

March 17, 2008

Bank of Japan

On-Site Examination Policy for Fiscal 2008

1. Review of Fiscal 2007¹

(1) On-site Examinations in Fiscal 2007

During Fiscal 2007, the Bank of Japan (hereinafter, the Bank) conducted on-site examinations on 119 financial institutions: 39 domestically licensed banks, 66 *shinkin* banks, and 14 other institutions, including securities companies and Japanese branches of foreign banks.

Number of Financial Institutions Examined

	FY 2005	FY 2006	FY 2007
Domestic banks	42	43	39
<i>Shinkin</i> banks	73	73	66
Other institutions	45	15	14
Total	160	131	119

(2) Risk Management Conditions Ascertained through On-site Examinations and Off-site Monitoring

Japan's financial system, on the whole, has remained stable. Against such a backdrop, efforts have been made to improve the governing structures used by financial institutions in risk management and business administration and to adopt more sophisticated methods in these areas, taking into account the changing economic and financial environment as well as the expansion in the size of businesses with complex risk attributes. However, more than a few financial institutions have continued to lag in establishing a basic risk management framework, and many challenges remain in terms of proper risk recognition and enhancing a governance structure that supports management as a whole, such as through the establishment of integrated risk management.

The financial institution risk management condition can be summarized according to

¹ The fiscal year in Japan starts in April and ends in March.

the examiner's viewpoints of the on-site examination policy for fiscal 2007², as follows.

(a) Effective risk management in a changing economic and financial environment

In terms of market risk management, more than a few financial institutions, mainly the regional banks, have continued to face challenges in establishing basic frameworks, such as frameworks for risk measurement, management reporting and the setting of risk ceilings and loss limits, to cope with the changing financial environment in a timely manner.

In terms of asset and liability management (ALM), the major banks and the advanced regional financial institutions have been conducting profit analyses and risk analyses that assume potential changes in interest rates and market prices, and reflecting the analytical results in their management of overall assets and liabilities. In contrast, for other regional financial institutions, many have not conducted such analyses, partly due to delays in building databases, and establishing ALM remains a challenge.

In terms of credit risk management, on the whole, nonperforming loans (NPLs) have steadily been reduced and both NPL ratios and credit cost ratios have declined substantially from their peaks. However, at the regional financial institutions, there have been an increasing number of examples of banks being forced to increase losses, due to delayed efforts to improve the business and inadequate screening and control of loans. Therefore, the NPL ratios at the regional financial institutions have stopped declining at a level higher than those at the major banks.

In the meantime, real estate-related credits have increased in metropolitan areas, and the management of credit concentration risk has become an issue. In several cases, measuring the effects of the credit concentration risk on management, profit and capital strength by conducting stress-testing has been inadequate and the use of credit limits inappropriate. With respect to the major banks, basic screening frameworks such as cash-flow analysis of real estate non-recourse loans have been established, while there have been cases of inadequate

² The six examiner's viewpoints of the on-site examination policy for Fiscal 2007 were: (a) effective risk management in a changing economic and financial environment; (b) effective risk management of complex financial assets and transactions; (c) effective operational risk management framework; (d) development and implementation of integrated risk management; (e) active credit portfolio management; and (f) ensuring smooth settlement and business continuity.

evaluations of underlying real estate and structures. At the regional financial institutions, there have been many cases in which basic credit exposure management, such as cash-flow analysis and real estate revenue management, has been inadequate. In addition, with respect to uncollateralized business loans for small and medium-sized enterprises and residential mortgage loans, which both presume pooled management, there have been many cases in which portfolio analyses based on borrowers' attributes and the verification of scoring models were conducted in an inadequate manner.

(b) Effective risk management of complex financial assets and transactions

As for the management of risks attached to investments in financial products that have complex risk features, financial institutions have faced some challenges. For securitized products, some institutions have incurred losses due to the plunge in credit markets since last year, and the evaluation of product structures, the analysis and monitoring of underlying portfolios, and the management of the risks associated with price fluctuations and market liquidity has been inadequate at many institutions. For various funds and structured products, challenges have been identified, mainly at the regional financial institutions regarding their risk management practices such as risk analysis at the time of investment and post-investment monitoring.

In addition, at the major banks that originate securitized products and syndicated loans, risk recognition has been inadequate, and there are many challenges including the management of risks associated with price fluctuations and market liquidity in underlying assets and corresponding loans during the processes of origination and sales.

(c) Effective operational risk management framework

The environment surrounding financial institution's operations has been changing substantially in terms of the diversity of business activities, changing employment patterns and increased outsourcing. Although the major banks, in particular, have been striving to strengthen their ability to identify potential risks by utilizing measures such as control self-assessments (CSAs), how to improve the effectiveness of such measures has become an important issue. In addition, many regional financial institutions have been identified as having sufficient room for improvement in basic elements of operational risk management, such as the accurately recognizing risks, establishing systems of checks and balances, organizing internal rules and ensuring their strict compliance, and strengthening internal auditing.

Regarding computer system risk management, governing structures have been generally in place at the major banks and the advanced regional financial institutions. However, for other regional financial institutions, structures to identify and assess risk have not been sufficiently established, and there is also much room for improvement in the area of information security. In addition, for the management of outsourcing companies that undertook development and operational work, there were financial institutions that had problems in progress management for development projects, as well as in gauging and verifying systems operations, back-up systems, and information security management.

(d) Development and implementation of integrated risk management

Against a backdrop of a steady deepening of management understanding about integrated risk management, the major banks and the advanced regional financial institutions have generally established frameworks to monitor capital adequacy. In order to further improve the effectiveness of such frameworks, progress has been made in discussions about the scope of and measures taken in risk measurement and implementation methods for stress-testing. In addition, in terms of applying integrated risk management to realize efficient business operations, banks have devised ways of reflecting individual banks' specific circumstances taking account of the limitations of risk-adjusted profit indicators.

On the other hand, management understanding about the significance of integrated risk management has been inadequate at several regional financial institutions, and there have been many cases in which a framework for monitoring capital adequacy was not been developed, or in which the monitoring carried out was inadequate despite a framework being in place.

(e) Active credit portfolio management

Under a business model that attaches importance to long-term relationships with customers and in which credits and shareholdings are retained, active credit portfolio management (CPM) continues to be in a trial phase.

However, at the major banks, there have been some moves toward full implementation of CPM, such as efforts to formulate an organizational consensus about the value of loan assets, or to consider a review of the lending process based on the idea that credit market information

would be utilized from the stage at which loans are drawn down. In addition, there have been new moves aimed not only at hedging risks, but also at improving returns, such as the reconstruction of loan portfolios by purchasing securitized products or the selling of protection such as credit default swaps.

(f) Ensuring smooth settlement and business continuity

Looking at liquidity management, there was no substantial problem in terms of daily financing. However, there have been several cases in which the liquidity management framework and verification of its effectiveness through training were inadequate for the type of emergency response required in the event of a liquidity crisis.

As for business continuity arrangements, the establishment of business continuity plans that, for example, take account of the outline of responses against major epicentral earthquake determined by the Center Disaster Prevention Council has been steadily progressing at the major banks. However, there is room for improvement in areas such as securing personnel in the event of an emergency, and little progress has been made in terms of responses to a new pandemic. In contrast with the major banks, the regional financial institutions face many challenges since some banks lacked a thorough recognition of the need to establish a business continuity arrangement.

2. On-site Examination Policy for Fiscal 2008

(1) Basic Concepts

On-site examinations verify the risk characteristics and risk management frameworks of individual financial institutions and, where necessary, encourage the making of improvements and enhancements. Through such steps, the Bank aims to contribute to the enhancement of the stability and robustness of the overall financial system. In fiscal 2008 on-site examinations, the following points will be taken into account.

a. Looking at the regulatory environment surrounding financial institutions, a trend that places an emphasis on the self-responsibility of financial institutions and market discipline has been proliferating, as witnessed by the implementation of Basel II and the enforcement of the Financial Instruments and Exchange Law.

b. Japan's financial system, on the whole, has remained stable, and its robustness against various risks has remained relatively high.

c. Against such a backdrop, improving profitability is an important challenge in the management of financial institutions. The major banks have been increasingly engaged in various financial intermediary channels and have been actively extending their overseas business, exploring new profit opportunities and their profit bases. Taking also into account lessons learned from the recent U.S. subprime mortgage problem, the major banks are required to establish risk management frameworks that are consistent with new businesses. While an increasing number of the regional financial institutions have strengthened their financial stability, the differential in terms of profitability and capital strength has been widening, due partly to differences in their business bases. The regional financial institutions are required to promote a business strategy that takes into account the business environment, such as regional characteristics, and develop a risk management framework that supports the business strategy.

Based on the above, the Bank will aim to conduct timely and effective on-site examinations according to risk conditions and their changes by taking into account each financial institution's impact on the financial system and the payment and settlement system as well as strengthening coordination with the off-site monitoring wing. In discussions with financial institutions during on-site examinations, the Bank, taking account of the relevant financial institution's business conditions, will confirm management recognition of the need to take measures aimed at enhanced profitability and its business strategy as well as its risk management policy, and will verify matters and offer advice according to the risk attributes and risk management status of the institution concerned.

Based on the above principles, the Bank has settled on the following points as the examiner's viewpoints of on-site examinations in Fiscal 2008, and will review how it manages on-site examinations.

(2) Examiner's Viewpoints

a. Effective risk management in a changing economic and financial environment

While the financial system on the whole remains stable, there are changes in the circumstances surrounding financial institutions, as witnessed by increasing uncertainty over the economy

both at home and abroad and instability in international financial and capital markets since last year. On-site examinations will verify whether financial institutions have developed frameworks that enable them to take appropriate measures in response to changes in economic and financial circumstances.

Effective credit risk management

Centering on the regional financial institutions and taking into account regional economic conditions, the Bank will again examine whether basic credit management frameworks such as initial screening, continuous monitoring, support for corporate rehabilitation, and off-balancing have been solidly established and function appropriately. In addition, the Bank will confirm whether financial institutions assess credit portfolios as a whole and have developed frameworks to avoid credit concentration on specific borrowers and industries.

Effective market risk management

Amid increased interest rates and market price volatility, the Bank will examine whether financial institutions have been appropriately gauging risk values, have established appropriate management limits relating to risk and loss amounts, and have been operating them appropriately. In addition, the Bank will confirm whether financial institutions have developed frameworks whereby management controls securities investments and the risk management thereof. As for equities, the Bank will investigate whether risk management frameworks consistent with the purpose of equity holdings have been established, and will deepen its discussions on the risk-adjusted profitability of strategic equity holdings.

b. Effective risk management of new businesses

Investments in products with complex risk profiles

From the perspectives of improving investment yields and diversifying the range of products to be invested in, financial institutions' investments in so-called alternative investment products, such as credit products including securitized products and structured products that use derivatives, have been increasing in recent times. Taking into account the complex risk profiles of these products, the Bank will mainly examine the appropriateness of decision-making processes, including risk assessment, at the time of the initial investment, post-investment monitoring, and frameworks for responding in the event of market price fluctuations and declining market liquidity.

Entry into new businesses

In order to increase profitability and diversify sources of profits, many banks, particularly the major banks, have been expanding new businesses such as investment banking services. Given that these types of businesses involve risks that differ from other more traditional commercial banking services, the Bank will examine whether financial institutions have conducted ex-ante risk analyses and developed monitoring frameworks. For example, the Bank will confirm whether financial institutions are (i) appropriately assessing and managing inventory risk (price fluctuation risk and market liquidity risk) in originating securitized products or syndicated loans; (ii) appropriately analyzing future cash flows, including stress scenarios and assessing the validity of the scheme in the cases of M&A financing and real estate financing; and (iii) appropriately managing risks in the case of providing liquidity or credit enhancement.

Risk management supporting financial globalization

Given that financial institutions, particularly the major banks, have been expanding their overseas bases and businesses, and many of those businesses are of a leading-edge nature, the Bank will examine whether risk management frameworks at such overseas bases have been established and function appropriately according to the status of business development. In addition, the Bank will explore headquarters' focus on global risk identification and risk controls and risk management frameworks within financial groups.

As for foreign financial institutions and securities companies, the Bank will mainly examine whether risk management frameworks are appropriately established to suit their businesses in Japan, including headquarters' control and coordination with other overseas bases.

c. Developing and utilizing a risk management framework that supports the entire management process

In financial institution management, establishing new business models and business strategies in order to enhance profitability have become critical challenges. Examiners will confirm the thinking of financial institutions' management on these challenges, check on how various measures that would support management in addressing these challenges have been utilized,

and offer necessary advice.

Development and utilization of integrated risk management

For financial institutions such as the major banks that have already made progress in establishing an integrated risk management framework, the Bank will hold in-depth discussions on the verification of capital adequacy, such as expanding the range of risks to be quantified and the appropriateness of stress scenarios. In addition, the Bank will discuss how to devise practical ways to apply an integrated risk management framework within businesses to realize the efficient use of capital, such as through the pricing of products, managing the profitability of business units and transactions, and evaluating business performance. On the other hand, for financial institutions that are in the process of developing an integrated risk management framework, the Bank will discuss the idea of integrated risk management and the challenges and points to keep in mind in introducing it, as well as the specific procedure for developing the framework.

Integrated risk management frameworks can be devised in various ways, according to a financial institution's business objectives and its operating and risk characteristics. The Bank will seek a thorough exchange of views with management so as to ensure productive discussions.

Development and utilization of the ALM framework

The Bank will examine the ALM framework as a whole. This will include examining whether financial institutions have developed and are utilizing databases, are appropriately conducting profit and risk analyses, and whether a mechanism has been adopted in which these analyses are conducted as flexibly as is necessary to enhance the precision of management decisions. For financial institutions in which ALM is already effectively functioning, the Bank will hold in-depth discussions on more practical measures such as how to set appropriate scenarios, including stress cases. For financial institutions that are in the process of establishing frameworks for ALM, the Bank will hold discussions to confirm whether management is aware of the importance of ALM and encourage the development of basic databases and improvements in analytical methods such as profit simulations and interest rate risk measurements for banking accounts. At the same time, the Bank will discuss how to utilize ALM in important management decisions such as the formulation of business plans, the

introduction of new products, and responses in the event of a rapid change in the financial environment.

Active credit portfolio management

Given that a certain degree of progress is being made at the major banks regarding the full utilization of CPM, the Bank will hold in-depth discussions on the challenges and problems involved in this area, such as improving objective assessments of the economic value of loan assets, reviewing lending processes through introducing a transfer price system, and the fair treatment of undisclosed information. In addition, the Bank will discuss necessary developments in market infrastructure, such as reviews of the legal framework and business practices.

Effective internal controls

In order to achieve business goals while also controlling risks, it is important to appropriately develop and operate a framework of internal controls. During on-site examinations, the Bank will verify whether a framework to identify and evaluate potential risks across the entire operating process is in place, and that necessary information is reported to management. The Bank will also confirm that appropriate steps are taken when risks are detected, such as by preparing internal rules and manuals and establishing systems of checks and balances, and will examine whether the implementation and effectiveness of such responses is checked through the institution's self-inspections or internal auditing.

Effective disclosure

Given the implementation of Basel II and the experience of the turmoil in international financial markets since last year, the Bank will hold in-depth discussions on the importance of disclosure and encourage the development of necessary responses.

d. Ensuring smooth payment and settlement and business continuity

Financial institutions are required to strive for appropriate liquidity management and ensure smooth payment and settlement. From the viewpoint of preventing systemic risk from arising, the Bank will try to detect risks inherent in the payment and settlement system and examine the following principal points.

Liquidity management

The Bank will confirm and examine financial institutions' liquidity risk management, focusing on responses in the event of a liquidity crisis, including the appropriateness and adequacy of assumed risk scenarios and responses under stress situations. In addition, the Bank will investigate financial institutions' frameworks for the control of cross-border liquidity management.

Development of frameworks to cope with risks relating to computer systems

In order to ensure the stable operation of the overall payment and settlement system, the Bank will examine the stability and credibility of computer systems as well as the development of management frameworks for information security. Specifically, the Bank will confirm whether financial institutions have properly identified and assessed risks relating to computer systems, have appropriately managed the development of computer systems and prepared measures to deal with computer problems, and have pursued appropriate access management systems and prepared measures to deal with risks associated with Internet connections. For financial institutions that entrust the development and operation of their computer systems to third parties, the Bank will check the appropriateness of how financial institutions manage such third parties and, where necessary, investigate the third parties to whom such operations are entrusted.

Development of business continuity arrangements

It is important for the managers of financial institutions to recognize the development of business continuity arrangements as a management challenge, and to implement initiatives to pursue such arrangements. For the major banks, whose business continuity plans in the event of a natural disaster such as an earthquake have been progressing, the Bank will, in order to ensure the effectiveness of the plan, examine the consistency of their plans and the securing of managerial resources, in addition to confirming whether such institutions regularly conduct training drills and review their plans based on the results of such drills. In addition, the Bank will hold in-depth discussions with financial institutions on their future challenges such as business continuity plans in the event of a new type of pandemic, and will encourage the development of frameworks to cope with such incidents.

On the other hand, for the regional financial institutions, the Bank will encourage the

development of frameworks in line with each financial institution's situation after confirming that management recognizes the need for and has a strategy for business continuity arrangements.

Based on the viewpoints referred to above, the areas of focus for on-site examinations in Fiscal 2008 by risk category are shown in the Attachment.

(3) Revision of On-site Examination Management

-- Introduction of "risk-based on-site examinations" under strengthened coordination arrangements with the off-site monitoring wing

In recent years, the off-site monitoring wing of the Bank of Japan's Financial Systems and Bank Examination Department has adopted advanced risk assessment methods and improved its analytical capabilities such as those used in analyzing the impact of market developments on financial institution management. Therefore, the off-site wing is now better positioned than ever to properly gauge the financial institution management condition.

As described in (1), the Bank will attach importance to self-responsibility in financial institution management and market discipline, and will enhance its capabilities to gauge financial institutions' capital strength and risk management as a whole by strengthening coordination between the on-site examination and the off-site monitoring.

Based on these factors, the Bank has decided to revise its general principles for the practical implementation of on-site examination, having in the past determined examination frequency according to financial institution categories and conducted regular on-site examinations on all financial institutions that have had a current account with the Bank. From this year onwards, the Bank will introduce "risk-based on-site examinations," which will place an emphasis on responding timely and effectively according to the risk profiles of individual financial institutions.

Under the "risk-based on-site examination" system, frequency, scope and the number of examiners will be prioritized based on a comprehensive assessment from two perspectives--the impact that individual financial institutions' latent risks would have on the financial system were they to become manifest, and the actual management conditions of the

financial institution concerned, such as its capital strength and risks it carries.

Specifically, for the major financial institutions that have a substantial impact on the financial system, on-site examinations will be enhanced in response to rapid changes in the surrounding environment and businesses, the increasingly complex risk characteristics associated with such changes and the evolution of risk management methods, while utilizing off-site information. On the other hand, for financial institutions that have a relatively low level of influence on the financial system and are soundly operated and managed with sufficient room to absorb the risks they carry, the Bank will seek to gain an understanding of their business and risk conditions basically through off-site monitoring, and, based on the information obtained, will conduct on-site examinations in a timely manner. In such cases, the Bank will utilize targeted on-site examinations that are limited in scope to risk areas that warrant special scrutiny.

The abovementioned approach to on-site examinations will contribute to reducing the burden on financial institutions, especially those with stable management. The Bank will continue to give due consideration to easing the burden of on-site examinations on financial institutions and will strive to conduct on-site examinations in an efficient manner.

The Bank will continue to hold in-depth discussions with management of financial institutions on challenges they face, such as establishing new business models and strengthening risk management frameworks, and will seek to explore ways to address such challenges, while further strengthening the coordination between on-site examinations, and the Center for Advanced Financial Technology and the off-site monitoring wing.

Areas of Focus for On-Site Examinations in Fiscal 2008 by Risk Category

1. Credit Risk

Screening and management of individual credits

- Re-examine whether basic credit management frameworks such as initial screening, continuous monitoring, support for corporate rehabilitation, and off-balancing have been thoroughly established and function appropriately.

- Examine whether financial institutions clearly understand the impact of changes in the economic environment on the business conditions of borrowing firms and have established a framework to formulate or revise lending policy and support policy in a flexible manner when necessary.

Management of credit concentration risk

- In the area of credit portfolio management, examine whether financial institutions fully understand whether there is excessive credit concentration in individual names, firm groups, or sectors, including firms that are categorized as “normal” borrowers with respect to their creditworthiness. In addition, examine whether financial institutions carry out predictive management and adopt measures to contain credit concentration in an appropriate manner.

- In cases where there is credit concentration in individual names, firm groups, or sectors, confirm whether financial institutions assume stress phenomena such as simultaneous defaults of large borrowers or substantial changes in risk factors that will adversely affect a specific industry (for example, a plunge in real estate prices for real estate-related businesses), and examine the effects on financial institutions’ profits and capital strengths. In addition, investigate whether institutions are taking specific risk management measures for credit concentration, such as by setting loan ceilings for borrowers or by promoting small loans.

- For financial institutions that extend credit to individual borrowers and projects through multiple channels, such as through corporate bonds and credit derivatives, examine whether they manage their credit risk exposures on an aggregated basis.

Risk management according to type of credit

- For credits extended in anticipation of future cash flows, such as real estate project financing and M&A financing, examine whether financial institutions have appropriately developed and are implementing risk management systems that adequately reflect the risk profiles of such credits.

- In real estate project financing, examine whether (1) future cash flows are appropriately estimated; (2) returns such as cap rates are set after fully taking into account the location and condition of the real estate; (3) the real estate is adequately reviewed to assess potential flaws; and (4) risks associated with the structure are examined.

- In M&A financing, examine whether future cash flows of companies are adequately analyzed inclusive of stress cases, and that the validity of the acquisition scheme is properly examined. Also, at the time of refinancing, confirm whether screening is conducted by incorporating the characteristics of M&A financing, where necessary.

- In cases in which financing takes the form of subordinated exposures, such as mezzanine debt and equity, examine whether financial institutions perform appropriate risk assessments and manage such risks by taking due account of the characteristics of the subordinate exposures.

- Where credit enhancement is provided, examine whether financial institutions fully ascertain the associated risks when enhancement is actually exercised and assess and manage their exposures according to individual borrowers and invested assets.

Management of pools of small loans

- Small loans, such as mortgage loans and uncollateralized business loans to small and medium-sized enterprises, are often managed on a pooled basis. For such loans, examine whether financial institutions have developed a framework to compile data such as borrowers' risk characteristics, examine the state of portfolio monitoring using such data, and examine whether they evaluate risk-adjusted profitability. Examiners will confirm whether the information obtained is utilized to review screening standards. In cases where scoring models are used for screening and managing such loans, examine whether financial institutions are validating the accuracy of and conducting reviews on such models.

Internal credit rating systems and risk quantification

- Examine whether financial institutions have established systems to collect and verify data

that form the basis for internal credit rating systems. Also examine the accuracy of internal credit rating systems by reviewing the differences between estimates and actual records of past defaults.

-- For financial institutions that are in the process of introducing or have just introduced internal credit rating systems, provide advice, taking into account each institution's situation, regarding the development of the overall framework, such as the collection and verification of credit data and the effective use of internal ratings.

● For financial institutions that have already established internal credit rating systems, examine the appropriateness of their measurement of expected losses (EL) and unexpected losses (UL). Also, through risk measurement and scenario analyses, examiners will confirm whether financial institutions have assessed the risk of credit concentration and the effects of the business cycle, will verify whether credit risk across an entire credit portfolio is appropriately controlled, and will also discuss the risk-adjusted profitability.

-- Verify the adequacy of the various risk parameters on which risk measurements are based, by examining (1) actual records of borrower defaults; (2) data related to loss given defaults (LGD) such as records of foreclosures; and (3) whether exposures to borrowers which are part of a corporate group are managed on a group-wide basis.

Active credit portfolio management

● Develop a common understanding on the framework for CPM with financial institutions, taking into account each institution's situation. Also hold in-depth discussions on challenges and problems in fully utilizing CPM, such as reviewing the lending process by improving the objective assessment of the economic value of loan assets and introducing a transfer price system, as well as fair treatment of undisclosed information that increases in importance as loan market transactions become more active. In addition, discuss the potential reviews of the legal framework and business practices, and the enhancement of the market infrastructure.

2. Market Risk

Basic framework for market risk management

● Examine whether financial institutions are fully aware of the importance of preparing for possible fluctuations in interest rates and market prices, and whether they have established and are operating appropriate risk management systems that recognize such market risks.

- Examine whether financial institutions have ensured there are checks and balances among sections and have developed and appropriately monitor methods such as risk ceilings and loss limits. Verify that measures to be taken in the event of any violation of risk ceilings or loss limits have been appropriately discussed with management.
- For securities held to maturity, confirm whether the risks attached to such securities, such as their effect on future profits, have been properly recognized, and that a mechanism is in place that ensures appropriate measures will be taken in the event that such risks are manifested.

Asset and Liability Management

- Examine ALM as a whole. This will include examining whether financial institutions have developed databases, appropriately conduct profit and risk analyses, and whether a mechanism allowing such analyses to be conducted as flexibly as necessary has been implemented to enhance the precision of management decisions.

- For financial institutions in which ALM is already effectively functioning, hold in-depth discussions on more practical measures, such as how to set future scenarios including stress events and how to incorporate prepayment risk for residential mortgages.
- For financial institutions that are in the process of establishing ALM frameworks, hold discussions to confirm management's approach to ALM and encourage the development of basic databases and improvements in analytical methods such as profit simulations and interest rate risk measurements for bank accounts. At the same time, also discuss how to utilize ALM in formulating and reviewing management plans, in responding to rapid changes in the financial environment, and in important management decisions such as the introduction of new products or new investments.

Alternative investments

- For financial institutions that invest in alternative investment products, such as securitized products and other credit products, as well as various funds and structured products, examine whether management and staff have a sound understanding of the features and risks involved. Assess whether investment decisions are made after confirming that the risks involved are not excessive compared with the capital strength and profitability of the institution concerned. Also examine whether financial institutions have appropriately developed and are operating systems for the continuous monitoring of investments.

- Confirm that financial institutions verify risks associated with the schemes of the products they invest in, are fully aware of the likely price fluctuations in these investments arising from various changes in market conditions, and fully recognize the effects of such price fluctuations on their profitability and capital adequacy. Also confirm that external ratings are used appropriately. In addition, examine whether financial institutions have formulated measures and rules regarding procedures to be taken when unrealized losses in such investments increase, whether they are fully aware of the risks associated with the sale and termination of such investments, including market liquidity and the period required to encash such investments, and have taken necessary measures.
- In the case of investments in securitized products, confirm that financial institutions assess the structures of such products, including the adequacy of credit enhancement, and the portfolio of underlying assets at the time of investment, and whether financial institutions are fully aware of the risks of price fluctuations and market liquidity and properly manage such risks. Also check whether financial institutions are properly monitoring price developments in underlying assets and products.
- In the case of fund investments, confirm that financial institutions are fully aware of the risk of entrusting funds to a third party and are managing risks by evaluating qualitative aspects such as fund managers' performance and their compliance with investment policies.

Equity investments

- Examine whether price fluctuation risks associated with equity investments are appropriately quantified and managed according to the purpose of such equity holdings (i.e., equity holdings for investment purposes or strategic equity holdings with the aim of developing long-term business relationships), while also taking into account past experiences of the time needed for the liquidation of positions. In addition, hold in-depth discussions with financial institutions on the evaluation of the profitability of strategic equity holdings.

Origination of securitized products

- For financial institutions that originate securitized products, investigate whether they are sufficiently aware that securitized products and underlying assets are exposed to risks of price fluctuations and market liquidity, and, having recognized such risks, properly manage the risks. For example, whether financial institutions strive to appropriately gauge and manage risk levels through measures including stress-testing, and through the proper monitoring of market prices

and market developments, have prepared mechanisms enabling them to respond in a flexible manner if the need arises. Also, confirm whether risks inherent in the securitization scheme, such as legal risk, are identified and properly managed.

3. Payment and Settlement and Liquidity Risks

- With a view to preventing the manifestation of systemic risk, continue to examine whether financial institutions adequately recognize payment and settlement and liquidity risks in their operations, and have developed and are operating risk management systems adapted to the changes in financial markets.

- Examine financial institutions' payment and settlement and liquidity risk management systems for both yen and foreign currencies. In particular, verify frameworks for cross-border liquidity management. Also examine the effectiveness of financial institutions' contingency plans in the event of funding difficulties, based on actual training drills.

- In cases where financial institutions provide commitment lines or liquidity enhancement for ABCP programs, confirm whether liquidity management arrangements are in place and that the operating process is checked on the assumption that liquidity might actually be drawn down.

4. Operational Risk

Basic framework for operational risk management

- Examine (1) whether financial institutions have established management systems which allow them to identify potential major risks in their operating procedures and computer systems; (2) whether they have established an appropriate operational risk management framework; and (3) whether their operations actually comply with the framework.

- In particular, where financial institutions enter new businesses or review business procedures, examiners will verify whether they identify the associated risks and have taken appropriate measures.

Risk relating to computer systems

- In order to ensure the stable operation of the overall payment and settlement system, examine (1) whether financial institutions have developed and are operating computer systems appropriately, especially those linked with large-scale payment and settlement systems such as BOJ-NET; (2) whether they have established and are properly utilizing a risk management framework that ensures the smooth development and operation of computer systems. In addition, given the increasing use of open systems and the development of networks, (3) examine whether financial institutions are properly managing risks posed by new technology, including those relating to information security, and are developing and operating systems compatible with these new risks.

- For projects aimed at computer system integration and joint system development by multiple financial institutions, examine whether appropriate project management arrangements are in place.

- In examining financial institutions whose major computer systems are being developed and operated by third parties (including joint operation centers), check the appropriateness of how financial institutions are managing such third parties and, if needed, investigate the third parties to which operations are entrusted.

Business continuity arrangements

- With the aim of enhancing the overall business continuity capability of the financial system, examine whether each financial institution has established the necessary business continuity arrangements, taking into account the impact a disruption of its operations would have on the financial system.

- Examine business continuity plans from the following perspectives: (1) whether risks that may cause operational disruptions have been identified; (2) whether crucial business operations that should be given priority in terms of business continuity have been specified and an expected timetable for recovery has been drawn up; and (3) whether financial institutions' coordination arrangements with relevant internal and external counterparties have been established, and verify the effectiveness of the business continuity plan as a whole. Also, confirm whether financial institutions continue to work on how to ensure managerial resources such as personnel, regularly conduct training drills, and review the plans based on the results of such drills.

- With respect to financial institutions with advanced business continuity arrangements and the disruption of whose business would have a large impact on the overall payment and settlement system, hold in-depth discussions on the further enhancement of the infrastructure necessary to strengthen their business continuity arrangements. In addition, hold in-depth discussions with financial institutions on business continuity plans in the event of a terrorist attack or a new type of pandemic.
- For financial institutions that are in the process of developing business continuity arrangements, such as the regional financial institutions, check their development plans, review actual progress, and encourage the development of an overall framework, depending on the specific situation of the individual institution.

Compliance

- With respect to compliance, investigate whether necessary mechanisms such as organizations, internal rules and monitoring schemes have been developed and operate appropriately. In particular, when dealing with new businesses such as investment banking services, confirm whether necessary measures are taken to deal with conflicts of interest and other issues.

- In addition, confirm whether necessary compliance mechanisms are established for over-the-counter sales of mutual funds and insurance.

Quantification of operational risks

- Hold in-depth discussions with financial institutions that are making efforts to quantify operational risks in order to further advance their operational risk management plans. Discussions will cover areas such as improving data collection, risk quantification methods, and their application to risk management.

5. Overall Management Controls and Risk Management

Capital strength and profit management

- Confirm whether financial institutions examine how potential future changes in the economic environment—growth rates and interest rates—could affect their profits and capital strength, after taking into account their own profit structures, business strategies, and management measures. In addition, confirm whether the results of such examinations are

reflected in managerial decision-making, such as changes in business strategies or the development of necessary risk management frameworks.

- For example, when financial institutions offer preferential interest rates or promote long-term fixed rates in order to increase residential mortgage lending, examiners will investigate whether such institutions examine the resulting changes in assets and liabilities, the effect on profits when interest rates change, and profitability inclusive of general and administrative expenses and credit costs, to confirm the validity of such measures.

Integrated risk management

- For financial institutions that have already established integrated risk management frameworks, hold in-depth discussions, taking into account management plans to develop and use integrated risk management, on the verification of risk quantification and capital adequacy, including the appropriateness of stress scenarios. Also, discuss how to apply integrated risk management frameworks to businesses in practice, such as when pricing products, reviewing the profitability of business units and trading partners, and evaluating business performance.
- For financial institutions that are in the process of developing integrated risk management frameworks, discuss with management and staff the approach to integrated risk management and challenges and points to keep in mind in introducing it, as well as the procedure for developing the framework.

Internal controls

- Verify whether internal control frameworks have been put in place and are functioning effectively.
 - For example, verify whether frameworks to identify and evaluate the potential risks of entire operating processes such as CSA are in place and that the necessary information is reported to management, confirm that appropriate responses are made when risks are detected, such as by preparing internal rules and manuals and establishing systems of checks and balances, and examine whether the implementation and effectiveness of such responses is checked through the institution's own inspections or internal auditing.

Disclosure

- From the perspective of enhancing market credibility, deepen discussions about the disclosure of management information and encourage the disclosure of information where necessary.

Reference

The Bank of Japan released research papers on the BOJ's web site for the purpose of contributing to the risk management of financial institutions.

(<http://www.boj.or.jp/en/theme/finsys/center/index.htm>)

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“Securitized-Product Investment: Risk Management Perspectives”, (forthcoming)

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