

RISK MANAGEMENT

Overview of Risk Management

Basic Approach to Risk Management

Financial deregulation, internationalization and the increasing use of securities markets for financing and investment have brought growing diversity and complexity to the banking industry. Accompanying these trends, the types of risks that banks must manage, including credit risk, market risk as well as operational and other types of risks, have expanded and now have a major impact on the management of banking institutions.

Since risks are inherent in virtually all types of transactions performed by banks, to respond to the increasingly diverse and sophisticated needs of customers and secure the soundness of bank management, having strong risk management systems is essential. Moreover, in the event that losses occur, banks must have sufficient capital to cover these when necessary.

DKB controls the volume of risks in its operations and maintains these within the limits of what its capital position can withstand. Also, to secure the soundness of its operations, DKB maintains its capital adequacy ratio (as measured by BIS standards) substantially above the level of 8% that is required for participation in international banking activities. As of March 31, 2000, DKB's capital ratio was 12.11%.

Risk-Management Systems

Under DKB's risk-management systems, all operating units are required to keep risk volumes below specified levels and implement strict risk-management procedures. DKB is continually working to enhance the effectiveness of its risk-management systems and has appointed an executive officer to be responsible for supervising market, liquidity and credit risk from a bankwide perspective. In addition, to manage risk comprehensively from the management level, DKB has established two committees, the ALM & Market Risk Management Committee and the Credit Risk Management Committee.

The ALM & Market Risk Management Committee considers optimal management policies for assets and liabilities appropriate to market

conditions as well as management policies for market risk, including those for trading operations. Moreover, the Credit Risk Management Committee considers basic strategies and risk-management policies related to DKB's credit operations. These policies and the current state of risk management are reported periodically to top management to ensure that excessive risk volumes are not being assumed in DKB's operations.

Under DKB's system for managing liquidity, yen and foreign currency positions as well as market conditions are closely monitored on a daily basis. Liquidity risk is managed precisely, making use of analyses of funding positions and the availability of funding sources.

In addition, DKB has established the Global Transaction Services Planning Division in the Corporate Section, which is responsible for the overall management of risk related to domestic and international monetary settlements, such as those risks that may arise in foreign-exchange operations due to time differences among countries where transactions are conducted.

Asset/Liability Management

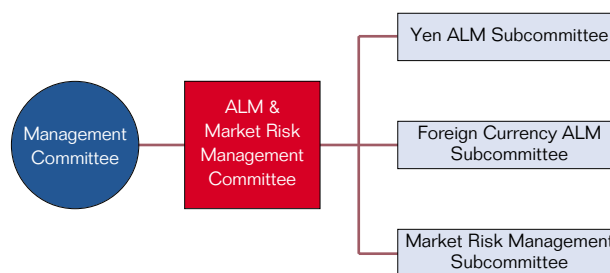
ALM Process

One of the most important requirements for ALM is the full understanding and active participation of top management in the ALM process. DKB's ALM & Market Risk Management Committee, which includes members of top management, meets every three months to discuss ALM policy, risk limits and related matters in depth. Policies regarding these issues are decided by the Management Committee and reported to the Board of Directors.

The ALM & Market Risk Management Committee is responsible for the oversight of interest rate, foreign-exchange currency, liquidity and market risks in DKB's banking, trading and other operations. This system allows DKB to avoid the assumption of excessive levels of risk.

The conduct of operations involving interest rate and other risks arising from day-to-day banking activities is concentrated in specialized ALM units that are continuously monitoring market conditions.

The activities of these units are monitored by independent risk-management sections. Subcommittees under the ALM & Market Risk Management Committee are made up of ALM specialists from divisions responsible for the funding, allocation and usage of funds, market risk and planning. These subcommittees meet on a weekly or monthly basis to provide timely advice.



ALM Operations

The interest-rate gaps between on-balance-sheet assets and liabilities of Japan's city banks mainly arise from yen deposits and loans. Deposits and loans are largely based on customer relationships and have substantial recurring and seasonal components.

DKB uses Interest-Rate Sensitivity Tables, together with basis point value (BPV), value at risk (VAR) and other methods to carry out the diverse and multilayered management of interest-rate gaps in its banking operations. Within the limitations set by DKB's risk-management policies and risk-taking limits, DKB makes use of derivative instruments, especially swaps, to control overall risk and stabilize and maximize earnings in the medium-to-long term.

Underlying requirements for effective ALM operations include accurate forecasts of interest rates and interest-rate gaps. Forecasts of interest-rate trends are prepared by ALM units that are

constantly monitoring market conditions and engaged in making precise analyses based on various scenarios. Forecasts of interest-rate gaps are based on analyses of historical data on the recurring and cyclical features of the interest-rate gaps of on-balance-sheet assets and liabilities as well as the analysis of fluctuations in deposits, loans and other items caused by changes in market interest rates, according to the term remaining to maturity for such items.

VAR in DKB's banking operations at the end of fiscal 1999, excluding securities held to maintain customer relationships, was ¥48.1 billion. Taking into account the nature of banking operations, this estimate assumes a holding period of one month and uses two standard deviations with a one-tail confidence interval of 97.7%. Other things being equal, a holding period of one day entails about one-fifth the risk of a holding period of one month.

Interest Rate Sensitivity Table

As of March 31, 2000	(¥ billion)			
	One Year or Less	One to Five Years	Over Five Years	Total
Yen Assets				
Loans and bills discounted	¥23,599	¥3,599	¥ 810	¥28,008
Securities	3,223	1,021	1,938	6,182
Call loans, bills bought, due from banks	410			410
Subtotal	27,232	4,620	2,748	34,600
Yen Liabilities				
Deposits and negotiable certificates of deposit	28,562	1,958	18	30,538
Call money, bills sold, borrowed money	3,353	307	312	3,972
Other (net)	90			90
Subtotal	32,005	2,265	330	34,600
On-Balance-Sheet Gap	(4,773)	2,355	2,418	—
Off-Balance-Sheet (Derivatives)	2,446	(1,584)	(862)	—
Interest-Rate Sensitivity Gap	(2,327)	771	1,556	—
Cumulative Interest-Rate Sensitivity Gap	(2,327)	(1,556)	0	—
Unrealized Gains	61	75	(1)	135

Notes: 1. This table shows the maturity ladder for yen assets and liabilities in banking operations.

2. Assets and liabilities not sensitive to interest-rate fluctuations and one-year swaps dated after the base date of this table are included in the category of maturities of one year or less.

3. The item "Unrealized Gains" shows unrealized gains related to interest rates by period to maturity. These figures do not include unrealized gains on stocks and securities investment trusts. (For Market Value of Securities, please refer to page 108.)

Management of Liquidity Risk

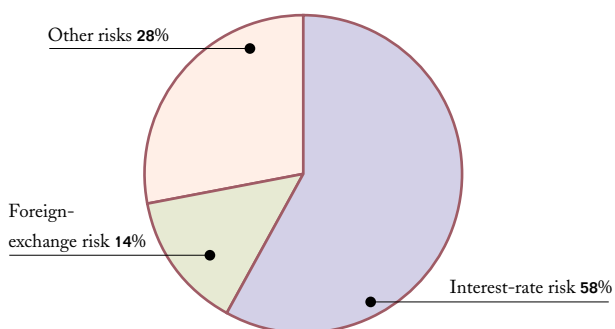
Liquidity risk is managed primarily by closely monitoring the volumes of deposits, loans and other fund flows, and estimating the amount of funds that must be raised in the market as well as the amount of funds that it is possible to raise from the market. For foreign currencies, overseas offices monitor these aspects of their liquidity positions, and the Head Office supervises liquidity centrally on a daily basis. Moreover, to prepare for worst-case scenarios, the Bank holds assets that can be easily converted to cash, establishes various kinds of risk-management limits and carefully carries out risk-management operations with close attention to detail.

Market Risk

The Market Risk Management Office is the center of bankwide activities to manage market risk arising from DKB's operations. There are two key requirements for market risk management that must be met. The first is to quantitatively measure and prepare timely and accurate reports on risk, and the second is to qualitatively make use of this information in the management of day-to-day operations.

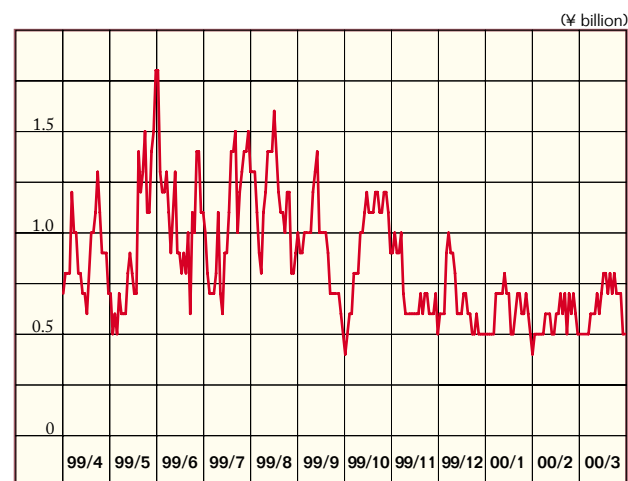
To quantify risk, DKB uses the VAR method on a daily basis for monitoring risk for all of its offices that are engaged in trading activities in Japan and overseas, including overseas subsidiaries. DKB's VAR model applies the variance-covariance approach to linear risks and the Monte Carlo Simulation, in most cases, to non-linear risks. At present, the model takes into account approximately 1,000 risk factors and about 298,000 correlation coefficients.

Breakdown of VAR by Type of Risk



This pie chart shows average VAR during fiscal 1999, broken down by the type of market risk in DKB's trading activities. Interest-rate risk accounted for 58% of the total. "Other risks" includes equity and options risks.

VAR during Fiscal 1999



This graph shows the VAR movements in DKB's trading activities. The holding period is one business day, and the confidence interval is 97.7% (two standard deviations). Average VAR for the period was ¥0.8 billion, with a minimum of ¥0.4 billion and a maximum of ¥1.8 billion.

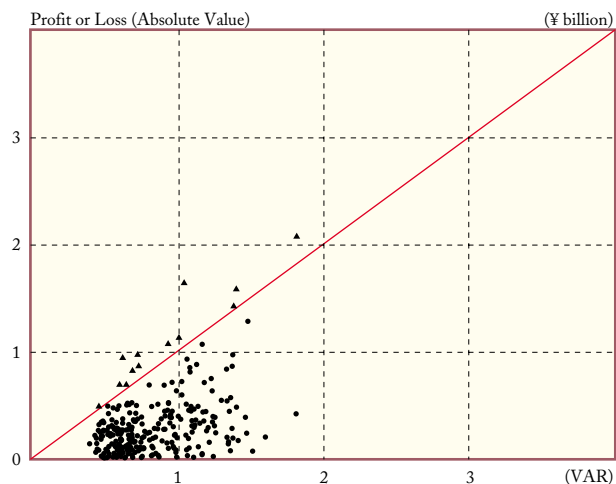
Next, to describe DKB's market risk management from a qualitative perspective, the Market Risk Management Office is an independent unit that specializes in the management of market risk on a bankwide basis. In addition to the Market Risk Management Office, DKB's offices that are engaged in trading activities, both in Japan and overseas, have middle offices, separate from the front offices, that are responsible for risk management. DKB's backbone systems for market risk management are set forth in the Fundamental Policy for Market Risk Management approved by the Board of Directors.

To enable top management to be fully committed to the risk-management process, the office reports on market risk, not only on a daily basis but also on a weekly and monthly basis, while providing reports on the results of stress testing. VAR limits for trading operations are set to incorporate the results of risk measures into day-to-day risk management. The VAR limit for DKB as a whole is determined by the Management Committee and reported to the Board of Directors. Limits are also set at the Company, divisional and office levels, and, thus, risk-management activities are conducted at each level of the organization.

The validity of the VAR model in measuring market risk is checked through back testing. The results of the testing are shown in the graph

(below), which suggests that the model is sufficiently accurate. In addition, stress testing is conducted to supplement limitations of the VAR method that may arise from the method's statistical assumptions.

Distribution of Profit/Loss and VAR



This graph compares daily VAR during fiscal 1999 with the absolute value of profits or losses. Points above the 45-degree line (upper-left portion) indicate days when the absolute value of profits or losses was higher than VAR. As the graph shows, the absolute value of profit or loss was higher than VAR for 13 days, or about 5% of the days during the period. As the estimates of VAR were made using a confidence interval of two standard deviations (97.7% for one tail and 95.4% for two tails), the probability of actual values exceeding VAR is estimated to be distributed around 4.6% (100% minus 95.4%). Accordingly, the results suggest that the incidence of values exceeding VAR is not significantly different from the incidence of such values in the model and that the level of precision is satisfactory.

Credit Risk

Banking operations have inherent credit risk because borrowers, counterparties in derivatives transactions and issuers of securities held by DKB may experience a deterioration in business performance, declare bankruptcy or otherwise become

unable to meet their obligations to pay interest and/or principal or meet other contractual commitments. In such cases, banks may incur losses.

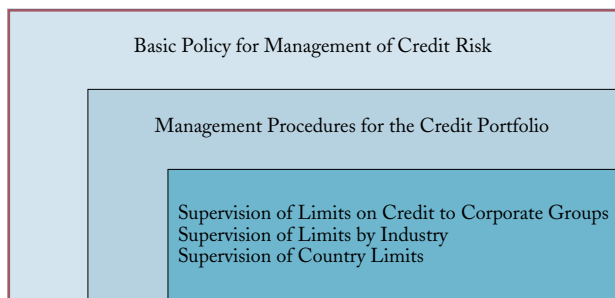
Of the various risks that banks must manage, credit risk may have the greatest impact on management performance. To deal with increasingly complex credit risk uniformly and comprehensively as financial transactions become more sophisticated and global in scope and work to maintain and upgrade the soundness of assets, DKB has developed the systems described below and is endeavoring to enhance the precision and sophistication of its risk-management process.

Organizational Systems and Credit Evaluation Functions

Under its Customer Segment-Based Business Management System, DKB has appointed an executive officer in overall charge of risk management to the Corporate Section. In addition, to implement credit-related operations and risk management from a bankwide perspective, DKB has formed the Credit Risk Management Committee, which is chaired by an executive officer in charge of risk management, as one of DKB's management committees. Moreover, DKB has created the Credit Planning Office within the Corporate Section to manage credit risk on a bankwide basis. This office focuses on activities to strengthen the management of the asset portfolio and upgrade various rules and procedures pertaining to credit operations.

In addition, to strengthen credit evaluation functions, DKB has created credit departments within those internal Companies that must deal with credit risk and appointed executive officers in charge of credit evaluation. Also, decisions regarding

Assets Classified in the Credit Rating Process	Obligors Classified	Credit Risk Ratings (Creditworthiness of Obligors)	Obligor Classifications for Self-Assessment of Assets	Asset Classifications
Loans	Non-financial corporations	1~10	Normal Obligors	I II III IV
Acceptances and guarantees	Public corporations	11-1	Watch Obligors	
Foreign exchange	National and municipal government entities	11-2		
Securities lent out	Sole proprietorships	12	Intensive Control Obligors	
Derivative transactions	Financial institutions	13	Substantially Bankrupt Obligors	
Accrued interest	Special-purpose corporations	14	Bankrupt Obligors	
Suspense payments	Others			
Others				



credit above a specified limit must be approved by the Management Committee.

In March 1998, DKB issued the *Code of Ethics & Basic Guidelines on Lending*, which contains basic policies and approaches for lending operations. Steps have been taken to ensure the use of this manual in the processing of loan applications at the branch level and in credit analysis activities within the credit supervision divisions, with the aims of maintaining and improving the soundness and profitability of DKB's loan assets.

Credit Risk Management Systems

DKB has established the following basic infrastructure, with the aim of enhancing its credit risk management systems. In principle, all credit customers are assigned one of 15 credit risk ratings to provide a uniform measurement of the credit risk of all DKB's assets.

DKB views the assignment of credit risk ratings as the initial step in its self-assessment of asset quality and matches its credit risk ratings to the Obligor Classifications, according to the principles of the Prompt Corrective Action System. In addition to assigning ratings to new credit customers, the financial results of current borrowers are reviewed, and, to promptly take account of any changes, ratings are reviewed at least once a year. This system allows DKB to have timely information on individual credit customers and on the overall quality of the loan portfolio.

Moreover, to improve the management of DKB's asset portfolio as well as enhance and strengthen the related accounting systems, in February 1998 DKB introduced its Credit Risk Quantification System to calculate the expected loss and unexpected loss by region, credit rating and industry. As a result of an upgrading of DKB's system for quantifying

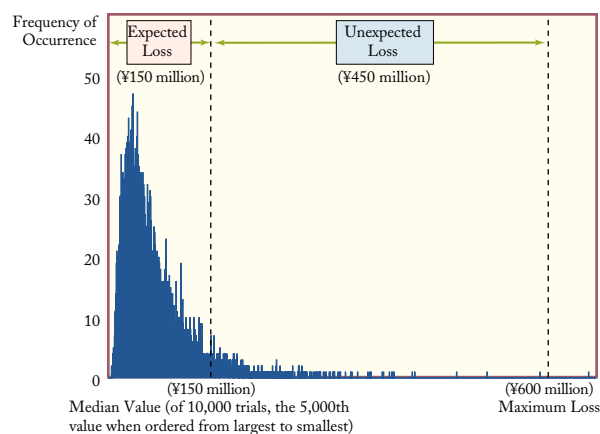
credit risk, in March 1999, the status of individual credits and other matters can be measured in detail by size of company and individual credit. This system makes it possible to assess profitability and risk distribution for each credit transaction, taking into account the potential default cost. The information provided is used to take specific measures to improve the return in proportion to risk and strengthen the management of DKB's asset portfolio.

In July 1999, DKB introduced its Basic Policy for Management of Credit Risk to establish fundamental guidelines for credit risk management. To prevent excessive concentrations of credit risk in certain regions, industries and other categories and achieve an appropriate distribution of risk, DKB established its Management Procedures for the Credit Portfolio, which sets basic rules, including various types of risk limits and monitoring lines. Risk management under these rules was implemented during the fiscal year under review.

Quantification of Credit Risk

The quantification of credit risk involves forecasting the probability of future losses that may arise due to such uncertain events as the insolvency of the borrower or the deterioration of the borrower's business activities. In other words, volatilities of creditworthiness are measured as variations of the

Measurement of Expected and Unexpected Loss Amounts due to Loan Default (The Monte Carlo Simulation)



The amount of loss due to loan default varies greatly with the default ratio as well as with which specific obligors actually default on their loans. The Monte Carlo Simulation generates 10,000 different loss distribution scenarios. By ordering the simulated loss amounts from largest to smallest, the expected loss amount (the median loss value in the simulation; ¥150 million in the example above) and the unexpected loss amount (the difference between the maximum loss and the expected loss; ¥450 million in the example above) can be determined.

probability of default. The impact on DKB's future income and shareholders' equity is measured through the estimation of average expected loss and unexpected loss, which is the difference between the largest loss and the median loss.

When quantifying credit risk, DKB uses the Monte Carlo Simulation (which generates a range of default rates through 10,000 trials). The median loss (obtained by listing the simulated default losses from the smallest to the largest and taking the 5,000th value) is designated as the expected loss, and the difference between the maximum credit loss at a specified confidence level and the expected loss is designated as the unexpected loss.

Operational Risk

Banks must conduct a wide range of clerical processing operations in connection with such services as deposits, remittances, foreign currency exchange and other activities. Operational risk is inherent in many aspects of banking operations because management and staff may fail to conduct operations correctly because of improper actions, oversight, lack of proper attention or because of problems in the processing systems. In such cases, banks may experience tangible or intangible losses.

To minimize operational risk, DKB has established thoroughgoing systems centering around its Operations Planning Division, which is independent of business promotion sections. Specifically, DKB has defined operating procedures, including clear steps for processing, put in place the necessary infrastructure, strengthened systems checking functions, concentrated certain operations into specialized units and conducts training and guidance programs on a continuing basis.

In addition, in fiscal 1999, DKB began to carry out analyses of operating work flows to determine where risks exist. These analyses enable DKB to understand the location of potential risks and work to strengthen risk management as well as take appropriate countermeasures. Moreover, DKB has classified all types of operations into several categories and analyzed the inherent risk for each category. By computing the risk in each category through a "bottom-up" approach, DKB is endeavoring to develop methods for measuring the amount of operational risk. For example, in addition to

computing operational VAR based on data regarding past losses, consideration is also being given to calculating the maximum unexpected loss making use of "near-miss" data and the worst-case scenario analyses approach.

Based on the understanding that accurate and speedy processing operations are fundamental for gaining and maintaining consumer trust, DKB is continually working in all related areas to strengthen management of and reduce operational risk.

IT Risk Management

Today's banking activities, including 24-hour ATM service and Internet banking, would be impossible to perform without computer systems. IT risk refers to the possibility that banking operations and customer services may be impaired because of computer system problems. With the growing usage of computers and networks, IT risk has increased substantially. DKB is adopting a range of measures to minimize IT risk, described as follows.

Backup Systems In the event that DKB's main computer centers, which provide on-line services, become inoperative because of major natural disasters, operations are switched to backup computer centers instantly and services continue virtually without interruption. Moreover, to provide for possible failures of the telecommunications networks linking the computer center and DKB's offices, backup lines are available to allow services to continue.

Ensuring the Safety of IT Equipment The buildings containing DKB's computer systems are capable of withstanding earthquakes, even one as strong as the Great Hanshin-Awaji Earthquake of 1995, and floors have been designed to dampen earthquake tremors. In addition, the computer centers have their own electric power generating equipment, water storage tanks and other systems that allow continued operations during and following emergencies.

Data Security DKB has taken strict measures to prevent unauthorized access to its systems, including the installation of a computer that is dedicated to monitoring and controlling data interchange with outside systems.