

## ***The U.S.-Sparked Financial Crisis and the Japanese Financial System***

*Mitsuhiro Fukao*

*President, Japan Center for Economic Research*

The American subprime mess has at length grown and deepened into a financial calamity of global proportions. Having ventured into new and uncharted waters of finance, several major Wall Street investment banks have successively found themselves on the rocks, highlighting the dangers of the business models they have relied on thus far to achieve such dramatic growth through maximum exploitation of leverage.

In our present report, we analyze the impact of the American financial crisis on Japanese financial institutions. We examine the business models and operational strategies of such financial institutions as regional banks, credit associations (or shinkin banks), credit cooperatives and Shinginko Tokyo. We also look at financial business targeting elderly customers, which has received growing attention in recent years. Finally, we comment on the monetary policy of China, which has significant impact on the Japanese economy.

---

### ***The American Financial Crisis and Credit Default Swaps***

The American financial crisis which arose in the wake of defaults on subprime loans grew into a business crisis for monoline insurance companies and led to a loss of confidence in major financial institutions. Bear Stearns faced collapse in March of this year. The U.S. government brokered a rescue plan with JP Morgan by effectively promising to make good the company's losses, and calm was restored to financial markets initially. However, the loss of confidence rapidly spread worldwide after the share prices of Fannie Mae and Freddie Mac, which had guaranteed large volumes of securitized mortgage loans, plummeted in July and again in early September. The two institutions were placed under government conservatorship, but since their manner of organization already meant that government was involved in their management, their credit standing was second only to treasuries. Although this de facto bankruptcy on the part of such huge financial institutions did not result in defaults, it nevertheless roiled markets. Then in the middle of September, Lehman Brothers collapsed. Lehman Brothers was seen as a higher ranking investment bank than Bear Stearns, but since the government refused to underwrite its losses for the financial institutions which showed an interest in participating in a rescue, it was soon apparent that a foremost

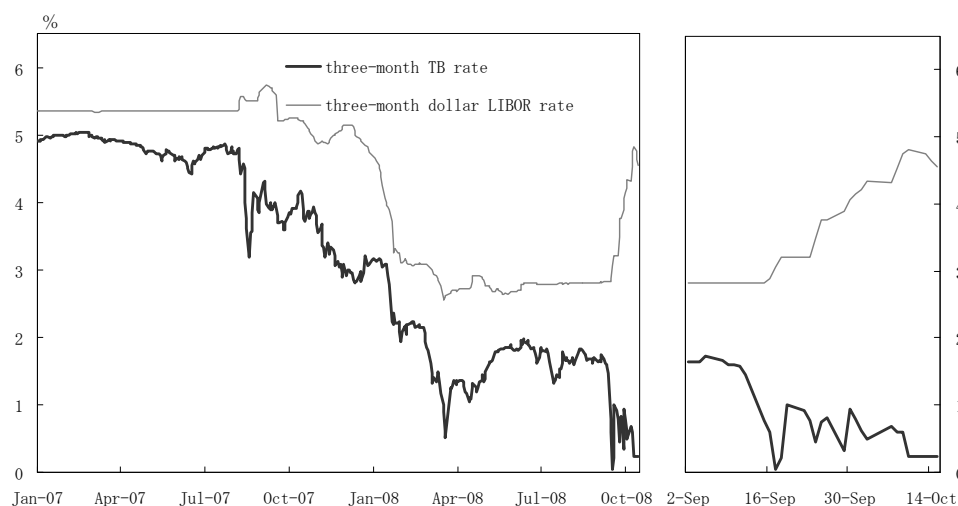
investment house would default on a huge volume of financial obligations, sparking turmoil in financial markets. Then the mammoth insurance company American International Group (AIG) found itself virtually unable to raise capital and received emergency financing from the government. Merrill Lynch was then bought and rescued by Bank of America, while Goldman Sachs and Morgan Stanley, the top two U.S. investment banks, found themselves scrambling to raise capital.

Not engaged in tightly regulated commercial banking operations, investment banks relied on the repo market or issuances of commercial paper and bonds secured by securitized financial products in order to raise capital. By doing so with a very small capital base, the major investment banks could boast a very high return on equity, but one can safely conclude that they stretched this business model of investment banking to its limits.

The breakdown of confidence in the financial system has not been limited to the United States. It has spread to Europe, where governments have stepped in to inject capital or provide financing support to several financial institutions. Underlying the global deterioration in the cash flows of financial institutions has been the fact that no one knows which banks are sitting on losses and to what extent, and this in turn has sparked fear and wariness, choking off the supply of funds.

Figure 1 shows the trend of the interbank lending rate (the three-month dollar LIBOR rate) and the rate on three month treasury bills. The spread between the two began to widen from the summer of last year, suddenly widening following the collapse of Lehman Brothers and virtually freezing up the interbank market.

Figure 1. U.S. Dollar Interbank Rate and the Treasury Bill Rate



Note: The vertical line marks September 15, the date of Lehman Brothers' collapse.

The right pane shows a close-up of the period from September through October, 2008.

Source: NEEDS-Financial Quest

With the enactment of the Emergency Economic Stabilization Act of 2008 on October 3, the U.S. government at last took concrete action to stabilize financial markets, stepping in to provide major financial institutions large capital. In the course of these events, the spotlight fell on problems about credit default swaps (CDS). A CDS is a financial derivative contract analogous to an insurance policy. For example, a bank holding the corporate bonds of a given corporation might buy a CDS from an insurance company to guard against any possible bankruptcy by the issuer. If the issuer then goes bankrupt and is unable to redeem the bonds, the insurance company pays the bank for the impaired portion of the value of the bonds as in an insurance payout. In this way, a CDS is a product which functions like insurance. However, they are in many cases used for sheer speculation. The bank may buy a CDS even though it does not hold the bonds of the issuer. In such a case, the bank stands to make a substantial profit from the insurer should the issuer go bankrupt.

In this way, it has been easy for large volumes of financial products having the effective character of a bet on changes in the credit risk of such companies to come into being. The notional value of the CDS market is colossal, at 54.6 trillion dollars (June 2008), an amount which rivals the gross domestic product (GDP) of the entire world for fiscal year 2007.

Table 1 lists the top twenty firms in the CDS market and shows well known American and European financial institutions in the top positions. The large investment banks in particular acted as "bookmakers" in CDS transactions, and financial institutions among themselves stood to win or lose in the CDS market as it mushroomed. Losses would of course arise if one were on the losing end, but even if one were on the winning side, that win would be negated if the counterparty went bust. As a result, a staggering amount of risk gradually crept into financial markets. Given the circumstances, fears have persisted in global financial markets, and financial institutions have continued to experience difficulty with their cash flow management.

Table 1. Top Twenty Firms in CDS Market  
 (as of 2006, estimated notional amounts outstanding)

1	Morgan Stanley	11	Credit Suisse
2	Goldman Sachs	12	Bank of America
3	JP Morgan Chase	13	Dresdner
4	Deutsche Bank	14	BNP Paribas
5	ABN Amro	15	Citigroup
6	Barclays	16	Societe Generale
7	Lehman Brothers	17	Royal Bank of Scotland
8	UBS	18	Calyon
9	Bear Stearns	19	HVB
10	Merrill Lynch	20	AIG

Source: Fitch Ratings, "CDx Survey-Market Volumes Continue Growing while New Concerns Emerge."

### *Impact on Japanese Financial Institutions*

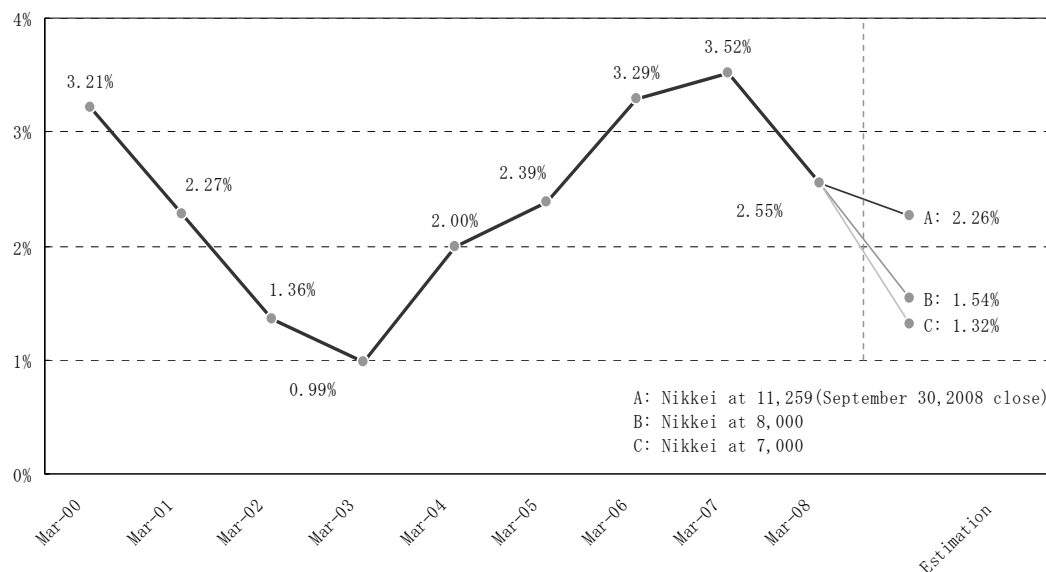
The impact of worldwide financial market turmoil and tumbling stock prices is clearly influencing Japanese financial institutions as well. A review of the condition of the Japanese banking industry shows that, while the gross profit of all banks nationwide followed a slow recovery through fiscal year 2005 (April 2005 - March 2006) as the domestic economy expanded, it declined for two consecutive years in FY2006 and FY2007. After the Bank of Japan altered its guidelines for market operations in FY2006, the effect of the higher lending rate began became apparent from FY2007, leading to some improvement in the yield on invested funds. However, with the impact of falling stock prices since last year and the full implementation of the Financial Instruments and Exchange Law in September of 2007, over-the-counter sales of risk products such as investment trusts froze up on the whole, and net income on fees and commissions eroded. Banks had been allocating more and more personnel until then with the economic expansion, but when the business cycle turned down, bank profits fell.

One can say that the major banks have for the most part completed their disposal of bad loans, but some regional banks have been slow to improve. If the economy continues to deteriorate, it is possible that bad loans will begin increasing again.

Figure 2 sets for the real capital adequacy ratios for banks nationwide. Publicized Bank for International Settlements (BIS) ratios include some items which do not constitute equity capital in the strict sense, so we have factored these out in our computation of real capital adequacy ratios. Our results show that although Japanese capital adequacy ratios had been improving for the past four years, they fell by 2.55% in FY2007. Our definition of equity capital is narrower than that used by the BIS, and let us consider 2% as a tentative guideline for soundness. Through FY2007, forty-nine of 124 banks nationwide had ratios under this level, and this includes three that were insolvent in real terms. The erosion in unrealized gains on securities caused by falling share prices has been a major factor in lowering capital ratios. The Japanese stock market has tumbled sharply since the middle of September on the Lehman shock and remains in a very unstable state.

Estimating capital adequacy ratios based on the Nikkei's closing price of 11,259 as of the last day of September, 2008 yields a figure of 2.26% (Case A). It may be seen that ratios by that time had already fallen by about 0.3 percentage points compared to the last day of March, 2008, when the fiscal year ended. But share prices have continued to decline since then. With the Nikkei at 7,000, the estimate would fall to 1.32% (Case C), pushing the average for all banks nationwide below 2%. That would be a level just above that prevailing at the close of the fiscal year in March, 2003, the worst year for banks as they struggled with bad debts and weak stock prices. The degree to which falling stock prices impact the financial positions of financial institutions is therefore apparent.

Figure 2. Estimated Trend in Capital Adequacy Ratios of Japanese Banks



Source: NEEDS-Financial Quest

### ***Regional Financial Systems and Business Strategy***

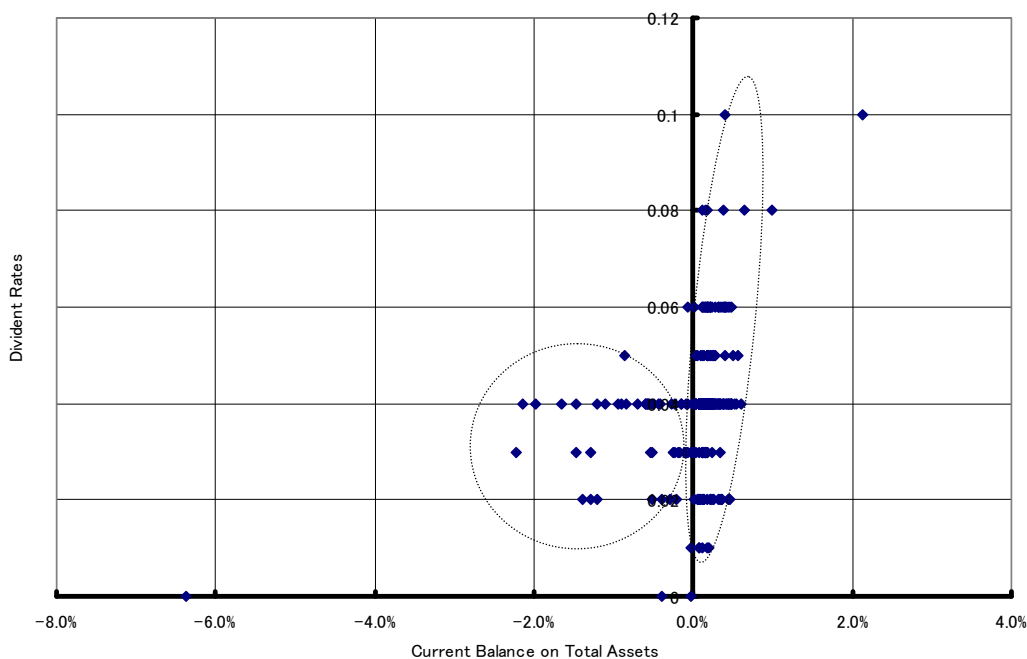
There are increasing concerns about the future of regional economies in Japan. Regional banks have gradually improved their finances both in terms of bad debt ratios and capital adequacy, but they have struggled in the face of narrowing net interest margins and deteriorating expense ratios. A look at each individually, however, reveals a widening gap between those banks that have been able to boost earnings and make steady progress in disposing of bad debts with the expanding economy over the past few years, and those which have not.

Each bank places a different degree of emphasis on its lending operations. This gives some indication of the business strategy of each bank, but other than such individual factors, regional macroeconomic factors also have substantial impact on regional banks. For example, there is an inverse relationship between the bad debt ratios of regional banks and the regional economic growth rate. The banks in the fastest growing regions have the lowest bad debt ratios. Regional macroeconomic trends have a large impact on the performance of individual regional banks. Regional banks need to employ a business strategy focused on geographically broadening their operations in order to strengthen the basis of their operations, thereby diversifying their portfolios.

On the other hand, the business of shinkin banks, credit cooperatives and other cooperative-type financial institutions needs to be considered from a different perspective than that of regional banks, even if they are also regional financial

institutions. Financial deregulation has broken down divisions separating the business operations of regional financial institutions, resulting in intensified competition. The content of their business is for the most part no longer evolving. In a bid to survive, shinkin banks and credit cooperatives have sought the benefits of scale through mergers and business transfers or have rescued peers which have fallen into financial difficulties. There is a risk, however, that broadening business operations and servicing a larger area could weaken institutions' ties to their region and impair their ability to gather the credit information on which their credit judgments are based, thereby making it difficult for them to maintain their original business model of relationship banking. It would be fine if it were possible to make suitable credit judgments solely through publicly available quantitative information, such as financial data. But if an institution is considering making low-interest unsecured loans to local small business operators, accumulating qualitative information is indispensable. Considering the fact that there is no small number of shinkin banks and credit cooperatives which, although small, maintain highly efficient operations deeply rooted in their communities, pursuing the merits of scale may not be the best strategy for these financial institutions, based as they are on the spirit of mutual aid. For shinkin banks and credit cooperatives to play such a role locally, it is critical that they maintain close ties to their communities while staying healthy and sound. However, there are many financial institutions seeking to maintain high dividend to retain investors even as their revenue base is weak, and it is not beneficial from the standpoint of strengthening their financial constitutions (Figure 3).

Figure 3. Current Balance on Total Assets and Dividend Rates of Credit Associations (FY2007)

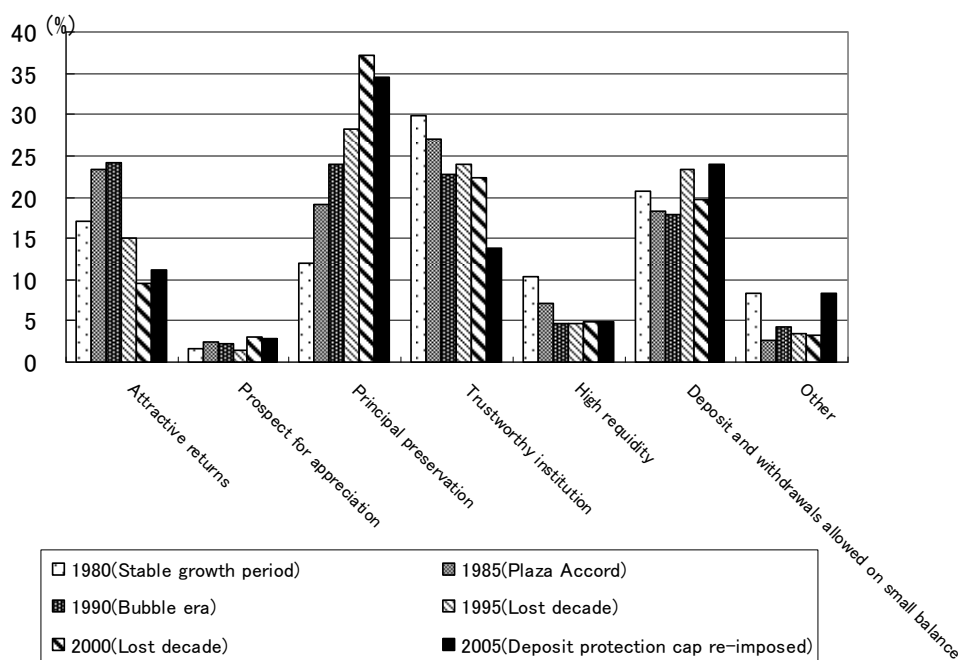


Source: Kinyu Toshō Consulting Co., "Financial Statements of Credit Cooperatives Nationwide."

The direct contrast to the business model of shinkin banks and credit cooperatives is that of transaction banking, in which scoring is used. It was about three years ago that Shinginko Tokyo began operations while fully adopting this model. Owing to mounting bad debts, however, the bank has in a short time lost nearly ninety percent of its capital base. With an additional capital injection of 40 billion by the city of Tokyo, the bank moved to restructure, but the plan is short on concrete details and the overhaul will not be easy. According to recent media reports, the Financial Services Agency recommended that the bank had a 10 billion yen shortfall in reserves for dead loans. Scoring-based lending has the advantage of reducing the cost of screening required when credit is extended, as well as shortening the time required for screening. However, quantitative data are subject to window dressing, and it is difficult to make reliable credit judgments while completely neglecting sound qualitative information.

Along with investment returns, income from fees and commissions on sales of financial products and the like are another source of revenue for financial institutions. One new closely watched market in this regard is financial business targeting the elderly. Japan is already an aging society, and seniors with accumulated assets represent a significant business opportunity. Competition for baby-boom customers is intensifying. The overwhelming number of seniors regard preservation of principal and liquidity as the most important factors in choosing financial assets. They have little interest in risk assets (Figure 4).

Figure 4. Features Sought by Customers in Choosing Financial Assets  
(households of two or more persons with head of household aged sixty or more)



Source: Central Council for Financial Services Information, "Public Opinion Survey on Household Financial Assets and Liabilities."

Financial institutions began offering private banking services and wrap accounts as services for high net worth customers. They have been lowering their minimum investment requirements on these in order to attract and retain customers, but all customers do not necessarily stand to benefit from such services. In the case of reverse mortgages, also, one issue remains the development of a means to hedge against falling real estate values. Most financial institutions presently offer membership-based services. Ones such as Sugamo Shinkin Bank are trying various means of boosting ties with customers through detailed services closely tied to the community. In the future, the importance differentiation strategies for services tailored closely to customers' genuine needs will become more important.

### *The Monetary Policy of China*

In order to control high volatility in the renminbi (RMB) on foreign exchange markets, the People's Bank of China, the country's central bank, moved to sterilize its intervention in the currency market by issuing bills and hiking required reserve ratios in a bid to drain liquidity released in the course of the intervention. The adjustment of the reserve requirement is a better option than issuance of bills in terms of the cost of the sterilized intervention. And under conditions in which the impact of an interest rate hike in slowing the economy is diminished, quantitative tightening by hiking required reserve ratios would be effective. It therefore plays an important role as a monetary policy tool.

The People's Bank of China now holds a huge volume of U.S. treasuries, and rates are now low in the United States. The RMB has also appreciated about 20% against the dollar, giving rise to staggering losses. From July 2005, when the People's Bank began revaluating the RMB versus the dollar, through the end of March 2008, losses have mounted to an estimated 13 trillion yen. This is an amount roughly equivalent to almost 4% of China's GDP and indicates that the policy cost of restraining appreciation has been huge.

Copyright © 2008 JCER

---

**Japan Center for Economic Research (JCER)**

Nikkei Kayabacho Bldg. 2-6-1 Nihombashi Kayabacho, Chuo-ku, Tokyo 103-0025, Japan  
Phone:81-3-3639-2801 / FAX:81-3-3639-2839 / E-mail:jcernet@jcer.or.jp