Risk Management

The global business environment affecting financial institutions is changing dramatically. As a result, the risks inherent in banking operations are rapidly gaining in complexity and diversity. More than ever, bank management must be able to identify, analyze and manage many kinds of risk, ranging from credit risk and market risk to operational risk, computerrelated risk and legal risk. In the belief that the creation of a robust and watertight risk management system is an absolute necessity for any worldclass bank, our operational and administrative structures are designed to make risk management one of our key managerial priorities.



We have set up special executive committees to establish and monitor the enforcement of risk management policies for each type of risk mentioned above, and various risk committees follow up on these policies. Semiannually meetings of the Executive Committee on Risk Management are held to discuss comprehensive risk management policies, and monthly Executive Committee meetings provide the necessary scrutiny and supervision. The Chief Risk Officer (CRO) specializes in consolidating bank-wide control and supervision of credit risk, market risk, operational risk, computer-related risk and other kinds of risk. The CRO is completely independent of profit-based divisions and fulfils a crucial function by monitoring and checking risks throughout the Bank.

I. Credit Risk

Of the various kinds of risk that banks face, 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.

To provide overall control of credit risk management, we established the Executive Committee on Risk Management and charged it with the specific task of controlling the entire portfolio risk. The Committee sets guidelines for dealing with credit transactions on the basis of the portfolio management policies set forth by management meetings. It also serves a credit risk portfolio management function by monitoring the management situation and initiating flexible reviews of the guidelines as necessary

The Credit Risk Management Division and the International Credit Division are responsible, respectively, for domestic and overseas credit matters. They specialize in devising means of examining and managing individual loan transactions, and in planning and developing methods for analyzing the risk inherent in the overall loan portfolio. They are also in charge of the in-house credit rating system and self-assessment of bank assets.

To strengthen our credit risk management of our portfolio, we established

the Credit Guideline Committee with the specific task of controlling the credit risk portfolio for each banking unit.

To strengthen portfolio credit risk management further, the Executive Committee on Credit Risk Management sets guidelines for credit risk ceilings and portfolio management policies for each banking unit. The Credit Guideline Committee formulates concrete measures based on the portfolio management policies set by the Executive Committee, and monitors their execution.

The Committee sets guidelines for dealing with credit transactions on the basis of the portfolio management policies set forth by the Executive Committee. It also fulfils a concrete credit risk portfolio management function for each banking unit by monitoring the management situation and initiating flexible reviews of the guidelines as necessary.

1. Credit Assessment and Monitoring of Individual Transactions 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 application 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. To cope with the rapid structural changes taking place in industry, we have also established an evaluation system based on a pool of specialist know-how that embraces sectoral knowledge and the ability to evaluate new technologies. For example, we set up the Credit for New Business Department to specialize in advanced sectors where technological innovation is progressing rapidly. The credit divisions thus provide branches with appropriate advice in a timely manner according to the characteristics of the customers and markets involved.

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 formulated the "Credit Operation Fundamentals and Policy" to clarify the rules that should be observed in credit operations, such as laws and regulations, and lay down the basic principles involved when making credit decisions. "Credit Operation Fundamentals and Policy" serves to define our lending policy by stipulating the standard approaches and mechanisms on which our lending procedures are based. In this way, we have endeavored to lay down common rules to be observed by all bank staff in lending operations as a means of promoting the formation of a universal lending stance and assuring the soundness of our loan assets.

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, and make the results available for use in credit decisions.

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 rating system

Our in-house rating system uses 17 grades and in principle is applied to all loan assets other than housing loans. First, the marketing or credit division in charge prepares rating studies on the basis of a manual. Then, the Credit Assessment and Audit Division, which is completely independent of our operational and credit divisions, confirms the validity of the results from a neutral, objective viewpoint. Reviews are conducted at least once every twelve months, but they may also be carried out at any time on a case-by-case basis when there are changes in the customer's position.

This system is used in analyzing and quantifying the overall credit risk associated with our loan portfolio. In fact, we make use of our credit ratings at all phases of the lending process,

from pricing for individual cases and evaluations of an industry's performance through to the

The system provides infrastructural support for the examination and management of individual transactions, as well as the basis for managing the loan portfolio and credit risk. It 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, asset self-assessment systems and the asset classifications used by the financial supervisory authorities.

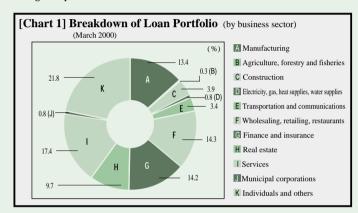
2. Portfolio Management

While assessing and managing individual projects and proposals are important, we also go to great lengths to ensure the overall soundness of our loan assets by analyzing and managing the loan portfolio, which is the aggregate of all individual loans.

Our Executive Committee and Credit Guideline Committee set guidelines for credit risk ceilings and portfolio management policies for each banking unit, then regularly monitor and analyze the entire loan portfolio by business sector, region, in-house rating and other criteria. This enables us to manage the credit risk held both by each banking unit and the Bank as a whole by keeping it within levels that are appropriate.

(1) Breakdown of Loan Portfolio by Business Sector

Through the Executive Committee and Credit Guideline Committee, we 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.



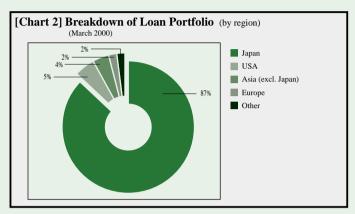
Note: Domestic offices (excluding loans booked in the Japan offshore market)

(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 2000, loans to Asian countries (excluding Japan) were as shown below in Table 1. Affiliates of Japanese companies accounted for just under 40% of loans to the private sector.

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



Note: Non-consolidated basis.

[Table 1] Loans to Asian Countries

	Millions of U.S. dollars						
		Public sector/ Project Private sector			te sector		
	Balance	Financial institution	finance	Total	Japanese	Non-Japanes	e (% of total)
South Korea	\$ 943	\$ 536	\$ —	\$ 407	\$ 37	\$ 370	(90.9%)
Indonesia	621	185	79	356	89	267	(75.0)
Thailand	763	52	198	532	374	158	(29.8)
Hong Kong	2,304	39	163	2,100	650	1,450	(69.0)
Singapore	457	_	_	457	340	117	(25.6)
Malaysia	545	294	_	251	41	209	(83.6)
China	738	112	33	593	339	253	(42.8)
Philippines	230	97	8	124	71	53	(43.1)
India	265	107	12	144	9	135	(93.4)
Taiwan	179	1	0	178	48	129	(73.0)
Vietnam	6	_	1	5	5	0	(0.3)
Other	3	0	2	0	_	0	(100.0)
Total	\$7,080	\$1,427	\$500	\$5,152	\$2,006	\$3,146	(61.1%)

Note: Non-consolidated basis.

3. Measuring Credit Risk

Our approach to measuring credit risk is multifaceted, focusing on integrating the management of credit, market and other risk, and promoting the efficiency of portfolio management and the allocation of management resources. We now quantify the credit risk associated with virtually all credit transactions, including derivative and other off-balance sheet transactions, on a daily basis. After measuring and analyzing credit risk according to such criteria as transaction type, rating,

region and business sector, we submit reports on our findings. Our management then uses this information in decisions relating to integrated risk management. The information is also applied in marketing strategies to ensure appropriate loan spreads, and in management information systems to compute profits following adjustment for risk according to bank division.

II. Market Risk Management and Derivative Transactions

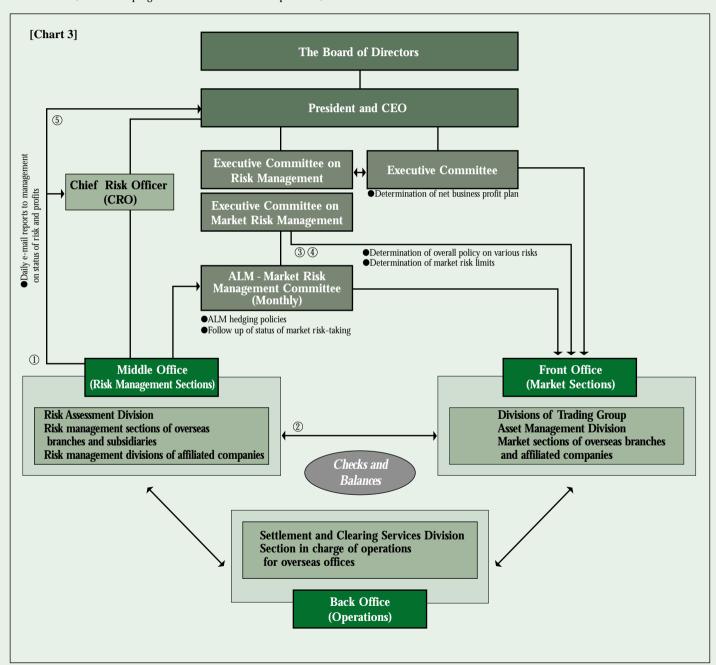
1. Market Risk Management Structure

Market risk means the risk of losses that the Bank could incur because of decrease in the value of assets (including off-balance sheet assets) caused by fluctuations in market risk factors such as interest rates, foreign exchange rates and bond and stock prices.

As a global dealer, we engage in market-making for interbank dealers and customers, and developing derivatives and other new products, and

other numerous activities. Our basic approach to market transactions is to maximize the profitability of our market divisions while controlling risk in an appropriate manner.

To achieve this, we have established a powerful organization for managing market risks, including the asset liability management (ALM) of interest rate risk on yen deposits and loans. This gives us an overall control of market risk and thus ensures greater stability in earnings. Chart 3 outlines our market risk management organization.



The following five features characterize our market risk management organization.

- ① Establishment of an independent risk management division.
- ② Sophisticated methodologies for measuring and managing market risk.
- ③ 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 division.

In 1994, we became the first Japanese bank to set up a risk control unit to identify, assess and control our overall market risk on a consolidated basis. The Risk Assessment Division (formerly the Market Risk Assessment Division) is responsible for overseas branches and subsidiaries as well as domestic activities. To guarantee the neutrality of the Division's decisions, it is completely independent of front office sections involved in transactions, dealing and other business activities.

Overseas branches and subsidiaries have also established their own market risk management sections that are independent of trading units involved in market activities. In each office, we have an effective system of checks and balances among the front office (market activities), the middle office (risk management) and the back office (operations), which are separated from each other.

② Sophisticated methodologies for measuring and managing market risk.

Virtually all of our business units engaged in market activities manage profits and losses on a mark-to-market basis, since it is indispensable to obtain a clear picture of unrealized, as well as realized, profit and loss.

We use the Value at Risk (VaR) methodology to manage market risk. When VaR is not enough to manage and control risk on its own, we supplement it with additional market risk information and tools. Among other things, we set limits on risk sensitivities such as Basis Point Value (BPV), carry out stress tests and back tests, and set stop-loss limits according to actual transactions in each division. For further information, refer to "2. Overall Market Risk Activities."

The Risk Assessment Division is constantly absorbing and applying advanced financial theory and expertise. It conducts research into upgrading management techniques, and devotes a great deal of energy to streamlining systems and infrastructure.

3 Risk management policy determined by the Board.

To clarify our standards for setting risk-taking limits, organizational structures, lines of authority, procedures and techniques for evaluating and controlling risk, we formulate our own "Risk Management Policy for Market-related Risks." This is reviewed every year in principle and approved by the Board of Directors. The policy is also kept fully consistent with the risk management principles issued by banking regulators in Japan and the Bank of International Settlements (BIS).

4) Risk limits determined by the Board.

We believe that our exposure to potential losses arising from all kinds of risk, including market, credit and operational risk, should be kept within levels that can be covered by our own capital. Based on this principle and taking account of our business strategies, we allot a portion of our capital for coverage for market risk and set the maximum risk limit for aggregate market risk (VaR). We then allocate this limit to each division according to the market outlook, our business strategies and other criteria, setting risk limits for each division. The President and CEO and the Board of Directors determine these risk limits and their allocation every six months.

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

[Daily] E-mail

Each day, a report summarizing VaR, trading activities, profits and losses and market risk by division is sent by e-mail to the Chairman, the President and CEO and other members of the Board of Directors and senior management.

[Monthly] ALM-Market Risk Management Committee The presiding Deputy President convenes the ALM-Market Risk Management Committee every month. The Committee reviews and reports trading activities, profits and losses, and market risk by division, as well as liquidity risk to close our position and liquidity risk in funding, and makes decisions on ALM hedging strategy.

The above procedures provide senior management with an accurate and timely grasp of our market risk exposure, creating an organizational structure that allows appropriate management decisions to be taken quickly.

We have also adopted the following measures to deal with ALM activities, particularly in respect of interest rate risk on yen deposits and loans:

- The Treasury Division deals exclusively with ALM hedging operations.
- To upgrade ALM procedures in managerial accounting, we have abolished the Head Office-Branch rate and use individual settlement rates based on market interest rates for each product and maturity instead
- The ALM-Market Risk Management Committee determines its ALM hedging strategy each month. The Treasury Division follows this strategy in its actual ALM hedging operations, reporting its results to the Committee the following month.

Value at Risk (VaR)

VaR is one of several methods used to measure market risk. It is defined as the maximum possible loss that could be incurred on our portfolio as a result of adverse market movements within a certain period and degree of probability. The actual amount of the VaR may vary according to the confidence interval and the length of the holding periods, as well as the models used for measuring the volatility of market risk factors. **Basis Point Value (BPV)**

BPV shows how much net present value on transactions varies when interest rates change by 1 basis point (0.01%).

2. Overall Market Risk Activities

(1) Level of Market Risk

Chart 4 shows the trend in market risk (VaR-amount) in fiscal 1999. Market risk amount (VaR) covers almost all market risk on a consolidated basis, including most of our overseas branches and subsidiaries, and also the trading sections of The Yasuda Trust and Banking Co., Ltd. However, it excludes market risk taken for strategic purposes, such as price fluctuation risk of stocks held for long-term appreciation.



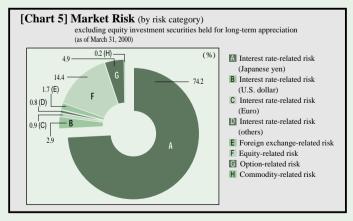
The standards used for calculating VaR in Chart 4 are as follows:

- Confidence interval: one-tailed 99.0% (two-tailed 98.0%)
- · Holding period: one day
- Historical observation period: six months
- Discretion to recognize empirical correlations across broad risk categories
- Measurement models: variance/covariance method (delta plus method)

We have been using our own internal models for calculating VaR based on the above standards for many years. In this way, we are able to confirm on an ongoing basis that our own capital and profitability are enough to cover the amount of market risk (VaR).

(2) Component of Market Risk

Chart 5 shows the impact each risk element has on overall market risk by giving a breakdown of our market risk (VaR) by risk category as of March 31, 2000. For example, "Interest rate-related risk (Japanese yen) = 74.2%" indicates that fluctuations in Japanese yen interest rates affect 74.2% of total market risk.



It is clear that while risk in other categories is dispersed in a well-balanced fashion, most of our market risk consists of yen interest rate risk, an area in which we are fully capable of exploiting our strengths as a Japanese bank.

(3) Yen Interest Rate Risk

Table 2 provides a more detailed analysis of yen interest rate risk, the largest component 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 (BPV) Sensitivity by Period

	Billions of yen			
March 31, 2000	1 year or less	1-5 years	5 years or more	
Interest Rate (BPV) Sensitivity	¥(0.2)	¥(1.0)	¥(0.4)	

Basis Point Value (BPV) is an index of interest rate sensitivity that shows how much unrealized gains increase when interest rates rise by 1 basis point (0.01%). The negative numbers in Table 2 show that unrealized gains decline when interest rates increase during the periods in question. We can therefore judge the impact of interest rate movements on unrealized gains more accurately even when short- and long-term interest rates behave differently.

(4) Simulation of Profits and Losses

To measure in greater detail the impact of interest rate fluctuations on our term profits and losses, we conduct regular simulations of profits and losses in interest rate portfolios (the accrued banking account) in various key currencies. Table 3 shows how our profits and losses would be affected should interest rates rise by 0.5% above the level we predict. (March 31, 2000 figures)

[Table 3] Earnings at Risk Simulation

(Difference between estimated accrued term profits and losses under current conditions and in the case where interest rate rise by 0.5% above the level we predict.)

	Billions of yen				
	Yen	U.S. dollar	Euro		
April 2000 – September 2000	¥ 26.9	¥(0.5)	¥(0.0)		
October 2000 - March 2001	¥(13.2)	¥ 0.1	Y(0.0)		

As the above simulation shows, we have enough capital and profitability to absorb the potential negative impact of changes in interest rates on accrued term profits and losses.

The combined use of risk sensitivities such as BPV and simulations of profits and losses, as well as the VaR methodology, enables us to obtain versatile evaluations of our market risk.

(5) Liquidity Risk to Close Positions

When a particular bank accounts for an unusually large share of total market transactions in a particular instrument, it may take several days before it is able to offset the position risk. Price fluctuations may cause it to incur far greater losses than VaR. This sort of risk is known as "liquidity risk to close positions." In our case, we calculate the volume that we can trade in each instrument at a reasonable price on a single day and compute the number of days it takes to close our positions based on that daily volume. We then calculate potential loss for the market risk (VaR) for the number of days to close our positions, and manage this kind of risk accordingly. This puts us in the position where we can offset our positions at reasonable prices in a very short time if necessary.

At the end of March 2000, liquidity risk to close our positions stood at ¥26.1 billion. In terms of the size of the market and the time to close our positions, our capital and profitability are enough to cover the maximum possible loss on liquidity risk to close our positions. (This is based on a conservative measurement that does not consider the correlation among market risk factors.)

The President and CEO sets the limit on total liquidity risk to close our positions every six months. Reports on the status of liquidity risk to close our positions are submitted to the ALM-Market Risk Management Committee every month.

(6) Liquidity Risk in Funding

We have adopted strict procedures for managing liquidity risk in funding, which is the risk of potential inability to raise funds necessary to execute transactions. Based on analyses of the gap between assets and liabilities, and funding resources, our President and CEO sets position limits on the gap every six months, and reports are submitted to the ALM-Market Risk Management Committee every month.

3. Methodologies for Evaluating Market-related Transactions

(1) Trading Transactions

When they are available, we use current market prices (fair market values) to estimate fair values in trading transactions. When current market prices are not available, we use discounted present value or other evaluation techniques. Our evaluations and evaluation methods incorporate significant assumptions that we regard as adequate, and using different assumptions may result in different evaluations.

(2) Non-trading Transactions

For management accounting purposes, we also estimate fair values in non-trading transactions in the same methods with trading transactions described above.

(3) Evaluation Adjustments in Management Accounting

Although they are not reflected in financial accounts, we monitor closeout costs (costs arising from the differences in market rates between mid price and bid or offer price) and credit costs (possible losses computed by quantitative methods) and use these costs in evaluation adjustments for management accounting purposes.

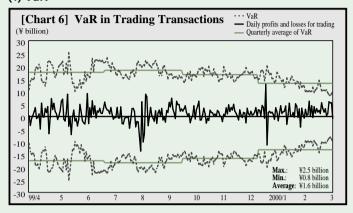
[Table 4] Close-out and Credit Cost

	Billions of yen		
March 31, 2000	Close-out cost	Credit cost	
Trading Transactions	¥0.3	¥1.8	
Non-trading Transactions	4.6	3.2	
Total	¥4.9	¥4.9	

4. Risk-taking in Trading Transactions

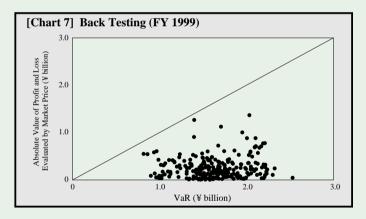
The following sections provide more detailed information on transactions that are subject to mark-to-market evaluations, which include both foreign exchange transactions and other trading transactions.

(1) VaR



(2) Back Testing

To evaluate the accuracy of the models we use for measuring risk, we carry out "back testing" to compare actual profits and losses with predicted VaR.



Dots above the diagonal line would show the number of days on which profits and losses exceeded predicted VaR. Chart 7 shows that in fiscal 1999, this happened on no business day. In other words, profits and losses exceeded predicted VaR in 0.0% of all cases while the probability predicted by our models is $2\%~(100\%\mbox{-}98\%)$. We believe this confirms that our models are sufficiently accurate in measuring our market risk exposure.

(3) Stress Testing

Since markets are inherently unstable, price fluctuations sometimes far exceed normal expectations. We therefore draw up worst-case scenarios that analyze the maximum potential losses that might occur. This procedure is known as "stress testing," and the scenarios we prepare are called "stress scenarios." Reports on the results of such tests are submitted to the Board and reflected in business decisions.

We use two scenarios for stress testing. The first is a scenario which postulates a tougher confidence interval than usual. (The confidence interval is 99.9% and the correlations among market risk factors are retained.) The second postulates the most extreme price movement based on historical price fluctuation data over a period of ten years. (The correlations among market risk factors are destroyed.)

[Table 5] Stress Testing

	Billions of yen
	Maximum potential loss
VaR (confidence interval 99.0%)	¥ 2.3
Stress Scenario (confidence interval 99.9%)	3.1
Stress Scenario (worst case)	66.9

(4) Risk-adjusted Returns

Bank management must obtain an accurate grasp of the risk it is possible to take, allocate assets properly and ensure appropriate profit levels. It is therefore extremely important to monitor whether the balance between risk and profits is appropriate and whether the possibility of potential losses is kept within sound levels.

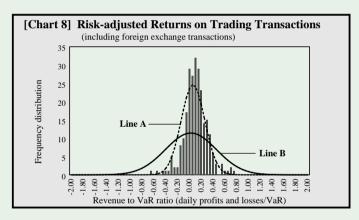


Chart 8 is a histogram that shows the proportion of profits/losses to our market risk (VaR) (profits and losses / VaR = risk-adjusted returns). Line A (normal distribution curve) represents risk-adjusted returns on an actual basis. Line B represents hypothetical risk-adjusted returns gained if transactions were executed without interest rate or market predictions.

We can draw the following conclusions from a comparison of Line A and Line B.

- The peak of the curve described by Line A (the mean), which represents our performance during the fiscal year ended March 2000, is skewed more to the positive side than that of Line B. This confirms that we were able to make profits effectively on the whole.
- Line A's distribution peak is sharper than that of Line B, showing that
 fluctuations in daily profits/losses are very small. In other words, we
 were able to make stable profits, while keeping conspicuous losses
 down to a very low frequency.

Our ability to achieve the stable profit distribution demonstrated by Chart 8 results from our solid client transaction base and our well-diversified trading portfolio. Risk-adjusted returns are thus a key indication to obtain an overall grasp of risk and returns, and to make effective decisions on distributing risk limits among our divisions.

In these ways, we use the VaR method and other complementary methods as well in order to evaluate and manage overall market risk and risk of each trading product minutely. This has enabled us to confirm that we have enough capital and profitability to cover the amount of market risk.

5. Derivative Transactions

(1) Status and Purpose of Derivative Transactions

Derivative transactions are not recorded in the balance sheet because there are no fund transfers involving the principal. We use derivative transactions, particularly transactions in swaps, futures, options and others, to satisfy the risk-hedging needs of our customers, to hedge against interest rate risk or exchange rate risk in our ALM positions, and to pursue profits in market transactions.

(2) Derivative Transactions and Market Risk

"2. Overall Market Risk Activities" provides further information on market risk, liquidity risk to close our positions and liquidity risk in funding, to which derivative transactions may be exposed.

(3) Derivative Transactions and Credit Risk

Tables 6 and 7 show the contract amounts, notional amounts and credit risk equivalents for derivative transactions.

"Credit risk equivalent" in derivatives corresponds to the principal amount of loan transactions. Our credit divisions control credit risk for individual customers by setting and periodically reviewing transaction limits according to their creditworthiness. They also set limits for each type of transaction.

The tables 8, 9 and 10 show quantitative data concerning credit risk in derivative transactions. The data cover virtually all our non-consolidated and consolidated derivative transactions.

[Table 6] Credit Risk of Derivative Transactions (calculated into BIS capital adequacy ratio)

		<u> </u>	• .				
Billions of yen							
	Notiona	l amount	Credit risk	equivalent			
March 31,	2000	1999	2000	1999			
Interest Rate Swaps.	¥312,086.4	¥301,291.7	¥3,191.4	¥4,181.2			
Currency Swaps	5,920.8	7,307.0	260.8	363.6			
FX Forward	13,865.7	13,374.0	471.8	504.7			
Interest Rate Option	IS						
(buying)	3,576.2	3,464.4	37.3	41.1			
Currency Options							
(buying)	1,006.8	1,442.3	41.9	41.1			
FXA	_	2,287.9	_	134.1			
FRA	33,280.9	34,482.2	38.6	44.3			
Other Derivatives	14.0	_	1.3	_			
Effect of Netting							
Arrangement			(2,736.0)	(3,742.6)			
Total	¥369,751.0	¥363,649.9	¥1,307.3	¥1,567.7			

[Table 7] Credit Risk of Derivative Transactions

(not calculated into BIS capital adequacy ratio)

	Billions of yen		
	Notion	al amount	
March 31,	2000	1999	
Financial Futures Transactions	¥42,215.0	¥63,236.3	
Interest Rate Swaps	· —	_	
Currency Swaps	_	_	
FX Forward	2,057.5	2,009.9	
Interest Rate Options (buying)	926.8	1,111.5	
Currency Options (buying)	49.4	98.3	
Interest Rate Options (selling)	4,987.5	4,584.3	
Currency Options (selling)	1,153.3	1,389.9	
FRA, FXA	_	_	
Others	56.8	117.6	
Total	¥51,446.4	¥72,547.9	

Note: These transactions are excluded from calculations of credit risk equivalents under BIS international capital adequacy standards because the risks involved are considered extremely low for the following reasons: Counterparties of these transactions have deposited margins in the relevant exchange or the transactions themselves are very short-term.

The most important figure for grasping the levels of credit risk on our derivative transactions is the total of the maximum potential loss (Consolidated Basis), $\S 12.0$ billion, as shown in Table 8 "Breakdown by Creditworthiness." This figure is a statistical forecast and indicates that the probability of losses of approximately $\S 12.0$ billion following the bankruptcy of counterparties is once in one hundred years. It does not represent a loss or unrealized loss affecting our financial position. In other words, even if this worst case occurs, the impact on our management will be negligible in light of our net worth and profitability.

As these tables show, approximately 86% of "credit risk equivalent" of our derivative transactions on a non-consolidated basis, and approximately 85% on a consolidated basis, were conducted with counterparties whose creditworthiness was the investment-grade ratings awarded by independent ratings agencies.

Counterparties from developed countries such as Japan, United States and European nations account for the majority of derivative transactions by region. There were very few transactions with counterparties in Asian countries or other regions.

By business sector, most of our transactions were with banks and other financial institutions that deal with derivative products as part of their regular business.

We have almost no derivative transactions that are considered highly speculative.

[Table 8] Breakdown by Creditworthiness

	Billions of yen			
	Credit exposure	Credit cost	Credit risk amount	Maximum potential loss
Non-consolidated Base:				
Customers whose creditworthiness is				
generally equivalent to AAA/Aaa -	V702 7	VO 9	V1 0	V1 E
BBB/Baa rating from rating agencies Customers whose creditworthiness is	¥783.7	¥0.2	¥1.3	¥1.5
generally equivalent to BB/Ba rating				
from rating agencies	80.7	0.2	1.6	1.8
Others	44.1	1.0	2.2	3.2
Total	¥908.5	¥1.5	¥5.1	¥6.5

	Billions of yen			
	Credit exposure	Credit cost	Credit risk amount	Maximun potential loss
Consolidated Base:				
Customers whose creditworthiness is				
generally equivalent to AAA/Aaa -				
BBB/Baa rating from rating agencies	¥1,113.1	¥0.5	¥2.3	¥ 2.7
Customers whose creditworthiness is				
generally equivalent to BB/Ba rating				
from rating agencies	91.0	0.3	1.7	2.0
Others	112.0	1.5	5.7	7.3
Total	¥1,316.0	¥2.3	¥9.7	¥12.0

Notes: 1. Almost all of our subsidiaries and affiliates are covered on the Consolidated Base.

- 2. "Credit cost" is expected losses computed by quantitative methods.
- 3. "Credit risk amount" is potential losses computed by quantitative methods. (unexpected losses reflected deviations from statistical expectations)
- "Maximum potential loss" refers to the total of credit cost and credit risk amount, and is a statistical forecast of maximum losses in the worst case.

[Table 9] Breakdown by Region

	Billions of yen			
	Credit exposure	Credit cost	Credit risk amount	Maximum potential loss
Non-consolidated Base:				
Japan	¥416.3	¥1.3	¥4.7	¥6.0
Asia	26.8	0.1	0.1	0.2
USA	321.9	0.0	0.1	0.1
Europe	112.3	0.0	0.1	0.1
Others	31.3	0.0	0.0	0.0
Total	¥908.5	¥1.5	¥5.1	¥6.5

[Table 10] Breakdown by Industry

	Billions of yen			
	Credit exposure	Credit cost	Credit risk amount	Maximum potential loss
Non-consolidated Base:				
Banking, Securities, Insurance	¥612.1	¥0.2	¥0.5	¥0.6
Manufacturing	67.4	0.2	0.6	0.8
Wholesale	52.1	0.2	0.9	1.1
Transportation and Communications	34.3	0.0	0.2	0.2
Services	13.6	0.2	0.5	0.6
Construction	5.2	0.1	0.1	0.2
Real Estate	10.2	0.0	0.3	0.4
Other Financial Institutions	71.3	0.2	1.8	2.1
Others	42.3	0.3	0.2	0.5
Total	¥908.5	¥1.5	¥5.1	¥6.5

III. Other Risks

Our organizational structure enlists the full participation of top management to obtain a clear grasp of the nature and size of not just credit and market risk but also other risk, and everything is done to ensure that it runs at maximum efficiency.

In addition to clarifying divisional lines of authority to deal with operational risk, systems risk and other important risk factors, we monitor all kinds of risk across the board. We have also prepared comprehensive disaster recovery plans and manuals to deal with various emergency scenarios, such as disasters that affect wide areas.

(1) Operational Risk

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

The System and Operations Administration Division is responsible for operational risk and works independently of the Bank's various business groups. The Division has established rules and procedures to be followed by domestic branches, overseas offices and market divisions when dealing with each type of operational activity. It also designates responsible persons in each division to check periodically that the prescribed procedures are being properly observed.

We have separated the front, middle and back offices in our market divisions and instituted other measures to provide a system of mutual checks and balances within the organization. We constantly incorporate the latest technical innovations into our computer center's data processing functions as part of our efforts to build an efficient operational processing system that reduces human error to a minimum.

The Inspection Division carries out annual inspections to check the status of operational and 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, evaluate the efficiency of our system for managing operational risk and, where necessary, put forward proposals for improvement to top management.

(2) Computer-related Risk

We define computer-related risk as the risk that the Bank may be exposed to tangible or intangible losses arising from system defects such as failures, faults, or incompleteness in computer operations, or illegal or unauthorized use of computer systems.

We have adopted a dual approach to dealing with computer-related risks, which are caused by various natural disasters and faults. On the one hand, we have established measures to forestall system problems. On the other, we have adopted operational procedures to deal with possible system malfunctions.

On the preventive side, we have worked for many years to create an extremely reliable system. Among other things, we have installed our computer systems in specially-designed buildings that incorporate the very latest in earthquake-proofing technology, created a dual-center organization that boasts hardware and software systems for foolproof backup, and a state-of-the-art network that features an automatic rerouting function to avoid circuit faults. We have also established a separate department that is independent of the systems development divisions to check and supervise system configurations and security when new systems are being designed and installed. In this way, everything is done to eliminate possible problems.

A full range of contingency plans lays down procedures to be followed and emergency measures to be adopted in the case of system malfunctions. We also hold regular drills to provide practice through dealing with simulated emergencies.

(3) Legal Risk

We define legal risk as the risk that the Bank may incur tangible or intangible losses as a result of infringements of laws and regulations.

We established the Legal Division to specialize in the management of legal risk, an issue to which we attach the greatest importance. The Legal Division serves in an advisory capacity and is responsible for analyzing the legal risk involved in the Bank's domestic and international business operations, and for devising means to deal with it. It is also working to create a healthy operational system in which bank employees from all divisions, not just the Legal Division, can go about their work in full knowledge of the legal risks involved. To this end and to ensure that legal requirements are observed, it holds seminars on legal matters, and has prepared and distributed a compliance manual to all employees.

(4) Settlement Risk

"Settlement risk" refers to the risk that the Bank may incur losses because settlements are not executed according to schedule. It arises not only from timing differences in the payments and receipts involved in settling foreign exchange transactions, but also from various transactions within the same domestic market. Settlement risk encompasses various kinds of risk including credit risk, liquidity risk and operational risk, and we are working to shorten the settlement timing difference and use netting to reduce the amounts involved in settlements.

Compliance

Banking is vitally important to the public interest, and banks play a major social role in contributing to economic development at home and abroad through their transactions with customers and other activities.

To ensure that we never lose sight of this, and in order to fulfil our responsibilities and earn the unwavering trust of society, we have positioned compliance as one of the most important issues facing management. Our basic policy is to comply strictly with all laws, ordinances, rules and regulations, and carry out our business activities with honesty and integrity and in conformity with social standards.

For this reason, we have given our Legal Division responsibility for compliance throughout the Bank, and made the Compliance Department the focal point for streamlining our compliance structure and carrying out activities to promote compliance. Further details on our thoroughgoing efforts in this area are given below.

1. Compliance Structure

Our compliance structure is made up of the Board of Directors, the Executive Committee on Compliance Management, compliance officers and the Legal Division. The Executive Committee on Compliance Management was established to discuss issues of key importance to compliance within the Bank and meets on a regular basis under the chairmanship of the President and CEO. The Board of Directors then approves matters that have been deliberated upon at the committee.

Compliance officers are deployed at all head office divisions and all business offices at home and abroad. In addition to ensuring full compliance within their respective organizational sectors, these officers act as advisors to other bank employees, and as a liaison with the Compliance Department. Because of the specialist nature of the market securities business and the risks it involves, we have established a Compliance for Trading and Investment Banking Department. This department is independent of the business divisions and falls under the jurisdiction of the Legal Division, where its task is to ensure strict compliance. We also retain the services of legal advisors and accounting firms in Japan and overseas to provide us with maximum specialist support.

2. Compliance Activities

Each year, we draw up a practical compliance program to streamline our compliance structure and organize activities to promote compliance.

We also compile detailed compliance manuals covering the principles for corporate conduct, code of conduct for employees and the key laws, ordinances and in-house rules that have to be observed. These compliance manuals are distributed to all employees, who are expected to become very familiar with their contents.

We have established a dual checking system to promote the strict observance of rules on compliance by each head office division and each business office. The compliance officers in the respective organizations conduct initial checks, and the Inspection Division and the Internal Audit Division conduct secondary checks.

In order to ensure that the basic framework of our compliance structure is properly understood, we provide various levels of education in compliance, ranging from training for general staff to more advanced studies for compliance officers.

Compliance remains the cornerstone of the banking business. To ensure the continued trust of our customers, we are committed to reviewing our compliance structure on an ongoing basis with a view to making improvements that will maintain and enhance its effectiveness.

Compliance Structure

