## **Capital Position**

## A Strong Capital Base Founded on the Strength of the Cooperative Membership

#### Capital Resources

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 stable returns to its members and to play its role as the central bank for Japan's agricultural, fisheries and forestry cooperatives, to contribute to those industries and the development of the cooperative banking business, and to align itself with the diverse needs of its customers. The Bank has had the strong membership of the cooperative system as its base, and it has ensured a sufficient capital ratio subject to international standards. Furthermore, the Bank refinanced subordinated loans (about ¥1,400.0 billion) in line with Basel III in fiscal 2013, with the full understanding and support of its members, and has continued to improve the quality of its capital.

As a result, the Bank's common equity Tier 1 capital ratios for fiscal 2017 on a consolidated and a non-consolidated basis, were both maintained at slightly more than 19%, and the total capital ratios for fiscal 2017, on a consolidated and a non-consolidated basis, were both maintained at a level exceeding 23% (Basel III stan-

#### dard).

In the years ahead, the focus of the Bank's management agenda will be to fully perform its role as the central bank for the cooperatives, while maintaining its high-quality capital at a sufficiently high level, and to ensure continuing stable returns to its members.

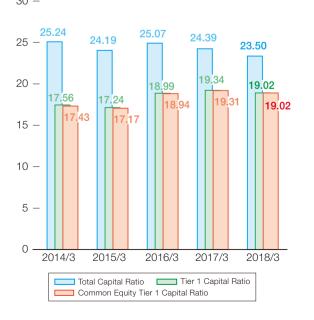
#### Strong Capital Base

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

While major commercial banks in Japan received injections of public funds in the past to restore financial soundness and to facilitate their ability to extend credit, the Bank, based on its capital adequacy, has not applied for such an injection.



(%) 30 -



# **Risk Management**

## **Basic Policies for Risk Management**

#### Basic Approach

Essential components of financial institution management are generation of stable profits and maintenance of an optimal portfolio. Management must address various types of risks arising from changes in the overall business environment, especially volatility 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.

To implement appropriate company-wide risk management, the Bank has formulated the Basic Policies for Risk Management. The policies identify the types of risks to be managed and the basic framework for risk management, including organizational structure and methodology. Based on the Basic Policies, the Bank is working on the management task of ceaselessly upgrading its risk management framework with the managerial goals to fully demonstrate its competitive edge and presence and fulfill its role adequately as a financial institution involved in the agricultural, fishery

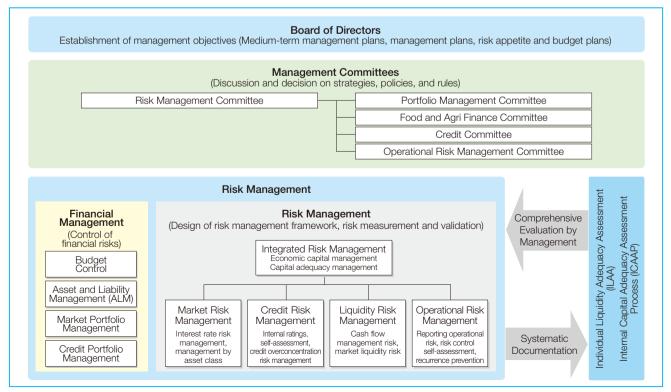
**Risk Management System** 

and forestry industries as well as food production and consumption, further reinforce the business base of its cooperative banking business and realize stable returns to its members through the further evolution of its existing globally diversified investments.

#### Risk Management Framework

The Bank's risk management framework under its internal control aims to achieve soundness and profitability by maintaining a good balance between risks and capital as well as adequate liquidity which supports business operations toward a management goal of realizing its profit objective and ensure the overall stability and sturdiness of operations.

To ensure the effectiveness of the risk management framework, the Bank manages individual risks after assessing the materiality of risks and identifying risks to be managed. The Bank also implements integrated risk management by measuring the overall amount of risk using quantitative methods and comparing it with the Bank's capital resources.



#### Formulation of Risk Appetite

In implementing the Bank's strategies, such as budget and management plan for attaining its business objectives, Risk Appetite reflects specific views on risktaking, and defines what types of risk and magnitude of risk the Bank is willing to accept. Under Risk Appetite, the level of risk to be managed is also determined by various related indicators from both qualitative and quantitative perspectives.

The Bank's Risk Appetite establishes qualitative and quantitative indicators from the perspectives of capital and liquidity management as well as operational risks. In addition, from fiscal 2018, qualitative indicators relating to conduct risks have been established.

#### Risk Management in Group Companies

Based on the Basic Policies for Risk Management of the Bank, each of the Bank's group companies has formulated its own risk management structure including effective risk management policies and a framework after discussion with the Bank and taking into consideration each company's business activities and risk profiles and characteristics.

#### Compliance with Basel Regulations

Basel regulations are international agreements relating to various regulations that aim to maintain the soundness of banks operating internationally. Currently, Basel III, which was discussed and agreed upon, learning from the global financial crisis that occurred in 2008, is being adopted incrementally. Moreover, in December 2015, the Bank was selected by the Japanese authorities as a Domestic Systemically Important Bank (D-SIB), thereby an additional capital buffer has applied to the Bank incrementally since fiscal 2016. The Bank is taking appropriate steps mainly for the sophistication of its integrated risk management including the application of the Basel III targets to its internal control, particularly to address the capital adequacy ratio based on the Basel III regulations, and starting to adopt the Interest Rate Risk in the Banking Book (IRRBB) regulation. Keeping a close eye on increasingly tightening regulations, the Bank will continue to respond to new regulatory requirements in an appropriate manner.

#### Compliance with the Basel Banking Regulations

Topics	Compliance with the Basel Regulations
2007	
• U.S. subprime	mortgage crisis
2008	
<ul> <li>Collapse of Le</li> </ul>	hman Brothers
2010	
European Sove	ereign Debt Crisis
<ul> <li>Announcemen</li> </ul>	t of Basel III
2013	
	<ul> <li>Start of application of capital</li> </ul>
	adequacy ratio requirements
	(Adopting the ratio incrementally
	through 2019)
2015	
	<ul> <li>Start of application of Liquidity</li> </ul>
	Coverage Ratio (LCR)
	<ul> <li>Selected as a D-SIB (Domestic</li> </ul>
	Systemically Important Bank) by the
	Japanese authorities
2017	
<ul> <li>Finalization of</li> </ul>	
	<ul> <li>Start of application of Advanced</li> </ul>
	Internal Ratings-Based Approach
	(A-IRB)
2018	
	<ul> <li>Start of application of Interest Rate</li> </ul>
	Risk in the Banking Book (IRRBB) regulation
2019	
	Start of application of Leverage Ratio
	Start of application of Net Stable Funding Ratio (NSFR)

## Capital Management Framework

#### Internal Capital Adequacy Assessment Process (ICAAP)

To manage profit, capital and risk in a consistent and efficient manner, the Bank conducts the Internal Capital Adequacy Assessment Process (ICAAP) and comprehensively manages its capital resources.

The ICAAP is a process for demonstrating the appropriate management of risks the Bank faces so that it can achieve its business objectives, and a sufficient level

#### **ICAAP** Concept



of internal capital to cover these risks. The purpose of the ICAAP is not only to understand capital in relation to risk, but to recognize capital adequacy as a "triangular" relationship among profit, capital and risk needed to attain business objectives and strategies. Its aim is to simultaneously achieve high level of soundness and profitability through a proper balance among these three factors.

## Framework for Maintaining Capital Adequacy

The Bank establishes a budget and management plan consistent with Risk Appetite and manages finances and operations by maintaining a balance between risk and capital. Capital management checkpoints are established in order to ensure that capital adequacy is maintained above a certain level determined by Risk Appetite, even in uncertain economic and financial environments.

The checkpoints provide a framework to ensure that capital adequacy is maintained above a predetermined level. This is done by monitoring key volatility factors and by discussing countermeasures at an early stage. Specifically, appropriate levels of capital are maintained by closely monitoring two major variables: the level of unrealized gains and losses on securities, and measured risk amount.

## Integrated Risk Management Methodology

#### Economic Capital Management

Based on the Basic Policies for Risk Management, the Bank stipulates a core integrated risk management framework that manages risk quantitatively and comprehensively in comparison with capital, which represents its financial strength. The core function in this framework is economic capital management.

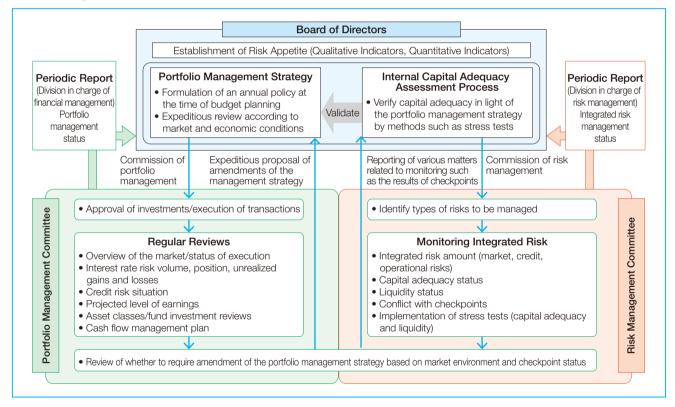
Under economic capital management, risks to be

covered by capital are measured, and the internal capital for this purpose is applied in advance. The amount of risk is controlled so as not to exceed the applied internal capital by monitoring the changes in the amount of risk caused by market fluctuations and additional risk-taking in a timely manner. The Bank manages economic capital on both a consolidated and a nonconsolidated basis.

#### Integrated Risk Management Consistent with Financial Management

The Bank's integrated risk management framework is carried out consistently with its financial management framework to maintain a balance between a sound financial position and adequate profitability. The Bank has particularly established the market risk management infrastructure to enable a prompt response to changes in financial market conditions. The Bank conducts analysis from various perspectives, including static and dynamic interest rate sensitivity analyses toward the impact on earnings, and price sensitivity analysis of its assets for the impact on interest rate changes. In addition, as a part of Asset and Liability Management (ALM), the Bank measures the amount of risk, taking into 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 strives for flexible financial management by understanding the impact of market volatilities on the value of its assets.

#### **Risk Management**

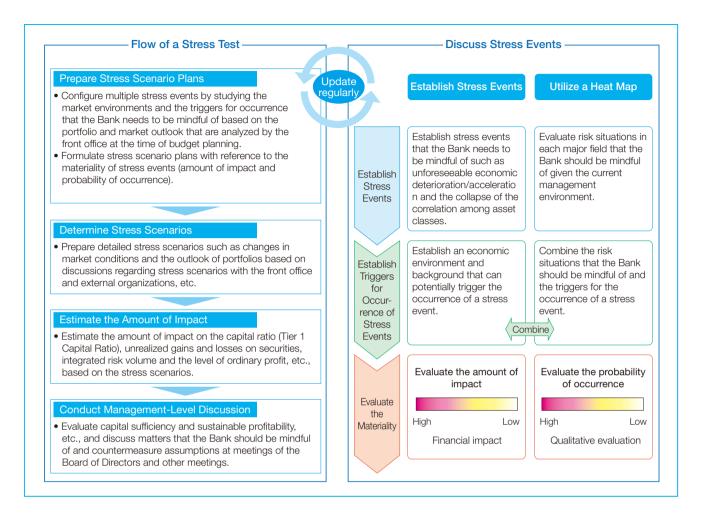


#### Implementation of Stress Tests

Stress tests are performed together with the implementation of the fiscal year's ICAAP and budget planning. By preparing strict stress scenarios that factor in specific timelines and the ripple effects of risks covering the Bank's entire portfolio after analyzing internal and external environments, the Bank verifies the impact of these stresses on profit, capital and risk.

Moreover, stress tests play an important role in the

process of formulating portfolio management strategies, which occurs along with budget planning. In addition, the Bank also utilizes stress tests for a forwardlooking assessment of internal capital adequacy such as reviewing the countermeasures (management actions) to take at times of stress based on the assumed amount of impact on profitability and capital, etc. resulting from stress tests.



## Market Risk Management

Market risk refers to a risk of loss incurred by changes in value of assets and liabilities (including off-balance sheet items) caused by changes in various market risk factors such as interest rates, foreign currency exchange rates and stock prices. It also refers to a risk of loss incurred by changes in profits generated by assets and liabilities.

The "globally diversified investment" concept is the basis of the Bank's portfolio management. With bonds, stocks and credit assets as major asset classes, this concept aims to establish a portfolio with high soundness and profitability and a good balance among risks as a whole by controlling profits from each asset and related risks within capital, taking into account the correlation among asset classes and other related points.

Therefore, the Bank deems market risk, such as interest rate risk and the risk of stock price volatility, to be a significant risk factor affecting the Bank's earnings base. Through active and appropriate risk-taking supported by a robust risk management framework, the Bank aims to retain a stable level of profit.

#### Market Risk Management Framework

To ensure the effectiveness of market risk management in the execution of market transaction operations, the Bank's Board of Directors formulates and changes portfolio management strategies (decision making), the front office conducts the trading of securities and risk hedging (execution) and the middle office assesses risk amounts (monitoring), operating independently of each other. In addition, the status of portfolio management is reported to the Board of Directors on a regular basis.

In market risk management, the Bank verifies the status of the market portfolio, such as the amount of market risk, the interest rate risk amount for banking accounts ( $\triangle$  EVE, NII and  $\triangle$  NII), the risk-return profile of each asset class and the correlation among asset classes, and manages the risk balance and the level of earnings. In addition, to address changes in the external environment such as the market environment, as well as the internal environment such as the financial position and in line with revisions to the related outlook, the Bank recognizes expeditious and flexible reviews of the market portfolio as an important element in market risk management. To this end, the Bank adopts a framework to quickly capture

changes in the market environment by setting an alarm point for losses in each asset class and risk volume increase as well as the impact of short-term market fluctuations, and then review its market portfolio management strategies.

#### Glossary

- ∠ EVE: Decrease in Economic Value of Equity (EVE) due to an interest rate shock
- ∠ NII: Decrease in Net Interest Income (NII) during 12 months from the base date due to the interest rate shock

## **Credit Risk Management**

Credit risk is the possibility of loss arising from a credit event such as deterioration in the financial condition of a borrower and the economic and financial environment that causes an asset (including off-balance sheet items) to lose value or to be significantly impaired.

For the Bank, in its portfolio management based on "globally diversified investments," credit risk, as well as market risk, is positioned as an important risk in optimizing the portfolio. Specifically, regarding credit risk that arises from investment/financing activities in the "food and agriculture business" and "investment business," the Bank has established a management framework centered on the Internal Rating System, striving to manage credit risk appropriately.

#### Credit Risk Assets

The Bank's major credit risk assets in the "food and agriculture business" are loans for and investments in the agricultural, fishery and forestry industries and related companies and other organizations, and those in the "investment business" are credit investments such as domestic and foreign securitized products, bonds and loans, and alternative investments such as private equity and real estate equity.

#### Credit Risk Management Framework

Adopting the Advanced Internal Ratings-Based Approach, the Bank manages credit risk regarding individual credit and the credit portfolio based on its Internal Rating System, which consists of the Debtor Rating System for the evaluation of each debtor's future debt repayment capacity and the Recovery Rating System for the evaluation of the probability of recovery in case of default.

Credit risk amounts regarding individual credit and credit portfolio have been assessed and measured appropriately based on the internal rating, simulations and stress tests, etc., and are reflected in capital management, write-offs and provisions to reserves.

In the management of individual credit, the Bank formulates a basic strategy, considering the medium- to long-term outlook of credit risks and the evaluation of business viability. Then, a designated authorized person approves the credit to the borrower. The credit risk for each loan is assessed by the Bank's Loan Facility Evaluation System based on the internal rating, the purposes of the loan and loan structure, etc. with the comprehensive consideration of such factors as the risk-return balance and consistency with the basic strategy for the borrower.

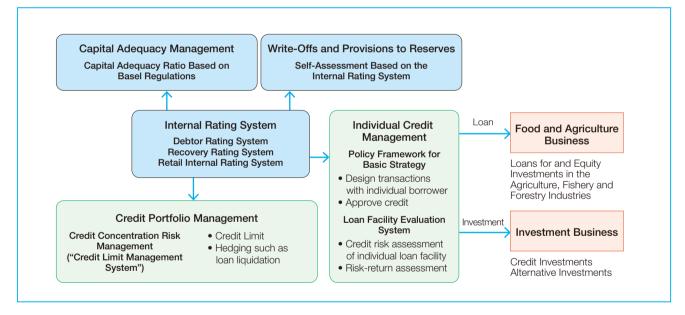
In credit portfolio management, the Bank is focused on managing credit concentration risk as investment and loan projects become increasingly large in scale and globalization progress, etc.

Specifically, the Bank is controlling risks appropriately through the cross-divisional approaches over its "food and agriculture business" and "investment business," from the multifaceted perspectives including borrowers' internal rating, business sector and operational region, mainly by setting a soft limit and monitoring under the "Credit Limit Management System" and hedging by loan liquidation.

#### Credit Review Framework

The Bank's credit review framework utilizes its expertise developed in making loans for the agriculture, fishery and forestry industries—the Bank's specialized field and conducting globally diversified investments. Especially in the food and agriculture business, the Bank is striving to strengthen its credit review capability for the evaluation of business viability utilizing its proprietary analysis methods for each business type/project and deliver a consulting function leveraging its research on the food and agricultural industry. In credit review related to the investment business, according to the characteristics of investment products and business fields, the Bank has strengthened due diligence analysis including stress tests at the time of investment and monitoring after investment. For investments in the form of a fund as well, the Bank strives to look through the component assets as much as possible, allocate an internal rating to each asset, apply overconcentration risk management to such investments and evaluate the fund managers' operations.

#### The Entire Picture of Credit Risk Management



## 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 arising from being unable to execute transactions in the market due to market turmoil, or from being forced to execute transactions under significantly less favorable conditions than normal occasions (market liquidity risk)."

The basic framework of the Bank's liquidity management is to manage liquidity limit amounts to control the fund gap (shortage in funding procurement) appropriately through the proper assessment of the market liquidity of each asset held by the Bank, through various types of monitoring to understand any change in the market expeditiously and through switching the liquidity alert level based on the change. With this basic framework, the Bank operates various frameworks for the evaluation of funding ability and the timely understanding of the collateral margin to prepare for unpredicted situations, etc.

# Individual Liquidity Adequacy Assessment (ILAA)

The Bank conducts Individual Liquidity Adequacy Assessment (ILAA) as a framework for the Board of Directors to periodically assess the appropriateness and adequacy of management of liquidity (cash flow), an element that is as important as capital resources (solvency) for financial institutions to remain in business.

ILAA involves the systematic assessment of the appropriateness of liquidity in terms of the framework for maintaining appropriate liquidity, the current status and future outlook of liquidity and the verification results thereof. Regarding the "risk appetite," the liquidity tolerance level is recognized, after which the appropriateness of liquidity risk management supporting the execution of active risk-taking to secure profits is assessed systematically.

## **Operational Risk Management**

Operational risk refers to a risk that arises in the course of business operations which per se do not generate profit. Operational risk is different from market risk, credit risk and liquidity risk, or the types of risks the Bank actively takes to generate profits. At the Bank, operational risk is further broken down into subcategories, such as processing risk, IT systems risk, legal risk, personnel risk, tangible assets risk, information security risk, business continuity risk, reputational risk and regulatory risk.

For operational risk management, the Bank has established definitions of the risk, its management framework and basic management processes by resolutions of the Board of Directors. In line with these, regarding "risk appetite," the Bank has clearly formulated basic policies for operational risk management, based on which the level of risk to be managed has been recognized. With this system, for the appropriate management of operational risks that are borne by the Bank's company-wide operations, the Bank has adopted the operational risk reporting system for the collection and analysis of risk events that have come to light, as well as the Risk & Control Self-Assessment (RCSA) system for the evaluation of potential risks applicable to all divisions and branches.

### Organizational Structure of Operational Risk Management

Important issues such as the basic policies and annual planning of the Bank's operational risk management are first discussed at the Risk Management Committee, and then approved by the Board of Directors. The Operational Risk Management Committee, comprised of relevant members of the Board as well as the general managers of related divisions, is set under the Board's supervision, and monitors the current status of the Bank's operational risk management. The committee also promotes cross-risk as well as cross-divisional approaches towards managing operational risk. Furthermore, the Bank has established a division to be in charge of operational risk management, which is independent of the business lines, as well as divisions to be in charge of individual risks. The Bank has also designated a person to be in charge of operational risk management in each branch and division.

Furthermore, in light of the fact that cyber-attacks are becoming ever more advanced and sophisticated, we are working to development a cyber-security system, including the establishment of a professional team, Computer Security Incident Response Team (CSIRT), concerned with responding to such incidents when they occur.