Business Synthesis", (in Japanese), *Kinyu Zaisei Zijo,* October 29, 1984.

[26] Tatsuta, Takashi, *et al,* "Recent International Trends in Restrictions of Insider Transactions", (in Japanese), *Securities Materials,* No. 84, August 1984.

[27] Tohyama, Hiroshi, "A Note on the Regulations on the Banking Business", (in Japanese), *Kinyu Kenkyu* Vol. 2 No. 3, Institute for Monetary and Economic Studies, Bank of Japan, November 1983.

[28] Tokuda, Hiromi, *U.S. Bank Deregulation: Spectacular Social Experience,* (in Japanese), Kinyu Zaisei Zijo Kenkyukai, 1984.

[29] Tanaka, Norio, *Advances in Financial Revolution and U.S. Bank Responses—Report of the Financial Market Inquiry Commission,* (in Japanese), Kinyu Zaisei Zijo Kenkyukai, August 1984.

[30] Bank of Japan, *One-Hundred Year History of Bank of Japan,* (in Japanese), Vol. 3, 1983.

[31] Bank of Japan, "Japan's Business World: From the Great Kanto Earthquake to the 1927 Financial Crisis", (in Japanese), *Material of Financial History of Japan,* Showa Edition, Vol. 24, Research Department, Bank of Japan, 1969.

[32] Japan Economic Research Council, *Probing the Degree of Openness of Japanese Markets,* (in Japanese), August 1984.

[33] Fukai, Eigo, *Looking Back 75 Years,* (in Japanese), Iwanami Shoten, 1941.

[34] Fukiya, Kenji, "Restudy of England's Banking Crisis 1973-1975", (in Japanese), *Securities Research,* Vol. 58, July 1979.

[35] Baker, J.V., *Asset and Liability Management,* American Bankers Association, 1981.

[36] Horie, Kiichi, "Panic and Reliance on State Compensation for Relief", (in Japanese), *Economist,* June 1, 1927.

[37] Yuki, Toyotaro, "Financial Disturbances in 1927", *Material of Financial History of Japan,* Showa Edition, (in Japanese), Vol. 26, Research Department, Bank of Japan, 1970.

[38] Rōyama, Shoichi, *Financial System of Japan,* (in Japanese), Toyokeizai Shinposha, 1982.

[39] ———, *et al,* "Future of Financial Innovation and Financial System", *Follow-up Study on Softonomics,* (in Japanese), Report 11, October 1984.

[40] Cooper, J., *The Management and Regulation of Banks,* Macmillan Publishers, 1984.

[41] Corrigan, "US Bank Deregulation—the longer-term consequences", *Banker,* August 1984.

[42] Edwards, F. R., and Scott, J. H., "Regulating the Solvency of Depository Institutions", *Issues in Financial Regulation,* McGraw-Hill Inc., 1979.

[43] Federal Deposit Insurance Corporation, *Deposit Insurance in a Changing Environment,* August 1983.

[44] Hill, G. C., and Firm, E. A., "Confidence Crisis", *Wall Street Journal,* 25 August 1984.