

# Risk Management

## Basic Policies for Risk Management

### Basic Approach

Along with economic and financial globalization, the business environment for financial institutions has changed significantly. New profit and operational opportunities have been created even as financial institutions are facing increasingly complex and volatile risks. For financial institutions to maintain a high level of public confidence in such an environment, it is important to establish and operate an effective internal control system.

To implement appropriate company-wide risk management, the Bank has formulated the Basic Policies for Risk Management. These 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 AFF 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

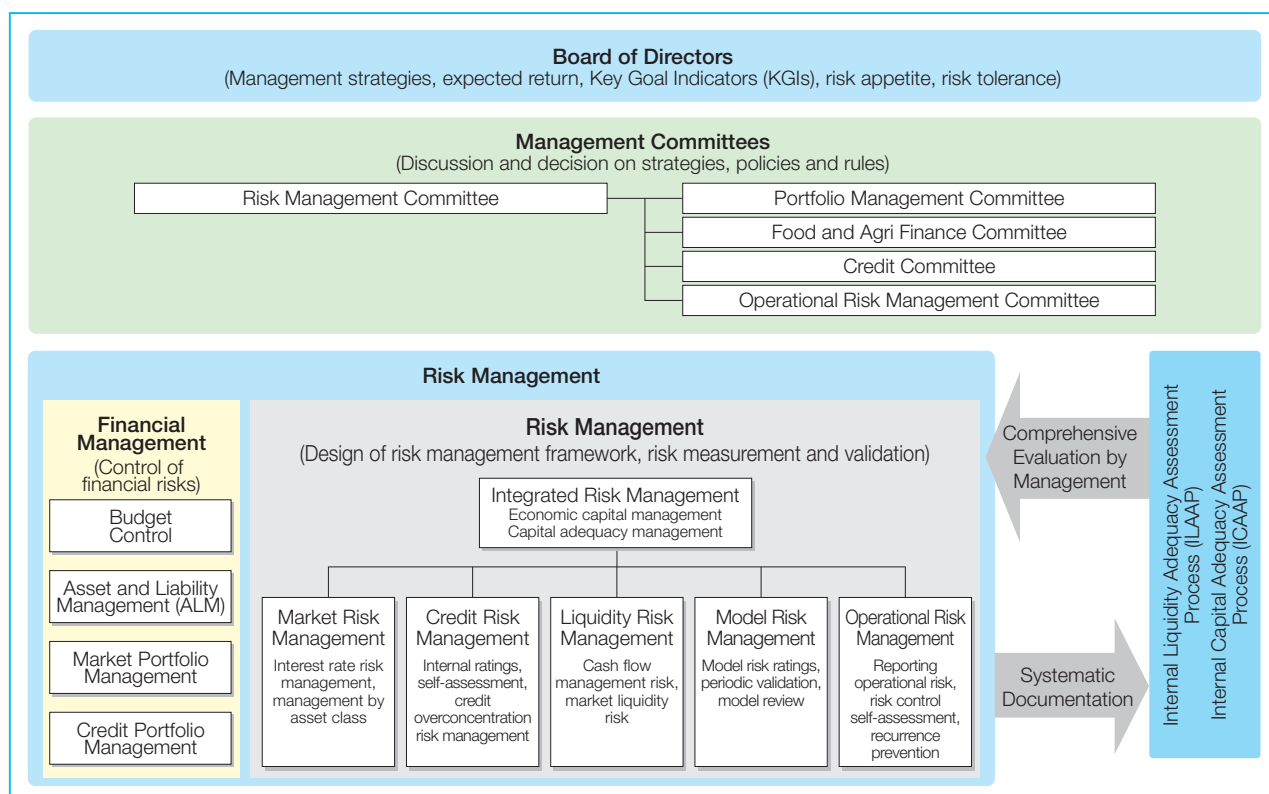
of its existing globally diversified investments.

### Risk Management Framework

The Bank’s risk management framework under its internal control aims to ensure the overall stability and sturdiness of operations according to the Bank’s risk appetite as specified in the Risk Appetite Framework (RAF), the framework for operational management.

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. Classifying market risk, credit risk, liquidity risk, model risk and operational risk as important risks, the Bank conducts risk management with economic capital management and capital adequacy management as its axes. In addition, we also manage and control environmental and social risk, conduct risk, and settlement risk corresponding to the individual risk characteristics under each risk category classified as such materiality of risk.

## Risk Management System



## ■ 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 the Basel Regulations

The Basel regulations are international agreements that aim to maintain the soundness of banks operating internationally. The 2008 global financial crisis triggered discussions and agreement on Basel III mainly to strengthen the qualitative and quantitative requirements for capital—the numerator of the capital ratio—and introduce minimum requirements for liquidity and leverage exposures for banks. At the end of March 2023, the Bank accomplished early application of the finalized Basel III (fully loaded basis without opting in transitional arrangements)—aimed at reducing discrepancies among banks regarding the calculation of risk-weighted assets—the denominator of the capital ratio—. In addition, the Bank is designated by the Japanese authorities as a Domestic Systemically Important Bank (D-SIB), to which additional capital buffers are applied. The Bank will ensure the sound management by utilizing various risk indicators defined under relevant regulations, principles and guidelines such as the requirements for capital, liquidity, leverage exposures and the guidelines under the principle for Interest Rate Risk in the Banking Book (IRRBB) etc. The Bank will continue to take appropriate actions for further international efforts as financial regulatory reforms progress in future.

## Compliance with the Basel Banking Regulations

Topics	Compliance with the Basel Regulations
2007	<ul style="list-style-type: none"> <li>• U.S. subprime mortgage crisis</li> </ul>
2008	<ul style="list-style-type: none"> <li>• Collapse of Lehman Brothers</li> </ul>
2010	<ul style="list-style-type: none"> <li>• European Sovereign Debt Crisis</li> <li>• Announcement of Basel III</li> </ul>
2013	<ul style="list-style-type: none"> <li>• Start of application of capital adequacy ratio requirements</li> </ul>
2015	<ul style="list-style-type: none"> <li>• Start of application of Liquidity Coverage Ratio (LCR)</li> <li>• Designated as a D-SIB (Domestic Systemically Important Bank) by the Japanese authorities</li> </ul>
2017	<ul style="list-style-type: none"> <li>• Finalization of Basel III</li> <li>• Start of application of Advanced Internal Ratings-Based Approach (A-IRB)</li> </ul>
2018	<ul style="list-style-type: none"> <li>• Start of application of Interest Rate Risk in the Banking Book (IRRBB) regulation</li> </ul>
2019	<ul style="list-style-type: none"> <li>• Start of application of Leverage Ratio</li> </ul>
2021	<ul style="list-style-type: none"> <li>• Start of application of Net Stable Funding Ratio (NSFR)</li> </ul>
2023	<ul style="list-style-type: none"> <li>• Early application of the finalized Basel III</li> </ul>

## Capital Management Framework

### ■ Capital Resources

The Bank considers it a major management priority to secure a sufficiently high level of capital resources to maintain and strengthen its financial position.

Through these measures, the Bank ensures stable returns to its members and plays its role as the central bank for Japan's AFF cooperatives, contributes to those industries and the development of the cooperative banking business, and aligns itself with the diverse needs of its customers. With the strong membership of the cooperative system as its base, the Bank has ensured an adequate capital ratio in compliance with international standards. The Bank's common equity Tier 1 capital ratio at the end of fiscal 2023 on a consolidated basis was 16.43% and that on a non-consolidated basis was 16.13%, whereas the total capital ratio at the end of fiscal 2023 on a consolidated basis was 21.23% and that on a non-consolidated basis was 21.02%. 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 highquality capital at a sufficiently high level, and to ensure continuing stable returns to its members.

Moreover, 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 toptier 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.

### ■ Framework for Maintaining Capital Adequacy

Utilizing the RAF and various risk management frameworks, the Bank strives for sound business operations with a good balance between risk and return. Capital management checkpoints are established to ensure that capital adequacy is maintained above a certain level even in uncertain economic and environments.

The checkpoints provide a framework to ensure that capital adequacy is maintained to comply with the RAF, which stipulates the risk appetite and the risk tolerance level—the level of risk that is acceptable to the entity. This is done by monitoring key volatility factors by discussing countermeasures at an early stage. Specifically, the Bank is closely monitoring the capital ratio and the level of unrealized gains and losses on securities to ensure that the appropriate levels of capital are maintained.

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

The Bank conducts the Internal Capital Adequacy Assessment Process and comprehensively manages its capital resources. The ICAAP is a series of processes for ensuring the recognition of the capital-related tolerable risks for the Bank and the risk tolerance level from the perspective of risk management in light of the business model and risk profile of the Bank, in accordance with its management strategies, business strategies, expected return and risk appetite, all of which are specified in the RAF, and demonstrating that the Bank maintains a sufficient level of internal capital to cover risks based on such recognition. In addition to monitoring the current status of the capital resources that the Bank holds, the Bank conducts comprehensive assessments mainly by verifying the appropriateness of its framework for maintaining capital adequacy and its operation, as well as confirming the sturdiness and flexibility of operations from a forward-looking perspective by implementing comprehensive stress tests.

## Integrated Risk Management Methodology

### ■ Economic Capital Management

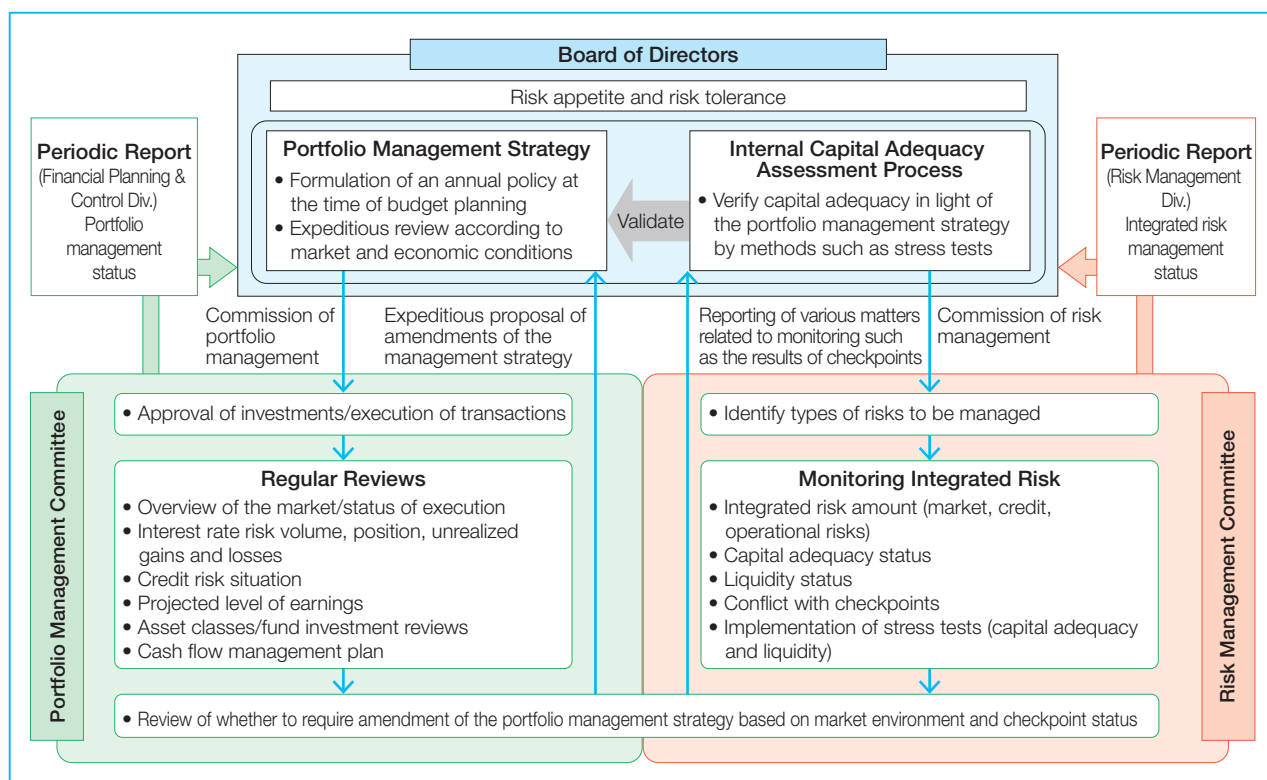
Based on the Basic Policies for Risk Management, the Bank stipulates a core integrated risk management framework that manages risk quantitatively and comprehensively in comparison with capital, which represents its financial strength. The core function in this framework is economic capital management.

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 during the fiscal year under review and additional risk-taking in a timely manner. The Bank manages economic capital on both a consolidated and a non-consolidated 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, considering 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

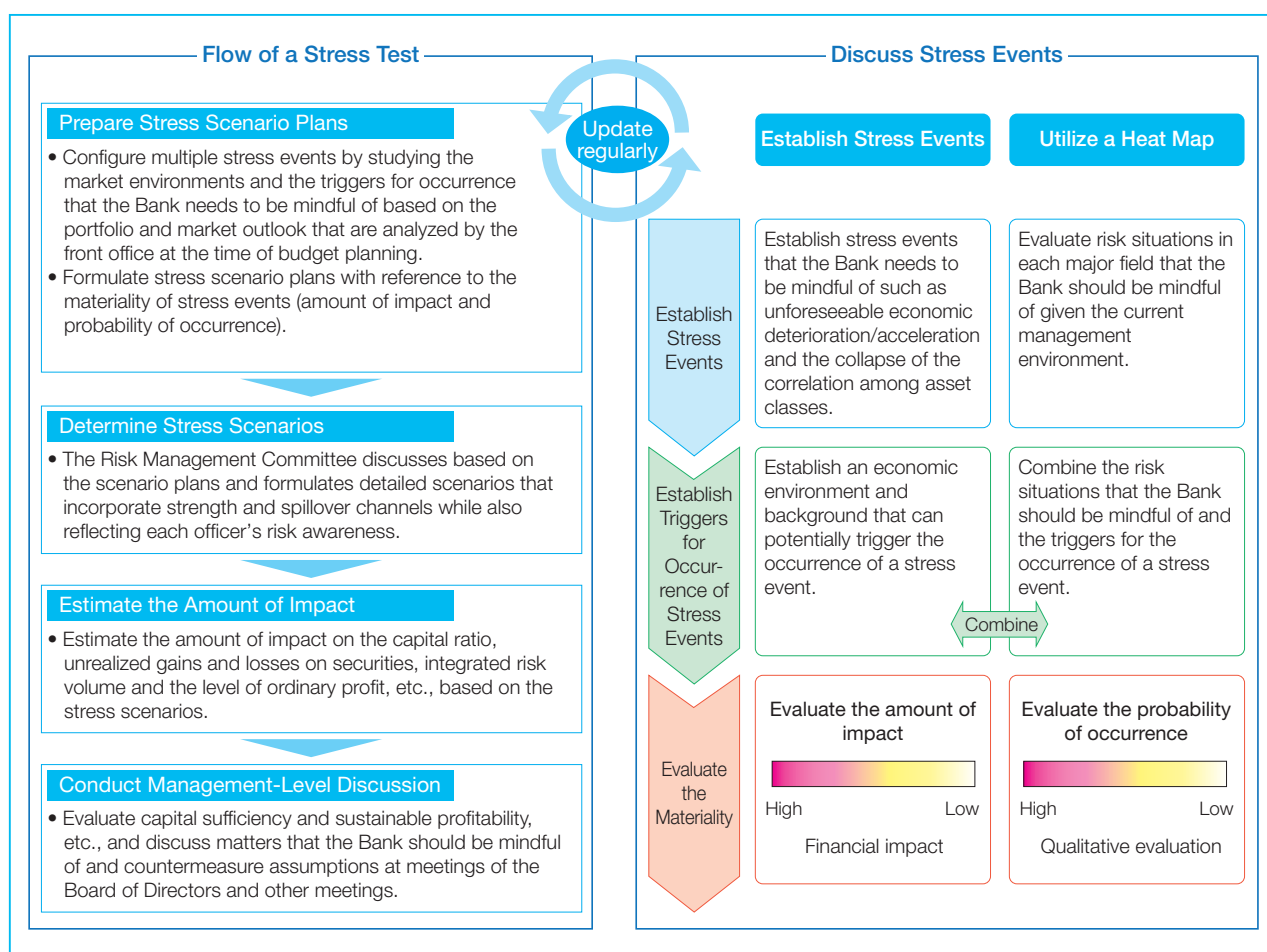


## Implementation of Stress Tests

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

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



## Market Risk Management

Market risk refers to a risk of loss incurred by changes in the 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 overall by controlling profits from each asset and related risks within capital, considering 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 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) and discusses the need for revisions to portfolio management policy (policy change), each office operating independently. 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 ( $\Delta$ EVE, NII and  $\Delta$ NII), the risk-return profile of each asset class and the correlation among

asset classes, and manages the risk balance, the level of the interest rate risk amount for banking accounts 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 monitoring fluctuations of unrealized gains and losses of the entire portfolio and changes in market indicators in each asset class, etc., and then reviews its market portfolio management strategies.

#### Glossary

$\Delta$ EVE: Decrease in Economic Value of Equity (EVE) due to an interest rate shock

$\Delta$ 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 AFF 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 riskreturn balance and consistency with the basic strategy for the borrower.

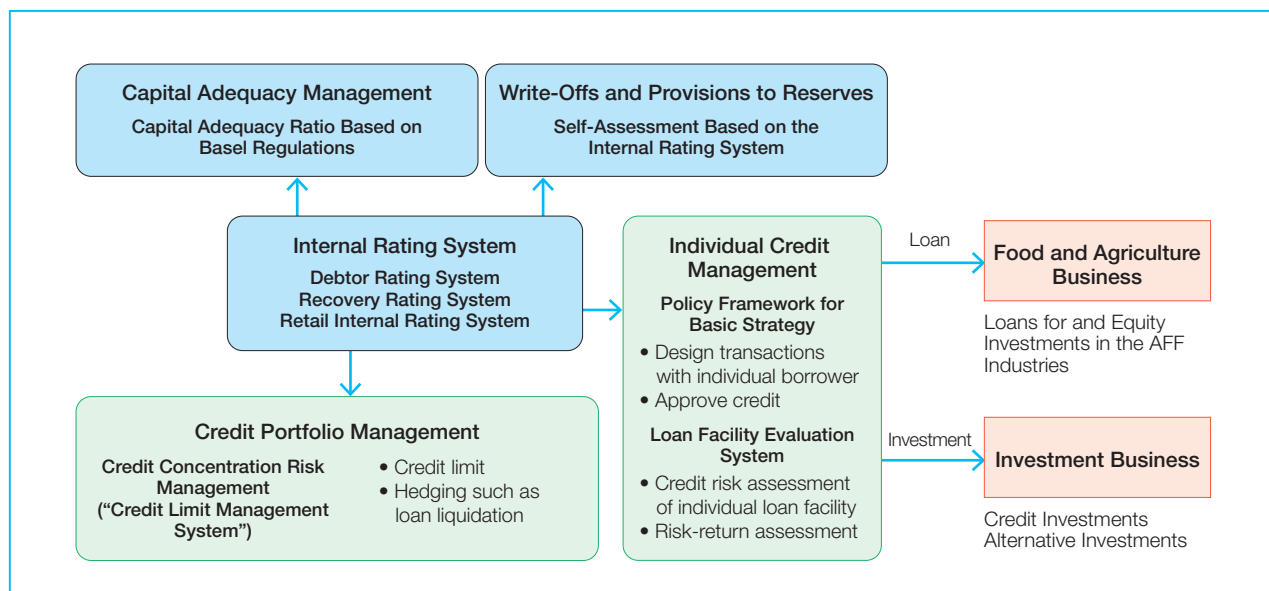
In credit portfolio management, the Bank is focused on managing credit concentration risk as investments and loan projects have become larger in scale and more globalized, etc.

Specifically, the Bank is controlling credit concentration risk appropriately through cross-divisional approaches over investments and finance in its “food and agriculture business” and “investment business,” from 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 AFF industries—the Bank’s specialized field—and conducting globally diversified investments. Especially in the food and agriculture business, the Bank is striving to implement 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 reviews 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 risk toward financial losses incurred from the difficulty in securing funds required for activities of the Bank, or from being forced to obtain funds at significantly higher funding costs than normal as a result of a maturity mismatch between assets and liabilities, or an unforeseen fund outflow from the Bank (funding liquidity risk). It is also defined as the risk toward financial losses arising from being unable to execute transactions, or being forced to execute transactions under significantly less favorable conditions than normal occasions in the market due to market turmoil (market liquidity risk).

### • Internal Liquidity Adequacy Assessment Process (ILAAP)

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

The ILAAP involves the systematic assessment of

the liquidity adequacy in terms of the management framework for maintaining adequate liquidity, the current status and future outlook of liquidity position, and the verification results thereof.

### • Liquidity Risk Management Methods

In addition to the proper assessment of the market liquidity of each asset it holds, the Bank monitors the Early Warning Indicators to identify the emergence of increased risk in the market and switches the liquidity tightness category expeditiously based on the impact of the risk. As basic frameworks for liquidity risk management, the Bank holds liquidity buffers to cover estimated liquidity needs based on the calculated cash outflow under the stressed condition and secures funding for low-liquidity assets using longer-term funding tools, as well as other various frameworks including the evaluation of its funding capacity and the management of collateral resources on a timely basis to prepare for contingency, etc. The Bank has also formulated measures for times of stress (Liquidity Management Action) and confirms their effectiveness through conducting stress testing.

## Model Risk Management

Model risk is “the risk of adverse consequences resulting from misinformed decision making based on inappropriate or misused models.” Model risk might occur because of: 1) inaccurate output resulting from fundamental errors of a model when viewed against its intended use, or 2) inappropriate use of a model, which includes the use of the model outside its intended use or beyond the model's limitation.

Models that have the potential to generate risk are assigned a “model risk rating” and managed by conducting monitoring and validation according to the size of the risk, and modifying the models as required. Models with model risk ratings are registered in the inventory to monitor their management status.

### • Model Risk Management System

The Board of Directors receives regular reports on the overall status of model risk management, confirms if the level of model risk is within acceptable limits, and directs actions to maintain and advance the model risk management framework. In addition, the Risk Management Committee, which is delegated by the Board of Directors, makes decisions on important matters related to model risk management. Furthermore, a department overseeing model risk management, independent of model users, has been established to monitor the status of model risks, and provide model improvement and other instructions.



## Operational Risk Management

Operational risk refers to a risk that arises during business operations, other than market risk, credit risk, liquidity risk and model risk. The Bank has established a basic policy in its RAF to prevent the manifestation of large-scale operational risks, break down operational risks by the scope of application of risk management activities and manage a control framework to address each risk.

Concerning the risks of which the occurrence itself needs to be controlled by risk management activities (processing risk, IT systems risk, legal risk, personnel risk, tangible assets risk, information security risk), the Bank collects and analyzes information on the risk events that have come to light via the operational risk reporting system applicable to all divisions and branches, and evaluates the potential risks inherent in business activities via the Risk & Control Self-Assessment (RCSA) system.

The other type of risks is one whose actions subsequent to a risk event occurrence needs to be controlled by risk management activities. Among such risks, business continuity risk is controlled by formulating a business continuity plan and improving effectiveness of the framework through regular training. Regulatory

change risk and reputational risk are addressed by minimizing ex-post impact through information gathering of such changes, appropriate management of the compliance framework and timely and appropriate disclosure.

- **Organizational Structure of Operational Risk Management**

Important matters such as the basic policies for the Bank's operational risk management are determined by the Board of Directors. The Operational Risk Management Committee, comprising relevant officers and 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-divisional approaches toward 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, thereby guiding and supporting operational risk management activities conducted by branches and divisions.