

## Approach to Risk Management

Changes in the economic and financial environments have had a major impact on financial institutions in recent years. Under these circumstances, as their operations have grown more diverse and complex, financial institutions have been obliged to develop effective risk management systems and enhance the sophistication of their capabilities for dealing with various types of risk to sustain the reliability and soundness of their business activities.

Discreetly aware of these developments, the Norinchukin Bank has established its Basic Policy for Risk Management, with the aim of further enhancing its risk management capabilities. This policy specifies the types of risks to be addressed as well as the appropriate management structures and mechanisms for risk management. Based on this policy, the Bank divides risks that must be managed into two broad categories, namely “risks that are taken actively to generate profits” (i.e., credit risk, market risk and liquidity risk) and “operational risks.” The Bank has prepared guidelines for managing each type of risk and is working toward the integrated management of risk on a Bank-wide basis.

To conduct risk management activities properly, the Bank has created systems for implementing these activities and clarified responsibilities for risk management, based on a full understanding of their importance. This system includes internal sections for decision making and organizational units that take charge of managing various forms of risk.

Also, in parallel with these comprehensive risk management activities, the Bank implements the regulatory capital management according to stipulated legal conditions to maintain the soundness of its activities as required under the provisions of the Norinchukin Bank Law.

## Comprehensive Risk Management

In general, the Bank must deal with two types of risks. This first type includes market risk and credit risk, which are taken actively to generate profits, and the second is operational risk that arises passively in the course of carrying out operations. These various kinds of risk must be managed according to their specific characteristics. The Bank has structured its portfolio based on the concept of globally diversified investments and accordingly holds a diverse range of assets. The Bank considers the comprehensive management of the different types of risks inherent in this portfolio and the management of its assets to take risks appropriate to its capacity as one of its most important management issues and an essential factor in maintaining financial stability.

With this understanding, the Bank quantifies its exposure to various risks and constrains the aggregate risk volume to within its equity capital. To implement this approach, the Bank has adopted the concept of economic capital management and allocates risk capital to individual units engaging in risk-taking activities.

Under the concept of economic capital management, risk is categorized into three types—market risk, credit risk and operational risk. To implement the concept of globally diversified investments to the maximum extent possible, capital is allocated to and managed by the market-oriented divisions without regard for the type of assets or division in charge in accordance with the methods appropriate to the Bank’s business model. The Bank’s Board of Directors meets every six months to make decisions regarding the allocation of risk capital to the Market divisions, the Corporate Business divisions

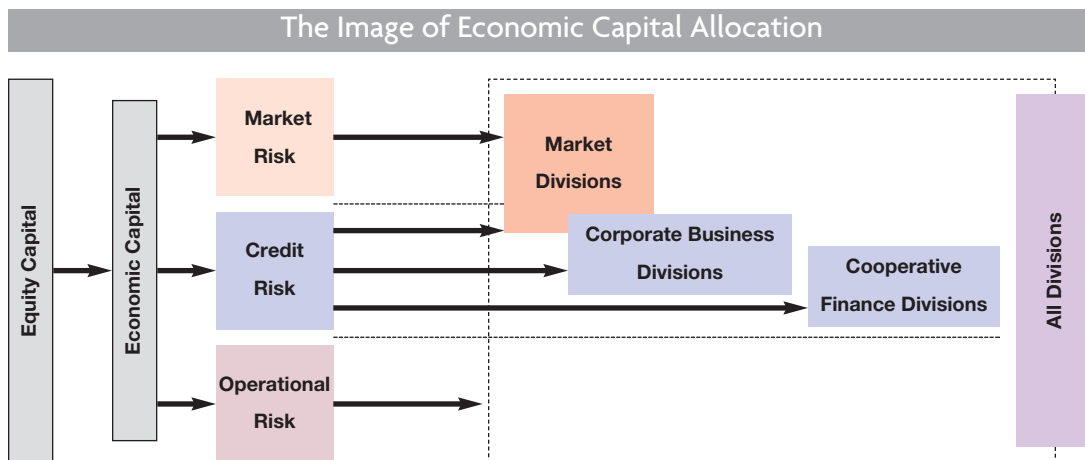
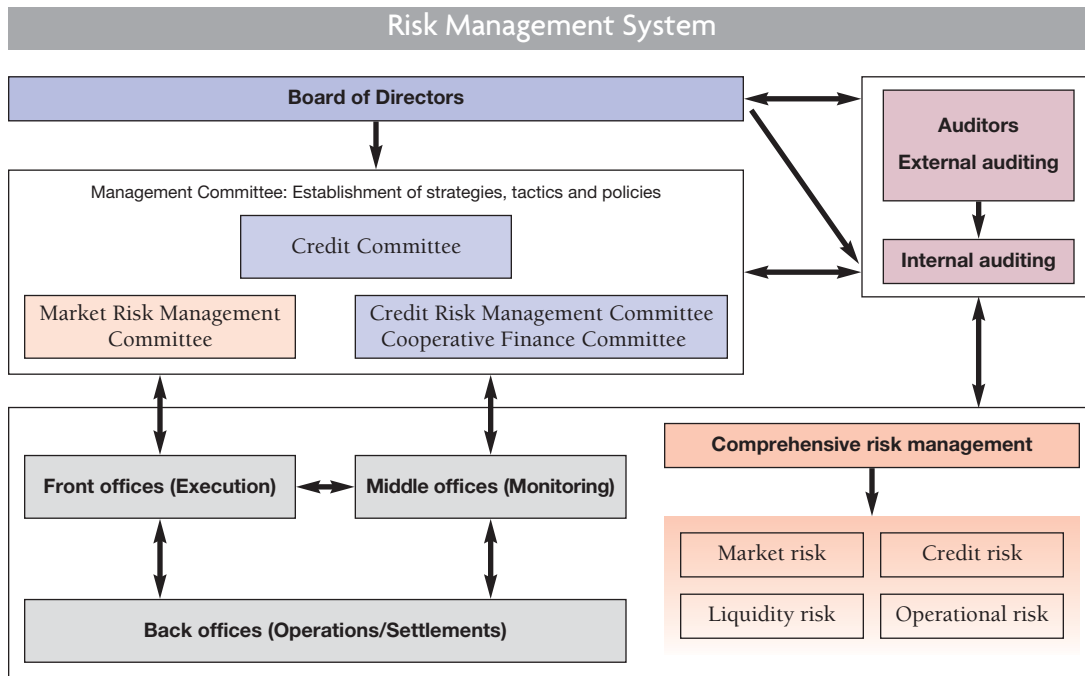
# Risk Management

and the Cooperative Finance divisions as well as policies for the application of funds. In the interim, the middle office measures and monitors risk levels and makes periodic reports to management.

Through efforts such as these, progressive improvements will be made hereafter towards developing fully integrated risk management systems.

## Credit Risk Management

For the Bank, transactions involving credit risk are one of the most important and strategic sources of earnings. In addition to assessments of the risks inherent in individual loans and other assets, the Bank conducts comprehensive risk management from the perspective of its overall credit risk portfolio. In this way, the Bank works to generate earnings commensurate with the level of credit risk it takes. Also, as a financial institution based on agricultural, forestry and fishery cooperatives, the Bank





aims to promote the development of these industries through “cooperative lending” while carrying out risk management appropriate to a private financial institution.

### ***Credit Risk Management System***

The Bank’s credit risk management system comprises three committees consisting of members of top management.

The Cooperative Finance Committee has the mission of assisting the Bank in fulfilling its mission of providing effective and efficient funding for cooperative members. To this end, it considers basic policies and strategies for cooperative lending and makes decisions on policies in response to important individual items and proposals for large financial commitments.

The Credit Risk Management Committee deliberates on specific strategies related to transactions involving credit risk other than those connected with cooperative lending. Its responsibilities also cover making decisions on policies related to important individual and major commitments of the Bank’s resources.

The Credit Committee conducts deliberations regarding the system and framework for credit risk management. The specific policies and other matters discussed and decided by the Cooperative Finance Committee and the Credit Risk Management Committee, as well as the Market Risk Management Committee—which is discussed later in this report—must be consistent with the basic framework set by the Credit Committee. The basic framework includes credit ceilings by country and individual company, the internal rating system and self-assessments. The Credit Committee is also responsible for deliberating basic directions for strengthening risk management, within this basic framework and in line with the concept of comprehensive risk management.

Monitoring of the credit risk portfolio is conducted by the Risk Monitoring Division, which is a middle office, independent of the front offices.

### ***Credit Analysis System***

While continually strengthening its credit analysis capabilities, the Bank conducts expert checks on the standing of borrowers, taking due account of their characteristics as cooperatives, private corporations, public entities, or non-residents. To conduct credit analysis on private corporations and public corporations, the Bank has established the Credit Risk Management Division, which is separate from the Corporate Business Management & Strategy Division, to prepare credit analyses by industry, drawing fully on the expertise the Bank has historically acquired. To achieve greater accuracy in assessments, each senior credit analyst in charge of a certain industry assesses each client and business through comparisons with competitors in the same business, making active use of industry research capabilities.

For credits extended to non-resident borrowers, the Bank adopts a country ceiling system that takes into account risks that differ from those of domestic loans, such as political and social conditions of the borrower’s country of origin. In addition to business-related credit analysis, the Bank appoints senior credit analysts specializing in various regions to evaluate loan applications and thereby carry out optimal risk management.

In addition, in view of the rapid expansion in recent years in markets for securitized and other asset-based investment products, including those linked to accounts receivable, real estate and other assets, in addition to credit risk analysis of individual borrowers, the Bank has created a specialized section in charge of analysis of investment product structures. This section focuses on obtaining a proper understanding of the risks associated with such products while conducting ongoing monitoring and reviews of these investment products.

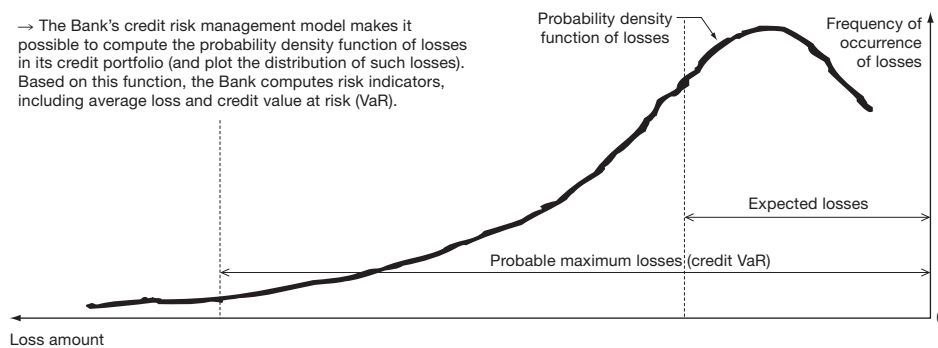
Under this credit analysis system, the Bank conducts sophisticated credit risk management based on strict screening standards and on its own methods for analyses of financial position and cash flow, as well as follow-up monitoring.

In addition to continuing to strengthen the previously mentioned analysis methods, the Bank has introduced management methods that aim to create an appropriate asset mix from a comprehensive portfolio perspective. To this end, the Bank sets credit limits based on internal ratings and monitors the ceilings on individual companies to control risk volume. Along with this, the Bank sets interest rates based on internal credit ratings and the security of principal to secure a return appropriate to the assumed risk.

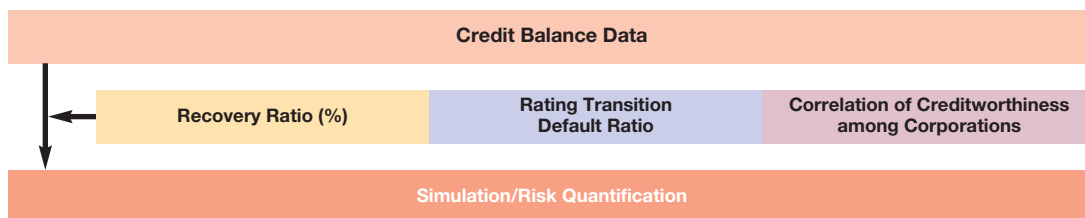
**Quantifying Credit Risk**

Through the above various ceiling systems and credit analysis for each transaction, credit risk is managed to prevent overconcentration in a specific industry, company or product to enable balanced portfolio management. At the same time, the Bank measures risk volumes using statistical methods as described below.

**Basic Outline of the Bank's Credit Risk Management Model**



**Quantifying Credit Risk**





### ***Credit Risk Measurement Methods***

Credit risk encompasses economic losses that may be incurred due to the decline of market prices for corporate bonds and losses in connection with the inability of borrowers to meet their interest and loan repayments as scheduled owing to deterioration in their corporate condition or other circumstances. The Bank works to measure the volumes of such credit risks.

Credit risk is measured for loans, guarantees, foreign exchange and securities, such as corporate bonds, as well as for swaps and other off-balance transactions. Measurement of risk volumes are conducted according to types of transactions partners, including domestic and overseas corporations and financial institutions.

Based on estimates of the total credit extended, the Bank uses information related to credit risk—such as rating transition ratios that measure the probability of rating changes and are computed based on background history and future business prospects, default ratios by rating, recovery ratios in the event of default and correlations among the creditworthiness of corporations and other entities to conduct tens of thousands of simulated scenarios, under various assumptions regarding defaults and rating changes for its customers and their products—to determine the distribution of potential losses.

For the estimated potential losses, the Bank calculates two risk volumes: the “expected loss” that corresponds to the loss that can be expected on average over the next year and the “probable maximum loss,” which is defined as losses that can be expected under the worst case scenario. This enables the Bank to check expected profitability against risk and determine the risk capital to be allocated for each business category.

### **Market Risk Management**

The Bank has positioned its market transactions as an important source of income as well as a means to hedge risk. Market risks, including interest rate and price fluctuation risks, are properly controlled using comprehensive risk management systems to generate profits and stabilize financial positions.

To ensure the implementation of these management strategies regarding market risk, the Bank has created a mutual checking system where decision making, execution and monitoring functions are systematically separated and organized into independent units. This approach has been adopted to implement optimal risk management.

Going forward, the Bank aims to further enhance its technical capabilities, including personnel, systems and the quantitative analysis of risk volumes, to further enhance the sophistication of its risk management systems.

### ***Banking Operations (ALM)***

The appropriate management of market risks in banking operations is indispensable for the stable management of financial institutions.

The Bank introduced risk management methods at an early stage into its asset-liability management (ALM) that places emphasis on a balance of maintaining financial soundness and strengthening profitability. The Bank’s ALM system analyzes both static and dynamic interest rate sensitivities of cash flow and asset prices. Based on analyses from various perspectives, the Bank works to create a flexible financial position that will enable prompt responses to changes in financial conditions.

***Market Portfolio Management***

Within its banking operations, the Bank places special emphasis on analyzing and managing its portfolios of market instruments, including its marketable securities, in view of their importance. The framework for managing portfolio risk is described below.

**Decision Making**

Important decisions on market transactions are made at the managerial level. The Market Risk Management Committee—which is composed of members of management, as well as the general managers of related divisions—considers, discusses and makes final decisions concerning specific policies related to market transactions.

When decisions are considered, in addition to examining the investment environment, including market trends and the economic outlook, the Market Risk Management Committee makes appropriate judgments giving due consideration to ALM and the Bank's securities portfolio. The Committee meets, in principle, once per month but, in practice, meetings are convened almost weekly. In addition, meetings are held on an ad-hoc basis when necessary to enable flexible responses to market trends and other such factors. Moreover, to facilitate the close exchange of day-to-day information related to market movements, management and the general managers of related divisions hold weekly meetings to share information and to be informed and ready to make swift and appropriate decisions.

**Execution**

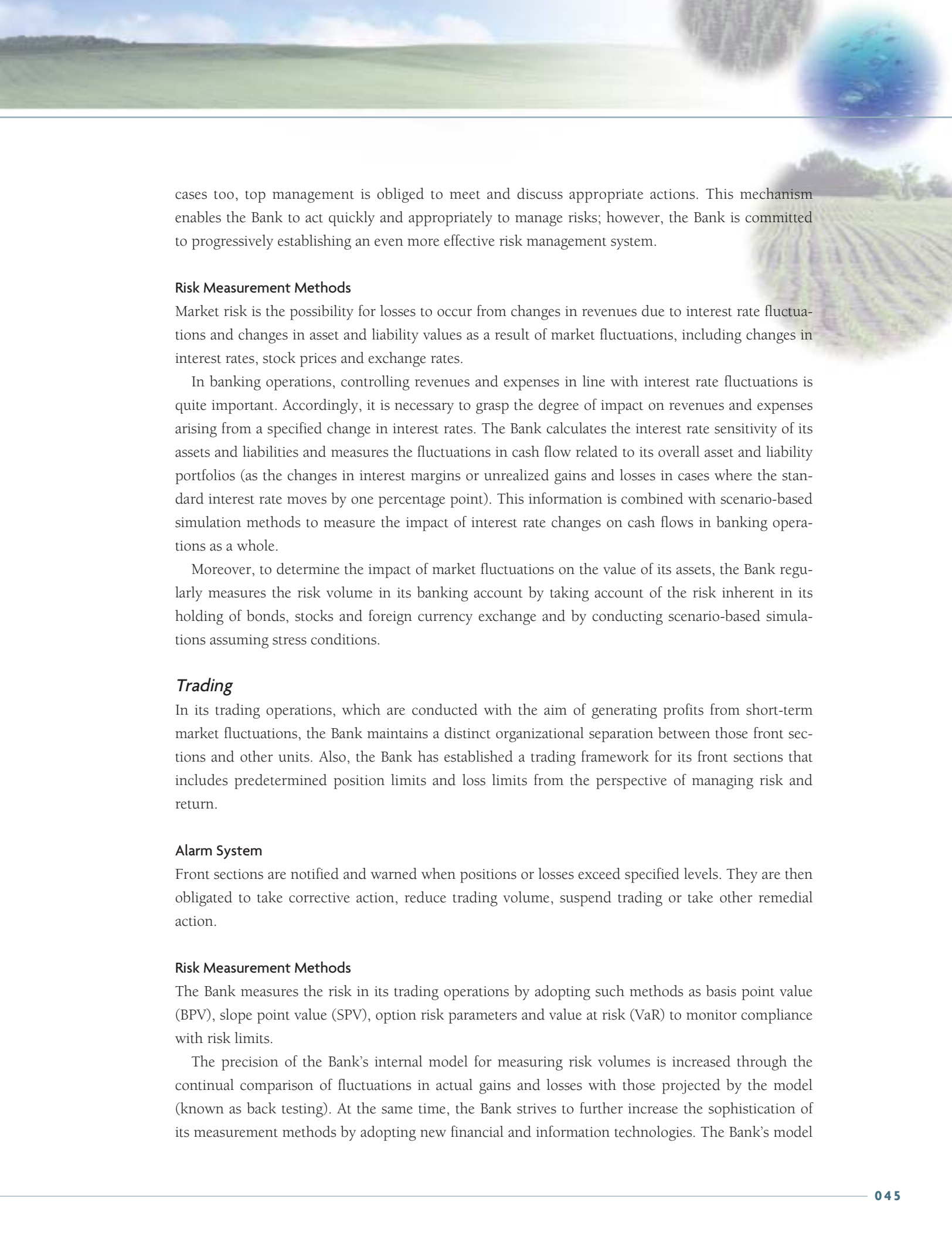
The departments in charge of portfolio management give orders for buying and selling securities as well as hedging risks based on policies set by the Market Risk Management Committee. Their orders for transactions are executed efficiently by the front sections, which also constantly monitor market trends and offer proposals for new investment strategies as well as other suggestions.

**Monitoring**

The monitoring functions include checking on whether the front sections are appropriately executing transactions based on the policies set by the Market Risk Management Committee and measuring risk volumes in the Bank's operations. These functions are performed by the Risk Monitoring Division, and the results of the monitoring are generally reported on a daily basis and, depending on the content, are also reported periodically to management. The reports on the activities of the Risk Monitoring Division are used by the Market Risk Management Committee as the basis for confirming the risk condition of the Bank's market portfolio and for exploring specific policies for the future.

**Alarm System**

The Bank has adopted an alarm system, called the "Checkpoint System," as a tool for risk management. This system requires the Market Risk Management Committee, which includes top management as previously mentioned, to discuss appropriate courses of action when the risk volume in the Bank's overall market portfolio reaches a certain level stipulated in the Bank's tolerance limits. An alarm is also activated when short-term changes in market indicators exceed a certain level. In such



cases too, top management is obliged to meet and discuss appropriate actions. This mechanism enables the Bank to act quickly and appropriately to manage risks; however, the Bank is committed to progressively establishing an even more effective risk management system.

### **Risk Measurement Methods**

Market risk is the possibility for losses to occur from changes in revenues due to interest rate fluctuations and changes in asset and liability values as a result of market fluctuations, including changes in interest rates, stock prices and exchange rates.

In banking operations, controlling revenues and expenses in line with interest rate fluctuations is quite important. Accordingly, it is necessary to grasp the degree of impact on revenues and expenses arising from a specified change in interest rates. The Bank calculates the interest rate sensitivity of its assets and liabilities and measures the fluctuations in cash flow related to its overall asset and liability portfolios (as the changes in interest margins or unrealized gains and losses in cases where the standard interest rate moves by one percentage point). This information is combined with scenario-based simulation methods to measure the impact of interest rate changes on cash flows in banking operations as a whole.

Moreover, to determine the impact of market fluctuations on the value of its assets, the Bank regularly measures the risk volume in its banking account by taking account of the risk inherent in its holding of bonds, stocks and foreign currency exchange and by conducting scenario-based simulations assuming stress conditions.

### ***Trading***

In its trading operations, which are conducted with the aim of generating profits from short-term market fluctuations, the Bank maintains a distinct organizational separation between those front sections and other units. Also, the Bank has established a trading framework for its front sections that includes predetermined position limits and loss limits from the perspective of managing risk and return.

### **Alarm System**

Front sections are notified and warned when positions or losses exceed specified levels. They are then obliged to take corrective action, reduce trading volume, suspend trading or take other remedial action.

### **Risk Measurement Methods**

The Bank measures the risk in its trading operations by adopting such methods as basis point value (BPV), slope point value (SPV), option risk parameters and value at risk (VaR) to monitor compliance with risk limits.

The precision of the Bank's internal model for measuring risk volumes is increased through the continual comparison of fluctuations in actual gains and losses with those projected by the model (known as back testing). At the same time, the Bank strives to further increase the sophistication of its measurement methods by adopting new financial and information technologies. The Bank's model

for measuring risk volume was developed internally, and it is used for calculating the required capital volume. The model has been certified by objective quantitative and qualitative audits conducted by an external audit corporation.

### Glossary of Terms

- **BPV (basis point value)**

BPV indicates the change in the value of a current position given a 0.01% change in interest rates. The Bank uses total delta as the indicator of the impact assuming a parallel shift in the yield curve.

- **SPV (slope point value)**

SPV is an indicator of the impact assuming a non-parallel shift in the yield curve. Because each yield curve grid is a compilation of absolute value for BPV, SPV indicates the changes in value of the Bank's positions when the interest rate moves against the Bank's positions by 0.01% in each grid.

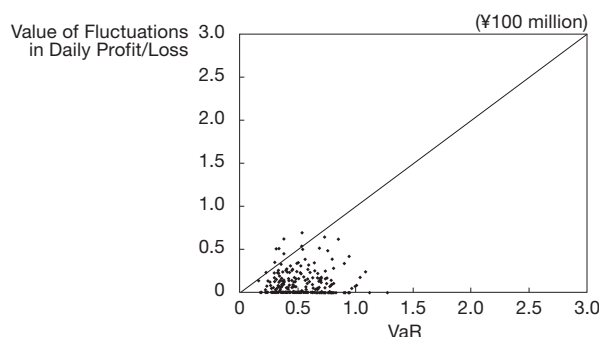
- **Option Risk Parameters**

Option risks occur, for example, when the volume and value of bond and other options change because of fluctuations in base interest rates or other indicators and owing to market volatility. The Bank uses delta (the ratio of changes in the level of indicators versus changes in the prices of such options), gamma (the ratio of changes in the level of indicators versus changes in the volume of option positions) and vega (changes in volatility versus changes in option prices) to evaluate the degree of correlation and sensitivity between the value of options and market indicators.

- **VaR (value at risk)**

VaR is the maximum possible loss over a specified holding period and for a specified confidence interval. The Bank calculates VaR using a variance-covariance matrix with two distinct holding periods (one day and 10 business days) and a 99% confidence interval (standard deviation of 2.33).

### Results of Back Testing (Trading Divisions, Interest Rate VaR (1 day))



From April 1, 2005, to March 31, 2006 (consisting of 246 business days), the negative value of fluctuations in daily profit and loss exceeded VaR (for a one-day holding period) eight times. Of this total, it was determined that special market conditions accounted for this result on four occasions and were not due to excesses resulting from the use of the model. The model is, therefore, deemed to have been proven valid within the specified probability range (one-tailed confidence interval of 99%).

#### Trends in Interest Rate Risk (for a one-day holding period) in the Trading Divisions

	VaR (¥100 million)
June 30, 2005	0.7
September 30, 2005	0.5
December 30, 2005	0.2
March 31, 2006	0.4





## Liquidity Risk Management

The Bank manages liquidity risk as stipulated in its Policy and Procedures for Liquidity Risk Management using the following definitions: (1) Market liquidity risk—the risk that rapid changes in the market environment may prevent taking positions or liquidating positions quickly and at appropriate prices—and (2) cash flow risk—the risk of disrupting the settlement of transactions due to a reduced volume of liquidity or incurring losses as a result of having no alternative but to procure funds at interest rates much higher than normal.

The Bank regards market liquidity risk as a major factor in making its investment decisions and, after investigating the liquidity (marketability) of each investment product, takes market liquidity risk fully into account when formulating specific investment strategies.

Since adequate cash flow management is essential for ongoing operations and portfolio management, the Bank manages cash flow risk on a daily basis for each currency, product and office from the perspectives of both funds management and procurement. Based on daily and monthly cash flow planning, the Bank works to maintain a stable level of liquidity while taking into account market movements.

## Operational Risk Management

The Bank defines operational risk to include all types of risk that arise in the course of business activities, after the exclusion of market risk, credit risk and liquidity risk, which are incurred when proactively seeking to generate profits. The Bank manages operational risk according to its Policy and Procedures for Operational Risk Management.

In managing operational risk, the Bank prioritizes operations, systems, legal and other forms of operational risk that occur passively in the course of conducting business to make it possible to allocate limited management resources rationally. The basic objective of operational risk management is to limit the possibilities of risks that are not incurred to make a profit and minimize the expected losses from such risks.

Operational risk management is divided into two areas: (1) management of risks where occurrence itself can be controlled, as in the cases of operations, legal and systems risk and (2) management of risks that must be controlled and contained after their occurrence, such as risk of the continuation of operations and certain other types of risks. Each of these types of risk is managed separately, depending on their special characteristics and the effectiveness of control measures, to secure appropriate risk management from an overall perspective.

In conducting such risk management activities, the Bank adopted the following approach:

- (1) Identification: Divisions in charge of risk management shall specifically identify the area of existing risks within the Bank's organization and the degree of such risks.
- (2) Analysis and evaluation: The diverse risks identified are then classified according to set criteria, and, after analysis of the characteristics of such risks and how they may arise, they are evaluated after establishing sets of assumptions. Evaluations include the measurement of the volume of these types of risk.

- (3) Risk control and/or mitigation: Following the analysis of risks mentioned previously, the relevant divisions consider such issues as whether the risk can be tolerated, and whether it should be controlled below a certain level, should be transferred or should be averted. Based on these considerations, appropriate control or mitigation measures on established objectives are implemented.
- (4) Monitoring: Monitoring is conducted to check whether objectives and policies are being appropriately implemented, and whether risk is being managed thoroughly.
- (5) Reporting: Reports are presented periodically on the current state of management of the various forms of operational risk. As necessary, the frameworks and procedures for operational risk management are reviewed and revised.
- (6) Internal review: The processes for management of operational risk are reviewed internally by an independent department.

### ***Operations Risk Management***

The Bank defines operations risk as the risk of losses arising when the activities of management and staff in the course of conducting operations are inappropriate. Specifically, operations risk may occur when there is a failure to process clerical matters according to established procedures, when losses are incurred because of accidents or unethical behavior, and when proper processing of operations matters cannot be carried out because procedural regulations are insufficient or there are faults in the prescribed operating processes themselves. The Bank manages operations risk according to its Policy and Procedures for Operations Risk Management.

Specific risk management activities include upgrading operations procedures, investigating the frequency of occurrence of accidents and clerical mistakes and adopting policies for preventing recurrences. Other activities to reduce operations risk include implementation of self-examinations, autonomous checks and risk assessments as well as conducting damage-control exercises. Through these activities as well as appropriate responses when there are changes in the operating environment that have an impact on processing operations, such as the changes in the Depositor Protection Law or implementation of final integration with the Shinnoren, the Bank aims at perfection of operations risk management.



### ***Legal Risk Management***

The Bank defines legal risk as the risk of adverse transactions or damage to the Bank from illegal or inappropriate contracts concluded in the execution of management decisions or individual operations. The Bank manages legal risk as prescribed in its Policy and Procedures for Legal Risk Management.

As the Bank continues to provide conventional financial services and works toward the realignment of the cooperative credit system, offers new financial services and engages actively in investment activities, legal risk management has been positioned as a key management issue in all of its offices. Efforts are under way to continue to upgrade legal risk management procedures.

Specific activities include the creation of a database of all laws and regulations governing the Bank's business activities by division and type of operation. The Bank works to update the database to take account of enactment, revision and repeal of legislation and reflect these changes in its operations quickly and accurately. Moreover, to minimize legal risk, the Bank's legal divisions offer their full support to departments and offices of the Bank in conducting legal checks of individual deals as well as in preparing and reviewing contracts.

### ***Systems Risk Management***

The scope of systems risk management has gone beyond its original mission of assuring the stable provision of financial services as an integral part of the social infrastructure to include responding to more sophisticated requirements for security, such as the protection of personal information and development of countermeasures for counterfeit and stolen cash cards. Moreover, more stringent internal control systems have become necessary under new regulations issued by the Bank for International Settlements (the new BIS regulations) for managing operational risk and under such legal provisions as the U.S. Sarbanes-Oxley Act.

In view of these changing requirements of society, the Bank is continuing to review its risk management systems and practices and, along with its Policy and Procedures for Systems Risk Management, is working to upgrade its various other internal policies and procedures, with the aim of substantially strengthening its internal control systems.

In addition, the Bank conducts comprehensive assessments of all of its main IT systems based on safety criteria established by the Center for Financial Industry Information Systems (FISC) and, following the preparation of its Systems Risk Management Plan, which aims at the enhancement of its IT systems, is continuing to work toward further improvements.

## Importance of Information Security

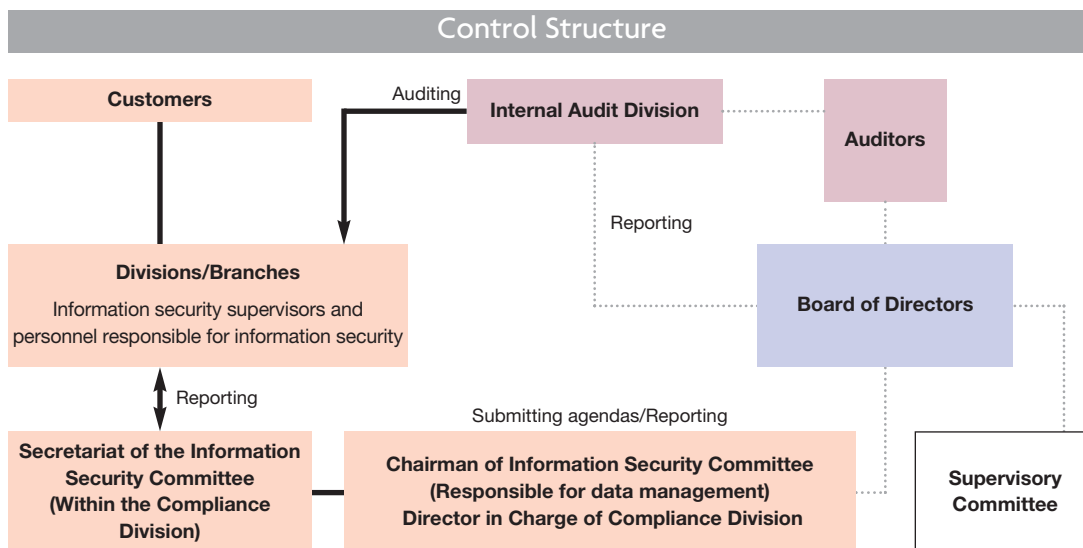
Along with the growing diversity of the activities of financial institutions, deregulation and rapid development of information technology, the appropriate storage, management and use of information assets (including both information and information systems) have become extremely important management issues.

In processing transactions for its customers, the Bank is in the position of being the recipient of information. It also possesses many kinds of its own information, including confidential data that is strategic from a managerial perspective, and uses this data in conducting its operations. On the other hand, the trend toward open information has proceeded, and exchanging data with individuals has become a daily matter. As a result of these and other developments, the environment for information processing and its objectives have become quite diverse. Accordingly, organized and systematic information security initiatives have become more important than in the past.

## Control Structure

The Bank's Information Security Committee (chaired by the Director in charge of the Compliance Division), located in the Head Office, is the central body for overseeing the control structure for its information security. At the operational level, information security is handled by information security supervisors (division/branch general managers serving concurrently as data managers) or the personnel responsible for information security (designated by the division/branch general manager) stationed in all divisions, branches and offices.

The Information Security Committee deliberates policies aimed at maintaining and improving the Bank's information security control, with critical items decided by the Board of Directors.





## Personal Data Protection

Japan's Personal Data Protection Law came into full effect in April 2005, and the Bank, as an institution responsible for processing personal information, created a new framework to facilitate the proper handling of personal information. Educational and training programs for employees were also instituted to ensure the effective and efficient operation of the framework.

In addition, the Bank has enhanced its capabilities for responding to inquiries and complaints related to the handling of personal information and has conducted appropriate reviews and made improvements in its measures to ensure the proper handling and secure management of personal information.

Moreover, the Bank cooperates with the Central Union of Agricultural Cooperatives (Zenchu), the National Federation of Fishery Cooperative Associations and other organizations that provide guidance to cooperative organizations to further improve systems for the protection of personal data for cooperative financial groups as a whole.

### Declaration on the Protection of Personal Information (Excerpts)

#### Acquisition of Personal Data

Personal information will be acquired only within the scope of that necessary for business and will be properly handled in accordance with all relevant laws and regulations.

#### Objective of Using Personal Data

Personal data is used only within the context of personal information.

#### Provision of Personal Data to Third Parties

Personal information is not provided to third parties without consent of the person in question, except under specific circumstances.

#### Handling of sensitive information

Sensitive information is not acquired, used or provided to third parties except under specific circumstances.

#### Safekeeping of Personal Data

Measures are in place to ensure the safekeeping of personal information. Also, the necessary and proper supervision of employees and/or consignees is conducted.

#### Disclosure, Amendment and Cessation of Usage of Personal Data

Based on the Personal Information Protection Law, measures have been put into place to prevent the disclosure, amendment and cease usage of personal information.

#### Response to Inquiries and Complaints

Inquiries and complaints about the handling of personal information are responded to quickly and in good faith.