# **RISK MANAGEMENT**

As a result of rapid advances in financial technology and major changes in the business environment, the risks inherent in banking operations are swiftly becoming more diverse and complex. As a result, it is more important than ever that bank management identify and carefully manage various types of risks including credit risk and market risk. Fuji Bank has made risk management one of its key managerial priorities.

Through the inspections and supervision carried out by our Inspection Division and external organizations such as the financial supervisory authorities, we are establishing organizational procedures that continually check the efficiency of our risk management systems. We also carry out comprehensive inspection of our entire risk management system at least once a year.

To facilitate statistical methods for measuring various types of risk on the basis of common criteria, we reorganized the former Market Risk Assessment Division into the Risk Assessment Division in January 1998. The new division follows a neutral approach to evaluating market risk and credit risk as well.

#### I. Credit Risk

Credit risk is associated with a wide range of operations, from lending and market transactions in products such as derivatives to settlements. We are striving to ascertain all possible sources of risk and devise appropriate means of dealing with them. The most important issue in the area of credit risk management is ensuring the soundness of loan assets, which account for the lion's share of credit risk. We take a dual approach to this issue. On the one hand, we assess and monitor each individual loan transaction; on the other, we manage the entire loan asset portfolio on an all-inclusive basis.

Overall control of credit risk management is in the hands of the Loan Strategy Committee chaired by the President and CEO. This committee determines lending strategy and policies, and monitors the entire loan portfolio. At the same time, the Credit Planning Division and the Credit Division for Overseas Business specialize in devising the means of assessing and managing individual loan transactions, and for planning and developing methods for analyzing our overall loan portfolio.

# 1. Credit Assessment and Monitoring of Individual

Each proposed loan transaction is carefully assessed for risk and profitability by the branch in charge. If the amount involved exceeds the branch manager's authority, the appropriate credit division at Head Office carries out the assessment. At this stage, active use is made of the in-house credit rating system\*, which provides the standards needed for assessing the risk and profitability of each loan proposal as well as the tools for monitoring the transaction after its execution.

Within the head office credit divisions, specialist departments are set up to deal with large and medium-sized enterprises by type of industry and operational scale, and with individuals and smaller businesses by region. The credit divisions also provide branches with appropriate advice in a timely manner according to the characteristics of the customers and markets involved. The Credit for New Business Department, for example, was set up to specialize in sectors where technological innovation is progressing rapidly.

Overseas, credit divisions have been established in New York and London with responsibility for America and Europe, respectively, while credit personnel have been assigned to Hong Kong who work with head office credit divisions to deal with the Asian region. These staffers engage in information-gathering activities in connection with the laws, commercial customs, and political and economic conditions in their respective jurisdictions, and use this information as the basis for carefully focused credit assessment and management activities in each region.

We have also established departments at home and abroad to carry out industrial surveys designed to gather and analyze information on sectoral trends, and new products and technologies.

Nurturing human resources to support this credit evaluation system is extremely important. In addition to making efforts to train specialists in assessing loans, the management team is paying particular attention to implementing practical training programs according to the type of specialization involved.

#### \*In-house credit rating system

Our in-house credit rating system has 16 grades and in principle is applied to all loan assets other than housing loans among others. The marketing or credit division in charge prepares rating studies on the basis of a manual, and the Credit Assessment & Auditing Department, which is completely independent of our credit divisions, confirms the validity of the results. In recent years, reviews have been conducted at least once every twelve months.

This system provides infrastructural support for the assessment and management of individual transactions, as well as the base for managing the loan portfolio and measuring credit risk. In addition, our credit ratings are applied to the pricing process for individual cases.

The system has been revised and upgraded repeatedly, and now provides an objective indication of the credit risk associated with our loan assets. We have also endeavored to ensure ample consistency between it and the ratings of rating agencies, self-assessment systems and the asset classifications used by the financial supervisory authorities.

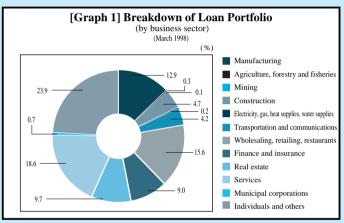
#### 2. Portfolio Management

So far, we have looked at the assessment and management of individual transactions. It is also extremely important to ensure the overall soundness of loan assets by analyzing and managing the loan portfolio, which is the aggregate of all individual loans.

In order to ensure that credit risk held by the Bank is kept at an appropriate level, the Loan Strategy Committee monitors and periodically analyzes the entire loan portfolio by business sector, region, in-house credit rating and other criteria.

## (1) Breakdown of Loan Portfolio by Business Sector

Generally speaking, we do not specify upper limits on outstanding loans in advance according to business sector. We do, however, monitor the makeup of our portfolio constantly to ensure that there is no bias toward any specific industrial sector and to avoid any adverse changes in portfolio structure.



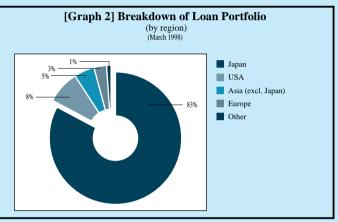
Note: Domestic offices (excluding loans booked in the Japan offshore market)

#### (2) Breakdown of Loan Portfolio by Region

Through the country risk/exposure system, upper limits are set for each country for all credit transactions, including loans. This upper limit is reviewed at least once every six months to reflect conditions in the world economy and political and economic conditions in each country.

As of the end of March 1998, loans to Asian countries were as shown below in Table 1. Affiliates of Japanese companies accounted for over 45 % of loans to the private sector.

Almost all of the loans to non-Japanese borrowers are for project financing and to the largest business groups in each country.



Note: Non-consolidated basis

#### [Table 1] Loans to Asian Countries

• •							
	Millions of U.S. dollars						
		Public	Financial		Private	Sector	
	Balance	Sector	Institutions	Total	Japanese	(% of total)	Non-Japanes
South Korea	\$ 885	\$ 23	\$162	\$ 699	\$ 45	(6.5%)	\$ 654
Indonesia	1,415	127	98	1,189	541	(45.5)	648
Thailand	1,816	76	132	1,608	845	(52.6)	762
Hong Kong	3,494	3	131	3,358	1,423	(42.4)	1,935
Singapore	821	8	11	801	651	(81.3)	150
Malaysia	604	193	_	410	143	(35.0)	267
China	1,541	119	278	1,144	589	(51.5)	555
Philippines	312	34	_	277	95	(34.5)	182
Total	\$10,890	\$584	\$815	\$9,491	\$4,336	(45.7%)	\$5,155

Note: Non-consolidated basis.

# 3. Measuring Credit Risk

We have been tackling the issue of measuring credit risk from several viewpoints: promoting integrated risk management (combining credit and market risk), and portfolio management. Now the credit risk associated with virtually all credit transactions (including derivative and other off-balance sheet transactions) is measured on a daily basis.

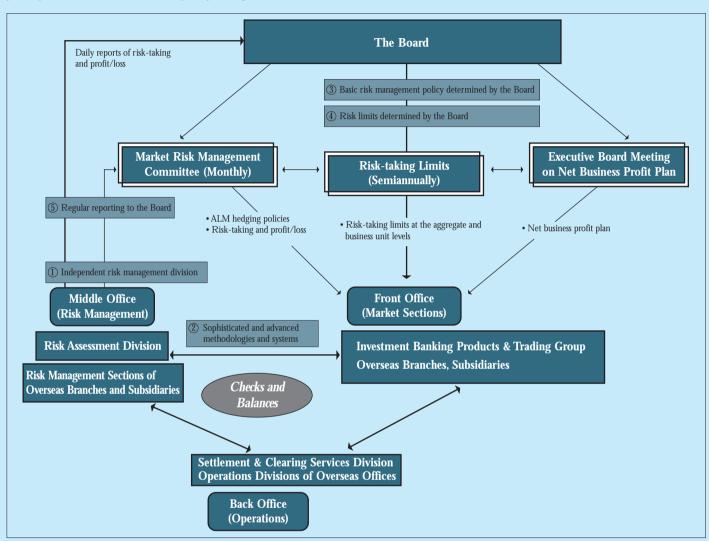
We measure and analyze credit risk according to such criteria as transaction type, rating, region and business sector, and submit reports on our findings to top management. The information thus derived is reflected in managerial decisions relating to integrated risk management.

## II. Market Risk Management

#### 1. Market Risk Management Structure

We have established a solid structure for managing market risks including ALM (Asset Liability Management of interest rate risk on yen deposits and loans). We can adequately manage market

risks through a centralized risk measurement system, and at the same time, we generate earnings through market trading. The following chart outlines our market risk management structure.



Our market risk management structure has the following key characteristics:

- ① Establishment of an independent risk management division.
- ② Sophisticated and advanced methodologies and systems for managing market risk.
- 3 Basic risk management policy determined by the Board.
- 4 Risk limits determined by the Board.
- (5) Regular reporting to the Board and senior management.

# ① Establishment of an independent risk management

In 1994, we became the first Japanese bank to set up the Market Risk Assessment Division (now the Risk Assessment Division), an independent risk control unit to identify, assess and control our overall market risk on a consolidated basis. This division is independent from business units involved in market activities, and reports directly to the

Deputy President of the Bank to make proper and timely business judgments without influence from business units.

Overseas branches and subsidiaries have also established their own market risk management sections that are independent from the business units involved in market activities. Therefore, each office segregates duties by separating the front office (market activities), the middle office (risk management) and the back office (operations) and establishes checks and balances between them effectively.

# ② Sophisticated and advanced methodologies and systems for managing market risk.

Profits and losses in virtually all business units engaging in market activities are managed on a mark-to-market basis. This approach has been adopted because we believe that not only realized profits and losses but also unrealized gains are important to have a clear overall grasp of profit and loss.

We use the Value at Risk (VaR) methodology to manage market

risk. For managing and controlling risk that cannot be ascertained by VaR alone, we also set limits on other risk sensitivities such as BPV (Basis Point Value), carry out stress tests and back tests, and set stoploss limits, according to market risk activities in each business unit. For further information, refer to the following sections regarding market risk profiles.

The Risk Assessment Division is continuously striving to absorb risk management innovation, to develop advanced financial theories and methodologies, and to improve information systems for risk management.

### 3 Basic risk management policy determined by the Board.

We have formulated our own risk management policy in order to clarify our standards on setting risk-taking limits, organizational structures, lines of authority, procedures, and techniques to evaluate and control risks. The risk management policy is reviewed every six months and approved by the President and CEO. This is consistent with the risk management principles issued by Japanese banking regulators and the Bank for International Settlements.

#### 4 Risk limits determined by the Board.

We believe that the potential loss from our aggregate risks such as market, credit and operational risk and other risks should be kept within levels that can be covered by our own capital. Therefore, we set aggregate VaR limits by allocating some portion of our capital to market risk based on our business strategy for market activities. Each division's VaR limit is set by allocating the Bank's aggregate VaR according to such criteria as the market outlook and business strategy. Risk-taking limits at the aggregate and business unit levels are decided every six months by the President and CEO.

# (5) Regular reporting to the Board and senior management.

[Daily] E-mail

A daily report that summarizes our aggregate VaR, and trading activities, profits and losses, and market risk-taking of each division is sent to the Chairman, the President and CEO and other members of the Board and senior management through E-mail.

[Monthly] Market Risk Management Committee
The Market Risk Management Committee is convened every month
by the presiding Deputy President. The Committee reviews trading
activities, profits and losses, market risk-taking of each division, as
well as liquidity risk, and makes decisions on ALM hedging policies.

The above procedures provide senior management with an accurate and timely grasp of our market risk exposure, creating an organizational structure that enhances appropriate and rapid management decision-making.

Overall, this management system has been functioning very well. For example, since the Asian market crisis in 1997, branches in the region have been managing their positions carefully according to the information provided by the risk management divisions in Singapore and Hong Kong, which have been monitoring the situation carefully. Not only has this helped forestall a number of problems, but the Market Risk Management Committee has enabled senior management to make quick decisions on proposals to reduce risk-taking limits according to changes in the market environment.

The following measures have also been adopted to deal with ALM activities:

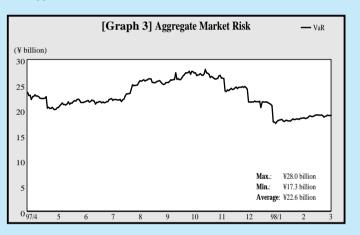
- The Treasury Division has been set up to carry out ALM hedging operations.
- Each month, the Market Risk Management Committee sets its ALM hedging policies. The Treasury Division follows these policies in its actual ALM hedging operations, and submits its report to the Committee the following month.

In this way, we have established a solid structure for managing market risks including ALM activities.

#### 2. Aggregate Market Risk Activities

#### (1) Level of Market Risk

Market risk amount (Value at Risk) in fiscal 1997 is shown in Graph 3 below. Market risk amount (Value at Risk) covers almost all financial instruments in our consolidated books including most of our subsidiaries (excluding equity investment securities held for long-term appreciation).



#### Value at Risk

Value at Risk (VaR) is defined as the potential loss for a certain period from an adverse market movement which could occur in a certain probability. Actual VaR may vary with degree of probability, length of holding period, or the nature of models used to identify the risks.

The following standards apply for the purpose of calculating VaR as shown in the graph above.

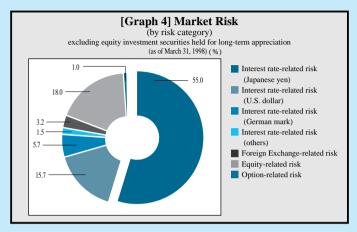
- Confidence interval one-tailed 97.5% (two-tailed 95%)
- Holding period one day
- Historical observation period 6 months
- Discretion to recognize empirical correlations across broad risk categories

We have been calculating VaR with our internal models to monitor and control our market risk effectively. We have continuously confirmed that potential loss calculated using VaR methodology is far below our own capital.

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#### (2) Structure of Market Risk

Graph 4 shows the breakdown of our market risk amount by each risk category as of March 31, 1998 (excluding equity investment securities held for long-term appreciation). This graph shows the sensitivity of our market risk profile by each risk category. (This graph covers the same instruments as in Graph 3.)



As shown in Graph 4 above, the majority of our market risk comes from Japanese yen interest rate instruments. This fact implies that we command good control of market risk since we have considerable access to the yen market. Also, this graph shows that market risks other than Japanese yen interest rate risk are well-diversified among various categories of market risks. Option-related risk which has non-linear price characteristics is only 1% of our overall market risk.

Since interest rate and foreign exchange risk of Asian currencies totaled approximately 2% overall, the Asian market crisis in 1997 had relatively little effect on our earnings.

#### (3) Yen Interest Rate Risk

Table 2 takes a more detailed look at yen interest rate risk, which is the majority of our aggregate market risk. It shows yen interest rate risk in terms of interest rate sensitivity by period (grid sensitivity).

[Table 2] Yen Interest Rate Sensitivity Table by Period (grid sensitivity)

	Billions of yen		
	1 year	1-5	5 years
March 31, 1998	or less	years	or more
Interest rate sensitivity	¥0.1	¥(1.3)	¥(1.7)

Note: This table covers the same instruments as in Graph 3.

The interest rate sensitivity above shows how much net present value increases when interest rates go up by 1 basis point (0.01%). The negative numbers in the above table thus show that net present value declines when interest rates increase during the periods in question. We can obtain a more accurate analysis of the influence of the shift of interest rates on net present value, even if short-term and long-term interest rates move differently.

#### (4) Simulations of Earnings at Risk

Periodically, we conduct simulations of earnings at risk regarding interest rate portfolios on the banking account of major currencies, other than securities investments. This enables us to obtain a more accurate analysis of the influence of changes in interest rate levels on our earnings. Table 3 below shows earnings at risk in the case where interest rates rise by 0.5%.

[Table 3] Earnings at Risk

	Billions of yen			
	Yen	U.S. dollar	German mark	
April 1998 – September 1998	¥(5.3)	¥(2.7)	¥(0.5)	
October 1998 - March 1999	(8.0)	(6.0)	(2.1)	

(Difference between estimated profits in the current situation and estimated profits in the 0.5% rise in interest rates)

Taking into account that net present value of interest rate portfolios at the end of March 1998 exceeded 200 billion yen by a large margin, we believe a potential negative impact on earnings shown on the above table is negligible in terms of the amount of our overall earnings and capital.

We manage market risk not only by VaR methodology, but also by using other risk sensitivities such as BPV (Basis Point Value) and earnings simulations to evaluate and manage risk even more sensitively.

#### (5) Liquidity Risk

Liquidity risk is defined as the risk of being unable to offset or hedge positions in a timely manner at a reasonable cost. This risk states that the loss might exceed normal VaR. We confirm our ability to offset or hedge positions in a short time at a reasonable cost by monitoring and reviewing the liquidity and turnover of certain asset inventories on a periodic basis.

Specifically, first, we estimate the one-day volume that we can trade at a reasonable cost for each financial instrument. Second, we calculate time to offset or hedge our positions based on estimated one-day volume. Then we compute market liquidity risk amount (VaR) by setting our holding period equal to time to offset or hedge positions calculated above.

Market liquidity risk amount as of March 31, 1998 is ¥ 74.6 billion. Therefore, even by taking the market liquidity and time to offset or hedge positions into consideration in computing VaR, we have enough capital and profitability to absorb market liquidity risk (No correlation among instruments is taken into consideration. Market liquidity risk amount includes the same instruments as in Graph 3 on page 45).

The President and CEO sets the limit on market liquidity risk amount every six months, and the Risk Assessment Division reviews and reports market liquidity risk amount to the Market Risk Management Committee every month.

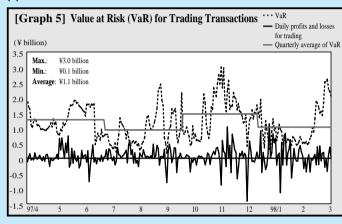
The other type of liquidity risk is the risk of the potential inability to meet funding requirements of transactions. We develop and enhance the procedure to identify, measure, and monitor our liquidity sources and use it in order to strictly control this type of liquidity risk. The President and CEO sets the limit every six months and the liquidity profile is reported monthly to the Market Risk Management Committee.

### 3. Profile of Risk-taking of Trading Transactions

Since fiscal 1997, mark-to-market accounting has been introduced in the trading books of Japanese financial institutions. The following sections describe trading transactions, which include transactions for trading purpose accounted for in the trading books and foreign exchange transactions (non-consolidated).

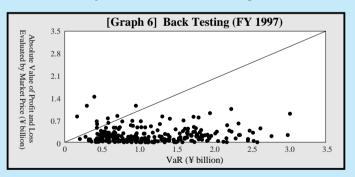
We value financial instruments by using quoted market prices (fair value) if they are available. If quoted market prices are not available, fair values are estimates derived from using discounted cash flows or other valuation techniques. Valuation includes the significant assumptions which we regard as adequate, and if different assumptions were used, the valuation may differ from our estimates.

#### (1) VaR



#### (2) Back Testing

We routinely compare daily profits and losses with model-generated risk measures to gauge the quality and accuracy of our risk measurement model. This process is known as "back testing."



The graph above shows the absolute value of the daily profit and loss flows to VaR. Dots that lie above the diagonal line indicate the days when the absolute value of the profits and losses exceeded VaR. According to the statistical specification underlying our VaR methodology, only approximately 5% (  $2.5\% \times 2$  as this considers both profit & loss ) of the observations should lie above the diagonal line. As shown in Graph 6, ten dots lie above the diagonal line, which is about 4% of all data. Accordingly, the comparison of actual trading results with model-generated risk measures is close enough, and the back test raises no issues regarding the quality of our risk measurement model.

#### (3) Stress Testing

In times of stress, market conditions change dramatically. Sharp and volatile price movement destroys liquidity and correlation between instruments. As VaR is a figure to determine potential losses in trading activities when the market is in normal conditions and liquid, it fails to evaluate the loss in stress condition. Stress testing is an alternative technique for evaluating the exposure under worst-case scenarios which plays an important role together with VaR in market risk management because it enables senior management to explore potential risks.

Stress testing can take several forms. We prepare several kinds of stress tests according to management needs. Some of the results of the stress testing is presented in the table below. Results are reviewed regularly by senior management and are reflected in the policies and limits which are approved by the President and CEO.

The table shows two stress scenarios and one worst-case scenario. With respect to the two stress scenarios, the results of the severe confidence interval scenarios tell the potential loss under abnormal conditions while still maintaining liquidity and correlation among instruments. The worst-case scenario is based on the market's most extreme movement according to historical data over ten years. It shows the potential loss when the market moves sharp and volatile in the case when the correlation among instruments are destroyed.

[Table 4] Stress Testing

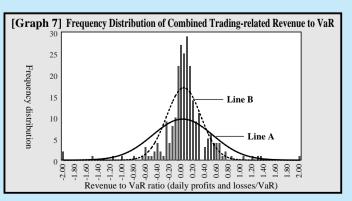
	Billions of yen
	Potential loss
VaR (confidence interval 97.5%)	¥ 3.0
Stress Scenario (confidence interval 99.0%)	3.5
Stress Scenario (confidence interval 99.9%)	4.7
Stress Scenario (worst case)	19.0

#### (4) Revenue to VaR Ratio

It is our basic policy to optimize risk-adjusted return by monitoring and managing risks we take. Therefore, it is extremely important to monitor if risk-adjusted return is sufficient, and if we have enough profitability to absorb any potential losses.

The frequency distribution of our daily combined trading-related revenue to VaR ratio during the twelve-month period ended March 31, 1998 is presented below. Line A shows the theoretical profit-and-loss distribution (normal distribution: mean = 0). Line B is the distribution curve based on our actual profits (mean > 0).

- Line B has a skewed shape toward the positive side. This clearly shows our good performance with respect to daily revenue.
- The deviation of Line B is smaller than that of the theoretical profitand-loss distribution curve (Line A). This shows the fluctuation of daily revenue is very small.



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Due to our well-diversified trading portfolio and client-oriented nature of our trading activities, we achieved the good performance and stability of daily revenue such as indicated in the graph above.

We use not only the Value at Risk (VaR) methodology, but also other risk management methods such as stress tests and back tests to manage market risks more effectively, and we have continuously confirmed that potential loss from market risk is far below our own capital, profitability and other resources.

#### 4. Off-Balance Sheet Financial Instruments

# (1) Purpose of Off-Balance Sheet Transactions

Off-balance sheet transactions are those which are not recorded on the balance sheet because fund transfer does not occur for the principal of those transactions. We deal with off-balance sheet transactions, especially derivative products, for the risk hedging needs of customers, for hedging in asset liability management, and for earning profits from trading.

#### (2) Market Risk of Off-Balance Sheet Transactions

As previously explained, off-balance sheet transactions are also exposed to market risk. (Refer to the previous sections regarding market risk profile.)

#### (3) Credit Risk of Off-Balance Sheet Transactions

When calculating BIS-based capital, credit risk of off-balance sheet transactions is calculated as follows.

[Table 5] BIS Base Credit Risk of Off-Balance Sheet Transactions

	Billions of yen			
	Notional amount		Credit risk (BIS	equivalent base)
March 31,	1998	1997	1998	1997
Interest Rate Swaps Currency Swaps FX Forward Interest Rate Options	¥265,698.7 4,919.8 34,008.5	¥176,325.6 4,030.2 31,726.9	¥3,098.7 506.3 1,518.3	¥2,183.4 457.2 1,304.1
(buying)	2,837.9	2,019.4	34.4	17.2
(buying)	2,415.6 27,908.1	1,541.5 17,230.5	73.8 35.6	49.3 45.7
Effect of Netting Arrangement			(3,040.4)	(833.6)
Total	¥337,788.8	¥232,874.5	¥2,227.0	¥3,223.5

Note: Consolidated basis.

Credit Risk Equivalent (which is basically calculated using the current exposure method) of off-balance sheet transactions shown in the above table is different from potential default loss. Potential default losses arise from the possibility that counterparties may default on their obligations to the Bank.

We establish credit limits to manage credit risk for individual customers, and review these limits regularly. Limits are set on each type of transaction and these limits are strictly observed.

Other quantitative data regarding credit risk of off-balance sheet transactions as of March 31, 1998 (non-consolidated) are presented in the following tables. These tables include virtually all off-balance sheet transactions (excluding our transactions with Fuji Capital Markets Group, our swap house subsidiary).

[Table 6] Breakdown by Creditworthiness

	Billions of yen		
	Credit	Credit	Credit risk
	exposure	cost	amount
Customers whose creditworthiness is generally equivalent to AAA/Aaa - BBB/Baa rating from rating agencies Customers whose creditworthiness is generally equivalent to BB/Ba rating	¥2,471.2	¥0.6	¥7.1
from rating agencies	79.8	0.2	0.3
Others	47.6	6.4	0.9
Total	¥2,598.6	¥7.2	¥8.3

- Notes: 1. Credit exposure in the table is similar to Credit Risk Equivalent, both of which are basically calculated using current exposure method and are different from potential default loss. However, details of calculation methods are different.
  - 2. Credit cost is expected losses computed using statistical models.
  - 3. Credit risk amount is potential default loss (volatility of expected losses) computed using statistical models.

[Table 7] Breakdown by Region

	Billions of yen			
	Credit Credit Credit r			
	exposure	cost	amount	
Japan	¥1,410.3	¥6.4	¥4.6	
Asia	45.5	0.4	0.3	
USA	550.1	0.1	1.6	
Europe	493.9	0.2	1.6	
Note: Based on countries in which head offices are located.				

[Table 8] Breakdown by Industry

	Billions of yen		
	Credit	Credit	Credit risk
	exposure	cost	amount
Banking, Securities, Insurance	¥2,023.0	¥0.6	¥6.3
Manufacturing	99.1	0.3	0.2
Wholesale	51.8	0.5	0.1
Transportation and Communications	31.8	0.1	0.1
Services	18.7	1.3	0.1
Nonbank	107.3	1.9	0.2
Others	267.1	2.6	1.3

The tables above show that over 95% of the credit exposure of off-balance sheet (derivative) transactions arises from transactions with customers whose creditworthiness is generally equivalent to the investment-grade ratings from rating agencies. Moreover, by type of customers, most of the credit exposure of off-balance sheet (derivative) transactions is with commercial bank and other financial institution counterparties, most of whom are dealers in these products. We deal in virtually no transactions of off-balance sheet (derivative) transactions which are considered to be highly leveraged.

#### III. Other Risks

We are making strenuous efforts to put in place an organizational structure that, with the full participation of top management, is able to obtain a clear grasp of the nature and size of risk other than credit and market risk. We have established divisional lines of authority for dealing with operational risk, system risk and other important risk factors. We also prepared comprehensive disaster recovery plans to deal with various emergency scenarios such as major disasters affecting a wide area.

#### (1) Operational Risk

Operational risk refers to the danger that losses may result from accidents arising as a result of inappropriate procedures performed by personnel.

The Systems & Operations Administration Division is primarily responsible for establishing systems to deal with operational risk. First, it establishes procedures to be followed in all operational processes. In addition, it designates a responsible person in each division whose job is to check periodically that the prescribed procedures are being properly observed.

The separation of front, middle and back offices in market divisions and other measures are designed to provide a system of mutual checks and balances within the organization. As part of our efforts to build an efficient operational processing system that reduces human error to a minimum, we are pushing ahead with computerization and the centralization of data processing functions at our computer center.

The Inspection Division performs various operational inspections annually to check the status of office management activities at each branch, and submits reports on its findings directly to top management. The Inspection Division is thus in a position to prevent problematic incidents, as well as evaluate the efficiency of the operational risk management system and, where necessary, to put forward proposals for improvement to top management.

#### (2) Computer-related Risk

We are working very hard on measures to deal with systems risk by setting up procedures for responding to various disasters and systems troubles. These focus on two aspects: measures to forestall systems troubles resulting from facilities and technical problems; and operational procedures in the event of system malfunctions.

With regard to measures to prevent systems troubles from occurring, we have worked for many years on building an extremely reliable system. Among other things, hardware is housed in a building specifically built for that purpose with its own electric generating facilities, and developed hardware and software systems with a full-scale backup function. Furthermore, we have established a department which is independent of systems development divisions to check the nature and security of new systems at the design stage, as well as the procedures involved in the use of the systems.

We have also greatly enhanced the safety of our network systems, introducing advanced networking technology which makes it possible to transmit data between branches. Hence, in the event of systems trouble between the computer center and a branch, data are automatically diverted through other branches eliminating the disruption of the flow of data.

We also have a full range of contingency plans which lay down procedures to be followed and emergency measures to be adopted in the case of systems malfunctions.

In addition, we have taken necessary steps to cope with the Year 2000 issue. (Refer to following page.)

#### (3) Legal Risk

We established the Legal Division to specialize in the management of legal risk, and appointed compliance officers at all marketing branches and head office divisions to ensure that all legal requirements are fully met. The Legal Division is directly in charge of analyzing the legal risk to which the Bank is exposed in its business, and of devising measures to deal with it. It also supervises the activities of the compliance officers. To ensure that legal requirements are observed, a compliance manual has been prepared and distributed to all employees. (Refer to following page.)

#### (4) Settlement Risk

Although the risk arising from timing differences in payments and receipts, such as those in settling foreign exchange transactions, is a sort of credit risk, it is necessary to adopt a different approach. We have instituted standard measures for managing limits on receivables. We are also successfully improving our track record in reducing risk by altering the rules for fund settlements with correspondent banks in order to shorten the settlement timing difference and by using netting to reduce the amounts involved in settlements.

#### (5) Other Risk

The growing sophistication and complexity of financial technology have led to the emergence of various new types of risk. For example, in the case where the risk involved in a particular type of product is not fully explained to customers when the contract is concluded, there is a danger that complications (including legal) involving customers will arise later. This is particularly true of complex new products such as derivatives.

For some considerable time now, we have been working to ensure that staff who deal with customers are well trained in proper sales procedures through our education and training programs. Derivatives and related products in particular are given ratings according to the nature of each product, and sales procedure rules are formulated for each rating. Where necessary, risk management information is disseminated to customers.

We will continue to deal appropriately with new types of risks which accompany the ever-changing financial business environment.

#### Year 2000 Compliance Program

Realizing that the Year 2000 problem is an important management issue, the Bank commenced a Year 2000 Compliance Program (Y2K Program) in fiscal 1996 coordinated by our Systems Planning Division.

#### Year 2000 Strategy

The scope of our Y2K program is to ensure that all domestic and international systems (including those in our branches, representative offices and subsidiaries) are Y2K compliant. Of particular importance are the accounting systems and related applications which comprise the majority of our systems resources. Domestically, these systems were upgraded in 1988, at which time we conducted and completed Y2K compliance testing. The remaining systems, therefore, are the current focus of the Y2K program.

#### Year 2000 Compliance Definition

Our Y2K program is being implemented in accordance with standards issued by local regulatory institutions such as the Japanese Ministry of Finance and the Bank of Japan, as well as with international benchmark standards set down in the U.S. Federal Financial Institutions Examination Council (FFIEC) Y2K Project Management Awareness Statement, and the British Standards Institution Y2K Compliance Statement.

#### **Timing**

In March 1998, we completed a comprehensive analysis of all mainframe internal systems, externally linked systems and microcomputer systems. At that time, specific plans and schedules were created for the development and implementation of any changes necessary for compliance, and this system development and testing is proceeding on schedule. Our Y2K program for major systems is expected to be completed by December 31, 1998.

#### **Organization**

Specific action plans for each system are made by the division (or branch) in charge, and are reported to the System Strategy Committee (headed by the Deputy President), which discusses and monitors the progress of the whole Y2K program and each specific action plan. For some overseas branches and subsidiaries, in-house Y2K project teams control the Y2K program and monitor the status of each system.

#### **Testing**

The testing of all technology components is proceeding according to the program. The testing process includes testing of modifications made to hardware and software components as well as interfaces with our customers, vendors and other systems. Internal testing is expected to be completed by December 31, 1998. Accordingly, we will undertake external testing to ensure the integrity of the system applications with third party data providers and the environment.

#### **Business Contingency Plan**

Our current Disaster Recovery Plan is being reviewed and will be modified where necessary by contingency plans specially designed to deal with the Y2K problem. The modification is expected to be completed by December 31, 1998.

#### **Budgeting**

The total cost required to implement the Y2K program is currently estimated to be approximately ¥5 billion (US\$37 million) and has already been approved and budgeted in our medium-term Management Resource Plan. Furthermore, all necessary personnel resources related to the project has been approved as well.

Our management fully recognizes the importance and seriousness of system compliance for the Y2K problem. The compliance program is being implemented with the highest priority to ensure an event-free transition to the year 2000, and to prevent any inconvenience to our customers.

Legal Compliance

Banking is a business based on mutual trust between a financial institution and its customers. And with the globalization of banking proceeding at an accelerated pace, banks are expected not only to be responsible corporate citizens that conduct business honestly, with integrity and according to solid business ethics, but also to conduct their worldwide operations in compliance with an increasingly complex web of local laws and regulations in the countries they operate. In this environment, the Bank focuses increasingly on the importance of compliance and hence has established a global compliance system.

Our Legal Division at Head Office is responsible for the Bank's legal affairs and has compliance officers in the Division. The Division has directed all head office divisions/departments and branches in Japan to designate an employee as a compliance officer as well. Overseas, we have a compliance officer in each country where our branches are located and in addition to this, we have also retained the services of local law and accounting firms in order

to implement a support system for the execution of contracts and to set up a program to ensure conformity to legal and compliance issues. The general manager of the Legal Division, who is also the Bank's chief compliance officer, instructs compliance officers directly to investigate and take the necessary measures for legal matters. Our compliance objectives are to ensure that all banking business is conducted in compliance with laws, regulations and supervisory requirements in each country where our branches are located. Therefore, our global compliance program is being implemented in line with standards and guidelines issued by local regulatory authorities and we have modified internal bank policies, and compliance manuals, including our code of conduct and procedures, accordingly. These objectives must be met in order to protect the Bank's franchise and reputation. We continually monitor and evaluate our compliance system in accordance with changing internal and external conditions, and will enhance the system as necessary to maintain its effectiveness.