The Bank considers it a major management priority to secure a sufficiently high level of capital resources in order to maintain and strengthen its financial position. It does so to ensure a stable return of profit to members and to enhance its capabilities as the central bank for Japan’s agricultural, forestry, and fishery cooperative system, contributing to those industries and the development of the cooperative banking business, and align itself with the diverse needs of its customers. As of March 31, 2009, the Bank’s capital adequacy ratio was 15.56% on a consolidated basis (eight consolidated entities), and 15.65% on a non-consolidated basis.

Amid the unprecedented financial crisis and market turmoil, the Bank implemented a large-scale capital increase during fiscal 2008. Its aim was to ensure operational soundness and also to meet appropriately the needs of members, customers, and domestic and overseas markets, and to maintain their confidence.

In December 2008 the Bank effected mergers with the Yamagata and Toyama Shinnoren (Prefectural Banking Federations of Agricultural Cooperatives), raising ¥24.8 billion in lower dividend rate stocks thorough private placement. In March 2009 the Bank took another step to maintain sufficient level of capital adequacy ratio, the key figure of soundness of financial institution especially for banks with international operations even if the turmoil in financial markets are worsened in the future. With the full understanding and support of members, the Bank raised ¥1,380.5 billion in lower dividend rate stocks, and increased perpetual subordinated borrowings from ¥963.7 billion to ¥1,476.0 billion. The Bank intends to enhance the Bank’s capital adequacy in both quality and quantity perspective, and strengthening its financial position.

In accordance with our Business Renewal Plan, the center of the Bank’s management agenda will henceforth be to enhance the value the Bank will provide as the central financial institution of the cooperative banking system, maintaining its capital adequacy ratio at a sufficiently high level, and to ensure a stable return of profit to members.
**Strong Capital Base**

The Bank is rated by the two leading credit rating agencies in the United States – Standard & Poor’s and Moody’s Investors Service – and has received top-tier ratings among Japanese financial institutions. One of the main factors supporting these ratings is the strong capital base afforded by the membership of the cooperative system.

While major commercial banks in Japan have received injections of public funds to restore soundness of financial system and support them to enhance the capability for credit extension, the Bank has yet to apply for such injection of public funds, in viewing the level of capital adequacy of the Bank.

### Methods of Capital Raising

The Bank’s paid-in capital is funded from the following sources.

<table>
<thead>
<tr>
<th></th>
<th>Common Stocks</th>
<th>Preferred Stocks</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Investors</strong></td>
<td>Members, as stipulated by the Norinchukin Bank Law</td>
<td>No restrictions</td>
</tr>
<tr>
<td><strong>Voting rights</strong></td>
<td>Yes</td>
<td>No</td>
</tr>
<tr>
<td><strong>Par value / Issue price</strong></td>
<td>¥100 / Issued at par value</td>
<td>¥100 / Issued at market value</td>
</tr>
<tr>
<td><strong>Dividends</strong></td>
<td>Dividend rates are approved by the Council of Delegates. Dividends are paid after the payment of dividends on preferred stocks. When dividends are paid on common stocks, participatory dividends are paid to holders of preferred stocks.</td>
<td>For lower dividend rate stocks Dividend rates are approved by the Council of Delegates. The priority of dividends is the same as for common stocks. Under the Bank’s Articles of Association, dividends on lower dividend rate stocks have a lower priority than common stocks.</td>
</tr>
</tbody>
</table>
Risk Management

Approach to Risk Management

Essential components of the management of financial institutions are the generation of stable profits and the sustenance of an optimal portfolio. Managements must also address various types of risk arising from changes in the business environment as well as volatilities in economic conditions and financial markets. Financial institutions must also maintain a high level of public confidence by providing reliable services and maintaining financial soundness.

The Bank’s financial position has been impacted significantly by recent unprecedented severe market turmoil and financial crisis, but the support of members and others has enabled it to increase the capital substantially, making it possible to secure a capital adequacy ratio at sufficient level as of the end of March 2009. In line with this capital increase, the Bank formulated a medium-term management plan for the purpose of business stabilization, Business Renewal Plan. The plan targets to fulfill its mission of ensuring a stable return of profits to members and of enhancing its capability to serve as the central institution of the Japanese agricultural, forestry and fishery cooperatives. To achieve this, its prime objectives are to build on the lessons learned from the current financial crisis and make a qualitative shift in investment and lending activities, in accordance with its basic concept of internationally diversified investment and lending, and to conduct its investments and its financial management by placing emphasis on stability and safety. From this perspective, it is a high priority for the Bank to make unceasing efforts to enhance its risk-management approach.

Initiatives of risk management by the Bank are stipulated in its Risk Management Policy. The policy identifies the types of risks to be managed by assessing the materiality of each risks at the operation and the basic framework for risk management, including organizational structure and methodology. In accordance with this policy, the Bank conducts risk management activities taking account of the inherent nature of each type of risk, measures the overall magnitude of these risks, making use of quantitative methods, and conducts integrated risk management by comparing the amount of risk with the Bank’s financial strengths.

To implement integrated risk management, the Bank has set up the Risk Management Committee. The Committee enables the Bank’s top managements to discuss important issues relating to its risk management framework and capital adequacy. The Committee also ensures that the total risk amount is kept within the Bank’s maximum tolerable risk. The structure also requires the integrated risk management situation (e.g. monitoring of economic capital, significant decisions made by the Risk Management Committee, current issues on overall risk management) to be regularly reported to the Board of Directors. The Bank has also established a number of committees according to the types of risk, i.e. the Market Portfolio Management Committee (market risk, liquidity risk), the Credit Committee, the Credit Portfolio Management Committee, the Cooperative Finance Committee (credit risk), and the Operational Risk Management Committee (operational risk), to enable the top managements to discuss risk management policies, including planned risk taking. In line with the control described above, applying various risk management framework, including the economic capital management (please refer to P. 43) determined by the Risk Management Committee, the Bank places high priority on ensuring safety and soundness of portfolio management and financial management, by cautiously watching the balance between risk, return, and capital amid the market fluctuations and severe economic and financial environment surrounding the Bank.

The Bank has set up a number of divisions to manage individual types of risks, as well as a division responsible for overall risk management. The roles and responsibilities of those divisions are clearly defined in the Bank’s policy. The Bank also ensures the maintenance of appropriate internal control among those divisions.
Complying with Basel II

Basel II (the new capital adequacy regulations), which went into effect in Japan in fiscal 2006, requires banks to comply with its three pillars. Pillar I is the introduction of a risk sensitive computational formula for capital adequacy. Pillar II is the financial institution’s internal capital adequacy assessment process, consistent with its risk profile, followed by supervisory review. Pillar III is the proactive disclosure to secure the proper evaluation of the effectiveness of Pillar I and Pillar II by the market. The Bank is making constant efforts to address issues relating to these three pillars. Basel II framework is discussed to be enhanced to respond to the recent financial crisis, and certain measures are planned to be implemented in next fiscal year. The Bank is working on this issue in order to respond to changes in the framework appropriately.

With regard to credit risk management, the Bank has worked to enhance its credit risk management infrastructure. The Bank has reinforced its existing internal rating framework (system in which borrowers are rated both on the basis of a quantitative assessment of financial data making use of a statistical model, and on the basis of qualitative analysis). The Bank also implements a method of measuring the credit risk by estimating the probability of defaults for borrowers in each credit rank, based on historical data of actual defaults. For operational risk (risk arising from operating activities, such as clerical errors, system defects as well as lawsuits), the Bank has strengthened its comprehensive management systems through Risk and Control Self-Assessment (RCSA) exercises. These exercises identify risk inherent in various business processes and assess the effectiveness of internal controls. The Bank adopted the “Foundation Internal Ratings-Based Approach (F-IRB)” for credit risk and “The Standardized Approach (TSA)” for operational risk, pursuant to the Norinchukin Bank Law Notification regarding Basel II.

Internal Capital Adequacy Assessment Process (ICAAP)

The Bank implements the Internal Capital Adequacy Assessment Process (ICAAP), an assessment process based on “International Convergence of Capital Measurement and Capital Standards: a Revised Framework” of the Basel Committee, to manage profits, risk, and capital in a consistent and efficient manner. Under the ICAAP, the Bank comprehensively manages its capital resources, from both capital (the numerator of the capital adequacy ratio) and risk assets (the denominator of the capital adequacy ratio) perspectives.

The ICAAP is a process to demonstrate the appropriateness of the risk management practice in addressing the risks that arise while achieving business objectives and maintain the sufficiency of the internal capital to cover these risks. The purpose of ICAAP is to provide its various stakeholders with strong confidence in the Bank’s sound business management.

The Bank’s ICAAP is beyond the framework of controlling just capital and risk. It intends to meet simultaneously two distinct management goals: capital adequacy and profitability. The ICAAP recognizes capital adequacy as a “triangular” relationship among profit, capital and risk with consistency and good balance. This

Concept of ICAAP
Capital and Risk Management

Framework constitutes the core concept of the Bank’s ICAAP. Specifically, the ICAAP ascertains the consistency between “Risk Appetite” and “Risk-Bearing Capacity,” both presented quantitatively as the amounts of risk and capital respectively. This process is achieved through two different types of framework to maintain capital adequacy: regulatory capital management and economic capital management (to be discussed later).

- **Risk Appetite**

In implementing the Bank’s strategies for attaining its management goals, Risk Appetite reflects specific views on risk-taking, and defines what types of risk and what magnitude of such risk the Bank accepts to take. The level of risk to be controlled is determined by various related indicators and from both a qualitative and a quantitative perspective. In other words, the setting of Risk Appetite interrelates management objectives (management strategy), risk, and capital within a single and consistent framework.

- **Setting Risk-Bearing Capacity**

The Bank stipulates the scope of the material risks and the measurement method (quantitative measurement) of risks it comprehensively manages, such as market risk, credit risk, and operational risk. The Bank then defines Risk-Bearing Capacity as “maximum tolerable risk,” and manages the level of risk within Risk-Bearing Capacity. When setting Risk-Bearing Capacity, the Bank clarifies each component of capital with types of risk to be covered.

- **Verification of Consistency between Risk and Risk-Bearing Capacity**

This verification process involves ascertaining that the volume of risk taken, based on Risk Appetite, does not and will certainly not exceed the Risk-Bearing Capacity. To ensure the maintenance of financial soundness ongoing basis, the Bank implements the checkpoint system within the framework of the regulatory capital management as well as economic capital management, supplemented by a set of stress tests and capital planning processes.

The checkpoint provides a framework to ensure that the capital adequacy is maintained above a predetermined level regardless of volatilities due to various factors by monitoring key factors that causes fluctuations and by discussing action plans at an early stage.

A specific checkpoint is determined according to the Bank’s risk profiles. Under this mechanism, each checkpoint is determined from two perspectives, namely regulatory capital management and economic capital management, and appropriate capital is maintained by closely monitoring two major variables: the level of unrealized gains and losses on securities, and degree of risk exposure.

The stress tests are basically performed in conjunction with semiannual budget planning. By preparing appropriate scenarios covering the Bank’s entire portfolio, the tests identifies degrees of impact of stresses on the regulatory capital and economic capital.

**Integrated Risk Management**

The Bank has drawn up its Risk Management Policy, and stipulates a core risk management framework that quantifies and manages risk comprehensively in comparison with capital, which represents the Bank’s financial strength. The Bank has further developed this framework in the ICAAP (Internal Capital Adequacy Assessment Process), focusing on capital adequacy, as described above. The Bank manages overall risk on a comprehensive basis, in addition to the risk covered by regulatory capital management.

The core function within the risk management process is economic capital management. Under this economic capital management policy, the risks to be covered by capital are measured, and the economic capital is applied in advance. The amount of risk is controlled in order not to exceed the applied economic capital...
capital by monitoring the changes of amount of risk caused by market fluctuations and additional risk taking in timely manner during a fiscal year. The Bank manages economic capital both on a consolidated and non-consolidated basis.

In the economic capital management the capital normally used is Tier I capital as the same basis as regulatory capital calculation. Additionally, Tier II capital may also be defined as a buffer for risk in stress situations. The Bank categorizes the types of risk to be controlled into market risk, credit risk and operational risk. To maximize the benefit of globally diversified lending and investment concept, the Bank manages the economic capital on an aggregate basis instead of allocating to each asset class or to each business segment, as the Bank believes such an approach should fit in the business profile of the Bank. In addition, the applied capital and the economic capital management framework are determined by the Board of Directors, while its middle sections are responsible for monitoring the changes of the capital and the amount of risk during each fiscal year. Those are reported to the management on a regular basis.

Market risk is measured by the Value-at-Risk (VaR) method, using a historical simulation model, with a 99.50% confidence interval and one-year holding...
period. Credit risk is measured through the Value-at-Risk (VaR) method, using a 99.50% confidence interval and rating transition within a one-year holding period. Credit risk capital is defined as the credit risk amount measured by the method described above, deducting the expected losses. Operational risk is measured by The Standardized Approach (TSA), in line with the regulatory capital requirement. This amount is adopted as the operational risk capital.

Through these initiatives, the Bank manages risk via a comprehensive perspective, and plans to further refine its risk management framework going forward.

**Integrated Risk Management Consistent with Financial Management**

The Bank’s integrated risk management framework is conducted consistently with its financial management framework to maintain a balance between a sound financial position and adequate profitability. The Bank has specifically established the market risk management infrastructure to enable it to promptly respond to changes in the conditions of financial markets. The Bank conducts a wide range of analysis from various perspectives, including static and dynamic interest rate sensitivity analyses toward the profit/loss impact, and price sensitivity analysis of its assets for impact on the interest rate changes. In addition, as a part of asset and liability management (ALM), the Bank measures the risk volume, taking account of price volatilities of bonds and stocks as well as volatilities in foreign currency exchange rates, and conducts scenario simulations under various stress assumptions. Through the analysis described above, the Bank understands of the impact of market volatilities on the value of the assets, and aims to construct a resilient financial position.

Credit risk is the possibility of a loss arising from a credit event, such as deterioration in the financial condition of a borrower, that causes an asset (including off-balance sheet items) to lose value or to be significantly impaired. For the Bank, transactions involving credit risk are one of the most important sources of earnings from a strategic point of view. The Bank comprehensively manages credit risk on an entire credit portfolio basis as well as individual credit basis for whole credit risk assets. In this way, the Bank appropriately manages the amount of credit risk to secure a steady flow of earnings.

**Credit Risk Management Framework**

The Bank’s credit risk management framework comprises four committees that are managed by the directors and general managers involved in risk management. These committees decide the credit risk management framework as well as credit investment policy. Front sections execute loan transactions and credit investments in accordance with the credit policy and within the credit limits approved by the committees. Middle sections, which are segregated from the front sections, monitor changes in the credit risk portfolio and report them to the committees. Those feedbacks are used for upgrading the risk management framework and for future credit investment planning.

Each of the four committees has a specific role assigned by the management. The Risk Management Committee is responsible for the deliberation of the basic infrastructure for overall credit risk management, including the Bank’s internal rating system, the self-assessment system, and the economic capital management system. The Credit Committee functions primarily to discuss a number of credit ceiling systems to manage concentration risk. The Credit Portfolio Management Committee and the Cooperative Finance Committee discuss basics strategies and policies regarding control of the credit risk infrastructure, and make decisions on
business strategy for material transactions or transactions with large amounts.

Middle sections perform monitoring including the condition of the credit risk portfolio. In addition, the status of credit risk measurement (such as market overview; significant decision made by the Credit Committee, Credit Portfolio Management Committee, and Cooperative Finance Committee; overview of the credit risk portfolio; current approach to risk management) are regularly reported to the Board of Directors.

• Credit Risk Analysis Framework
As a result of the Bank’s continuing efforts to further upgrade its credit risk analysis capabilities, the Bank performs highly specialized analysis for all outstanding credit according to borrower type, such as cooperatives, corporates, public entities, financial institutions, overseas borrowers, and securitized products. Credit analyses on corporates and public entities are assigned according to sectors in order to utilize accumulated institutional knowledge on analysis for each industry. That framework is designed to take benefit from a sector-specialized senior credit administrator system. A senior credit administrator specialized in a certain sector reviews each debtor and its business conditions individually and compares it with other companies in the same industry utilizing its credit and sector research function. In analyses of loans to overseas borrowers the Bank reviews country risk, an inherently different category of risk from domestic corporates, by looking into economic and political conditions and effectively uses the country ceiling system. Together with the region-specialized senior credit administrator system for evaluation of credit applications, the Bank considers credit risk on overseas loans are appropriately managed. In addition, securitized products such as those backed by cash flows generated from residential mortgage, corporate lending, and commercial real estate are subjected to due diligence and credit analysis according to the risk profile of each product. In addition, in order to monitor and identify the risk, the Bank performs ongoing monitoring and review of performance indicators of underlying assets of these investment products.

Through this credit analysis system, the Bank maintains high-level credit risk management based on stringent analytical standards, proprietary financial and cashflow analysis methods, and monitoring reviews after deals.

• The Bank’s Internal Rating Framework
Outline of the Internal Rating Framework and Special Features
In addition to the Bank’s traditional lending activities as a financial institution specialized in the agricultural, forestry, and fisheries industries, the Bank adopts a management strategy of diversified investment and pursuit of an optimized investment portfolio by diversifying investment assets according to profile of products, region or industry. Accordingly, the Bank considers that it is crucial to manage credit risk exposure from an integrated perspective, to manage regulatory capital by measuring the amount of credit risk, ensure financial soundness, and maintain profitability.

The Bank’s internal rating framework is designed to evaluate and measure the Bank’s credit risk portfolio consistently, and is considered to be a crucial tool for the integrated management of credit risk. It plays an important role in daily credit risk management and portfolio management, such as economic capital management.

Structure and Application of the Internal Rating Framework
The Bank’s internal rating framework comprises three components: the Borrower Rating System, the Loan Recovery Rating System, and the Retail Exposure Internal Rating System.

The Borrower Rating System is designed to evaluate the exposure grades of corporate borrowers. The Bank has 15 borrower grades: 10 borrower grades for non-defaulted borrowers and 5 for defaulted borrowers. Each borrower grade defines the level of credit risk for
In principle, ratings are evaluated and assigned using a combination of quantitative and qualitative factors. For certain assets subject to risk-weighted asset calculation for the investment fund, the Bank assigns its internal ratings by using external ratings as the primary factor, those of Standard & Poor’s (S&P) and Moody’s Investors Service (Moody’s). The Bank maps clearly its internal grades to the scale used by credit rating agencies (e.g., internal grade “1-1” corresponds to the external grade “AAA” and “Aaa”). This mapping is based on comparisons of grades and default probabilities on the same borrowers between internal ratings and credit rating agencies’ ratings.

The Loan Recovery Rating System is used to grade the recovery of collateral for corporate exposure. Ratings are assigned according to the expected recovery ratios, and are determined from the assessment of factors that may have an impact on the recoverability, such as loan security (collateral or guarantees), seniority (senior or subordinate), and other factors affecting recovery for defaulted exposures.

The Retail Exposure Internal Rating System estimates Probability of Default (PD), Loss Given Default (LGD), and Exposure at Default (EAD) on an exposure pool basis, and allocates exposure according to type of pool.

As the Bank adopts the F-IRB approach, the internal rating system is foundation of the calculation of the capital adequacy ratio of regulatory capital, the primary indicator for the financial soundness of a bank. The Bank applies the same PD figures calculated for capital adequacy ratio of regulatory capital to measure credit risk deriving from credit exposure to maintain consistency between the internal rating system. In addition, the Bank differentiates interest rates according to internal ratings and collateral provided, in order to maintain a sufficient level of returns in line with the credit risk.
### Relationship among Internal Rating, Self-Assessment, and Exposure Requiring Mandatory Disclosure under the Financial Revitalization Law

<table>
<thead>
<tr>
<th>Internal rating</th>
<th>Debtor classification</th>
<th>Self-Assessments</th>
<th>Exposure requiring mandatory disclosure under the Financial Revitalization Law</th>
</tr>
</thead>
<tbody>
<tr>
<td>1-1 4</td>
<td>Standard</td>
<td>Category I</td>
<td>Debtor classification, Asset category, Definition of asset category, Standard</td>
</tr>
<tr>
<td>1-2 5</td>
<td>Substandard</td>
<td>Category II</td>
<td>Debtor requiring close monitoring going forward, Special attention</td>
</tr>
<tr>
<td>2-6</td>
<td>Other substandard debtors</td>
<td></td>
<td></td>
</tr>
<tr>
<td>3-7</td>
<td>Debtors under requirement of control</td>
<td></td>
<td></td>
</tr>
<tr>
<td>8-1</td>
<td>Doubtful</td>
<td>Category III</td>
<td>Debtor who is highly likely to fall into bankruptcy, Doubtful</td>
</tr>
<tr>
<td>8-2</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>8-3</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>8-4</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>9</td>
<td>Doubtful</td>
<td>Category IV</td>
<td>Debtor who has effectively fallen into bankruptcy, although no facts have emerged to indicate legal or formal bankruptcy, Bankrupt or de facto bankrupt</td>
</tr>
<tr>
<td>10-1</td>
<td>Debtors in default</td>
<td></td>
<td></td>
</tr>
<tr>
<td>10-2</td>
<td>Debtors in bankruptcy</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

### The Norinchukin Bank’s Debtor Classification and Reserves for Possible Loan Losses (As of March 31, 2009) (On a Non-Consolidated Basis)

<table>
<thead>
<tr>
<th>Debtor classification</th>
<th>Self-Assessments</th>
<th>Reserves for possible loan losses</th>
<th>Claims disclosed under the Financial Revitalization Law</th>
<th>Risk-managed loans (Note 2)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Debtors in bankruptcy</td>
<td></td>
<td></td>
<td>Specific reserve for possible loan losses: 134</td>
<td>Loans to borrowers under bankruptcy proceedings: 12</td>
</tr>
<tr>
<td>Debtors in default</td>
<td></td>
<td></td>
<td>Bankrupt or De facto bankrupt: 16</td>
<td>Delinquent loans: 123</td>
</tr>
<tr>
<td>Doubtful debtors</td>
<td></td>
<td></td>
<td>General reserve for possible loan losses: 57 (Note 1)</td>
<td>Loans with principal or interest payments three months or more in arrears: 53</td>
</tr>
<tr>
<td>Standard</td>
<td></td>
<td></td>
<td>Standard loans: 11,177</td>
<td>Restructured loans: 53</td>
</tr>
</tbody>
</table>

### Notes:
1. The expected default ratios for computing the provisions to the general reserve for possible loan losses are 0.20% for standard debtors, 4.69% for substandard debtors (excluding claims under requirement of control), and 11.02% for claims under requirement of control.
2. The difference between the total of claims disclosed under the Financial Revitalization Law and the total of risk-managed loans is the inclusion of claims other than loans.

### Criteria for Write-Offs and Provisions to Reserves

Write-offs and provisions to reserves for possible loan losses are made in accordance with the criteria set by the Bank for each classification of obligors determined for self-assessment exercises. For exposure to standard debtors and substandard debtors, the Bank makes provisions to the general reserve for possible loan losses for each category of borrowers based on the expected loss ratio, which is calculated from historical loss data, including losses from defaults. For debtors under requirement of control with substantial exposure, provisions to specific loan loss reserves for possible loan losses are calculated by the discounted cash flow (DCF) method on an individual basis. For exposure to doubtful debtors or lower, provisions to specific reserves for possible loan loss are made, or write-offs are performed, for the amount not recovered by collateral or guarantee to the exposure classified as Category III, and the amount deemed necessary to the exposure classified as Category IV.
Credit Overconcentration Risk
Credit overconcentration risk is defined as the risk to incur unexpected huge losses triggered by simultaneous credit event such as event of default, due to overconcentration of credit exposure to specific groups of borrowers, industries or regions. To mitigate such risk, the Bank has installed credit ceiling systems according to the profile of credit exposures, namely, Country Ceilings (for credit exposure to individual countries or regions), Corporate Ceilings (for credit exposure to corporates), and Bank Ceilings (for credit exposure to financial institutions). Total credit exposure for each ceiling category is monitored on a regularly basis and controlled to avoid any overconcentration on credit exposure.

Regarding the corporate ceiling, maximum lending limits are set for each borrower, based on the rankings assigned by the internal rating system. Limits are set and lending managed not only on an individual obligor basis but also on a corporate group basis. The Bank Celing is precisely managed and credit limits are set for each type of transaction. Regular reviews are also performed on credit exposure of each industry.

Measuring Credit Risk
The Bank measures the amount of credit risk using statistical based methods, and applies it to economic capital management.

Methods for Measuring Credit Risk
The Bank uses the internal model for credit risk (the Monte Carlo Method) in estimating credit risk, and measures credit risk on a monthly basis. The scope of measurement includes loans, guarantees, foreign exchange, and securities (e.g. corporate bonds), as well as off-balance-sheet transactions (e.g. swaps). The Bank measures the amount of credit risk by defining it as the potential impairment amounts incurred from credit exposure.
The method of measuring credit risk involves the performing the simulations on tens of thousands of scenarios using statistical models for the credit portfolio. Such exercise intends to simulate adverse changes of asset value due to rating changes of obligors or invested products, and losses incurred from defaults. Key parameters for the simulation include probability of defaults (PD) for each rating category, rating transition probability (likelihood for changes of one rating category to another rating category), and correlation among credit exposures. Using the simulation results, the Bank estimates the distribution of potential losses on the Bank’s credit portfolio over the next year.

The economic capital of the Bank is managed by calculating two figures for the amount of credit risk, namely the “Expected Loss (EL),” the average figure of losses on simulated scenarios, and the “Maximum Projected Loss,” defined as the potential losses in the worst case scenario in the simulation. Utilizing EL and UL, the Bank monitors the utilization of allocated risk capital against the amount of risk under economic capital management.

### Market Risk Management

The Bank deems market risk, such as interest risk and equity risk, to be one of the most significant risk factors affecting the Bank’s earnings base, along with credit risk. Through active and appropriate risk-taking supported by a robust risk management framework, the Bank aims to retain a stable level of profit by constructing a sound and profitable market portfolio that balances profit, capital, and risk. The Bank’s investment principle is to maintain a good balance of risk in its globally diversified investment portfolio in viewing the amount of aggregated market risk, the risk-return profile of each asset class, and the correlation among asset classes. Asset allocation is decided after considering the risk balance described above and other crucial factors, such as the financial position of the Bank and the market environment. To ensure the effectiveness of market risk management through the execution process of investments, the Bank ensures the segregation of duties among divisions in charge for decisions (planning) on allocation policy, execution of individual transactions, and monitoring of risk positions. Specifically, the Risk Management Committee is responsible for and discusses overall risk management, the Market Portfolio Management Committee sets market portfolio allocation policy, the front sections execute the transactions in accordance with allocation policy, and the middle sections conduct monitoring. Matters relevant to

### Illustration of Credit Risk Measurement Model

The loss distribution of the Bank’s credit portfolio is estimated based on the Bank’s credit risk measurement model. Credit risk parameters, including expected loss and Credit Value-at-Risk (VaR) are calculated using this model.
the market risk portfolio management activity (such as market conditions, major investment decisions made by the Market Portfolio Management Committee, condition of the market portfolio, and views on near-term market portfolio management) are reported to the Board of Directors on a regularly basis.

Going forward, the Bank will continue to upgrade its market risk management infrastructure by implementing various measures such as increasing the number of staff in charge, enhancing technical elements, such as the information technology infrastructure, and refining risk measurement techniques.

• Market Portfolio Management

The fundamental element of the Bank’s market risk management is management of allocated capital under economic capital framework. The key objectives of risk management of the market portfolio are to construct an optimal market portfolio through active adjustment of the risk balance among asset classes according to the economic and financial conditions, in pursuit of efficient use of the allocated economic capital, and to manage the risk balance and the level of earnings of the market portfolio in line with the financial position of the Bank. Specifically, the risk balance of the market portfolio is managed by analyzing and understanding the situation of the market portfolio based on market risk measured by the middle sections, including the amount of aggregate risk, risk indicators, such as Value at Risk (VaR) and Basis Point Value, and correlation among asset classes. The Bank also analyzes and takes into account its financial position, based on the outlook for economic and financial conditions supported by research into macro-economic factors and the financial markets, and simulations of earnings, unrealized gains and losses of the portfolio, and the capital adequacy ratio.

In principle, market risk measurement covers all financial assets and liabilities in the Bank’s portfolio, and applies the Internal Model (historical simulation method) for VaR calculation.

The basic framework of market risk management is described in the following section.

Decision Making

Material decisions on market investments are made at the Board level. The Market Portfolio Management Committee – composed of relevant Board members as well as the general managers in charge of market portfolio management – examines, discusses, and makes decisions concerning specific policies related to market investments.

Decision making for market investment is carried out after examining the investment environment, including the financial markets and the economic outlook, the current position of the securities portfolio, and the asset and liability management (ALM) situation of the Bank. In principle, the Market Portfolio Management Committee holds meetings on a monthly basis (actually on a weekly basis), as well as flexibly when needed, to enable prompt response to changes in market conditions.

In addition, to facilitate close communication regarding the market environment on a regular basis, relevant board members and the general managers in charge of the market portfolio hold meetings to share information and awareness on a weekly basis to make a decision timely and appropriately.

Execution

Based on the investment decisions made by the Market Portfolio Management Committee, front sections execute securities transactions and risk hedging. Front sections are not only responsible for execution but also monitor markets conditions closely and propose new investment strategies, as well as make other suggestions to the Market Portfolio Management Committee.

Monitoring

The term “monitoring functions” refers to checking whether the execution of transactions made by front sections is compliant with the investment decisions
approved by the Market Portfolio Management Committee, and measuring the amount of risk in the Bank’s investment portfolio. Risk measurements include risk calculation for economic capital management and measurements using various risk indicators to maintain a good risk balance among asset classes. Middle sections independent of front sections are responsible for those risk measurements and regularly report to the Board of Directors about the results of monitoring, mainly conducted on a daily basis.

Monitoring results reported to the Board are used to analyze the current situation of the market portfolio and as a data source for discussing the investment strategies of the Bank in the near future by the Market Portfolio Management Committee.

• Trading Operations

The Bank’s trading operations are conducted to generate profits from short-term market fluctuations. The Bank maintains an organizational separation between front sections, in charge of executing trading activities, and units undertaking other types of transactions. The front sections in charge of trading activities aim to achieve profit targets within the approved position and loss limits determined from a risk-return perspective.

The risk involved in trading operations is managed under an integrated risk management framework and within the market risk management framework with economic capital management as a key element. From a risk management perspective, the front sections executing trades for the Trading accounts are explicitly separated from the front sections executing trades for the Banking accounts. Targets for profits, and position and loss limits are revised semi-annually. Progress in achieving profit targets within approved limits is monitored on a daily basis.

When positions or losses exceed the approved limits, the middle sections raise the alarm and require the front sections to take appropriate action, including preparing corrective measures, reducing trading volume, or suspending trading.

During the last 250 business days, including and ended on March 31, 2009, the adverse changes in value in daily profit and loss exceeded VaR (for a one-day holding period) twice. The Bank utilizes an internal model to calculate VaR, validated internally or by outside experts on a regular basis, and is working to incorporate cutting-edge financial and information technology into the model. Depending on results, the Bank also revises the internal model if discrepancies beyond certain level occur due to the designs of the model, based on back-testing and an analysis of the relevant factors if necessary.

Thanks to the use of more refined internal models, the Bank was able to adequately capture market fluctuations resulting from the financial sector crisis of fiscal 2008.

| Changes in Interest Rate Risk (with a one-day holding period) in the Trading Divisions |
|-----------------------------------------|------------------|
| June 30, 2008                          | 0.5 (¥100 million) |
| September 30, 2008                     | 1.1               |
| December 30, 2008                      | 1.3               |
| March 31, 2009                         | 1.0               |

Risk Measurement Methods

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

The Bank uses an internally developed model for risk measurements. The model employs a variance-covariance method with a one-tailed 99% confidence interval and a 10 business day holding period, and measures VaR on a daily basis. The Bank’s internal model is developed by the Bank and periodically validated internally by middle sections and the Internal Audit Division, as well as by outside experts, from the
quantitative and qualitative perspectives. The Bank continues to apply cutting-edge financial and information technologies to the upgrading of its risk measurement methods.

In addition, to validate the Bank’s internal model, the amount of risk calculated by the model is compared with the volatilities in actual profit and loss on a daily basis (known as back testing). When discrepancies between the model’s estimates and actual results due to the designs of the model go beyond a certain level, the Bank scrutinizes the relevant model factors and revises the model if necessary.

The Bank also performs a series of stress tests assuming extremely volatile market situations, such as the largest interest rate changes in the last five years, on a monthly basis. The Bank also monitors whether the amount of risk in the stress tests is within the maximum tolerable loss limit and within the capital allocated to the trading activities on a monthly basis.

Liquidity Risk Management

The Bank defines liquidity risk as the following: “The risk towards financial losses incurred from a difficulty in securing funds required for activities of the Bank, or from being forced to procure funds at significantly higher funding costs than normal as a result of a maturity mismatch between investment and funding procurement, or as a result of an unforeseen fund outflow from the Bank (cash flow risk).” It is also defined as: “The risk towards financial losses arises from being unable to execute transactions at the market due to significant market turmoil, or from being forced to execute transactions under significantly less favourable conditions than normal occasions (market liquidity risk).” The Bank manages liquidity risk in accordance with its Policy and Procedures for Liquidity Risk Management.

The appropriate management of cash flow risk is a prerequisite for business continuity and reliable portfolio management. Considering the profiles of the Bank’s ALM (asset liability management) together with the relatively less liquid assets that it holds, and examining the funding procurement capability under stressed environment, the Bank takes initiatives to diversify and enhance the varieties of funding instruments, placing emphases on stability of cash flows. The cash flow management is conducted on an aggregated basis at the head office, by each currency, funding instrument, and funding operation center. The cash flow management plan is reviewed on a quarterly basis with the Bank’s investment portfolio projection and its expected funding procurement capacity, and it is approved by the Market Portfolio Management Committee. The progress of the cash flow management plan and the result of the stress test conducted accordingly are reviewed on a monthly basis and its execution strategies are discussed on a weekly basis. This cash flow of the Bank is managed by constantly monitoring market conditions.

Market liquidity risk is considered to be a crucial factor for investment decisions in order to maintain a

Glossary of Terms

BPV (basis point value)
BPV refers to the changes in the value with respect to a 0.01% change in interest rates given the current position. The Bank uses total delta as the indicator of the impact of the change 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. It is the aggregate of the absolute value for BPV for each yield curve grid. 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.

Optional Risk Parameters
Financial products such as bond options have specific risk characteristics such that the position or value of the products might change according to the changes in the base indicator level, such as interest rates and volatilities. The Bank uses delta (changes in the value of options according to the change in the level of an indicator), gamma (changes in the the positions of options according to the change in the level of an indicator) and vega (changes in the value of options according to the changes in the volatility) 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 within a certain confidence interval. The Bank calculates VaR by setting specific holding periods and confidence intervals, and applying the appropriate measurement method to measure the risk.
flexible investment allocation framework that enables prompt response to changes in market conditions. Investment strategies are also prepared through assessing the market liquidity (cash-convertibility) of each type of financial product. This market liquidity risk management framework is applied to the evaluation of stabilities on funding procurement as well. For this reason, middle sections are regularly reviewing and analyzing the market liquidity of financial products, including its market size of each asset class and product. The results of these analyses are reported to the Risk Management Committee and the Market Portfolio Management Committee. Operations of these liquidity management are also regularly reported to the Bank’s Board of Directors.

The Bank defines operational risk as including all types of risk that arise in the course of business activities, after the exclusion of risk incurred when the Bank actively seeks to generate profits, such as market risk, credit risk, and liquidity risk. The Bank manages operational risk according to its Operational Risk Management Policy.

In order to make an effective and efficient management resource allocation, the Bank prioritize various risks that arise passively in the course of business operations and are supposed to make no profit and handle them in order of the priority to minimize the probability of occurrence of such risk events and possible loss amount.

Operational risk management is divided into two areas: (1) management of risks where the occurrence of the risk itself can be controlled, and (2) management of risks that must be controlled and contained once it occurs. Each of these types of risk is managed separately, depending on their specific characteristics and the effectiveness of control measures, and in accordance with policy and procedures stipulated for each type of risk.

In addition, regarding types of operational risks for which occurrences of risk should be controlled, such as processing risk, legal risk, information technology risk, human risk, tangible asset risk, information security risk are managed on an overall basis applying both risk management framework designed for each type of risk as well as common platforms for operational risk management such as monitoring and analysis of actual loss data, and RCSA (risk and control self-assessment).

(1) Gathering and analyzing data on losses to identify operational risks and develop countermeasures
The Bank gathers and analyzes data on actual loss events such as accidents, errors, and system failures that are considered to be the realization of operational risk, identifies operational risks that are inherent in each business process, and develops countermeasures.

(2) Implementation of RCSA to assess inherent risks, control measures, and residual risks
RCSA is a series of procedures conducted by each business unit itself to identify operational risks inherent in their business processes, identify control measures for the risks, evaluate the effectiveness of the control measures and residual risks, and clarify problems to be resolved.

Loss data identified and analyzed by the above method, including results of RCSA, such as problems to be resolved, are reported to Board members. These reports are then reflected in the preparation of the Comprehensive Risk Management Plan, the Systems Risk Management Plan and the Processing Risk Management Plan, and used to manage and mitigate the risk.

The Comprehensive Risk Management Plan and other plans are discussed by the Risk Management Committee and the Operational Risk Management Committee, which are composed of relevant Board members and general managers in charge of operational risk management, and approved by the Board of Directors.

There are several initiatives aimed at improving the effectiveness of operational risk management. The Risk Management Division monitors the progress and
appropriateness of implementation of the plans as the organizational unit responsible for operational risk management.

In addition, the Internal Audit Division, as the unit responsible for internal auditing, assesses the framework and effectiveness of the operational risk management.

The Bank adopts the Standardized Approach (TSA) for calculating operational risk capital charges, as required in Basel II.

• Processing Risk Management
The Bank defines processing risk as the risk of losses arising when the activities of management and staff or the processes employed in business operations are inappropriate. Specifically, processing risk may occur when staff fail to follow the established procedures for processing business operations, when losses are incurred due to accidents or unethical behavior, and when proper processing of operational matters cannot be carried out because procedural regulations are insufficient or there are faults in the prescribed operating processes themselves. The Bank manages processing risk in accordance with its Policy for Processing Risk Management.

Specifically, according to results of processing risk RCSA and analysis of collected loss data resulting from accidents and errors, the Bank prepares a Processing Risk Management Plan covering risk mitigation measures and measures for upgrading processing risk management. Progress in the implementation of the plans is reported to the Board members. Along with this, the Bank also implements continuing initiatives to minimize occurrences of accidents and errors. Such initiatives include preparing action plans to prevent recurrence of the same type of accidents and errors on an individual case basis, making improvements in procedures, conducting self-inspection and self-reviews, and conducting staff training programs. Through these activities, as well as by proactively and appropriately responding when there are changes in the operating environment that may impact the processing of operations, such as mergers with Shinmoren, the Bank ensures that operational risk is managed.

• Legal Risk Management
The Bank defines legal risk as the risk of losses or problems arising from the conduct of transactions in violation of the law, or entering into inappropriate agreements in the course of management decision or execution of individual business operations. The Bank manages legal risk in accordance with its Policy for Legal Risk Management.

As the Bank strives toward the realignment of the cooperative credit system, offers new financial services and engages actively in investment activities in addition to providing conventional financial services, it considers legal risk management to be a key management issue for all of its offices, and works continuously to upgrade legal risk management.

Specifically, the Bank has developed a database that enables staff to search laws and regulations relevant to business activities according to sections or type of businesses. By using the database, the Bank’s staff can easily recognize the enactment, revision and repeal of relevant laws and regulations, and appropriately and promptly make the corresponding changes in their procedures. The Bank’s legal divisions work to minimize legal risk by offering their full support to departments and offices of the Bank, performing legal checks of individual transactions as well as assisting in the preparation and reviewing of contractual documents, and by liaising closely with units in charge of compliance.

• Information Technology Risk Management
In addition to the traditional mission of providing stable and reliable financial services as an integral part of the social infrastructure, there are growing requirements for more sophisticated information technology risk management due to implementation of the Basel II operational risk management framework, enforcement of the Financial Instruments and Exchange Law (the Japanese
version of the Sarbanes-Oxley corporate reform law) and the Private Information Protection Law and various information security issues arising from a spate of counterfeit or stolen cash cards cases in Japan.

In view of growing social demand, the Bank makes continued efforts to enhance its control level of information technology risk management including establishment of various Policies and Procedures (most notably its Policy for Systems Risk Management), and carrying out Risk and Control Self-Assessment (RCSA) for critical information systems on a regular basis to identify and assess information technology risk based on the industry standard criteria such as the safely standard established by the Center for Financial Industry Information Systems (FISC).

■ Risk Management in Group Companies

The associated companies in the Norinchukin Bank Group are managed in accordance with the Bank’s Management and Operation Policy for Group Companies. The Bank’s Risk Management Policy provides that each of these companies should prepare a feasible and effective risk management policy and framework, taking account of the Bank’s Risk Management Policy as well as the nature of its own business activities and the risk profile. The Bank and each Group company then confer and decide on a risk management system for the company in question, taking into consideration the characteristics of the risks the company bears.

At the sections responsible for supervision of all group companies, to ensure adequate risk management and compliance throughout the Group, those sections work together with relevant sections as and when necessary, and categorize group companies according to risk profiles and other characteristics. For each category of Group companies, required risk management framework and control by the Bank are stipulated in policies.

Based on those policies, risk management of Group companies is performed. When deemed necessary, meetings between the Bank are arranged and represented by the top management levels or operational levels. With regard to the risk management framework of Group companies and their administrative operations, the Bank’s Internal Audit Division oversee and audits in accordance with Internal Audit Policy and relevant policies and procedures.

In addition, the Bank performs the economic capital management on a consolidated basis and ensures to maintain its economic capital within the allocated capital by understanding and measuring the risks the Bank bears on a exhaustive basis including the risk of consolidated subsidiaries. Among consolidated entities, Norinchukin Trust & Banking Co., Ltd. and Kyodo Housing Loan Co., Ltd. manage market risk, credit risk, liquidity risk, and operational risk. Other consolidated entities manage operational risk.

Through the various initiatives described above, the Bank aims to refine the risk management framework of the Bank Group on a group basis.