

# **Monitoring Report on Regional Banks' Securities Investment Management**

**September 2023**

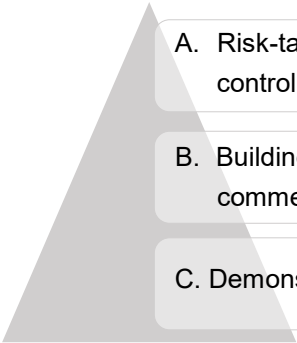


## Table of Contents

<b>I. Purpose of the Report.....</b>	<b>1</b>
<b>II. Main Discussion Points in Monitoring.....</b>	<b>2</b>
<b>A. Risk-taking Commensurate with Financial Strength and Risk Control Capabilities .....</b>	<b>2</b>
<b>B. Building Effective Investment and Risk Management Systems Commensurate with Risk-taking .....</b>	<b>3</b>
1. Clarification of Risk-taking Policy .....	4
2. Clarification of Risk Tolerance.....	6
3. Risk Management of Fund Investment, etc. ....	8
4. Utilization of Stress Testing .....	10
5. Responding to Changes in the Market Environment.....	12
<b>C. Demonstrating Effective Risk Governance .....</b>	<b>14</b>
1. Control by 1st, 2nd, and 3rd line of defense.....	14
2. Control by Management Team and Board of Directors .....	14

### **(Reference) Points at issue recognized by Financial Services Agency**

There are concerns that excessive risk-taking will not only lead to a decline in confidence in individual financial institutions, but also in the financial system as a whole.



A. Risk-taking commensurate with financial strength and risk control capabilities

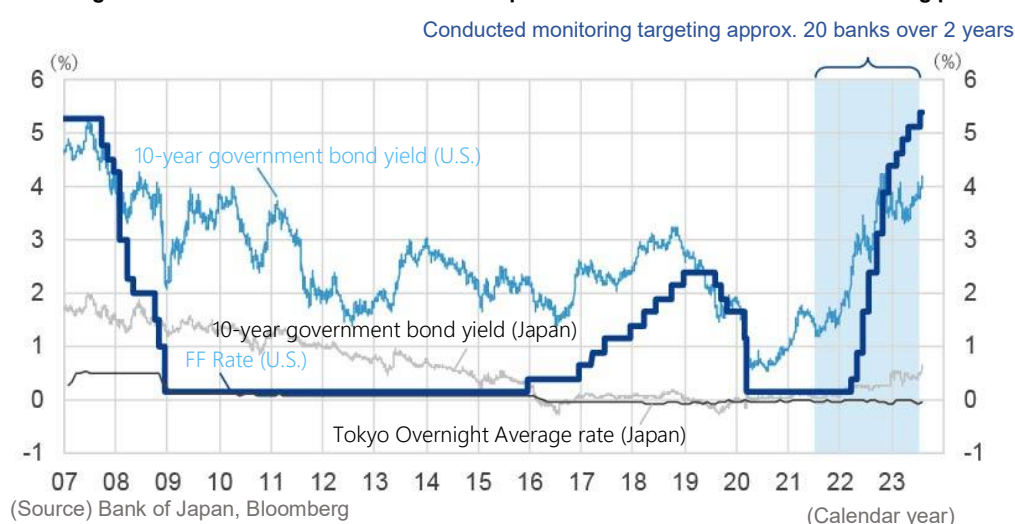
B. Building effective investment and risk management systems commensurate with risk-taking

C. Demonstrating Effective risk governance

# I. Purpose of the Report

- The Financial Services Agency (FSA), from the perspective of maintaining the stability of the financial system in Japan, conducts intensive monitoring of regional banks' securities investment, targeting those with large risk-taking in securities investment. The monitoring is carried out by the Monitoring Division of the Strategy Development and Management Bureau in collaboration with the Supervision Bureau and Local Financial Bureau (Figure 1).
- **Taking into account the business environment, scale, and characteristics of banks, we conduct monitoring based the following discussion points<sup>3</sup>:**
  - A. Risk-taking commensurate with financial strength<sup>1</sup> and risk control capabilities<sup>2</sup>.**
  - B. Building effective investment and risk management systems commensurate with risk-taking.**
  - C. Demonstrating effective risk governance.**

Figure 1 Long-term and short-term interest rates in Japan and the US<sup>4</sup> and intensive monitoring period



- The key findings and observations obtained from the monitoring include contents that can be useful for financial institutions other than the target regional banks (primarily those with large-scale risk-taking in securities investment), therefore, we have made them public.
- Monitoring by FSA and local financial bureaus emphasizes whether the risk governance and risk management systems of the target bank function effectively as a whole. Therefore, we do not request uniform measures across banks. Regional financial institutions<sup>5</sup> often face various challenges and have some constraints on their management resources. Therefore, the individual discussion points presented in this document should not be used as a checklist in a formalistic manner, nor should the realization of particular risks immediately suggest inadequacies in the risk management system.
- The FSA will continue to encourage financial institutions' enhancement of their securities investment management and risk management systems and demonstration of effective risk governance through monitoring focused on such issues in the future. We expect financial institutions to put effort into further improving their risk management practices.

<sup>1</sup> Financial strength refers to quantitative aspects, such as capital (regulatory equity capital and internal management risk capital) and earnings (core net business income).

<sup>2</sup> Risk control ability includes qualitative aspects, such as the quality of the investment systems (including investment and hedging methods) and risk management systems (including risk management methods).

<sup>3</sup> Referring to the July 13, 2018, "Interim Report on Securities Investment Monitoring of Regional Banks" for the Financial Services Agency's awareness of the issue

<sup>4</sup> The FF rate (U.S.) is the median of the Fed's target range.

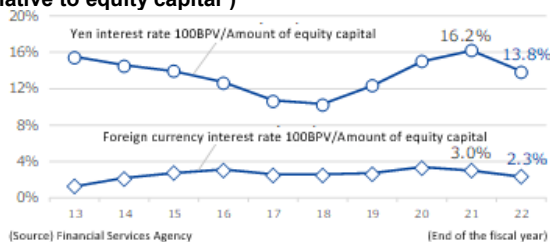
<sup>5</sup> Regional banks (regional banks, secondary regional banks)/shinkin banks/credit associations

## II. Main Discussion Points in Monitoring

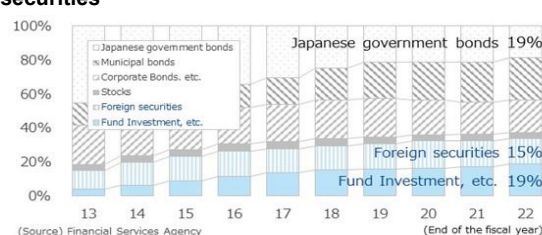
### A. Risk-taking Commensurate with Financial Strength and Risk Control Capabilities

- Amidst a challenging banking business environment, regional banks have expanded the scale of their risk-taking in securities investment to secure fiscal term earnings at a certain level. This expansion has reached a considerable level (Figure 2). Specifically, there is a notable trend of increasing investment in relatively high-yielding foreign bonds and overseas interest-bearing funds, indicating an expansion of the risk-taking domain (Figure 3). Due to the reversal of ultra-loose monetary policies and rapid interest rate hikes by major central banks, primarily in the US and Europe, a decline in the value of securities held by regional banks (Figure 4) and an increase in bond sale losses (Figure 5) have been observed.

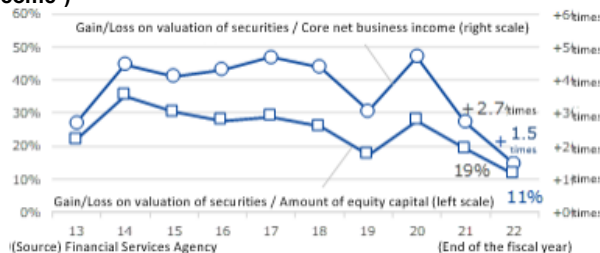
<Figure 2> The amount of interest rate risk on securities<sup>6</sup> (relative to equity capital<sup>7</sup>)



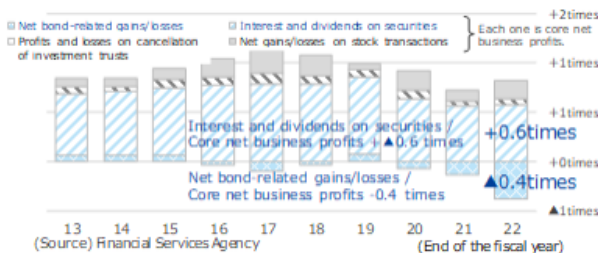
<Figure 3> Composition of outstanding balance of securities



<Figure 4> Profits and losses on valuation of securities<sup>8</sup> (relative to equity capital<sup>7</sup>) (relative to core net business income<sup>9</sup>)



<Figure 5> Securities-related profits and losses (relative to core net business income<sup>9</sup>)



#### Clarifying the Strategic Positioning and Risk-taking Approach of Securities Investment

Amidst significant changes in the financial environment driven by such factors as rising global inflation, regional banks are required to maintain their soundness and continue to fulfill their financial intermediation function in their local communities over the long term.

To maintain soundness, it is crucial for each bank, under the leadership of its management, to clarify the strategic positioning and risk-taking approach of securities investment based on its management philosophy. Specifically, each bank needs to clarify whether it positions securities investment as one of the core businesses for maintaining the financial strength that supports its intermediation functions or as an operation for managing excess funds. Based on this clarification, each bank should define the risk-taking domain and upper limit of securities investment in line with its financial strength and risk control capabilities, and should maintain its risk-taking within them.

#### Risk-taking Commensurate with Financial Strength and Risk Control Capabilities

The utmost importance lies in ensuring that risk-taking in securities investment does not exceed the financial strength and risk control capabilities of each bank. To achieve this, it is essential for each bank to maintain financial strength and risk control capabilities corresponding to the strategic positioning of securities investment.

#### Monitoring Results

From these perspectives, the FSA has conducted monitoring of regional banks and has engaged in dialogue with the first line of defense function (market department), the second-line function (risk management department), and management. As a result, it has been confirmed that, overall, the monitored entities maintain risks within a level commensurate with their financial strength and risk control capabilities.

<sup>6</sup> Foreign currencies are only the US dollar and Euro for the amount of interest rate risk on securities after reflecting the effect of hedging by derivatives.

<sup>7</sup> The amount of equity capital of the Uniform International Standard Bank is Common Equity Tier 1 (CET1) capital.

<sup>8</sup> Profits and losses on valuation of securities include held-to-maturity bonds (accounting for approx. 5% of the total outstanding balance of securities).

<sup>9</sup> Core net business income and interest and dividends on securities exclude profits and losses on cancellation of fund investment. \*Figures 2 to 5 are all aggregate values for all regional banks.

## B. Building Effective Investment and Risk Management Systems Commensurate with Risk-taking

- In order to maintain risk-taking within a level commensurate with financial strength and risk control capabilities as described in II.A above, regional banks need to build effective investment management and risk management systems commensurate with risk-taking, and each of the 1st line of defense (market department), the 2nd line of defense (risk management department), and management teams have a role to play.
- The FSA has conducted monitoring of the following items, primarily engaging in dialogue with the department in charge. As a result, it has been confirmed that, overall, the monitored entities maintain reasonably effective investment management and risk management systems.

### <Main Items Discussed During the Monitoring and the Function in Charge>

Item		Function <sup>10</sup>		
		1st Line	2nd Line	Management
<b>1. Clarification of Risk-taking Policy</b> Clarify risk-taking areas and policies, taking into account the strategic positioning and financial strength (capital and earnings) and risk volume, and establish a management system.	(1) Consideration of Desirable Portfolio	●	○	●
	(2) Developing a Management System Commensurate with Risk-taking	●	●	●
<b>2. Clarification of Risk Tolerance</b> Clarify the maximum risk amount and loss limits that can be tolerated in light of financial strength (capital and earnings), and establish a risk management system to control risks within those ranges.	(1) Allocation and Management of Risk Capital	○	●	●
	(2) Setting and Managing Loss Limits, etc.	○	●	●
<b>3. Risk Management of Fund Investment, etc.</b> Analyze and manage the risks in investment assets and asset management companies and fund returns to the same extent as possible as in the case where banks directly hold the assets.	(1) Management of Risks Inherent in Assets Invested through Funds	●	●	○
	(2) Management of Risks Associated with the Asset Management Company	●	●	○
<b>4. Utilization of Stress Testing</b> Utilize scenario-based stress testing that reflects the risks recognized by management and the risk-taking policy, and evaluate the impact on future financial strength (capital and earnings).	(1) Market/Integrated Stress Testing	○	●	●
	(2) Foreign Currency Liquidity Stress Testing	●	●	○
<b>5. Responding to Changes in the Market Environment</b> Formulate action plans to prepare for market fluctuations, conduct simulations to prepare for future swings in fiscal term earnings, and control risks.	(1) Action Plan for maintaining Capital	●	○	●
	(2) Preparation for the Risk of a Decline in Fiscal Term Earnings	●	○	●

- On the other hand, from the perspective of consistently ensuring soundness and sophisticating risk management to the extent that each bank is expected to demonstrate depending on its risk characteristics, some cases of concern (referred to as “concerns”) and some recommended practices (referred to as “recommended practices”) are recognized, and they are presented in the tables on pages 4 to 13.

<sup>10</sup> ● indicates a function that is considered to be primarily responsible, and ○ indicates a related function. This is a summary of the general cases in terms of the roles and responsibilities identified through the monitoring, and there may be slight differences depending on the size and characteristics of the bank.

# 1. Clarification of Risk-taking Policy

## (1) Consideration of Desirable Portfolio



### ● Clarification of Risk-taking Policy

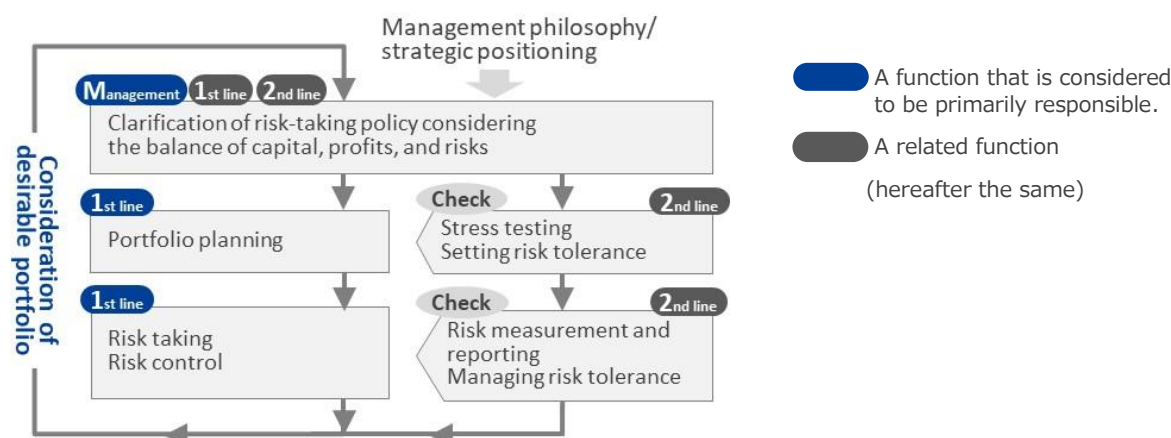
Under the leadership of the management team, in collaboration with the market and risk management departments, banks need to take into account the strategic positioning of securities investment and the balance between financial strength (capital and earnings) and risk volume, and to clarify risk-taking areas and policies ensuring that investment operations are consistent with them.

### ● Consideration of Desired Portfolio

Based on the clarified policies, it is necessary to establish a management system for considering the desired portfolio composition from the perspective of risk and return, among other things, in order to ensure consistent investment operations in line with the policies.

To establish such system, each bank may take approaches, depending on its size and risk characteristics, such as utilizing a risk appetite framework (Figure 6), or verifying the appropriateness of the risk-taking policy with a quantitative analysis of its financial soundness and profitability (risk-adjusted return), among other methods.

Figure 6 Utilization of the Risk Appetite Framework Concept



- In this regard, the following cases of concern and recommended practices have been observed at the monitored banks:<sup>12</sup>

Concerns	<ul style="list-style-type: none"> <li>● Medium-to long-term policy for securities investment is unclear [a small number]</li> <li>● Prioritizing short-term financial results over medium- to long-term portfolio composition and risk-return discussions [a small number]</li> <li>● While “diverse investment” and “diversification of assets” are stated as investment policies, quantitative verification of diversification effects and its application to risk management have not been carried out [a certain number]</li> </ul>
Recommended practices	<ul style="list-style-type: none"> <li>● Positioning securities investment as an important business alongside lending and strengthening the management system for it [a certain number]</li> <li>● Clarifying the policy of not taking excessive risks in securities investment [a certain number]</li> <li>● Understanding the theoretically desired portfolio composition by utilizing external knowledge and considering its application to the bank’s medium-term investment plan [a certain number]</li> <li>● Considering the asset composition with attention to the increase in credit risk assets [a small number]</li> <li>● In the case of setting up a tactical portfolio not based on a medium- to long-term perspective, managing it strictly separately from the core portfolio (e.g., core-satellite investment) [a small number]</li> </ul>

<sup>11</sup> ● A business management framework in which the type and total amount of risk that a company should be willing to accept in order to achieve its business plan is expressed as “risk appetite” based on the individual characteristics of its business model and is used as a common internal language for risk-taking policies in general, including capital allocation and profit maximization. Figure 6 is a simplified illustration and differs from the practice at large financial institutions.

<sup>12</sup> ● Small number: less than 5 regional banks, certain number: 5 or more but less than 15 regional banks, almost all regional banks: 15 or more regional banks (hereinafter the same)



## (2) Developing a Management System Commensurate with Risk-taking

### ● Clarification of the Risk-taking Policy and Organizational Structure

It is necessary to clarify the risk-taking policy in securities investment, to develop an organizational structure (1st, 2nd, and 3rd line of defense) (Figure 7-1) that enables the implementation of the policy, and to clearly define the roles and authority of managers in each department.

- Specifically, above all, the market department needs to be strongly aware of being a risk owner and to control risks autonomously, the risk management department needs to effectively perform checking functions, and the internal audit department needs to conduct effective internal audits adequately corresponding to changes in risk.

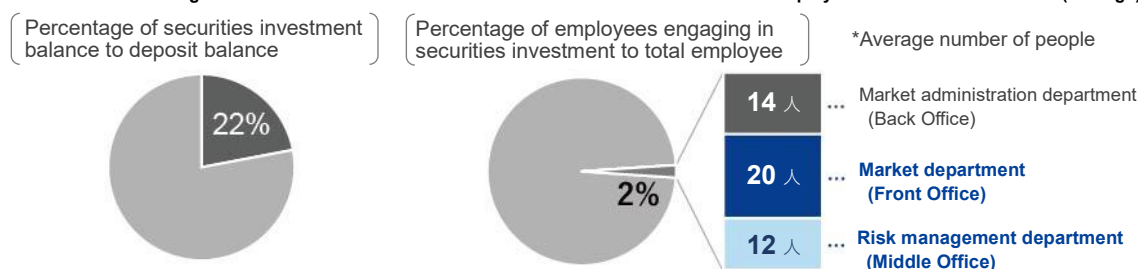
**Figure 7-1 Example of an organizational structure commensurate with risk-taking**



### ● Securing and Developing Suitable Human Resources

Additionally, since the extraordinary low interest rate environment has continued for a long period of time, it is anticipated that the number of staff who have practical experience in appropriately coping with rising interest rates has decreased. It is also necessary for banks to continue working on securing and developing suitable human resources so that practical and specialized skills related to securities investment are passed on over the medium to long term.

**Figure 7-2 Contribution of securities investment in terms of balance and employees at the monitored banks (Average)**



- In this regard, the following cases of concern and recommended practices have been observed at the monitored banks:

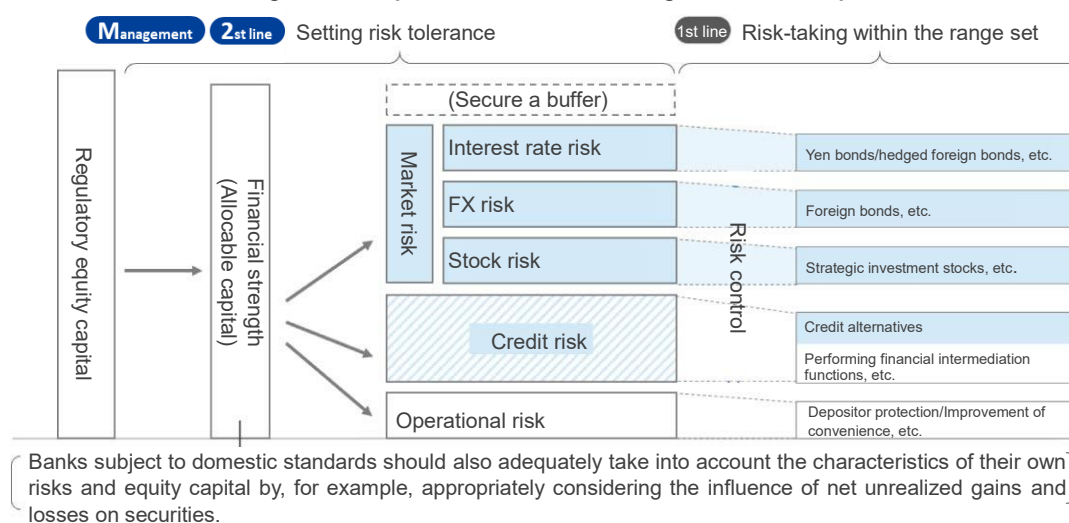
Concerns	<ul style="list-style-type: none"> <li>In both front and middle offices, the number of employees is small in light of the amount and variety of risk-taking [a certain number]</li> <li>In the middle office in particular, efforts to secure and develop human resources with a view to skill inheritance are insufficient [a small number]</li> </ul>
Recommended practices	<ul style="list-style-type: none"> <li>Clearly separating the 1st, 2nd, and 3rd line of defense functions in terms of organization and responsible executive officers [almost all]</li> <li>Open recruitment and promotion from branches in the corporate / retail banking divisions to the market department front line (the 1st line of defense function) [almost all]</li> <li>Supply of human resources from the 1st line to the 2nd and 3rd line of defense functions [a certain number]</li> <li>Dispatch of trainees to major banks, asset management companies, and securities brokerage firms [almost all]</li> </ul>

## 2. Clarification of Risk Tolerance

### (1) Allocation and Management of Risk Capital

- In order to ensure financial soundness, it is necessary to establish a management framework for allocating risk capital within the financial strength (allocable capital) based on a comprehensive understanding of the various risks, including those not included in the calculation formula for the capital adequacy ratio, and controlling the amount of risk during the fiscal term within the allocated risk capital (Figure 8).
- **Setting Risk Tolerance**  
In order to do this, it is necessary for the management team, market department, and risk management department to thoroughly discuss and clearly define the basic method of calculating the maximum risk amount allowable (expected loss amount, such as VaR) at the stage of allocating market risk capital, taking into account the risk characteristics of the held products. It is also necessary to clearly define the risk management actions (including reporting and approval authority) in case of exceeding or being likely to exceed this amount.
- **Buffer for Risk Capital Allocation**  
In addition, in cases where there are many products with difficult risk assessment, and in order to maintain the financial intermediation function in the region even in times of stress, it is necessary to secure a certain buffer in risk capital allocation.
- Banks subject to the domestic standards should also adequately take into account the characteristics of their own risks and equity capital by, for example, appropriately considering the influence of net unrealized gains and losses on securities.

**Figure 8 Example of allocation and management of risk capital**



- In this regard, the following cases of concern and recommended practices have been observed at the monitored banks:

Concerns	<ul style="list-style-type: none"> <li>● The market risk amount exceeds the allocated market risk capital during the fiscal term due to larger market fluctuations [a small number]</li> <li>● Insufficient consideration of the impact of net unrealized gains and losses for available-for-sale securities that have already occurred [a small number]</li> </ul>
Recommended practices	<ul style="list-style-type: none"> <li>● Securing a buffer as unallocated capital for the amount exceeding the regulatory minimum [a certain number]</li> <li>● Verifying the sufficiency of the buffer through stress testing [a small number]</li> <li>● Allocating risk capital taking into account the impact of net unrealized gains and losses for available-for-sale securities on allocable capital [a small number]</li> </ul>



## (2) Setting and Managing Loss Limits, etc.

### ● Loss Limit Setting

Many banks set limits on the level of net unrealized gains and losses, or on the comprehensive gains and losses (the sum of (i) change in net unrealized gains and losses during the fiscal term and (ii) realized gains and losses during the fiscal term), etc., to prevent the realization of maximum risk amount seen as in (1) above.

### ● Ensuring Effective Functioning of Loss Limits

In order for such a loss limit framework to function effectively even when rapid changes in the market environment continue to happen, it is necessary to clarify that the loss limits are set at acceptable levels in light of financial strength (capital and earnings) and to establish a risk management framework for controlling risks within those limits.

### ● Determining the Acceptable Level of Valuation Losses

Management teams need to get involved and deepen the discussion about the extent to which the bank as a whole can tolerate an increase in valuation losses of securities, from the perspective of both capital and fiscal term earnings: For example, discussions are necessary on whether the capital amount can be maintained within the range that management deems necessary even if valuation losses are realized and on whether the level of unrealized losses can be kept within the range that fiscal term earnings for certain periods would be able to cover, considering the bank's overall business situation.

Figure 9 Example of setting and managing loss limits, etc.

#### [Perspective of capital]

Even if losses on valuation are realized, whether they will be kept **within the range that can secure the amount of capital that management deems necessary**.

#### [Perspective of profits]

Considering the bank's overall business situation, whether unrealized losses are kept **within the range that can be absorbed by term earnings for certain periods**.

Setting contents	Basic concept	Management actions upon breaches, etc.
Alarm point 1 ▲○○ billion yen	• The loss can be covered by above-plan profits in service fees or cost reduction.	Implement ○○ after reporting to ○○
Alarm point 2 ▲○○ billion yen	• Term earnings for ○ years	
Loss limit ▲○○ billion yen	• Term earnings for ○ years • If it realizes, it will be equal to ○% of capital adequacy ratio.	Implement ○○ after reporting to ○○

### ● Formalizing the Basic Concept and Management Actions

In addition, it is necessary to clearly define the basic concept for setting loss limits, etc., and to periodically review them. It is also necessary to clearly define the risk management actions (including reporting and approval authority) when the loss limits exceed or are likely to exceed the limit (Figure 9).

- In this regard, the following cases of concern and recommended practices have been observed at the monitored banks:

Concerns	<ul style="list-style-type: none"> <li>● The concept of setting loss limits, etc. established in the past has become excessively conservative or non-conservative while the internal and external management actions change [a small number]</li> <li>● Insufficiency of discussions on how much loss the bank as a whole can tolerate, without taking into account the current business and financial situation and market environment [a certain number]</li> <li>● After breaching loss limits, etc., losses further increased until concrete risk management measures were implemented [a small number]</li> <li>● Limits are only set for individual products, and loss limits, etc. for the entire portfolio are not set [a small number]</li> </ul>
Recommended practices	<ul style="list-style-type: none"> <li>● Setting limits considering fiscal term earnings for certain periods (core net income, etc.) [a certain number]</li> <li>● Setting and managing limits for individual asset classes and products in addition to those for the entire portfolio [a certain number]</li> <li>● Setting and managing loss limits, etc. at a level that can ensure a capital adequacy ratio equivalent to 8% even if losses on valuation of securities are all realized [a small number of banks, including banks subject to domestic standards]</li> <li>● Close communication with outside directors and the internal audit department when loss limits, etc. are breached [a small number]</li> </ul>

### 3. Risk Management of Fund Investment, etc.

#### (1) Management of Risks Inherent in Assets Invested through Funds

- **Clarifying Investment Objectives**

Firstly, it is necessary to clarify the purpose of holding securities in the form of fund investment, etc. before investing in funds considering the positioning of such investment in the bank's business strategies and the impact on its financial strength (capital and earnings). Then, it is necessary to clarify the methods of grasping and managing risks for each product.

- **Monitoring and Reporting Risks**

After investing, it is necessary to appropriately grasp the breakdown of risks, such as by aggregating sensitivities and profits and losses on the valuation of funds across risk factors (Figure 10) and to report them regularly to the management team.

**Figure 10 Understanding sensitivities by risk factors**

	Interest rate		Exchange		Exchange rate fluctuations		Cash etc.
	Yen	Dollar	Dollar	Euro	Share	Others	
Fund A	-	○○	○○	-	-	-	○○
Fund B	○○	-	○○	-	-	-	○○
⋮							

- **Use in Risk Management**

Additionally, while taking into account the risk characteristics of each product, banks are expected to measure risk amounts (VaR) by each risk factor unit or index (Figure 11), to analyze the correlation between those and to grasp the risks of the fund with the same granularity as possible as in the case of direct holdings of securities held in the fund. It is expected that this will lead to efficient portfolio management and effective risk management.

**Figure 11 Measurement of risk amount by each risk factor**

Risk amount		Risk amount	
Bonds	○○○	Interest rate	○○○
Domestic bonds	○○	Yen's interest rate	○○
Foreign bonds	○○	Dollar's interest rate	○○
Stock	○○○	Exchange	○○○
Net investment stocks	○○	Dollar	○○
Strategic investment stocks	○○	Euro	○○
Fund Investment	○○○	Price fluctuations	○○○
Index type	○○	Stock	○○
Balance type	○○	Others	○○
Simple sum	○○○	Correlation considerations	○○○

Correlation effect ○○%

- In this regard, the following cases of concern and reference cases have been observed at the monitored banks:

<b>Concerns</b>	<ul style="list-style-type: none"> <li>● Investing in products that are largely dependent on the discretion of the asset management company, such as multi-asset funds, without clarifying the purposes of investing in a fund vehicle [a small number]</li> <li>● Despite investing in multi-asset funds or funds for which the asset management company has a large degree of discretion in allocation change, VaR is measured based on the net asset value records without consideration of correlation with assets held directly [a small number]</li> <li>● A breakdown of risks, such as sensitivities and profits and losses on valuation of funds, across risk factors is not reported to the management team [a small number]</li> </ul>
<b>Recommended practices</b>	<ul style="list-style-type: none"> <li>● Clarifying the policy of not holding products for which analyzing risks by risk factors is difficult or setting an upper limit on the outstanding balance of products with complex risks [a small number]</li> <li>● Setting risk management alarms according to the risk characteristics of the product [a small number]</li> <li>● Reporting risk factor sensitivities, valuation gains and losses, and detailed information on underperforming funds at monthly ALM committee meetings, etc. [a certain number]</li> <li>● Having a clear purpose for investing in a fund vehicle, such as enabling investment in product areas, strategies, and methods that cannot be assessed on their own [a certain number]</li> </ul>

## (2) Management of Risks Associated with the Asset Management Company

### ● Managing the Risk of Asset Management Companies

When investing in products with a high degree of asset management company discretion, it is necessary to properly manage not only the risk of the investment assets, but also the risk associated with the investment skills of the asset management company.

### ● Pre-Investment Assessment and Selection

Before investing, when selecting the funds, it is necessary to conduct an assessment (due diligence) of the asset management company's business conditions, financial status, organizational structure for investment and risk management, investment policy, investment methods, and investment performance, and so on.

- Since the items to be checked and the criteria used should vary depending on the product characteristics and external environment, it is expected to prepare different ones for the products with characteristics and review them from time to time (Figure 12).

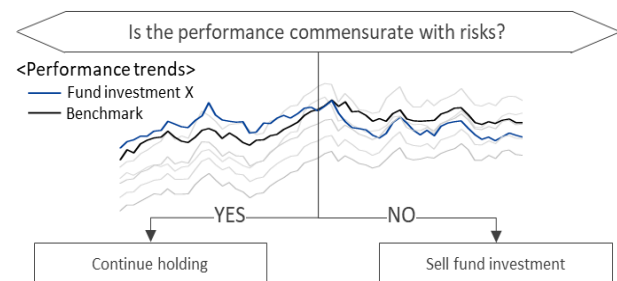
**Figure 12 Example of the due diligence check list**

Management/ Financials	Nationality, history, number of employees, financial details, ESG policy, investor profiles, assets under management
Investment system/risk management system	Organization (investment, risk management, internal audit, etc.), human resources (career, experience), frequency of market valuation, measurement method and validity of risk amount
Investment policy	Main investment asset classes, investment philosophy, investment strategy, specific investment method
Investment performance	Past track record (reasons for poor performance under market stress, etc.)

### ● Post-Investment Monitoring and Evaluation

After investing, it is necessary to evaluate the performance of the funds held in contrast with benchmarks (Figure 13), consider in advance strategies for exiting the fund investment, and check the situations on a regular basis to ensure that there are no significant subsequent changes due to changes in the external environment in the items that were evaluated positively or in the risks that were decided to accept at the time of investment.

**Figure 13 Example of performance evaluation**



- In this regard, the following cases of concern and recommended practices have been observed at the monitored banks:

<b>Concerns</b>	<ul style="list-style-type: none"> <li>● Investing small amounts in different funds based on the same strategy and methods without sufficiently analyzing and selecting the risks associated with the asset management companies [a certain number]</li> <li>● Insufficient assessment of fund performance, lacking factor analysis for each product (market factors, asset management company factors, etc.) [a certain number]</li> <li>● Unclear action plans in case of performance deterioration, or continued holding of underperforming products without rational analysis [a certain number]</li> </ul>
<b>Recommended practices</b>	<ul style="list-style-type: none"> <li>● Frequently communicating with the asset management companies and acquiring knowledge through those [a small number]</li> <li>● Direct communication with overseas asset management companies [a small number]</li> <li>● Reporting the results of performance evaluation compared to benchmarks, etc. at monthly ALM committees, etc. [a small number]</li> </ul>

## 4. Utilization of Stress Testing

### (1) Market Stress Testing / Integrated Stress Testing

- In order to complement the framework of risk capital allocation and loss limit management based on statistical methods, it is expected that stress testing based on hypothetical scenarios should be utilized under the active involvement of the management team for verifying the future impact on financial strength (capital and earnings).

#### Stress Scenario Development

It is expected that the risk management department should first identify a wide range of risk factors and transmission paths that could cause stress events, rather than simply applying the changes or change ratios in risk factors (interest rates, stock prices, exchange rates, etc.) in past stress situations.

#### Selection of Stress Scenarios

Based on the above, the risk management department should have deep discussions with the market, financial, and planning departments, taking into account the risk appetite policy, to consider what scenarios would seriously impact the sustainability of financial strength (capital and earnings) and the ability to perform financial intermediation functions in the region. Finally, it is expected that the management team itself should decide on stress scenarios that are worth testing in terms of providing beneficial insights to management. (Figure 14).

#### Utilization of Stress Test Results

It is also expected that stress test results should be utilized, not only for understanding the impact on valuation gains and losses and the capital adequacy ratio, but also for risk management during the fiscal term; for example, identifying portfolio vulnerabilities through factor decomposition for the purpose of considering action plans to avoid the impact on financial strength (capital and earnings), or adopting early warning indicators that are linked to events that could trigger stress scenarios (Figure 15)

Figure 14 Example of creating a stress scenario.

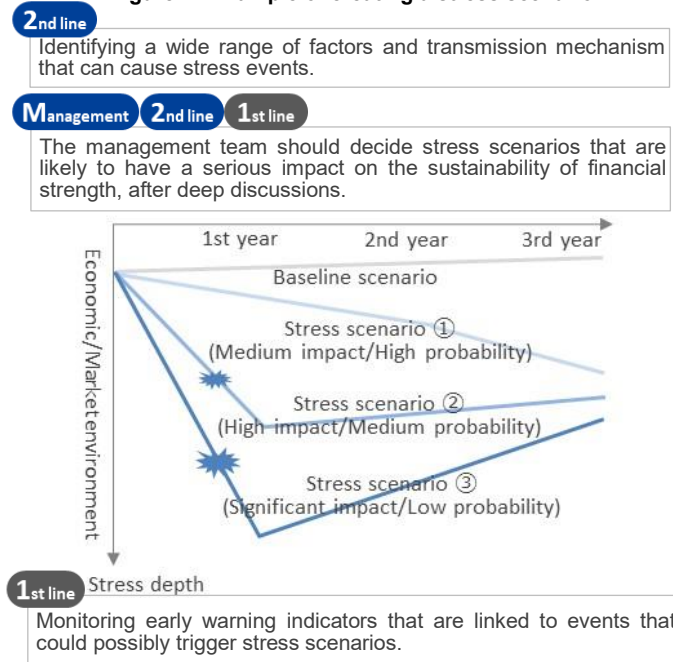
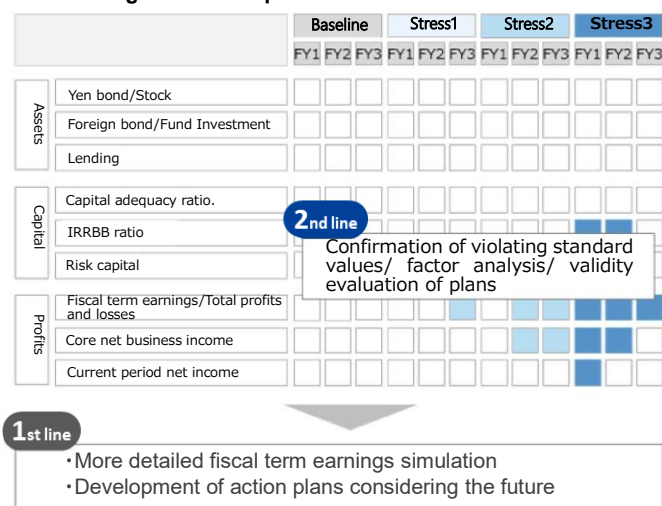


Figure 15 Example of use of stress test results



- In this regard, the following cases of concern and recommended practices have been observed at the monitored banks:

Concerns	<ul style="list-style-type: none"> <li>The reporting of scenarios and test results is objective, in itself, and there is a lack of perspectives, such as utilizing stress testing for identifying portfolio vulnerabilities and for judgment in times of rapid market changes [a certain number]</li> <li>The scenario narrative used for stress testing is just as per the original plan of the 2nd line, and the stress events that the management team and the 1st line recognize as having larger impacts or higher probabilities are insufficiently reflected [a certain number]</li> <li>The recent B/S is used as the base of the calculation, and future risk appetite policy and portfolio composition changes are not reflected [a small number]</li> </ul>
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Recommended practices	<ul style="list-style-type: none"> <li>Multiple sets of stress scenarios with horizons over multiple future years (suitably 3 years) [a small number]</li> <li>Active involvement of the management team and executive directors [a small number]</li> <li>Developing scenarios based on cross-organizational discussions with related departments or at ALM committees [a certain number]</li> <li>Adding unfavorable scenarios based on the bank's own risk characteristics, such as an increase in foreign currency financing costs [a small number]</li> <li>Considering risk-taking and risk reduction policies, and changes in portfolio composition, etc. over future years [a small number]</li> <li>Internal capital adequacy assessment at the end of the fiscal year [almost all regional banks]</li> <li>Evaluating the sustainability of profits and dividends [a certain number]</li> <li>Setting evaluation hurdles in stress testing at conservative levels (e.g. securing a capital adequacy ratio of 8% even if losses on valuation of securities are all realized) [a small number of banks including banks subject to domestic standards]</li> <li>Checking the appropriateness of increasing investments when losses on valuation of securities are becoming larger (implementation of ad-hoc stress testing) [a small number]</li> </ul>
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## (2) Foreign Currency Liquidity Stress Testing

- Japanese financial institutions, including regional banks, do not have a retail operation base in the United States and Europe, so they have no other choice but to rely heavily on market funding for their foreign currency funds.
- Therefore, as the amount of foreign currency funding increases with the expansion of foreign bond investments and foreign currency lending, it is necessary to strengthen the ability to respond to funding stress. This requires not only checking the current situation, but also confirming the funding availability period and clarifying the trigger order and responsible departments for funding countermeasures (contingency plans) to ensure effectiveness (Figure 16).

Figure 16 Measurement of survival period

	T	1 M	2 M	X M
Total assets				
Total funding costs				
Foreign currency deposits				
Interbank				
Bond repurchases.				
<b>Net balance</b>				
Financing				
Commitment line contract				
Amount available for yen				
<b>Balance after measures</b>				

Confirmation of not only the current situation but also the survival period

Confirmation situation after reflecting the countermeasures

- In this regard, the following cases of concern and recommended practices have been observed at the monitored banks:

Concerns	<ul style="list-style-type: none"> <li>Whereas the business policy is to expand the foreign currency B/S, only the current position is checked [a small number]</li> <li>Funding countermeasures have not been developed or are not effective (trigger priorities and responsible departments are unclear) [a small number]</li> </ul>
Recommended practices	<ul style="list-style-type: none"> <li>Multiple sets of scenarios (a. externally caused stress, such as market turmoil, b. internally caused stress, such as bank downgrade, c. simultaneous occurrence of a and b) [a small number]</li> <li>Periodic measurement of survival period, which should be over 1 month, 3 months, etc. [a small number]</li> <li>Development of funding countermeasures having trigger priorities and responsible departments clearly defined [a small number]</li> </ul>



## 5. Responding to Changes in the Market Environment

### (1) Action Plan for Preserving Capital

- Since securities investment is always affected by market fluctuations, changes in profits and losses on valuation as a result of risk-taking are not issues of concern in themselves.
- However, since changes in profits and losses on valuation lead to an increase or decrease in capital, it is necessary to conduct, even during an ordinary market environment, vulnerability analysis of one's own portfolio and prepare for the uncertainty of the market, which can change rapidly with action plans (autonomous risk control measures by the first line) readily available (Figure 17).
- In addition, if there is a high probability that valuation gains will decrease significantly or valuation losses will increase in comparison to financial strength (capital and earnings), it is necessary to make judgments or take actions appropriately in accordance with changes in the environment. In addition, if necessary, the validity of the originally established market division revenue plan needs to be reviewed (Figure 18).
- However, since market fluctuations cannot be completely predicted, it is necessary for the departments concerned and the management team to always share an understanding of possible cases that the situation may not develop as described in the scenarios assumed in the action plans or that actions completely different from those planned may have to be taken.
- In this regard, the following cases of concern and recommended practices have been observed at the monitored banks:

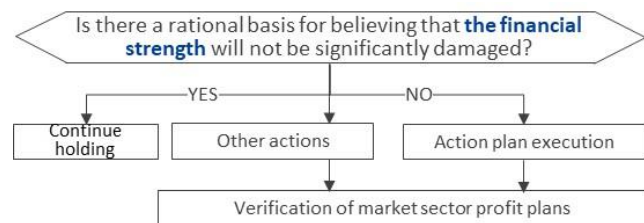
Figure 17 Example of action plan development

	Pattern 1	Pattern 2	Pattern 3
Trigger criteria	○○○	○○○	○○○
Initial response	Short Japanese stocks	Short U.S. treasury note futures	
Actions on the day	Convened the extraordinary ALM committee and decided on specific measures		

Examples of specific response menus

	Added short futures	Interest rate swap	Bear fund purchase	Asset sale
Merit	○○○	○○○	○○○	○○○
Demerit	○○○	○○○	○○○	○○○

Figure 18 Example of a decision tree for taking actions



Concerns	<ul style="list-style-type: none"> <li>● Although the market environment has deviated from the assumptions for the business plan, specific discussions, such as revising the revenue plan have not been carried out [a small number]</li> <li>● Risks associated with yield curve fluctuations have not been considered when developing plans for monitoring interest rate positions or hedging policies [a small number]</li> <li>● Although various indicators are monitored using external knowledge, there is no early warning framework nor concrete action plans developed [a small number]</li> </ul>
Recommended practices	<ul style="list-style-type: none"> <li>● There is an early warning framework in place with various indicators for monitoring the macro economics and the market environment set together with thresholds [a small number]</li> <li>● Monitoring and analyzing factors that affect changes in correlation coefficients (situations where market correlation collapses) [a small number]</li> <li>● Having multiple response patterns or action menus ready in preparation for sudden market changes [a small number]</li> <li>● A framework for monitoring and factor analysis is in place in terms of the IRRBB (Interest Rate Risk in the Banking Book) ratio and ΔEVEs (Economic Value of Equity) by currency and by scenario [a small number]</li> <li>● Flexible risk control with substantial involvement of the management team with consideration given to the impact on financial strength [a small number]</li> </ul>



## (2) Preparation for the Risk of a Decline in Term Earnings

### ● Impact of Rising Interest Rates

While rising interest rates can deteriorate the valuation gains and losses of securities, it is generally considered to be positive for bank earnings in the medium to long term through improved yields on loans and investments. However, it is important to pay attention to investment assets with yields lower than the cost of funds. For example, some foreign currency bonds with high book prices purchased in the past low-interest rate environment have been in a negative carry situation due to the significant increase in foreign currency funding rates since 2022.

### ● Negative Impact of Negative Carry

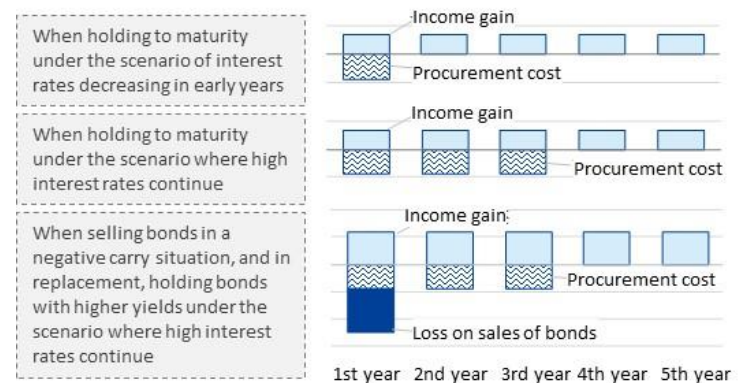
Keeping such bonds held in the book, depending on future trends in short-term and long-term interest rates, will continue to push down fiscal term earnings going forward. Further, locking funds in unprofitable investment may deteriorate flexibility and efficiency in investment operations, and thereby undermine the soundness of the portfolio.

### ● Importance of Scenario Analysis and Action

Therefore, it is necessary to understand the impact of holding poor-performing positions, such as bonds in a negative carry situation, on future term earnings of the bank through simulations based on multiple scenarios (Figure 19)..

- In addition, if any of the negative scenarios seem to occur in high probability, it is necessary to make appropriate judgments and take actions considering the impact on financial strength (capital and earnings) (Figure 20).

**Figure 19 Example of term earnings simulation**



**Figure 20 Examples of materials for judgment when taking action**

			Continue holding	Sell
Profitability	P/L	Securities-related profits and losses	Current fiscal term <b>Negative carry</b>	<b>Realized loss</b>
			Subsequent fiscal terms <b>Negative carry</b>	<b>Zero (Improvement if replaced)</b>
Soundness	B/S	Valuation gains and losses on securities	<b>Remain negative</b>	Improvement
		Core capital	Unchanging	<b>Negative</b>

- In this regard, the following cases of concern and recommended practices have been observed at the monitored banks:

Concerns	<ul style="list-style-type: none"> <li>● Despite the significant changes in the market environment, no agile risk control that considers both the economic value of equity and fiscal term earnings has been implemented [a small number]</li> <li>● An analysis of the impact of high foreign currency funding costs on net interest income has not been conducted or is insufficient, even though the situation where the foreign currency funding cost exceeds the Bank's fiscal term earnings (negative carry) is expected to continue for the time being [a small number]</li> </ul>
Recommended practices	<ul style="list-style-type: none"> <li>● Addition of indicators that are expected to trigger an alert on any impacts on future term earnings (foreign currency funding costs, basis costs, etc.) for monitoring [a certain number]</li> <li>● Understanding the impact of holding bonds in a negative carry situation through simulations based on multiple scenarios with the analysis horizon starting from the timing of interest rate hikes or rate cuts, and taking actions to improve the portfolio soundness [a small number]</li> <li>● Trial analysis of future NII (term earnings) and <math>\Delta</math>NII (fluctuation risk of term earnings) of all the banking accounts [a small number]</li> </ul>

## C. Demonstrating Effective Risk Governance

- The most important factor in ensuring that the effective investment and risk management systems commensurate with the risk-taking are in place as outlined in II.B above is for the management team to take the lead for effective risk governance.
- From this perspective, the FSA discussed with management teams for monitoring mainly about the following points 1 and 2. As a result, it has been found that risk governance is generally being appropriately exercised in the monitored banks.

### 1. Control by 1st, 2nd, and 3rd line of defense

- The market department, as the risk owner, must autonomously control risks based on the balance between financial strength and risk amount (see in II.B.1 above) along with taking the risks (see in II.B.3.5 above). To this end, it is necessary to evaluate the performance of the market department from the perspective of risk and return combined.
- The risk management department needs to maintain its independence, assign specialized personnel, and perform an effective checking function against the market department (see in II.B.1.2.3 above). At the same time, it is expected to deeply understand market operations through daily communication with the market department (see in II.B.5 above), analyze and evaluate the potential impacts under various stress scenarios, and provide feedback to the management team and the market department (see in II.B.4 above).
- The internal audit department needs to maintain its independence, assign specialized personnel, collect information on the situation of securities investment and risk management on a daily basis, conduct effective internal audits that appropriately respond to changes in risks, and report the results to the board of directors, etc. (see in II.B.1 above)

### 2. Control by Management Team and Board of Directors

- The management team and board of directors must, from the perspective of ensuring future profitability and sustainable soundness, affirm whether risk-taking is being carried out in line with financial strength and risk control capabilities (see in II.A above) and whether effective investment and risk management systems have been built in line with risk-taking (see in II.B above).
- In order to respond flexibly to changes in the environment, the management team needs to demonstrate leadership in making high-level decisions, in a timely manner, that will benefit the entire organization of the bank and its future. Such decisions should be made as a result of a thorough understanding of its risk characteristics, which should be based on communications with the market department and the risk management department (Figure 21).

Figure 21 Examples of Ideas for implementing Risk Governance

Main discussion points	Undesirable situations	Desirable situations
1. Clarification of risk-taking policy 2. Clarification of risk tolerance 3. Risk management of fund investment, etc.	<b>Partial</b> decision/verification • Excessive profit expectations and dependence on securities investment, etc.	<b>Organization-wide</b> decisions and risk evaluation • Does the company as a whole maintain a balance between each element, such as risk-taking vs. risk management, and earnings vs. capital?
1. Clarification of risk-taking policy 4. Utilization of stress testing	Risk evaluation focusing on <b>the past and the current situation</b> • Will the net income become negative this fiscal term? • Does it currently violate the minimum standards?	Risk evaluation with an eye on the <b>future</b> • Continue to secure profits commensurate with the risk? • What is the possibility of the minimum standards being breached in the future?
2. Clarification of risk tolerance 5. Responding to changes in the market environment	<b>Formalities</b> take precedence and response is delayed. • Discussion at ALM committee only after issues become materialized	<b>Substantial</b> involvement of management • Capture issues proactively and respond flexibly?