Financial Markets Strategy Team

First Report

November 30, 2007

I. Introduction

The Financial Markets Strategy Team is an advisory group conceived for the purpose of discussing Japan's financial strategy, which was established on September 19, 2007 by Mr. Yoshimi Watanabe, Minister for Financial Services. Most of its members are practitioners in Japan's financial industry. This team, immediately following its establishment, held ten sessions aimed at discussing the problem of subprime mortgages in the United States, which came to the surface this summer in international financial markets. The team held energetic discussions, interviewing specialists on credit markets and the U.S. housing market, as well as securitization practitioners and credit rating agencies as shown below.

Various developments have been observed in recent years in financial markets throughout the world, including the boom in emerging markets, active investment by oil money and fund investors, and the development and penetration of new financial technologies such as securitisation. Given that the subprime mortgage problem will also have a significant impact on global financial markets, financial institutions, and financial supervision in the period ahead, analyzing the current situation and providing necessary recommendations at this stage is meaningful.

While more time is required to grasp the full picture of the subprime mortgage problem, it has been affecting financial and capital markets, as well as financial systems, as described below. That is, the reassessment of credit risk is resulting in increased market volatility and reduced liquidity, making it difficult to issue high-risk debentures and asset-backed securities (ABS), and causing liquidity problems in asset-backed commercial paper (ABCP) and inter-bank markets. The issue also resulted in a number of lessons to be learned from the perspective of the stability of financial systems, as the large losses incurred by some U.S. and European financial institutions were brought to light, and a few financial institutions fell into financial difficulties.

This report provides an overview of the market developments and trends in international discussions, and puts forth some policy recommendations. It is hoped that the Financial Services Agency and others concerned will continue to take appropriate measures in response to this report.

[History of Discussions]

1st Session	September 19	Overview of the Subprime Mortgage Problem (Bank of Japan, Financial Services Agency)
2nd Session	September 21	World Economy, Financial Market Trends (Team Members Koji Shimamoto and Kazuo Mizuno)
3rd Session	October 5	U.S. Housing Market Trends (Mr. Masahiro Kobayashi, Japan Housing Finance Agency;

	Mr. Tomomi Kikuchi, JP Morgan Securities Japan Co., Ltd.)
4th Session October 18	Credit Rating Agencies (Team Member Takayoshi Hatayama)
	Fund Regulations (Team Member Sadakazu Osaki)
	Basel II (Financial Services Agency)
5th Session October 25	International Trends (Team Member Rintaro Tamaki, Financial Services Agency)
	Securitisation Practice (Ms. Nana Otsuki, UBS Securities Japan Ltd.; Mr. Atsuo Akai, Morgan Stanley Japan Ltd.)
6th Session November 2	Credit Rating Agencies (Mr. Yasuhiro Harada and Mr. Hidetaka Tanaka, Rating and Investment Information Inc.; Mr. Makoto Utsumi, Japan Credit Rating Agency, Ltd.; Mr. Kei Kitayama, Moody's Japan K.K.; Mr.Yu-Tsung Chang, Standard and Poor's; Mr. Keiichiro Hashimoto, Fitch Ratings Japan)
7th Session November 7	Sale of Securitized Products (Mr. Yasuhiro Shibata, Mizuho Securities Co., Ltd.; Mr. Yuzo Yonemoto, Merrill Lynch Japan Securities Company Ltd.)
	Accounting and Audit of Securitized Products (Mr. Kimitaka Mori, The Japanese Institute of Certified Public Accountants)
8th Session November 14	Institutional Investors (Mr. Shinichi Saito, the Norinchukin Bank; Mr. Yasunobu Amamori, Nippon Life Insurance Company)
	Free Discussion
9th Session November 21	Sorting the Issues
10th Session November 30	Preparation of Report

II. Evolution of the subprime mortgage problem

1. Structure of the subprime mortgage problem

"Subprime mortgages" is a term that generally refers to mortgage loans in the United States to less creditworthy borrowers[1]. It is said that of the total U.S. mortgage market of approximately $10 trillion (approximately ¥1.1 quadrillion), subprime mortgages account for approximately 13-15 percent (approximately $1.3-$1.5 trillion, or ¥140-¥170 trillion)[2].

[1] "Less creditworthy borrowers" generally are those whose FICO scores are below a certain level (about 660 or less) for reasons such as a history of delinquency.
[2] Source: Materials from the FRB, National Association of Mortgage Brokers, and others.

The number of subprime mortgages increased particularly in and after 2004, and the following are pointed out as being the contributing factors[3]:

(i) Negligence of screening on the part of mortgage-lending financial institutions[4], due to such reasons as the anticipation of further increase in housing prices and the granting of loans based on the assumption that credit risks will be transferred to others by securitization, and

(ii) The easing of borrowers' ability to take out mortgage loans with the development of new mortgage products[5] (during the period starting in 2002, when the interest rates were low), such as those that limit initial mortgage payments to interest only for a certain period.

Many of these subprime mortgages have been combined with financial technology known as securitization and sold as securitized products to investors throughout the world, including not only in the U.S. and Europe but also in Asia and the Middle East, resulting in a global dispersion of the underlying risks of subprime mortgages originated in the United States. In this process, not only asset backed securities (ABSs), which are securitized products, but also more complex financial products such as collateralized debt obligations (CDOs) referencing these ABSs, have been formulated.

Also becoming widespread is the formulation of investment schemes such as conduits and structured investment vehicles (SIVs), which are aimed at securing net interest spread by obtaining short-term market funding through asset-backed commercial paper (ABCP) and investing in long-term products such as ABSs and CDOs. As regards the cash-flow management of such conduits and SIVs, there also have been agreements to the effect that financial institutions will extend liquidity support with respect to the redemption of ABCP.

(Note 1) It is generally said that conduits and SIVs differ in the following ways. While conduits are basically funded by ABCP, SIVs are funded not only by ABCP, but also by subordinate bonds and medium-term notes. It is also said that while the total amount of ABCP issued is generally covered by liquidity facilities in the case of conduits, only a part of the amount procured is covered in the case of SIVs, although the percentage covered varies by case from 5 percent to 15 percent.

(Note 2) It is said that the increase in the number of entities taking full advantage of leverages in an attempt to maximize their returns from such instruments as ABSs, CDOs and SIVs, has resulted in an increase in and contagion of investment risks pertaining to such products.

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[3] Some other contributing factors in the United States are (i) the strong demand for housing, with an increase in both population and income, (ii) implementation of various policies that promote home ownership, and (iii) excessive liquidity in the U.S. real estate and financial markets.

[4] It has been pointed out that there were cases where loans were granted with essentially no screening, as well as allegations of fraudulent loans.

[5] Major examples of new mortgage products:

(i) 2/28-Type Floating Interest: Products involving the application of a fixed interest rate for the first two years and the adoption of a floating interest rate the third year onwards.

(ii) IO (Interest Only): Products involving the payment of interest only for a certain period (generally five years) and the initiation of principal payments thereafter.

(iii) PO (Pay Option Arm): Products involving the payment of interest to the extent possible and the addition of unpaid interest to the principal. The principal is forcibly redeemed when it exceeds a certain amount.

2. Surfacing of the subprime mortgage problem

The U.S. housing market entered into an adjustment phase from about 2006, and the percentage of delinquencies in subprime mortgage payments increased (up from 11.5 percent in the first quarter of 2006 to 14.8 percent in the second quarter of 2007). A number of mortgage companies have gone bankrupt since February 2007, due to loan deterioration[6].

In this situation, the financial difficulties of two hedge fund companies affiliated with Bear Stearns, an American investment bank, came to the surface in June 2007, and the bank announced that it would provide bail-out financing. This served as a turning point and the subprime mortgage problem fully attracted the attention of market players, with its impact subsequently spreading to financial markets throughout the world.

The ratings of products related to subprime mortgages, mainly those with low ratings, were downgraded in rapid succession in July. Subsequently, the overall index of securitized subprime mortgage products has dropped significantly, making product pricing difficult, particularly with respect to those with low ratings.

This downgrading also triggered a collapse of the confidence in the ratings *per se*, on which the securitization market was premised, giving rise to the suspicions that other securitized products not related to subprime mortgages might also be downgraded. This resulted in a decline in the liquidity of the securitization market.

Furthermore, the situation in the securitization market, together with its impact on the European financial markets as detailed below, induced investors to resort to risk aversion, which caused the spillover effects to the entire credit market and even to the foreign exchange and stock markets.

> (Note) The issuance of securitized corporate loans, such as collateralized loan obligations (CLOs), and M&As has also decreased with the increase in credit default swap (CDS) premia and corporate bond spread, particularly in the U.S. and Europe. Further, risk aversion by investors resulted in an increase in the volatility in various markets, including stock and foreign exchange markets, thereby causing a global decline in stock prices.

3. Repercussions to U.S. and European financial systems

(1) Repercussions on short-term financial markets

The subprime mortgage problem had a significant impact on the U.S. and European financial systems through the turbulence of the short-term money markets.

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[6] Major bankruptcies of mortgage companies since February 2007:

① Mortgage Lenders Network (February 5, 2007)
② People's Choice Home Loan (March 20, 2007)
③ New Century Financial (April 2, 2007)

This is to say that the rollover of ABCP became difficult with the surge in the issuance cost of ABCP in connection with the aforementioned conduits and other schemes, due to anxieties concerning the assets backing the ABCP. Consequently, U.S. and European financial institutions, which had been providing liquidity support to said ABCP, were forced to secure the funding necessary to ensure liquidity in the ABCP market, thereby constraining the liquidity in U.S. and European short-term money markets. It is also said that the balance sheets of the financial institutions concerned have been expanding through the provision of liquidity under the ABCP programs, as a result of which liquidity risks are transformed into credit risks.

The functions of U.S. and European short-term money markets weakened considerably, with mutual suspicion arising among financial institutions about the extent to which each was exposed to credit risk. Under these circumstances, U.S. and European central banks have been providing large amounts of liquidity to short-term money markets, and the Federal Reserve Board (FRB) and some others have been taking such measures as lowering short-term interest rates and expanding the means of providing funding since August 9.

(2) Effect on European financial institutions

In Germany, a fund affiliated with Deutsche Industriebank (IKB), a midsize bank, and another affiliated with Sachsen LB, a state bank, fell into financial difficulties on August 2 and 17, respectively. Because the two banks had extended liquidity supports to the respective funds, the IKB was set to be rescued by a government-affiliated financial corporation, while Sachsen LB will be granted a large credit line by a German banking syndicate.

In France, BNP Paribas announced on August 9 that it was going to stop calculating the net asset value of its affiliated funds, and freeze new offers and cancellations with respect to them. However, these measures have been lifted subsequently, beginning on August 28.

In the United Kingdom, Northern Rock, a midsized bank, fell into funding difficulties on September 14 in spite of the fact that it did not hold many subprime mortgage-related products, due to the facts that (i) the condition of the European short-term money markets were extremely tight, and (ii) it relied on short-term financial markets for a large portion of its funding, while specializing in long-term mortgages. As such, the U.K authorities extended an emergency loan for liquidity support. Nonetheless, the turn of events caused the first bank run in the U.K. in about 140 years, prompting an announcement of full guarantee of bank deposits.

(3) Subsequent developments

In September and October 2007, the financial results for the latest quarter, since market turmoil were announced gradually (little by little). Some financial institutions announced reduced profits or overall losses due to large losses incurred with respect to subprime mortgage-related products and related business.

The prices of secondary securitized products such as CDOs fell further after October, due in part to the downgrades for some subprime mortgage-related products such as relatively highly rated securitized products. In response, some financial institutions announced the outlook of incurring additional losses, leading to the resignation of top management in some instances. Further, many market players have been expressing concerns not only on subprime mortgage-related products and their secondary securitized products, but also with respect to the trends of other securitized products and the credit markets.

In addition, interest is growing in the finances of financial institutions in connection with the review of the U.S. Accounting Standards (SFAS 157), as questions has been raised as to whether illiquid securitized assets that are appraised based on theoretical values (Level 3) has increased.

There are also moves to reinforce the financial basis in recent days, with some financial institutions announcing capital increases.

(Note) In the United States, "SFAS 157 – Fair Values Measurements" announced in September 2006 has been implemented from the fiscal year starting on or after November 15, 2007 (it is said that major financial institutions have already applied this standard, prior to the mandating effective date). SFAS 157 seeks to clarify priorities of various inputs in the fair value measurement of values, placing the greatest priority on the transaction prices of the same type of assets in a liquid market (Level 1), followed by the transaction prices of similar types of assets in a liquid market (Level 2), and appraised values based on theoretical values (Level 3). In the event there are no appropriate transaction prices for a certain securitized instrument, possibly, due to the lack of trading thereof based on sufficient liquidity in the markets, the appraisal thereof based on reliable theoretical values (Level 3) will be considered.

As such, the effects of the subprime mortgage problem are continuing to be felt, mainly in the United State and Europe. As can also be seen from the downward revision of the outlook of the world economy in 2008 in the World Economic Outlook of the International Monetary Fund (IMF), it is necessary to continue to pay due attention to how and through what channels the problem impacts the real economy, as well as the correlation between the real economy and the financial markets.

4. Estimated loss due to the subprime mortgage problem

The extent of the loss caused by the subprime mortgage problem has been estimated by private financial institutions and various others. These estimates include (i) the statement in the IMF's Global Financial Stability Report (GFSR), announced on September 24, that it might reach a maximum of $200 billion (approximately ¥22 trillion), (ii) the statement by Chairman Ben Bernanke of the FRB on November 8 that it could reach a maximum of $150 billion (approximately ¥17 trillion) in a revision of his earlier statement ($100 billion (approximately ¥11 trillion) maximum), and (iii) the reference in the Financial Market Trends of the Organisation for Economic Co-operation an Development (OECD) that it could be anywhere from $200 billion (approximately ¥22 trillion) to $300 billion (approximately ¥33 trillion).

However, it is difficult to predict the ultimate loss at this point in time given, among other things, that

(i) there are no precise statistics for measuring the scale of and the estimated losses from subprime mortgage-related products;

(ii) the amount of losses from subprime mortgage-related products fluctuate significantly depending on such things as the valuation method; and

(iii) the losses incurred in the actual settlement process, including the auctioning of homes pledged as collaterals for subprime mortgages, are expected to be impacted significantly by future price trends in the U.S. housing market.

It is therefore necessary to continue to monitor the situation closely, paying careful attention to the trends in the U.S. housing market, which is the source of the subprime mortgage problem, and the situation of the securitization market, as well as the various risk scenarios in the markets.

5. Impact on the Japanese financial system

(1) Limited overall impact

(i) So far, there has not been serious impact on the Japanese financial system because the Japanese financial institutions have been enjoying increased soundness overall, as can be seen from the decrease in the non-performing loan ratio[7], and

(ii) the risks associated with direct holding of subprime mortgage-related products have been relatively limited, due in part to the efforts to enhance risk management through such measures as the appropriate implementation of Basel II.

(2) Impact on various markets

While the impact on the Japan's credit market has been relatively mild compared to European markets, the Japan's stock market suffered comparatively large impact than the credit market, due in part to (i) the large share of transaction volume by foreign investors, and (ii) the effects of exchange rate appreciation on exporters.[8]

Furthermore, the foreign exchange market has observed investors buying back the yen in the context of their risk aversion.

(3) Situation of subprime mortgage-related products held as of September 30, 2007

The results of Japanese financial institutions as of September 30 have been announced little by little. Exposures to subprime mortgage-related products (securitized products, etc. with underlying assets that encompass some form of subprime mortgage-related risks) of Japanese deposit-taking financial institutions as of September 30 are as follows:

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[7] The ratio of non-performing loans (= non-performing loans ÷ total amount of credit) has been decreasing overall from FY2002 (ending March 2003) to FY2006 (ending March 2007). (Major banks – 8.4% ⇒ 1.5%; regional banks – 8.0% ⇒ 4.0%; shinkin banks – 10.1% ⇒ 6.5%; credit cooperatives – 12.7% ⇒ 10.3%)

[8] It is said that that sale of Japanese stocks by hedge funds and other to ensure profit had relatively large effects on the Japanese stock market.

Large banks, etc.:
book value – approximately ¥1.246 trillion;
valuation loss – approximately ¥122 billion;
realized loss – approximately ¥122 billion

(Large banks include major banks, the Norinchukin Bank, Shinsei Bank, Aozora Bank, Citibank Japan, new-type banks, foreign trust banks and others.)

Regional banks:
book value – approximately ¥115 billion;
valuation loss – approximately ¥6 billion;
realized loss – approximately ¥9 billion

Cooperative financial institutions:
book value – approximately ¥47 billion;
valuation loss – approximately ¥7 billion;
realized loss – approximately ¥10 billion

(Cooperative financial institutions include Shinkin Banks including Shinkin Central Bank, Credit Cooperatives including the Shinkumi Federation Bank, Labour Banks including the Rokinren Bank, Prefectural Banking Federations of Agricultural Cooperatives, and Prefectural Banking Federations of Fishery Cooperatives. This does not include Japan Agricultural Cooperatives, etc. while the Norinchukin Bank is included in major banks, etc.)

Total:
book value – approximately ¥1.407 trillion;
valuation loss – approximately ¥135 billion;
realized loss – approximately ¥141 billion

In view of the net business profits (¥6.722 trillion as of end-March 2007) and tier 1 capital (¥49.408 trillion as of end-March 2007) of financial institutions, the situation seems to be manageable overall.

However, it is necessary to pay sufficient attention to future market trends, given that some U.S. and European financial institutions have announced large losses and some Japanese financial institutions have also announced losses with respect to securitized products not directly linked to subprime mortgages following the turmoil in global financial markets, and particularly in the U.S. and European markets.

It is necessary for financial institutions holding subprime mortgage-related products or other securitized products to disclose the specifics of such products adequately, as well as handle them appropriately, such as by appropriating a reserve based on accurate pricing as soon as possible.

In any case the situation must be monitored closely and carefully as we approach the end of the fiscal year.

III. Analysis of why the subprime mortgage problem led to market turmoil

In the United States and Europe, financial intermediation is undergoing drastic change from the originate-to-hold business model, where the lender manages loans by monitoring the borrower status, to the originate-to-distribute business model, where the lender disperses credit risks pertaining to the original loan to investors through the markets. Such changes, together with the diffusion of new financial technologies such as securitization, have been gaining momentum in recent years.

The subprime mortgage problem is believed to have led to the manifestation of three types of uncertainties in the markets where these changes are underway. These three uncertainties have intertwined each other, complicating the problem and destabilizing the market. Anxieties remain in the markets because these uncertainties are yet to be eliminated. A prompt response to and the resolution of these uncertainties are called for.

1. The three types of uncertainties

(i) **Risk proliferation uncertainty.** As financial technologies such as securitization became widespread, it became difficult to identify the location and magnitude of risks because the risks pertaining to the underlying assets had been widely dispersed.

(ii) **Pricing uncertainty.** The volume of market transactions shrunk rapidly and market liquidity dried up as the pricing function of the securitization market broke down, due in part to the collapse of the confidence in the ratings system

(iii) **Liquidity uncertainty.** Liquidity risk has materialized due to the insufficient management of liquidity risk arising from the maturity mismatch between the assets and liabilities of investment activities related to securitized subprime mortgage products, where long-term investment had been funded by short-term instruments.

2. Likely issues to be addressed

At the background of the subprime mortgage problem, with respect to which the three uncertainties have come to the surface, are the following problems and issues that pertain to each party involved in the subprime mortgage-related products. It is desired that these wide-ranged issues be addressed and resolved, one by one, in a steady manner:

(1) Borrowers: There is a possibility that borrowers have resorted to easy borrowing option with disregard for such factors as their own income, anticipating an increase in housing prices, among other things.

(2) Lenders:

(i) They may have been lenient in their screening of mortgage applications in anticipation of transferring credit risks through the sales and securitization of mortgages.

(ii) They may have gone excessively lenient in granting mortgages to less creditworthy borrowers by using new mortgage products, in anticipation of re-financing as the result of an increase in housing prices.

(iii) There is the issue of whether they were providing adequate information on the risks arising form underlying assets to the arrangers of securitized products.

(3) Arrangers of securitized products

(i) There is the issue as to whether they were on target in collecting and analyzing information on the risks associated with underlying asset risks.

(ii) There is the issue as to whether moral hazards existed in the arrangement of securitized products, where the arrangers do not hold certain portions of the securitized products. They may have been thinking that they would be able to transfer credit risks easily to investors.

(iii) There is the issue of whether the arrangers assessed the risks adequately and appropriately and conveyed the information thereon when arranging the products.

(4) Credit rating agencies

(i) The possibility that conflict of interest may have been inherent to the business of rating of securitized products.

(ii) While models are normally used for rating securitized products, there is the issue of whether there were adequate verifications and disclosures concerning the description and appropriateness of the models. Another issue is as to whether risks were accurately considered in the simulation, using data for a sufficiently extended period.

(iii) There has been the issue of whether information necessary and sufficient for rating was being appropriately obtained from arrangers in recorded or oral forms.

(iv) There has been the issue of whether the credit rating agencies caused investors misunderstandings on the meaning of information on their ratings.

(5) Distributors of securitized products

(i) There is the issue of whether there have been inadequacies in the sales systems pertaining to the provision of appropriate explanations of risk information.

(ii) There is the issue of whether they have been providing appropriate pricing information on low-liquidity products.

(6) Investors

(i) There is the issue as to whether investors have had an adequate understanding of direct and indirect risks, as well as have in place an adequate risk management system (they may have relied excessively on rating with no understanding of the underlying assets, increasing their exposures to risks unknowingly).

(ii) Hedge funds and other investors may have been utilizing excessive leverage in conducting trade, with inadequate recognition of risk in their quest for high yields. Lack of transparency in investment management is also an issue.

(iii) As regards deposit-taking financial institutions, there are issues as to whether there have been a) adequate disclosures were in place; b) appropriate risk management and valuation had been made; and iii) adequate risk management and disclosures were conducted on liquidity facilities, concerning the securitized products held.

There are many other issues that should be discussed in addition to those mentioned above, such as the broader economy, the global capital flows, and the investment behavior of global investors. While it is difficult to conduct a comprehensive discussion of the foregoing issues at this stage, preliminary considerations are given to some extent in the later sections.

IV. Road to normalization of markets from a global perspective

1. Current status of international discussions, etc.

In the course of the normalization of the markets, it is important for financial institutions holding subprime mortgage-related products to specify the exposures and valuation losses thereof, including such detailed information as the ratings of the products actually held, with a view to easing the anxieties in the markets. It is also necessary to disclose such valuation losses appropriately, as well as take necessary measures such as provisioning and write-downs as soon as possible, based on accurate pricing and without delay.

However, a certain amount of time will be required for the complete normalization of the market, since it is necessary to address the aforementioned issues properly from medium and long-term perspectives in order to dispel investor anxieties and normalize market functions, including securing confidence in the value of subprime mortgage-related products and recovering trust in credit rating agencies.

Efforts were made in the past such as the preparation of a Basic Code of Conduct by the International Organization of Securities Commissions (IOSCO) on ratings by the credit rating agencies, and the introduction by the Basel Committee on Banking Supervision of the requirements for the use of ratings under the Basel II framework, including those of securitized products.

International organizations and forums are already studying a wide range of issues related to the subprime mortgage problem, including liquidity and risk management; accounting and valuation of securitized products; the roles of credit rating agencies, rating methods, and disclosure methods concerning securitized products, and the use thereof by investors; the manner of supervising financial institutions, including the handling of off-balance structured investment vehicles; and international cooperation among the supervising authorities. It is hoped that the result of these studies will be presented as soon as possible, and that market players will actively promote measures aimed at the recovery of confidence.

(Note 1) At the request of the G7 Finance Ministers and Central Bank Governors, a working group of the financial Stability Forum (FSF) is expected to analyze the causes of the market turmoil triggered by the subprime mortgage problem and offer necessary recommendations for enhancing market resilience.

(Note 2) The IOSCO has established a task force on the issue of credit rating agencies and is conducting extensive research on the roles of credit rating agencies, rating methods, etc. concerning such complex financial instruments as securitized products. Further, it has established a new task force to address the subprime mortgage problem.

In the United States, President Bush instructed Treasury Secretary Paulson to have the President's Working Group on Financial Markets investigate the impact on the housing industry of the roles played by credit rating agencies and securitization. Moreover, in September 2007, Securities and Exchange Commission (SEC) Chairman Cox announced, in connection with the subprime mortgage problem, that investigations have been initiated with respect to credit rating agencies that rates large numbers of residential mortgage-backed securities (RMBS).

In the EU, the Committee of European Securities Regulators has been investigating the status of compliance with the IOSCO Code of Conduct since last year and reporting the results thereof to the Commission of the European Communities. The CESR is conducting investigations this year with particular emphasis on issues related to the credit ratings of structured financial instruments.

(Note 3) On October 15, a general agreement was reached on a number of financial institutions, led by such major U.S. banks as the Bank of America, Citigroup, and JP Morgan, jointly creating a fund and purchasing qualified assets with high ratings held by SIV (M-LEC (Master Liquidity Enhancement Conduit) framework). The creation of such funds, which the U.S. Department of Treasury is said to have encouraged, is aimed at providing liquidity to the ABCP market that currently lack liquidity. It is necessary to pay sufficient attention to the trends, effects, etc. of such undertakings by market players.

(Note 4) Various G7 countries and other nations are discussing such issues as risk management, valuation, a review of disclosures to investors and counterparties, and the monitoring of counterparty risk management with regard to hedgy funds. Japan has already put in place certain regulation as described hereafter and, when discussing specific measures in such discussions, it is necessary to give thorough consideration to the purpose, effect, etc. thereof.

2. Matters to be considered in international discussions for resolution of problem

(1) General

Measures based on the best practice of private practitioners should be sought with respect to ensuring communication of information in the process of securitization, calculating appropriate prices, reviewing advanced risk management such as stress testing and pricing when there is little market liquidity. Market discipline will be reinforced and progress will be made towards the resolution of numerous problems, should private sector entities establish and widely adopt such practices. Holding various discussions from this perspective in the international discussions would also be beneficial.

The U.S. and European financial markets are expected to take a leading role in dealing with this problem, since they are the markets that refined the advanced financial technologies in question and nurtured the best practices related to securitization.

Further, it is necessary to pay attention to the fact that the major trend now is for the supervisory authorities of various countries to seek, through close dialogues with the market players, regulatory measures that promote such developments in the private sector.

(2) Specifics

Securitization is a financial technology that contributes to the distribution of risks. Sound development of the markets is beneficial to many concerned persons. It can be said that securitization now plays an indispensable role in the markets, backed by improvement in financial technologies and advances in the level of risk management.

At the same time, there are some side-effects to securitization, such as the difficulty in identifying where the risks lie, as can be observed in the current situation. Hence, efforts are sought of those concerned to normalize and further develop the securitization market, based on the lessons learned from this situation.

The following are the issues that the Strategy Team believes are of importance for the time being and should be considered in future international discussions in seeking the road to the normalization of global markets.

(i) **Ensuring communication of information.** A common problem observed in the flow of events described in III 2, from the arrangement of subprime mortgage-related products to the sale of the products to investors, is the possibility of inadequate communication of information on credit risks pertaining to the underlying assets. Presumably, there have been various problems in overcoming the asymmetry of information. In the course of interviews with experts conducted by the Strategy Team, private practitioners and credit rating agencies pointed out the importance of information monitoring and the problem of having been unable to identify the risk of fraudulent loans.

In connection with this point, attention should be paid also in international discussions to whether the arrangers of securitized products, distributors, credit rating agencies and others adequately gather and communicate information on risks pertaining to the underlying assets, and what kind of measures can be taken to encourage appropriate communication of information.

> (Note) Although the problems of the mortgage borrowers and of the screening abilities of the lenders are somewhat different in nature from the problem of securitization, it is important for regulatory authorities to take necessary measures in accordance with the actual situation in each country.

(ii) **Risk management.** It is also important to address the issue of whether financial institutions and investors were managing risks sufficiently. In this regard, there are some items on which common perception among financial institution was missing, including the materialization of liquidity risk, transformation of liquidity risk to credit risk, and the recognition of risks that could arise when the liquidity of securitized products have declined[9]. It can also be pointed out that risk management was fundamentally not sufficient including in loan screening, the use of credit rating agencies, and information collection. It will be necessary for each financial institution to review its existing risk management methods constantly, as well as for the authorities to take adequate supervisory measures.

In Japan, Basel II has been implemented as from the end of March 2007. Based on the experience so far, the implementation of Basel II has contributed greatly to improvement of risk management at deposit-taking financial institutions as well as to the enhancement of market discipline.

The "First Pillar" of the Basel II framework — minimum capital requirements, entails such elements as a thorough application of look-trough principle in treating investment funds, and enhanced disclosure by credit rating agencies on individual securitized

[9] Risks pertaining to the underlying assets are transferred to the investors once through securitization. However, in the case of financial institutions that are arranging such investment schemes as conduits and SIV or are supplementing liquidity, it is believed that there are times when it cannot necessarily be said that they are free of the risks pertaining to the underlying assets from the perspective of liquidity and reputational risks.

products, with a view to encouraging financial institutions to understanding the composition of the underlying assets in an appropriate manner. Furthermore, with respect to back-up lines (e.g., liquidity enhancement) to ABCP programs, for which the past framework eventually did not require any regulatory capital, Basel II elaborates on risk measurement of such back-up lines by setting a certain level of capital requirements based on their risk characteristics.

The "Second Pillar" ー supervisory review process, calls for "self-disciplined" risk management that enables financial institutions to comprehensively assess/evaluate and manage various risks including those not covered under Pillar1 such as liquidity risk, and to establish their own capital strategies.

Moreover, the "Third Pillar"ーmarket discipline, seeks to achieve the enhancement of quantitative and qualitative disclosures on risks faced by financial institutions as well as the management status thereof. Amid all these efforts, the disclosure of information on investments in funds and securitized products has dramatically improved, in terms not only of such qualitative information as the risk management policies and processes, but also of such quantitative information as the exposure of securitized products by type of underlying assets and by risk weight category.

Given that Basel II provides incentives for financial institutions to engage voluntarily in further improvement of their risk management through the elaboration of risk measurement and the utilization of market discipline, it is important for other countries to implement Basel II as promptly and steadily as possible. Attention should be paid to the importance of this issue in international discussions as well.

Should a further review of international regulatory frameworks including clarifications of certain rules in areas such as the treatment of investment funds and securitized products in Basel II, be taken up for discussion in response to the current market turmoil, it would be beneficial to contribute proactively to such international discussions, while introducing various efforts that have been taken in Japan.

(iii) **Credit rating agencies.** The Strategy Team interviewed credit rating agencies with regard to conflicts of interest, the issue of perception on ratings, rating methodology, and supervisory systems and sought their views. In view of the fact that many of the major credit rating agencies are operating internationally, and ratings are issued for a wide range of financial instruments around the world, it is necessary for international forums such as the IOSCO to conduct thorough verifications first as to whether the Code of Conduct was structured appropriately to address such issues as the conflict of interest, rather than for Japan to solely address the issue of credit rating agencies.

Although there are regulatory moves to subject credit rating agencies to supervision by the authorities, such as the implementation of the SEC registration system in the United States, a consensus does not necessarily exists at the international level that there is a need to introduce or reinforce regulation or supervision. Even if international agreement is reached that some kind of regulations or supervision is required, in addition to the review of IOSCO Code of Conduct, it would be necessary to take into consideration such issues as the overlap of regulations as a result of various countries implementing different regulations, how to secure enforcement in the event there are countries that do not implement regulation, and interference with market efficiency.

As regards these issues, it is hoped that a wide range of discussions are held, mainly by the IOSCO, on such issues as the incentive structure of credit rating agencies including the salary structure, measures to prevent conflict of interest and the disclosure of rating models, with due consideration given to the reality of the credit rating agencies. An appropriate report by the IOSCO at an early date would be desirable.

(iv) **Valuation and accounting of securitized products.** As regards the valuation of securitized products, there may have been cases where some investors have not given sufficient consideration to the liquidity risk of such products and may have relied only on the ratings, which in its nature is merely a credit risk assessment, for valuation purposes. There is also a question whether adequate valuation methods are established for situations where there is a significant decline in market liquidity. As regards these issues, it is expected that the efforts or studies are to be developed through international cooperation among authorities. Meanwhile, auditors and others are also expected to promote studies on best practices that will enable appropriate auditing with respect to fair pricing.

(v) **Accounting treatment of consolidation and non-consolidation of conduits, etc**.
It has been pointed out that some vehicles that have invested in subprime mortgage-related products, particularly in the United States and Europe, have been excluded from consolidation by financial institutions that have led the leading role in the arrangement, operation and funding of such products. It is expected that fact-finding through international discussions hereafter, including as to whether this is an issue of the accounting standards themselves or the application of thereof.

V. Measures on the part of Japan

While the impact effect of the subprime mortgage problem on the financial system has been limited so far in Japan, it is believed that the problem has resulted in a number of lessons to be learned in terms of financial supervision and the future development of the securitization market in Japan. The Strategy Team hopes that those concerned will work seriously on the points listed below.

1. Reinforcing tracking and monitoring of market trends by supervisory authorities

There are concerns in the United States that the delinquency rate will increase further as the “reset” of the interest rates of subprime mortgages granted since the latter half of 2005. Developments in the U.S. housing market, macroeconomic trends and other factors continue to require careful observation also from the perspective of their macroeconomic impact on the Japan’s economy. Furthermore, it is necessary to continue to pay careful attention to the trend of the U.S. and European financial market, with respect to not only subprime mortgage-related products, but also the impact on the credit markets overall, such as the CDO markets and a wide range of other secondary securitized product markets.

It can be said that the recent market turmoil represents a new type of challenge for the financial system, where the risks that were diffused through financial means known as securitization surfaced in the markets all at once, compared to a traditional type of problem where the financial difficulties of individual financial institutions have significant impact on the financial system.

In response to this new challenge, it will be necessary for supervisory authorities to analyze market information promptly and utilize the information in supervision. To this end, it is important to work on making necessary improvements to the system, including by enhancing market research and analytical capabilities. In addition, it is also important to enhance monitoring of liquidity risk and reinforce the monitoring of the entire credit markets in the context of the strengthening of off-site monitoring by the authorities in view of future market developments.

2. Reinforcing international cooperation among supervisory authorities

Cooperation among supervisory authorities of various countries is indispensable in properly addressing issues that have spread throughout the world, such as the subprime mortgage problem. Since various problems related to financial systems tend to spread instantaneously in global financial markets, it is necessary to make efforts to understand the actual state of global impact and to share common perceptions through prompt exchange of information and opinions with foreign authorities, utilizing various international meetings.

Moreover, there is a possibility that risk management practices at financial institutions for various risks, including liquidity risk as well as the supervisory framework for risk management, will be discussed at the Basel Committee on Banking Supervision. Japan, which has experienced financial system instability, already has ample experience and performance records concerning risk management methods pertaining to financial institutions, monitoring by the authorities, and means of providing liquidity through the central bank. It is believed that the Japanese financial authorities will be expected to contribute actively to discussions at international meetings, etc. from this perspective.

(Note) As regards fund regulations in Japan, business regulations on the sale and management of investments funds, which had not been subject to the traditional regulatory framework, are imposed through the Financial Instruments and Exchange Law. With respect to the impact on the markets of investment actives of investment funds, such measures as the amendment of the reporting system of the large shareholding have been taken from the perspective of ensuring further transparency of transactions. Amid the establishment of such regulations, further efforts are sought for the exchange of information among the authorities of various countries.

3. Addressing the issue of the lending mortgage models based on risk transfer through securitization (Originate-to-distribute model)

The possibility of moral hazards within financial institutions is being highlighted out, where securitization products were arranged without the originators and arrangers holding certain parts thereof, and with sloppy loan screening premised on the transfer of risks to investors via securitization.

Such business models significantly undermine the function of information production performed by financial institutions. In order to deal with this issue, the establishment of rules on risk retention by originators and arrangers is a possibility. Conceivable measures would include, for example, asking credit rating agencies to look at whether certain portions of the risks are held by the originators and arrangers, and take that into account in the rating process as well as encouraging the originators and arrangers to explain and disclose their holding to investors. It is necessary for those concerned to hold further discussions on the practical aspects of this issue, from the perspective of reinforcing market discipline.

4. Ensuring traceability of underlying assets of securitized products

This also relates closely to point 3. above in that it is necessary for all those concerned to work proactively to improve the communication of information, which was observed to be a problem in the arrangement of securitized products. For example, the establishment of a framework for identifying and managing information on the underlying assets would contribute to the enhancement of the transparency of Japan's securitization market. It would be beneficial also in terms of securing a "peace of mind" concerning securitized products through the reinforcement of market discipline.

The provision of necessary information in an appropriate manner by individual entities involved in the securitization process to those concerned should be explored first. It is hoped that effective measures for the establishment of a foolproof mechanisms for ensuring traceability will be discussed among those concerned, including who is to and how to manage, accumulate, and provide (or disclose) what kind of information, with given to the business routine in the private financial sector.

5. Premising securitization on statistical processing of sufficient data

The subprime mortgage problem in the United States has been complicated by securitization, and securitization is premised on the statistical processing of abundant data. Finance deals with future uncertainties, and Frank Knight claims that there are two types of uncertainties. The first type, known as "risks", is randomness with knowable probabilities, and the second type, known as "true uncertainties", is randomness with unknowable probabilities in unknown domains. The latter is now known as "Knightian uncertainties."

While securitization is capable of dealing with the first type, or "risks", it is not designed to deal with "Knightian uncertainties," which preclude objective statistical decisions based on past data. It has also been pointed out that, in the case of the United States, underlying assets for securitization were being processed based only on data from when the economy was strong, and that this has aggravated the problem. In other words, there is a possibility that "Knightian uncertainties" were being expanded unnecessarily by cherry-picking only favorable data from the past.

Having a track record that includes the unprecedented financial crisis in Japan in the 1990s, in addition to traceability, in connection with the securitization of underlying assets of "Japanese origin," would give Japan the opportunity to take advantage of the past lessons learned in a period of global financial confusion. Moreover, the Japanese government's policy is to separate the tremendous assets owned by the government and government affiliated organizations, such as independent administrative institutions, from the government's balance sheet by securitization from the perspective of promoting asset and liability reform. It is therefore hoped that the sale of these securitized products in the world market as those products with ample data and limited " Knightian uncertainty" would contribute to the invigoration of the markets, among other things.

6. Presenting principles and exploring best practice

The Financial Services Agency is currently studying the best combination of rules and principles as a part of its efforts for better regulation. The presentation of voluntary codes by the industry and the search for best practices is indeed a situation where the principles come into play.

It is beneficial for the Financial Services Agency and those concerned in the private sector to share a common understanding of the principles required of financial institutions, such as providing adequate explanation to customers and manage assets in a secure manner. The industry is also expected to formulate best practice and voluntary codes on the arrangement, sale and holding of securitized products based on the principles, including the enhancement of the trustee's review structure and information provision.

7. Credit rating agencies

As stated earlier, the United States has implemented a registration system to the SEC with respect to credit rating agencies. If regulations are to be considered in Japan, it would be important to select measures that are balanced in terms of maintaining effectiveness of the regulation, while avoiding making it excessively restrictive. If Japan is to base its regulations on the current U.S. regulations or the IOSCO Code of Conduct, conceivable measures would include requiring credit rating agencies to establish a structure for ensuring independence and prohibit conduct constituting conflict of interest, and disclose information on rating models, rating processes, and conflicts of interest, while refraining from directly regulating the rating itself. Currently, credit rating agencies voluntarily disclose the rating models used in order to ensure independence and neutrality. Hence, another possibility would be for each firm to verify the validity of its rating model and disclose the results.

In any case, a wide range of studies are being conducted by the IOSCO on various issues, including the problem of rating methods concerning complex financial instruments such as securitized products, and more in-depth discussions will be held hereafter from various perspectives, on the international level as well as the national level. As such, it is important for supervisory authorities to pay careful attention to these developments and take appropriate measures as necessary in a timely manner.

(Note) Under the standardized approach and some other parts of Basel II, external ratings can be used for the calculation of credit risk weighted assets. In Japan, the Financial Services Agency recognized individual credit rating agencies as eligible external credit assessment institutions (ECAIs) for the purpose of Basel II, in accordance with qualification criteria to assess such aspects as objectivity, independence, transparency, organization structure, and reliability of credit rating agencies and/or ratings.

Also, from the perspective of utilizing the market discipline to ensure the appropriateness of ratings that are assigned to securitization exposures, the disclosure of detailed information, for example, on the type of underlying assets, subordination ratio, and an overview of the scheme of each securitized product has to be disclosed if the ratings are to be used for calculation of regulatory capital under Basel II.

8. Valuation and accounting of securitized products

In regard to the valuation of securitized products, the Strategy Team made efforts to understand the actual practices by interviewing auditors. It is hoped that Japan continues to make efforts to understand the actual practices of valuation and contribute actively to discussions on appropriate valuation and accounting treatments at international forums such as FSF.

With regard to the issue of consolidation of conduits, etc., a review is being made to the standards on the consolidation of special purpose companies by the Accounting Standards Board of Japan (ASBJ), which is the body responsible for establishing Japanese accounting standards, so as to promote the convergence of accounting standards. It is important to promote such undertakings steadily, as well as to understand the actual practices and share common perceptions through participation in international fact-finding activities related to the consolidated accounting of conduits, etc.

VI. Conclusion

The Japanese financial institutions and financial markets can be said to have been relatively stable, compared to the U.S. and European counterparts, since the subprime mortgage problem came to the surface. Japan’s financial infrastructure is well developed as a result of past experiences such as financial system difficulties. Furthermore, Japan is ahead of other countries in some respects, including in terms of regulatory measures such as Basel II. From this perspective, Japan should be able to contribute to international discussions in many aspects. It is likewise important for Japan to take necessary measures and put in place an appropriate environment so that financial institutions can establish proper risk management systems and perform adequate financial intermediary functions, with a view to securing the country’s presence in global financial markets. Furthermore, it is hoped that effective measures for enhancing the international competitiveness of the financial and capital markets will be presented in the Plan for

Strengthening the Competitiveness of Japan's Financial and Capital Markets to be prepared by the end of the year.

As discussed above, there are a wide range of issues that require steady efforts on the part of the public and private sectors. The Strategy Team intends to continue to examine the financial strategies for Japan while maintaining an attentive eye on the subprime mortgage problem.