

Credit Portfolio Management at Japanese Financial Institutions
— Current Status and Challenges —

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Study Group on Credit Portfolio Management

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Foreword

Credit Portfolio Management (CPM) refers to such activities as financial institutions evaluating the risk/return profile of the credit portfolio and enhancing the soundness and profitability of the portfolio through credit risk transfer transactions. Unlike traditional loan management, CPM is characterized by the fact that it not only assesses the credit risk and profitability of individual loan assets, but also controls the overall risk/return profile of the credit portfolio. In recent years, more and more globally active financial institutions in the US and Europe have been proactively engaged in CPM, rebalancing their loan asset portfolios while utilizing the credit market's functions to the full. There are also many cases where institutions evaluate credit concentration risk and mitigate it mainly through control of the loan approval process, without involving themselves in active market transactions of this sort.

In Japan, while the financial system has regained its soundness as a whole, there are still issues with the earning power of financial institutions and credit concentration risk. There is a growing awareness that CPM may be an effective way of dealing with these issues, particularly among major banks. That said, CPM is still in its infancy at Japanese financial institutions. The relatively few financial institutions that have started taking a proactive approach to establishing CPM departments are going through a trial and error phase while facing various constraints such as the underdeveloped credit market.

In light of this situation, credit portfolio managers at major banks, and staff from the Center for Advanced Financial Technology of the Bank of Japan's Financial Systems and Bank Examination Department held seven meetings of the Study Group on Credit Portfolio Management between April and November 2006¹.

In launching this Study Group, the following three objectives were adopted.

- (1) To deepen understanding of CPM by exchanging information on practices at individual banks.
- (2) To exchange views on common challenges that have been identified through initiatives to date, including practical issues and obstacles arising from systems and customs, and to study possible approaches to addressing them.
- (3) To provide financial institutions and other entities interested in CPM with reference materials by publishing the results of the Study Group's discussions in the expectation

¹ The Center for Advanced Financial Technology in Financial Systems and Bank Examination Department of the Bank of Japan served as the secretariat of the Group. The Group's membership is listed in the Attachment.

that this will further encourage the discussion on CPM in Japan.

This paper summarizes the Study Group's discussions mainly in line with objective (3), and is organized as follows².

Chapter 1 provides an overview of CPM, examining the underlying concepts as compared with traditional loan management and tracing its development in the US and Europe. Chapter 2 explains CPM's basic framework by taking a more specific look at its objectives, credit portfolio evaluations, credit risk control, the verification of its effects, and organizational structures. It also introduces the initiatives at major Japanese banks in each area. Finally, Chapter 3 takes up points of discussion that are recognized as common challenges from the viewpoint of increasing risk hedging flexibility and promoting progress in CPM, as well as introducing approaches to improving CPM.

2 The "major banks" referred to in this paper are the four banks participating in the study group as members. In addition, this paper only addresses the issue of CPM in Japan and does not cover trends at overseas offices.

Chapter 1 An Introduction to CPM

A. The Features of CPM

With traditional loan management, interest income from a loan itself has always occupied an important position as a source of earnings. At the same time, it has been considered important to maintain and increase loans as a means of building favorable relationships with customers while seeking various business opportunities going forward. Based on this approach, marketing divisions have generally executed loans and held them to maturity or default. When working to reduce exposures in response to a deterioration in a borrower's creditworthiness, they usually curb new credit or reduce the amounts of rollovers on existing credit. They normally do not sell off loan assets because of concerns that this might cause the relationship with the client to deteriorate. And since they do not envisage market sales, they do not as a general rule use fair value (or theoretical value) for evaluating loan assets.

In the case of credits premised on CPM, on the other hand, the lender executes the loan by not only judging the creditworthiness of individual borrowers, but also after considering its impact on the credit portfolio's overall risk/return profile and, in some cases, estimating the gains that may be available should the loan asset be sold in the market. Therefore, the expected loss (EL), unexpected loss (UL) and Risk Adjusted Return on Capital (RAROC) arising when the subject loan is added to the portfolio become important criteria for judgments, along with the transactional relationship with the customer, its share of the loan to the customer, and gross operating profits.

If it becomes necessary to improve the risk/return profile of the credit portfolio after granting a loan, the credit risk exposure should be flexibly reduced through sales, the credit derivative market or the securitization market. Conversely, if there is leeway to make additional use of capital, the exposure can be increased by making use of market transactions, not just new credits. With CPM, therefore, fair value (or theoretical value) is often used in managerial accounting to evaluate loan assets on the assumption that the credit market will be used for credit risk transfer transactions (risk hedging or risk taking).

Quite often, this kind of control over credit risk/return is covered by specialist departments (CPM departments) organized separately from the marketing divisions.

The following table provides a comparison between the features of CPM and traditional loan management³.

	Traditional loan management	CPM
Investment policy	Originate & Hold to the maturity/default	Originate & Distribute if necessary
Loan transaction evaluation criteria	Stand-alone Analysis	Relative to Existing Portfolio
Loan incentives ⁴	Secure loan interest Secure outstanding loans (share)	Entry ticket to fee and commissions business⁵
Management indicators	Net business profit	Risk-adjusted returns
Loan evaluations	Acquisition cost	Acquisition cost/fair value
Risk/return adjustments	Control of the loan approval process only	Also use the credit market
Risk/return adjusting entity	Marketing Division/Credit Division	Specialist department (CPM department)

Source: Prepared using Smithson and Hayt [2], etc.

3 This table attempts to draw conceptual contrasts between traditional loan management and CPM. In reality, there are many cases where the boundaries between CPM and other loan management methods are not necessarily as clear as depicted here.

4 One of the loan incentives — the creation and maintenance of transactional relationships with customers — has been treated as common to both traditional loan management and CPM. In the CPM practiced by US commercial banks, for example, single-name credit default swaps that allow silent risk transfers are used for risk hedging at the individual company level out of consideration for transactional relationships with customers. There are also cases where silent loan participation is used even in sales of loan assets (please refer to The Thompson Corporation and Bank Loan Report [2004]).

5 This approach sees loans as an entry ticket to securing more profitable fee and commissions business — investment banking business — from customers. Financial institutions that have adopted investment banking-type business models see loans as simply one product in the line-up necessary to build and maintain transactional relationships with customers, and believe their main source of earnings lies in their ability to offer comprehensive financial services. When this approach is adopted, risk/return performance that views loans and commissions business, etc., on a total basis is strictly monitored within the CPM framework.

B. Types of CPM

CPM takes various forms depending on the development status of the credit market, the features of the credit portfolio (level of credit concentration, etc.), the importance of long-term relationships with customers, relationships with a broader range of stakeholders, and management strategies that take such factors into account. To simplify our discussion in this paper, it is useful to set up two categories: risk-hedge-oriented CPM, and enhanced return-oriented CPM.

Risk-hedge-oriented CPM focuses more on reducing risk in the credit portfolio than on increasing returns, and typically aims to free up economic (or regulatory) capital by correcting credit concentration. Currently, major Japanese banks have basically adopted this type of CPM which, for example, involves reducing rollovers or selling off loan assets when large loans exceed internal credit limits.

On the other hand, enhanced return-oriented CPM aims to improve the risk/return balance by not only reducing risk, but also raising returns. More specifically, the intention behind this type of CPM is not simply to release economic capital, but also to make effective use of it, and it is normally used in the credit market for flexible rebalancing of credit portfolios (risk hedging and risk taking). The next section looks at the history of CPM, which started in the US as risk-hedge-oriented CPM before evolving into enhanced return-oriented CPM at some financial institutions.

C. CPM's Historical Development⁶

[Risk-hedge-oriented CPM]

In the second half of the 1980s, US commercial banks faced declines in capital adequacy ratios and rising funding costs against a background of non-performing loans. As a result, bank managements became increasingly aware of the need to shrink their balance sheets and boost their earning power, and moved to sell off their non-performing loans and reinforce their credit risk management systems. These moves marked the starting point for the subsequent development of the US credit market.

In the 1990s, the major commercial banks drew on these experiences by establishing CPM departments within their risk management divisions, and started proactive initiatives to reduce credit concentration risk aimed at their large corporate credit portfolios. Most

⁶ See IACPM [1], Walenta [2003].

activity in the early stages was at the individual company level and involved control of the loan approval process, loan sales and hedging through single-name credit default swaps (CDS)⁷. Subsequently, measures to reduce risk were adopted at a portfolio level through CDS targeting specific segments, and securitization.

These more proactive risk hedging activities by the banking sector are said to have contributed to the development of the credit market by encouraging new investors such as insurance companies, institutional investors and hedge funds to participate.

[Enhanced return-oriented CPM]

While the profitability of loans to large companies declined in the second half of the 1990s, the credit market's liquidity increased, encouraging commercial banks to view CPM as an effective way of increasing ROE (or shareholder value). More specifically, they took bold steps to reduce lending to barely profitable large companies within a CPM framework that was clearly conscious of the cost of economic capital. At the same time, they moved rapidly to channel their management resources into more profitable transactions. These included investment banking sectors such as asset turnover business and commissions business, and retail business with individuals, medium-sized companies and SMEs. Asset turnover business included flexible lending and sales to investors in high value-added areas such as corporate turnarounds and M&A deals, as well as normal loans to companies. This switch in business models is believed to have resulted from strong top-down directives from managements conscious of shareholder value, and against a background of progress in credit risk quantification techniques.

In recent years, more frequent use is being made of a framework (Credit Transfer Pricing) whereby loans extended to large companies by marketing divisions are transferred to the CPM department at fair value or theoretical values. At such marketing divisions, a credit market perspective is used to establish explicit rules for the pricing of new loans, and if the margins applied are below the relevant levels, the shortfalls must be clearly covered by other economic advantages. CPM departments are not only used to hedge credit risk, but are also required to flexibly enhance returns through the market operation and to play a role in achieving the high ROE targets imposed on the organization as a whole.

7 It is said that US commercial banks used CDS to hedge against individual company credit risk for the first time in 1991 (see Smithson and Mengle [2006]).

Box 1: Case Study — Deutsche Bank

In 2002, Deutsche Bank drew up a new management plan based on specializing in core businesses, reducing credit risk and cutting costs. The plan set the achievement of pre-tax ROE of 25% as its medium-term management target, and introduced ROE-based economic capital management schemes.

Under the plan, the bank took steps in 2003 to minimize loan losses assumed for the next downturn, establishing a new **Loan Exposure Management Group (LEMG** — equivalent to a CPM department) and adopting a de-risking strategy to improve the risk/return profile by switching lending toward large businesses to the retail and investment banking divisions.

The LEMG has jurisdiction over credit portfolio management for large businesses in Europe, the United States and Asia, and for medium-sized companies in Germany itself. Its primary missions are to (1) reduce credit concentration risk (free up economic capital) and (2) improve the transparency of the credit process.

(1) Reducing credit concentration risk (freeing up economic capital)

Based on its threshold policy, the LEMG works to reduce credit concentration risk in its portfolio by proactively hedging against risk using CDS, securitization, loan sales and other methods. The LEMG is expanding the scope of its risk hedge targets in stages, as shown below.

- <2003> Investment-grade loans with an original maturity greater than 180 days
(excluding loans to medium-sized companies in Germany)
- <2004> Loans to medium-sized companies in Germany with an original maturity greater than 360 days added to hedging targets (excluding preexisting loans)
- <2005> Shorter-maturity loans in both categories and preexisting loans added to hedging targets

It is reported that these initiatives have had the following results.

- [Total outstanding loans] Down 13%
(from €265 billion at the end of 2001 to €230 billion at the end of June 2003)⁸
- [Total credit lines for top 100 companies] Down 40%
(from €107 billion at the end of 2001 to €64 billion at the end of June 2003)
- [Economic capital]

⁸ Excluding a €65 billion drop in lending due to the disposal of three consolidated subsidiaries.

Loans to large companies down 38% between 2003 and 2004

Loans to individuals and SMEs up 10%, investment banking division up 5%
(both between 2003 and 2004)

With regard to the large company credit portfolio (€48 billion at the end of June 2006), approximately 45% of the medium- to long-term commitment line was hedged using CDS (primarily single-name CDS) or securitization, making it possible to keep the credit cost ratio assumed for the next downturn (0bp in the first half of 2006) to less than 20bp⁹. The bank is also making progress in diversifying risk under the threshold policy, and has recently been practicing more active CPM aimed at improving the risk/return profile.

On the other hand, with regard to the credit portfolio for medium-sized enterprises in Germany (€18 billion at the end of June 2006), approximately 20% of the medium- to long-term commitment line was hedged using CDS or securitization, and the hedge ratio was expected to reach around 40% by the end of December 2006. As a result, it should be possible to keep the credit cost ratio assumed for the next downturn (5-15bp in the first half of 2006) to less than 50bp. While it used proactive restructuring through market transactions for its large business credit portfolio, it is improving the risk/return profile of its medium-sized enterprise credit portfolio by focusing instead on cost-cutting through a more rational credit screening system, higher fee and commissions earnings (cross-selling), and stronger pricing discipline when making loans.

(2) Improving the transparency of the credit process

The LEMG has introduced the following Credit Transfer Pricing scheme for the credit portfolios as part of its internal infrastructure for promoting greater transparency in the marketing division's credit and pricing processes, and realizing flexible CPM through the credit market. It has been phasing in the Credit Transfer Pricing scheme, using similar credit concentration reduction targets and timing to those mentioned above.

(a) Evaluation of loans at market prices

When the marketing division extends a new loan, the LEMG indicates a reference price derived from the cost of hedging it in the credit market (e.g., the CDS premium). In the case of loans that do not involve credit market transactions (such as loans to medium-sized enterprises in Germany), it calculates reference prices on the basis of internal ratings, loan size, lending period, type of collateral and examples of loans in similar deals.

(b) Decisions by the marketing division

Taking into consideration the reference prices indicated by the LEMG, the marketing

9 The "credit cost ratio" mentioned here refers to the ratio between provision for loan losses after taking the hedge effect into account, and the loan balance.

division makes an overall judgment based on the transactional relationship with the customer, and the prospects for securing fee and commissions earnings before deciding whether it should enter into the new loan and if so, at what interest rate.

(c) Marketing division earnings

After the loan is made, the loan book is transferred from the marketing division to the LMG at the above-mentioned reference price, and the realized gain or loss on this internal transaction is recognized by the marketing division. If the marketing division realizes a sales loss because it set the loan interest rate too low, it must endeavor to make up the shortfall by itself by, for example, increasing fee and commissions earnings.

(d) Risk hedging by the LEMG

For its part, the LEMG hedges against risk on the transferred loan on the basis of its threshold policy. Since the loan in question was acquired at the above-mentioned reference price, risk hedging should be profit-neutral for the LEMG provided there are no subsequent fluctuations in market prices.

By introducing this Credit Transfer Pricing scheme, the bank has clearly separated the responsibility for originating individual loans at appropriate prices and the responsibility for controlling credit risk in the overall portfolio between the marketing division and the LEMG.

Starting with its financial accounts for 2007, Deutsche Bank has been assessing a substantial part of its loans to large companies at fair value in accordance with the International Financial Reporting Standards (IFRS).

The information in this box draws on Deutsche Bank's annual reports, its IR materials for investors and published articles.

Chapter 2 CPM's Basic Framework and the Initiatives at Major Banks

Major Japanese banks are currently implementing CPM with the primary objective of reducing credit concentration risk towards large companies.

The following sections examine the general approach to individual aspects of CPM by taking a point-by-point look at its objectives, the evaluation of credit portfolios, credit risk control, the verification of its performance, and organizational structures. It also introduces actual initiatives undertaken by major Japanese banks in each area.

A. The objectives of CPM

CPM's objectives ultimately boil down to improvements in risk/return profiles, but its direct targets can be broadly broken down into three categories as follows¹⁰.

1. Reduce credit concentration risk

Reflecting various factors, including the financial institution's marketing policies, business base and lending practices, credit may well end up concentrated in certain areas, business sectors and/or individual companies. Some observers have pointed out that main bank system in Japan has been a factor in causing concentrations of credit with certain business partners. It has also been noted that regional financial institutions find it difficult to diversify their borrowers because their business bases are strong in certain areas and business sectors.

The experience since the collapse of the economic bubble in Japan clearly demonstrates that credit concentration risk has a major impact on financial institution management at times of stress, such as recessions. Reducing credit concentration risk is thus a vital issue for many financial institutions, and CPM can be seen as a potentially effective solution.

2. Reduce credit risk (economic capital)

CPM is effective not only in reducing credit concentration risk as seen above, but also in ensuring that capital is adequate vis-à-vis credit risk. Even when current credit risk is judged not to be excessive, CPM can be broadly applied to adjusting the risk

10 According to an overseas survey of 44 major US and European institutions conducted in 2004 (see Rutter Associates LLC [2004]), the key objectives of CPM as seen by credit portfolio managers were, in order of importance: (1) management of concentrations; (2) protection against risk deterioration; (3) reduction of economic capital; (4) portfolio risk/return optimization; and (5) reduction of regulatory capital.

profile by taking steps to reduce credit risk as part of protective preparations against potential stress situations, such as the next downturn. Broadly speaking, category 1 and category 2 can be described as risk-hedge-oriented CPM.

3. Risk/return optimization

In cases where management is also conscious of the need to optimize shareholder value, CPM's direct objectives will be to reduce risk while improving returns as a means of improving the balance between the two. In this case, the primary aim is to ensure that the risk/return relationship is optimized at all times by dynamically replacing credits that bear a poor risk/return profile with credits that bear a better one, while monitoring risk-adjusted return indicators. This kind of enhanced return-oriented CPM normally develops from risk-hedge-oriented CPM. For example, this development tends to be triggered by strategies for allocating to new sectors or priority operations, etc. any risk capital (risk-taking capacity) released by reducing credit concentration in certain business sectors or large individual companies.

[Initiatives at major banks]

Currently, major Japanese banks have focused on category 1 (the reduction of credit concentration risk) as CPM's main objective. An analysis of organizational lines of command also shows that CPM departments are granted authority, budgets and responsibility in connection with credit portfolio risk hedging. The reason for this is that when the impact of any future stress on management is considered, there is a common awareness that reducing credit concentration risk continues to be an important issue for management even after the quality of the bank's loan portfolio has improved substantially because credit concentration in certain counterparties or industrial sectors remains, partly because of the impact of management consolidations. Since credit concentration risk is not covered by Basel II's Pillar 1 (minimum capital requirements), major banks have adopted their own approaches to creating and operating more sophisticated internal control systems, including business management based on economic capital.

The CPM currently practiced by major Japanese banks is therefore risk-hedge-oriented. If the CPM departments of major banks deliver a certain level of results by reducing credit concentration risk, and a strong consensus forms within the organizations that CPM is effective and useful, it is believed that there could be steady progress towards enhanced return-oriented CPM.

B. Evaluating credit portfolios

1. Credit portfolio evaluation methods

Credit portfolio evaluation consists of identifying concentration in the credit portfolio, the risk/return profile and other factors in accordance with the objectives set for CPM. More specifically, it means identifying counterparties with high credit concentration risk, assets that have significant amounts of risk, and low-return counterparties in order to provide objective information that will contribute to the formulation of credit portfolio management policies.

[Initiatives at major banks]

The major banks use the following evaluation indicators after segmenting their credit portfolios into several sub-portfolios based on internal ratings, business sectors, individual companies and groups, and regions.

	Specific examples of indicators
Credit amount indicators	Gross credit amount, unsecured credit amount
Earnings indicators	Gross operating profits, net business profits ¹¹
Credit concentration indicators	Compliance with thresholds (excess over credit limits) Diversification indicator (Effective Dispersion Index, HHI, etc.) ^{12 13}
Risk amount indicators	EL (Expected Loss)

11 Only gains on loans are taken into consideration when evaluating the profitability of the lending entity on a stand-alone basis. Returns in the form of total gains on loans plus fee and commissions earnings are calculated when evaluating overall profitability including fee and commissions earnings.

12 Effective Dispersion Index = (the square of the total credit amount) / (total values of squared individual company credit amounts)

When using the Effective Dispersion Index, it is necessary to bear in mind the fact that calculation results may fluctuate according to the coverage and the method used for identifying multiple accounts under the same name as a single entity (name gathering).

13 HHI (Herfindahl-Hirschman Index)

= Total values of squared credit shares by industry (or individual companies)

The reciprocal of this indicator is the Effective Dispersion Index.

	UL (Unexpected Loss)
Risk-adjusted returns indicators	(Return amount indicators) Returns after credit costs ¹⁴ Shareholders Value Added (SVA) ¹⁵ (Return ratio indicators) Rates of return after credit costs (RAROC, RAROA, etc.) ^{16 17}

The major banks are developing more sophisticated credit risk quantification methods and generally measure the above-mentioned indicators on a monthly basis. Since the main objective of CPM today is to reduce credit concentration risk, the evaluation indicators that get the most attention in implementing CPM are company/group-specific limit excess amount and EL/UL. Risk-adjusted return indicators are generally used as reference indicators when monitoring the profitability of credit portfolios and individual transactions and in the simulation analyses described below.

In evaluating credit portfolios, CPM departments use not only the static indicators referred to above but also the following dynamic analyses and market information.

(1) Stress tests

Stress tests are divided into two types: (a) analysis of its overall impact on the credit portfolio (verification of capital adequacy); and (b) analysis of its impact on specific individual companies and groups, or business sectors (verification of whether the credit portfolio includes any areas that are exceptionally vulnerable to stress).

At major Japanese banks, the former is covered by the risk management division, and the latter by the CPM department. In other words, the CPM department verifies how much an individual company's EL or UL, as well as its financial reserve burden, will increase in the case where its internal rating falls by 2-3 notches (so-called "sensitivity analysis"). It also links macroeconomic factors such as economic growth rate and land price fluctuations with the probability of default (PD) or loss given default (LGD), and confirms the extent to which EL or UL are likely to increase in specific

14 Returns after credit costs = Net business profit - Credit costs

15 SVA (Shareholders Value Added) = Returns after credit costs - Risk capital x Capital cost ratio

16 RAROC (Risk Adjusted Return on Capital) = Returns after credit costs / Risk Capital

17 RAROA (Risk Adjusted Return on Assets) = Returns after credit costs / Credit balance

business sectors under certain scenarios (so-called "scenario analyses").

The CPM department then uses the results of these stress tests in selecting assets for hedging and counterparties for priority monitoring in CPM, as well as in communications with management and the marketing division concerning its recognition of risk in the credit portfolio.

(2) Simulation analyses

Simulation analyses are used to identify the impact of specific risk hedging operations in connection with part of the credit portfolio.

For example, when looking into hedging operations against the specific individual companies exceeding their credit limits, major banks analyze how these operations can reduce the credit risk (EL/UL) of the targeted individual companies or the credit portfolio as a whole. They also confirm the impact of hedging operations on the risk/return balance, and analyze the impact on financial accounting of such factors as assumed changes in returns on loans, the provision and hedge costs.

(3) Credit market information

Focusing on counterparties selected for priority monitoring, the CPM departments of major banks make use of market information such as credit spreads on bonds and CDS when assessing their credit portfolios. Utilizing signals from the credit market allows them to respond dynamically to sudden deteriorations in borrowers' credit standing that cannot be observed by regular credit evaluation process.

Box 2: Credit risk factor analysis

Taking the Merton-type credit risk quantification model as an example, the Study Group looked at methods for analyzing the contribution of credit risk (UL) in the credit portfolio by risk factors — systematic risk factors and unsystematic risk factors.

If the size of systematic risk and unsystematic risk in the credit portfolio can be identified, it should be possible to use the results in CPM risk hedging strategies. For example, if interest rate products such as government bonds can be used to hedge the systematic risk portion that is believed to have a strong correlation with economic cycles primarily, the risk capital allocated to the credit portfolio should be enough to cover just the unsystematic risk portion, not overall credit risk. This approach should also be applicable to the integrated management of credit risk and market risk.

Several conditions must be satisfied if this is to work. First, since the systematic risk factors of the Merton-type model used by the Study Group cannot be observed directly, it is

necessary to tie them as objectively as possible to observable indicators such as interest rates and stock prices. Second, it is necessary to promote a common awareness of the stability of the correlation between credit risk and interest rate risk through appropriate verification. Clear progress in connection with the second condition should facilitate progress in creating an environment where it is easy to implement credit risk management focused on systematic risk factors by reflecting the result of hedges in financial accounting and capital adequacy requirements, and strengthening intra-organizational cooperation between credit and market departments.

2. Determining basic CPM policies

Basic CPM policies based on credit portfolio evaluations need to receive top management approval following discussions within the organization. At the same time, management grants the CPM department the necessary authority to modify the credit portfolio in accordance with the basic policies.

[Initiatives at major banks]

When the major banks' CPM departments draw up basic CPM policies at the beginning of the business period, they use their ingenuity to ensure that the awareness of risk and its own message are clear. It not only prepares a list of regular evaluation indicators, but also includes drawbacks in the current credit portfolio, the need for initiatives aimed at improvements, numerical targets, the scale of hedge operations, specific countermeasures and methods, and information on cost versus effects. The basic policy is presented to management and the marketing division, where it is discussed, taking into account such viewpoints as the business advantages stemming from long-term relationships with customers.

At the same time as it approves the basic CPM policy, management makes a blanket decision on the size of the risk hedge in the current business period (based on transaction and/or risk amounts), budgets for risk hedges (hedge costs) and risk hedging methods, and grants risk hedging authority to the line managers (executives, departmental managers, etc.) in the department in charge of CPM. The CPM department then freely engages in flexible hedging operations within the authorized range, without having to obtain managerial approval in connection with individual risk hedge transactions.

It should be noted that in the debate on basic CPM policies, there are quite a few

differences of opinion between the CPM department, management and the marketing divisions. In view of this situation, the major banks' CPM divisions are moving ahead with studies on creating common standards concerning credit portfolio evaluations. (One example is the approach for improving assessments of the economic value of loan transactions introduced in the first section of Chapter 3.)

Box 3: The role of stocks held for strategic purposes

Japanese financial institutions hold considerable quantities of stocks for strategic purposes. Currently, there are no moves to make such stocks CPM targets for at least two reasons: (1) there is a strong awareness that sale of such stocks as part of CPM could damage stable, long-term relationships with customers; and (2) it would generate a need to adopt more stringent controls over insider information.

In future, however, it is highly likely that the treatment of such strategic stock holdings in terms of CPM will become an issue because: (1) the impact of price fluctuations in stock holdings can have a significant impact on capital; and (2) CPM may well develop to the extent that it has a clearer awareness of the risk/return improvements.

C. Credit risk control methods

The key points when actually controlling credit risk come down to the choice of a control method and the calculation of indicated prices.

1. Selecting control methods

Methods for controlling credit risk¹⁸ in CPM include the following.

	Specific methods
Control of the loan approval process	Approval / Disapproval of new business and Renewal / Non-renewal of existing business
Adjustments through	Loan sales and trading

18 See Smithson and Hayt [1]

non-market transactions	Debt guarantees Loan participations (so-called “portfolio exchanges” combining these)
Adjustments through market transactions	Credit derivatives (CDS, etc.) Securitization Loan sales and trading

(1) Control of the loan approval process

The most basic credit risk control method available to financial institutions is to adjust risk/return when extending new credits and rolling over existing credits¹⁹. Financial institutions evaluate the credit risk posed by the counterparty whenever they make loans. If they judge that the risk is increasing, they either control it by reducing the size of the loan, or raise the loan interest rate in an endeavor to secure returns that match the risk. Adjusting the amount of the loan or the loan interest rate are not the only tools available. They may also raise the frequency of checks and adjustments of the risk/return profile by shortening the term of the loan, or may require additional collateral from borrowers.

Control of the loan approval process can be applied to any counterparty and there are no ambiguities from the legal or accounting viewpoints. However, this approach has problems with flexibility, and it takes a long time to alter the credit portfolio's risk/return characteristics using it alone.

(2) Adjustments through non-market transactions

Adjustments through non-market transactions use credit risk transfer transactions between certain financial institutions through loan sales and trading and debt guarantees in connection with borrowers about whom little public information is available. They allow more flexible control of credit risk for medium-sized companies, SMEs and unlisted companies than the methods outlined in (1). However, the lack of public information means there are many cases where transactions are not concluded at the indicated prices, and there are also difficulties in handling nonpublic information, as

19 In the above-mentioned overseas survey (see Rutter Associates LLC [2004]), the most important CPM methods as seen by credit portfolio managers were, in order of importance: (1) Approval/Disapproval of new business and Renewal/Non-renewal of existing business; (2) Single-name credit default swaps; (3) Loan sales and trading; (4) Securitizations; and (5) Portfolio credit default swaps.

discussed below.

(3) Adjustments through market transactions

Adjustments through market transactions allow credit risk transfer transactions in connection with borrowers about whom a certain amount of public information is available to take place in the credit market, where many investors participate in trading in CDS, asset-backed securities and loan assets. This is the most flexible approach, but although the credit market in Japan is expanding, it is still small and the numbers of both issues with sufficient liquidity and market participants are still limited.

[Initiatives at major banks]

Most major banks currently rely on control of the loan approval process as a CPM control tool. Since this method alone provides little flexibility, they also use market and non-market transactions, but face various constraints.

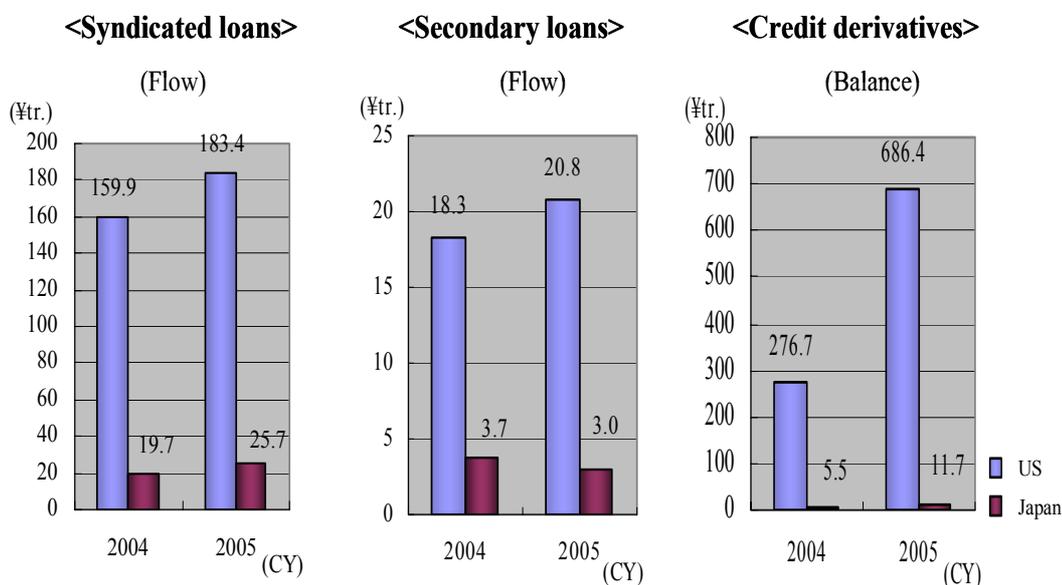
More specifically, there are cases with non-market transactions where, for example, two financial institutions disclose their respective limit excess loans (candidates for sale) and complete the trade after determining a price through bilateral negotiations (a so-called “portfolio exchanges” transaction). With such loan asset sales, the borrower may prefer not to approve the transfer because it seeks a stable relationship with the financial institution. In such cases, institutions use "silent" formats whereby credit risk is transferred not through assignment but through loan participations and debt guarantees that, on the surface, maintain the original contractual relationship with the borrower. Since such non-market transactions are based on limited credit information, it often takes quite a while before they are completed.

Next, in market transactions, one way of doing that is to buy CDS protection (i.e., become a seller of credit risk). The most common case is to purchase large company single-name CDS protection from investors through a securities company or other brokers however purchases of CDS protection that refers the obligations of multiple companies within a specific business sector are also beginning. Another way is to sell loan assets in the loan market. Currently in Japan, sales are made almost exclusively to regional banks, etc., and the trading market is still small, but since there are many cases where transactions are concluded when the sales price is constantly offered, there is room for the market to expand. The third way is securitization. Because of liquidity problems and difficulties in making individual sales due to relationships with customers, borrowers are often separated out into groups and their debts arranged into asset-backed securities for sales to investors.

More banks are gradually moving into market transactions of this type, and in some cases, CPM departments are beginning to take risk by selling CDS protection and

purchasing asset-backed securities. That said, the Japanese CDS market is far smaller than the CDS markets in the US and Europe, where they play a central role in CPM.

Comparison of the Japanese and US credit markets



Source: Estimates from the following data. Syndicated loans: Bank of Japan, Thomson Financial. Secondary loans: Bank of Japan (excluding non-performing loans), Loan Pricing Corporation. Credit derivatives: Bank of Japan, FDIC (Federal Deposit Insurance Corporation).

Note: Base date: December 31. US market results calculated at the rate of US\$1 = ¥117.9.

2. Calculating indicated prices

Irrespective of whether market or non-market transactions are involved, indicated prices (theoretical fair values) for loan assets subject to hedging are calculated on the basis of internal ratings and other factors. Details of original contracts (amount, term, contracted interest rate, and the existence or otherwise of pre-maturity redemption clauses or transfer restriction clauses), and the relationship between supply and demand in the lending market are taken into consideration.

D. Verifying CPM performance

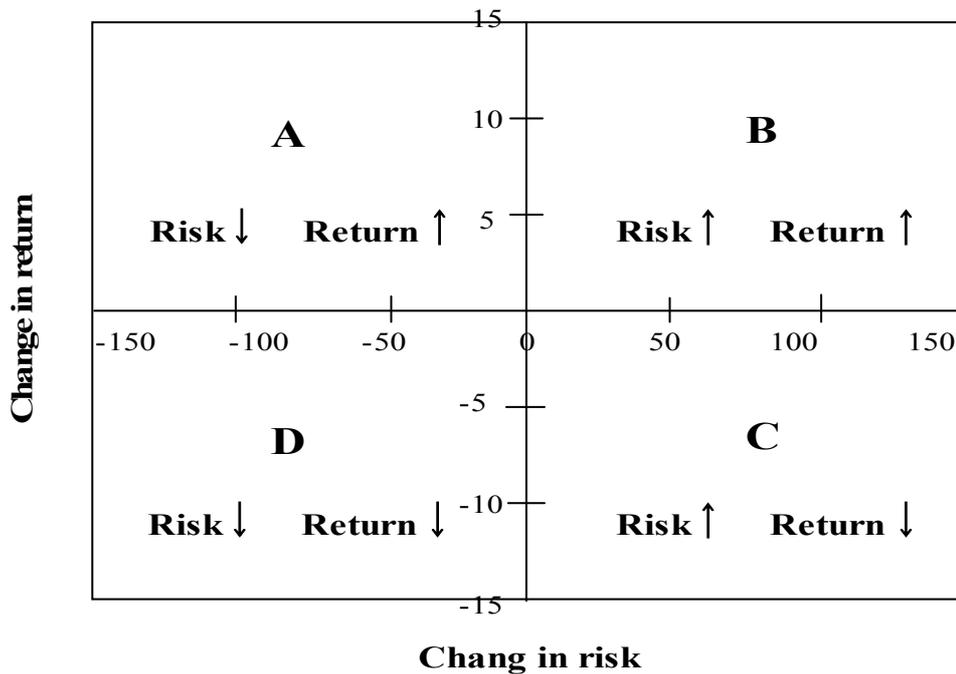
In order to verify CPM performance, it is necessary to clarify initial targets and establish a framework for ex post facto evaluations of the extent to which they are achieved. Evaluating the results of CPM in an appropriate manner clarifies the contribution of the responsible departments, and creates incentives for even more effective implementation. It also provides opportunities for reviewing basic CPM policies and internal organizational structures in light of the issues discovered as a result of the verification process.

[Initiatives at major banks]

Because risk hedging is their primary objective for CPM, major banks have set initial targets for reducing credit risk by individual company, corporate grouping and business sector, and for reducing EL/UL in the credit portfolio as a whole. Naturally, management is involved in verifying the performance of CPM in line with these indicators. In view of the fact that control of the credit portfolio takes time, partly due to the nature of frequently-used measures such as adjustments through the loan approval process, some institutions have introduced evaluation frameworks covering multiple fiscal years. If the credit portfolio's liquidity can be enhanced by switching loan contracts to something more negotiable, even if this does not actually reduce credit exposures, they may be evaluated positively.

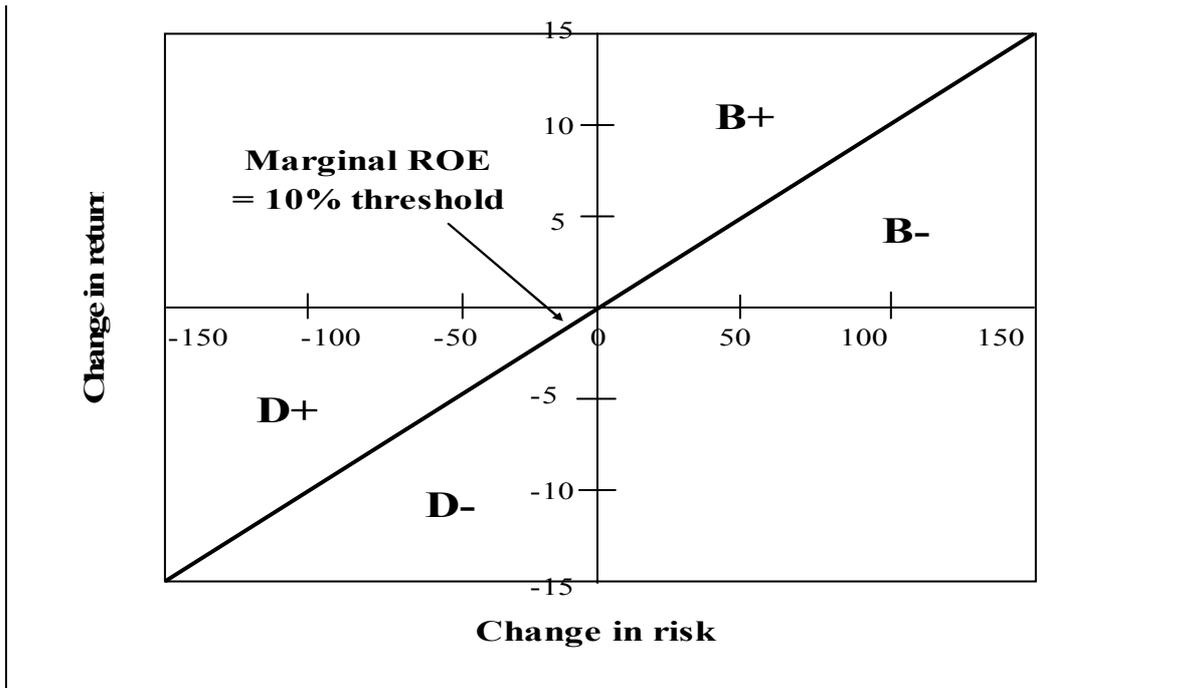
Box 4: Concepts behind CPM performance evaluations

The figure below plots changes in returns with time along the y-axis, and changes in risk with time along the x-axis for the credit portfolio as a whole and for sub-portfolios based on individual companies, corporate groupings and business sectors. From this figure, it is clear that area A denotes a favorable performance by CPM where risk decreases and returns increase, while area C denotes an unfavorable performance where risk increases and returns decrease.



Now, how should we evaluate area B (higher risk and return) and area D (lower risk and return)? One idea is to focus on the extent to which CPM raises marginal ROE. The diagonal line in the figure below delineates the combined changes in risk and return for achieving the marginal ROE target (set at +10% here). It shows that when returns increase as a result of newly-taken risk in area B, the marginal ROE of +10% assigned for CPM is cleared in area B+, but not in area B-. In area D, it also shows that the target of +10% set for marginal ROE is achieved in area D+ because even though absolute return declines, risk declines even more.

Since CPM by major Japanese banks takes the approach that certain levels of hedging cost are unavoidable if the primary aim of reducing risk is to be achieved, we can thus conclude that their strategy should be to aim for area D+ (area A if possible).



E. CPM's organizational structure

1. Loan ownership and recognizing earnings

With traditional loan management, the marketing division originates the loan, books it to its account, and acquires any spread earnings deriving from it. Since CPM does not assume that loans will be held to maturity, on the other hand, it is necessary to make organizational arrangements between the marketing division and the CPM department concerning their authority to dispose of the loans and the attribution of profits and losses accruing to them.

[Initiatives at major banks]

A comparison with financial institutions in the US and Europe that are proactively pursuing CPM as described in Chapter 1 reveals that the CPM departments of major Japanese banks (1) do not have ownership of the loans (the marketing division retains ownership) and (2) usually incur deficits on risk hedge transactions. Taking the organization as a whole, therefore, the CPM department often ends up paying all the costs necessary for reducing risk, while the system is not set up to make the marketing division holding the loans directly aware of the costs involved in reducing risk.

That said, a few major banks have initiated attempts to transfer ownership of loans,

mostly to large businesses, from their marketing division to their CPM department, albeit on a limited basis. This enhances the flexibility of risk hedging because it enables the CPM department to acquire the authority to dispose of loan assets. However, transfer pricing is not based on market prices as in the case of US and European financial institutions that are proactively engaged in CPM, but set at levels that assume the CPM department will continue to shoulder the hedging costs²⁰.

Box 5: Discussion points concerning loan ownership transfers

Loan ownership can be broken down into two concepts: "write-off responsibility" — gains on loans and the responsibility to shoulder losses if a credit event occurs are attributed to the owner — and "disposal authority" — the authority to hedge risk through sales and other tools. Transfers of loan ownership can take several possible forms, including the attribution of both write-off responsibility and disposal authority to the CPM department, and the sharing of disposal authority between the marketing division and the CPM department while leaving write-off responsibility with the former.

Even if ownership is transferred to the CPM department, the marketing division is responsible for subsequent intermediate risk monitoring activities, including reviews of internal ratings and self-assessment of loans. This is only natural in cases where write-off responsibility is left with the marketing division, but it is nonetheless fundamental for the marketing division to carry out intermediate monitoring even when write-off responsibility is transferred to the CPM department. This is because the CPM department is involved in risk hedge transactions with the market and should preferably avoid acquiring the nonpublic information necessary for assigning internal ratings and determining borrower classifications for self-assessments. In such cases, the CPM department may well pay the marketing division a commission for intermediate risk monitoring.

2. Cooperation with the marketing division

The CPM department ensures ample cooperation with the marketing division

²⁰ Under Credit Transfer Pricing, risk hedging costs are passed on to the marketing division. Please refer to the explanation of Credit Transfer Pricing described in Chapter 3 for more details.

originating loans, and encourages it as necessary in accordance with the CPM objectives. If risk hedging is the primary objective of CPM, it is important that the CPM department and the marketing division share a common awareness of the current problems in the credit portfolio.

[Initiatives at major banks]

Based on this awareness of the issues, the major banks endeavor to ensure smooth cooperation between the two by not only creating opportunities for discussions about the above-mentioned basic CPM policies involving management, but also establishing an office within the marketing division to liaise with the CPM department, and holding regular cross-sectional meetings concerning CPM. The CPM department may also be placed as part of the marketing division.

The CPM department explains the advantages that CPM brings to the marketing division as follows: (1) reducing credit concentration risk enhances the capability to extend additional credit for customers; and (2) checking customer-specific risk/return from the CPM department's viewpoint can provide marketing guidelines for selecting customers that should be targeted for expanded commissions business.

3. The placement of the CPM department²¹

Generally, specialist CPM departments are set up to clarify the role and responsibilities of the CPM function, strengthen the organization's ability to formulate and implement CPM plans, and accumulate practical know-how.

[Initiatives at major banks]

The placement of CPM departments at major banks follows several patterns. Organizational structure, authorities and lines of responsibility should vary according to what management seeks from the CPM function, including the extent to which it attaches priority to credit concentration risk.

²¹ See Ingrassia and Greatrex [2005].

Responsible division	Features	Caveats
Business management division	Allows management's thinking to be directly reflected in CPM.	Risk management functions may be duplicated.
Risk management division	<p>Easy to implement CPM functions to deal with credit concentration and other risk hedging objectives.</p> <p>Clarifies the division of roles and areas of responsibility between the CPM department and the marketing division.</p>	Costs for adjustments with the marketing division are high.
Marketing division	<p>Easier to build a cooperative system with branches.</p> <p>Easier to obtain information concerning loan market development.</p>	<p>Tends to be impacted by the market division's return targets and thus to restrict flexible risk hedging.</p> <p>Requires more stringent control of nonpublic information.</p>

Chapter 3 Challenges for CPM in Japan and Approaches to Addressing Them

In recognition of a number of challenges learned from implementing CPM to date, major Japanese banks have started working on improving the transparency of the credit process and the flexibility of risk hedging. These efforts incorporate elements designed to make today's risk-hedge-oriented CPM more effective and perhaps help it evolve into enhanced return-oriented CPM in the future. Currently, the main efforts pursued by the major banks can be separated into: (1) more objective evaluations of the economic value of loan transactions; and (2) greater liquidity for loan assets. Both are important aspects of efforts to improve the loan market liquidity. This chapter examines challenges that are commonly recognized for both of them respectively, and introduces examples of approaches to improve them.

A. More objective evaluations of the economic value of loan transactions

[Common challenges]

Amidst intensifying lending competition between financial institutions in recent years, spreads on loans to large companies and blue-chip companies have tended to tighten. Assuming current quantification methods, therefore, the view is that there are quite a few cases where it is unclear whether returns are actually commensurate with the credit risks involved. This implies that there is the possibility that current pricing at the primary market makes it difficult to sell loan assets at the indicated price and therefore contributes to the high cost of risk hedging²².

In the case of loan transactions with large borrowers, moreover, the marketing division may object if the CPM department decides that risk hedging is needed to correct credit concentration, or that it is appropriate to sell because profitability is low from a risk-return perspective. These objections might include the detrimental effect on the transactional relationship with the customer, or the fact that overall profitability is not low if the fee and commissions earnings arising from the long-term relationship are taken into consideration. Within an organization, therefore, creating a consensus concerning economic assessments of loan transactions is in itself quite difficult.

Because there is often some ambiguity about the economic value of loans that are

22 Other factors probably have an impact, including the fact that since the credit market is still small, liquidity is low and bid-ask spreads are wide.

held for a long time, the CPM departments of some banks are devising methods to identify these values from various angles, thereby stimulating the in-house discussion on the subject and providing support for managerial judgments pertaining to the lending business. Another approach is to consider introducing Credit Transfer Pricing. Credit Transfer Pricing can be regarded as the core mechanism of US- and European-style CPM (see the case of Deutsche Bank in Box 1) and its introduction can be described as an "osmotic" approach to establishing an awareness of market discipline within the organization. The following sections look at these two approaches.

[Efforts for improvement]

1. Identifying the profitability of loan holdings

The fact that trustworthy valuation criteria have not been established is probably one reason why assessments of loan profitability differ according to point of view, as in the case of CPM departments and marketing divisions. From this perspective, the largest problem with general risk-adjusted return indicators is the fact that they are calculated on a single fiscal year basis. Given the business model adopted by Japanese financial institutions, which looks for profit-earning opportunities from long-term relationships with customers, such single fiscal year figures invite objections on the grounds that they fail to fit the reality and do not reflect the fact that there are no problems with total profitability over the long term. It is therefore necessary to ascertain the profitability of loan transactions in line with the realities of continued holdings, and the following formula gives one possible example of a suitable indicator.

(1) Rate of return to maturity after credit costs (maturity-based RAROC)²³

$$= \frac{(\text{Assumed net business profit to maturity} - \text{Assumed EL to maturity}) / (\text{No. of years to maturity})}{\text{Assumed UL to maturity}}$$

(2) Returns to maturity after capital costs (maturity-based SVA)

$$= \text{Assumed net business profit to maturity} - \text{Assumed EL to maturity} - \text{Assumed capital costs to maturity}$$

23 "Maturity" here refers to the period up to the final recovery of the loan, including continuances in the case of rollovers.

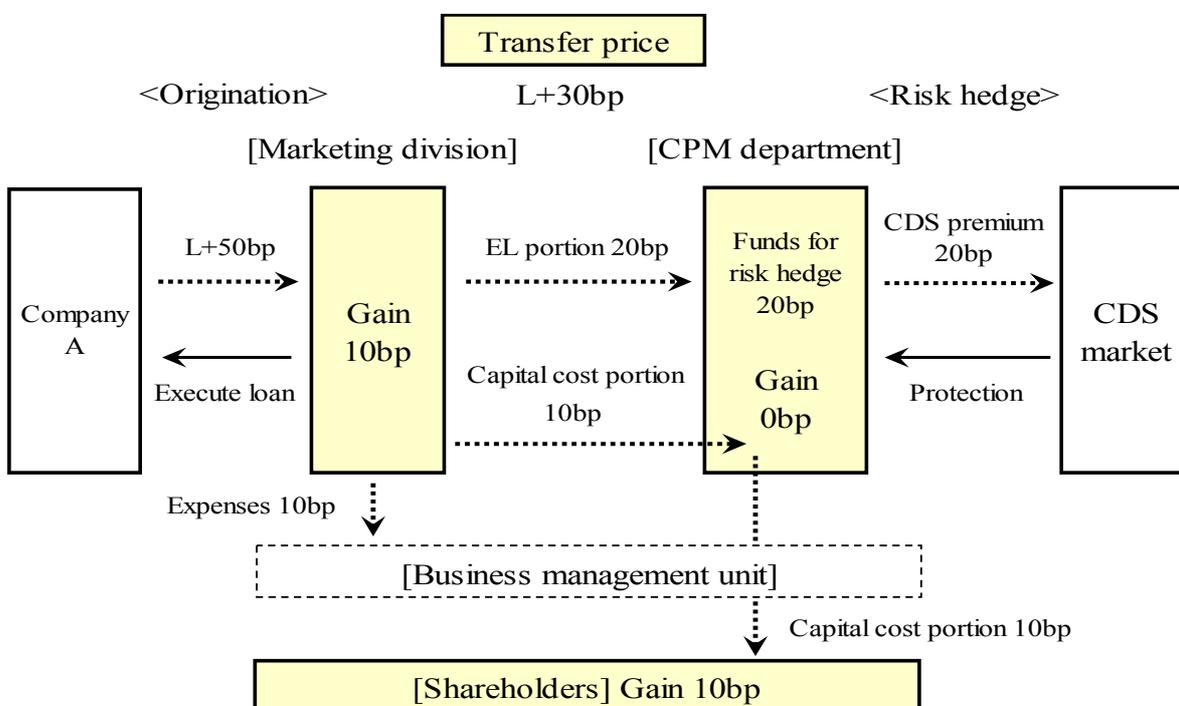
= Value of loan transaction

"Assumed net business profit to maturity" as referred to here includes fee and commissions earnings. Using the formula for identifying loan values as described here, it becomes easier to apply organizational checks when evaluating the total profitability of the loans, including checks on whether or not the outlook is overly optimistic. And since the evaluation takes credit costs and capital costs into account, profitability vis-à-vis risk and the opportunity costs of loan holdings can be discussed. Of course, it cannot be denied that such evaluation methods necessitate various assumptions, including hypotheses concerning rollovers and the outlook for long-term rating migrations, or that the resulting figures may be quite vulnerable to change. Nevertheless, they are likely to have considerable significance if the entire organization, including management, is encouraged to make the most objective possible evaluations of overall profitability within common parameters.

2. Introduction of Credit Transfer Pricing

Introducing Credit Transfer Pricing, principally with regard to loans to large companies, represents another attempt to identify the economic value of loan transactions more objectively. Credit Transfer Pricing is an internal process that reflects credit market views in loan origination and plays an essential role in US- and European-style CPM. More specifically, (1) it transfers loan ownership from the marketing division to the CPM department²⁴, and (2) it sets the transfer price based on the credit market price (or a theoretical price calculated rationally using credit market parameters).

The Credit Transfer Pricing Mechanism²⁵



24 If we envisage a framework for transferring the ownership of all loans to large companies from the marketing department in the future, one issue to be studied is that of detaching intermediate monitoring functions such as the assignment of internal ratings from the marketing division. In such cases, one option is that the CPM department could engage in intermediate monitoring only if the internal rule of handling nonpublic information is set in force. Another option is that a department other than the CPM department could be established to deal with assigning and reviewing internal ratings.

25 See Dev and Kim [2006]. Credit Transfer Pricing designs take various forms depending on the management policies and business strategies of the financial institutions in question. The Credit Transfer Pricing mechanism shown here assumes a business management framework that favors returning profits to shareholders.

- (a) Marketing department pursues a loan deal to company A.
- (b) Reflecting the evaluation of a neutral division within the organization, the transfer price is set at, for example, L+30bp on the basis of company A's credit cost (EL=20bp) and capital cost (single-name UL x capital cost ratio=10bp)²⁶.
 - The transfer price may be determined on the basis of company A's credit spread (hedge cost) in the case where such spread information is available in the credit market²⁷.
- (c) Taking the above-mentioned transfer price into consideration, the marketing division extends the loan to company A at L+50bp.
- (d) The marketing division recognizes a gain of 10bp after the transfer price portion (30bp) and expenses (10bp).
- (e) The CPM department uses the 20bp remaining after deducting the capital cost portion of 10bp from the 30bp transferred from the marketing division as funds for the risk hedge transaction.
 - If the risk premium paid for the risk hedge transaction in the credit market is 20bp, the CPM department's gain is zero.
 - If, on the other hand, the CPM department manages to hedge company A's risk at a risk premium of 15bp in a timely manner, the 5bp difference is recognized as a gain for the CPM department. Conversely, if it has no choice but to hedge the risk at 25bp, the difference of minus 5bp is recognized as a loss²⁸.
- (f) The 10bp capital cost portion is returned to shareholders (or kept as retained earnings).

If this type of Credit Transfer Pricing mechanism functions properly, it clearly distinguishes the role of the marketing department, which extends the loan at appropriate

26 The level of the transfer price would greatly affect both the breakeven assessment for the marketing department's loan origination and the breakeven assessment for the CPM department's risk hedge. For this reason, it is necessary to have a framework whereby a department that is independent of both the marketing division and the CPM department (such as the risk management division) assesses the appropriateness of the transfer price.

27 US and European financial institutions mainly determine the transfer price on the basis of the borrower's credit spread as observed in the credit market.

28 If company A defaults before the CPM department can hedge the risk, the CPM department has to bear the loss.

pricing, from that of the CPM department, which manages credit risk in an integrated manner. At the same time, it provides both with the incentive to increase their returns.

(1) Earnings-enhancement incentives for the marketing division

Normally, the loan margins offered by Japanese financial institutions are ultimately determined with the credit division's participation and in accordance with ratings-specific spread guidelines. From the perspective of sound economic reasoning, it cannot be denied that in such cases ambiguities may remain in the guideline spread and the final decision process.

With Credit Transfer Pricing, on the other hand, the costs charged on the loan funds are based on economic rationality. If the marketing division extends a loan with margins that do not match these costs, it will incur a loss for which it will be accountable to management. Consequently, the marketing division has the incentive to (1) extend loans with margins that exceed these charges²⁹, and (2) expand its fee and commissions business³⁰.

(2) Earnings-enhancement incentives for the CPM department

As mentioned earlier, the CPM departments of major banks are normally in deficit because they have to bear the cost of risk hedges in the face of limited gains on risk-taking.

With Credit Transfer Pricing, the CPM department acquires a portion of the loan spread commensurate with the rationally calculated credit costs. As a result, the gain/loss on the risk hedge can be plus or minus depending on whether this portion is large or small compared with the risk premium demanded by the market. Based on this mechanism, the CPM department does not simply hedge against risk, but has the incentive to increase its own returns on the same risk hedge by skillfully choosing its timing and its counterparties as a means of lowering costs³¹.

This means that the CPM department is no longer a cost center within the

29 If capital costs equivalent to credit concentration risk are charged, this functions as an incentive to curb lending to large borrowers.

30 The marketing division is free to make overall judgments that allow it to set low interest rates but make up the shortfall through commissions. The key point is that using the transfer price as a basis makes it possible to clarify whether overall profitability, which is prone to ambiguity in such cases, is plus or minus.

31 This approach is similar to the case where a portion commensurate to funding costs is transferred from the returns on a loan to the ALM department (Fund Transfer Pricing), which then centrally manages interest rate risk within the organization at the lowest possible cost.

organization but is transformed into a profit center that is expected to post gains from market transactions. It probably marks the first step towards the type of CPM practiced by some leading financial institutions in the US and Europe, whereby the CPM department posts gains while taking on risk exposures of its own by, for example, purchasing what it believes to be undervalued credit risks from the market.

Whether Credit Transfer Pricing functions well or not depends to a large extent on the manner in which transfer prices are determined. Given that the Japanese credit market is still underdeveloped today, there are probably many cases where the transfer price has to be set at the theoretical price obtained using the EL/UL buildup approach. However, it is probably more meticulous organization-wide discussion on the economic value of loans that will lay the groundwork for the development of the credit market.

B. Raising the liquidity of loan assets

[Common challenges]

Establishing more objective rules for loan pricing through the initiatives discussed in the preceding section is an important condition for the credit market's expansion. Apart from these initiatives, however, there is still room for fostering the liquidity of loan assets. We examine two points below.

The first is to negotiate with borrowers and to promote a switch to loan contracts that make it easier to transfer claims. Even if the claims are not transferred, it is possible to hedge credit risk in the CDS market. That said, the present CDS market is limited in terms of its size and the number of reference names that can be transacted in a flexible manner, while CDS are subject to mark-to-market accounting³². From the viewpoint of diversifying hedging tools, therefore, it is necessary to make proactive use of measures such as loan sales and trading. However, transfers of claims require the borrower's approval, unlike CDS transactions. The problem here is that borrowers tend to be reluctant to

32 Current accounting treatment leads to a mismatch in the accounts because loans subject to hedges are recognized at acquisition cost while hedge instruments like CDS are marked to market. For example, it has been noted that if a target borrower's creditworthiness improves after CDS are used as a risk hedging tool, the improvement in the quality of the loan (namely the increase in fair value) is not reflected in the financial statements, while losses are incurred in the CDS hedge. For this reason, the overall economic value of the financial institution is not correctly communicated to investors.

approve claim transfers because they prefer stable, long-term relationships with financial institutions or have concerns about the prevalence of their nonpublic information. The point here is how to negotiate with borrowers and win their understanding.

The second is to establish practices concerning the fair handling of nonpublic information. Credit risk transfer transactions tend to fail if a potential purchaser of a credit risk suspects that there is a large information gap between him and the potential seller. In this respect, the CPM departments of major Japanese banks are generally not strictly walled off from nonpublic information pertaining to the borrower and are acting in an intermediate mode between the private side and the public side (see the table below)³³. To ensure that risk hedge transactions are consummated smoothly in this sort of mode, it is necessary to establish internal procedures so that it is possible to explain that the CPM department does not have a large information advantage over the purchaser of the credit risk, at least as far as the borrower subject to the transaction is concerned.

Location of the CPM department	Features
Private side	It is possible to obtain nonpublic information in full
Intermediate mode	It is possible to obtain limited nonpublic information - Lenient information firewalls
Public side	It is possible to obtain only public information - Rigorous information firewalls

[Efforts for improvement]

1. Switching to loan contracts that make it easier to transfer claims

Increasing the liquidity of loans brings the advantage that financial institutions can reduce liquidity risk premiums, thus lowering capital costs and ultimately increasing the value of their credit portfolios. From some points of view, there is a possible disadvantage for borrowers in that their relationships with specific financial institutions may be diluted, but there should also be an advantage in that a wider investor base should increase the availability of funding in the future. Some major banks are already explaining these

³³ This intermediate format is largely attributable to the fact that the present-day credit market is still underdeveloped and therefore CPM activities on the public side are limited.

advantages to customers, primarily to large borrowers, in an attempt to obtain their understanding. At the same time, they are entering into negotiations on switching to loan contracts that make it easier to transfer claims while passing on to customers some of the economic advantages that financial institutions themselves enjoy.

The following sections look at this in more concrete detail.

(1) Proposal of candidate lists

The CPM department selects candidates for contract switches (e.g., borrowers with loans exceeding a certain outstanding threshold) and discloses them to the marketing division.

(2) Negotiations with customers

The marketing division enters into negotiations with the listed customers concerning a switch in contracts. The aim of negotiations with customers is to change current loan contracts in such a way that they assume transfers in the future, and cover several aspects: (a) state in the contract in advance that when the claim is transferred, the customer, i.e., the borrower shall approve the transfer without objection; (b) insert stipulations prohibiting offsets of depository claims and loan obligations by the customer itself in order to allow use of registrations under the Law Concerning Special Exceptions, etc., to the Civil Code Pertaining to Perfection of Claim Transfers (retention of borrower perfection by acquiring third-party perfection only); and (c) clarify the parties to which nonpublic information can be disclosed, and the scope of such disclosures.

(3) Incentives for the marketing division

To encourage the marketing division to take proactive initiatives, the CPM department grants incentive gains (contingency fees) to the marketing division in cases where contract switches have been achieved³⁴.

(4) Passing on benefits to customers

Against the background of the extra lending capacity created for the financial institution by greater loan asset liquidity, the marketing division explains, during the above-mentioned discussions with customers, that the customer may also be able to procure funds on a timelier basis. Another possible way in which the financial

34 Another possible approach is to cancel the penalty, which has been imposed on the marketing division for loans larger than a certain amount, if a switch in contracts is successful.

institution may pass on benefits is to tailor loan conditions more to the customer. Steps like these may well make customers more willing to cooperate.

(5) Compliance

To ensure that the marketing division does not coerce customers into approving the contract switches in order to secure incentive gains, compliance procedures are strengthened by improving guidelines and check sheets concerning the handling of related operations.

Since the above-mentioned initiatives may greatly change the traditional hold-to-maturity approach of loan operations, they are not necessarily progressing in line with expectations at the moment. Another probable reason for this is that loan spreads are tight and the benefits that can be channeled back to customers are limited.

2. Establishing practices concerning the fair handling of nonpublic information

In order to eliminate the possibility that they may have a large information advantage over purchasers of credit risk in risk hedge transactions, some major banks are considering drawing up voluntary rules concerning the handling of nonpublic information about the borrower, and explaining to purchasers that they intend to comply with them. More details follow below.

(1) In the case of trading in corporate bonds

If the CPM department handles corporate bonds issued by listed companies, it will not trade in such corporate bonds in cases where material facts concerning trades in corporate bonds (default information) exist within the organization. This is to avoid the risk of infringing on insider trading regulations under the Securities and Exchange Law.

(2) In the case of risk hedge transactions

With regard to borrowers who may be subject to risk hedge transactions, the bank shall confirm whether it is in the position of a bond manager or a syndicated loan agent itself. It shall also note that if it engages in risk hedge transactions while in such a position, there is a legal risk that it may be accused of infringing on the duty of due

diligence if the borrower in question subsequently defaults³⁵.

From the viewpoint of preventing unfair transactions using information disparities, the CPM department shall confirm in advance whether the scheduled risk hedge transaction is subject to any pre-established check criteria³⁶. Where check criteria apply, the CPM department shall confirm with the marketing department whether the latter holds any material nonpublic information concerning the creditworthiness of the borrower targeted by the hedge transaction, and whether it has identified any possibility that the borrower may default within a certain time in the future.

In the case where the marketing division holds material nonpublic information about the borrower, prior discussions should be held in-house with the compliance department or with external lawyers. The first aim is to determine whether a risk hedge transaction should go ahead. If the answer is yes, the next aim is to determine on a case-by-case basis whether there is a need to disclose nonpublic information to the counterparties and, if there is, the scope of such disclosure³⁷.

(3) In the case where the counterparty to a transaction seeks proprietary information concerning risk hedge transactions

Disclosure of proprietary information to a counterparty in a transaction requires that consideration be given to matters relating to the duty of confidentiality to the borrower. With this in mind, judgments on proprietary information disclosure are made on a case-by-case basis after comprehensively considering the five elements mentioned in the "Report of the Study Group on Disclosure in Loan Markets" published by the Japanese Bankers Association (JBA) in 2004. These are: the purpose of the disclosure; the nature of the information to be disclosed; the impact on the corporate borrower; the recipient of the disclosure; and the information management system.

Where information is to be disclosed, the following principles shall be observed: (a) the recipients of the disclosed information shall be entities that satisfy certain criteria, such as financial institutions under a certain degree of supervision by the authorities; (b) a non-disclosure agreement (prohibitions on use for unauthorized purposes and information leaks; compensation for damages due to leaks; obligation to return or destroy information when trading negotiations are discontinued, etc.) shall be concluded

35 One possible example of this risk is the case where an agent incurs the obligation to notify other lenders of any information it receives about a deterioration in a borrower's creditworthiness in its role as an agent under a syndicated loan contract.

36 Check criteria may, for example, be set to include whether the creditworthiness of the borrower targeted by the risk hedge transaction falls below a certain level.

37 See the Japan Syndication and Loan-trading Association's [2002] Code of Conduct concerning disclosure of information in loan sales and trading transactions.

with the recipient of the disclosed information; and (c) decisions on information to be disclosed shall be made for each transaction on a case-by-case basis.

With regard to the handling of nonpublic information, there are some points where legal opinions in the form of precedent and theory have yet to be published. In order to ensure as much transactional transparency as possible under such constraints, it is desirable that market participants deepen and share the debate on some form of code of conduct, such as the internal procedures mentioned above.

Of course, the fact that handling nonpublic information should be a matter of debate arises because CPM departments are currently in a position where they may obtain nonpublic information. When we envisage a possible future situation where the players in the credit market diversify beyond banks and other financial institutions, whose core business is lending, to insurance companies, investment trusts, pension funds and hedge funds, or where different legal environments apply, it may become a realistic choice to place CPM departments on the public side and isolate them from nonpublic information.

Box 6: Approach to internal ratings and self-assessments in market-based financing

In connection with syndicated loans and other forms of market-based financing, the Study Group discussed approaches to assigning internal ratings and determining borrower classifications on the basis of self-assessments with a view to promoting the smoother flow of borrower information in the credit market.

With current internal ratings and self-assessments, it is assumed that financial institutions can obtain quite detailed information on borrowers on the basis of long-term relationships between the two. With CPM, on the other hand, it may be possible to purchase loan assets through the secondary market without having a relationship with the borrower. In such cases, financial institutions may not always be able to assign internal ratings or carry out self-assessments in their intermediate risk monitoring activities as they do at present because they cannot obtain the credit information necessary for ascertaining the real status of the borrower³⁸.

A look at the Japanese loan market in recent years shows an increase in syndicated loans and other market-based financing. Given the situation, it was suggested that the development of the credit market might be helped by the establishment of frameworks that

38 For this reason, CPM departments often limit their purchases of loan assets to existing counterparties for which they can obtain the necessary credit information for internal ratings and self-assessments from their own banks' marketing divisions.

allow internal rating assignments and self-assessments on the basis of information obtainable from the market, such as fair value information and external ratings concerning loan assets.

With respect to the use of fair value, it was suggested that, for such loans as a reliable fair value can be obtained from the loan trading market, the self-assessment can be implemented in the same way as the self-assessment for marketable securities, simply by using the fair value or by applying a theoretical value derived from an internal model. Another method proposed regarding the use of external ratings was to determine borrower classifications on the basis of translating external borrower's ratings into internal ratings under appropriate rules. In connection with these methods, it was pointed out that it is difficult to acquire reliable fair values or external ratings at times of stress, such as when a borrower's creditworthiness deteriorates sharply. It was also noted that there is a need to carefully debate the pros and cons of applying fair value accounting to loans.

Another point raised was the possibility that it might be helpful to adopt a mechanism whereby the results of the authorities' assessments of agents are shared by the participants in a syndicated loan, as happens with the Shared National Credit (SNC) program of the US³⁹. There was an opinion, however, that more comprehensive information disclosure by borrowers in the US might be at the foundation of the SNC program. Another was that borrowers might become less willing to provide information to their main bank.

In any case, one of the basic factors militating against finding a solution would appear to be the fact that information about borrowers that can be shared by market players is not necessarily adequate. Inevitably, market-based financing in Japan will at the very least not be as "market-oriented" as in the United States as a result.

39 The SNC program is a scheme whereby the financial authorities conduct assessments of agent banks in connection with syndicated loans aggregating \$20 million or more in which three or more banks participate. The results of the assessments are then communicated to the participating financial institutions, which, as a general rule, use them as self-assessments.

Closing

One of the important changes affecting the management of financial institutions in recent years is probably the fact that they have started engaging in creative and strategic activities in order to make their credit portfolio more sound and profitable while making use of the functions of the credit market. This trend not only improves the management of individual financial institutions, but also encourages further development of the credit market, enhances the functions of the financial markets, and may lead to greater efficiency in the allocation of resources in macro terms.

This paper introduces the current CPM initiatives at the major banks participating in the Study Group. However, this is a period of transition and the situation may well change rapidly in the future. CPM styles may also vary from one financial institution to another depending on such factors as management objectives and policies, risk characteristics, business area and corporate culture. Whatever the case may be, endeavoring to analyze one's own credit portfolio objectively and striving towards a common awareness of issues concerning the location of weakness at times of stress as well as profitability are both essential first steps in improving management. Based on these efforts, CPM may function as an efficient mechanism for tackling various issues, including management of credit concentration, overall credit risk control, and enhancing the risk/return profile and shareholder value. That is this paper's main message.

Study group members hope that this paper will contribute to arousing greater interest in CPM among a broader range of Japanese financial institutions.

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Note: Departmental names and titles were current as of November 2006, when the Study Group concluded its deliberations.