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# Credit Risk Transfer Transactions in Japan

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Japanese banks are increasingly using syndicated loans and loan securitizations to diversify their credit risk and improve their operational efficiency. This report examines the situation in Japan in the light of US and European developments, and considers what needs to be done to promote the use of credit risk transfer in Japan.

## 1. Credit Risk Transfer Transactions

### 1) Significance and techniques of credit risk transfer

"Credit risk" is the risk to a lender that, as a result, for example, of default or insolvency, a borrower may not be able to repay its debts. Since lending is one of the main activities of banking, how banks manage the credit risk of their loans is one of their most important responsibilities. Japanese banks have traditionally sought to mitigate credit risk by means of collateral and guarantees. More recently, however, having to write down bad debts has sapped their strength and forced them to manage this risk more carefully than ever. As a result, they have begun to adopt new risk management techniques for transferring credit risk.

There are four main ways of doing this: (1) by selling off loans; (2) by using syndicated loans to spread the risk; (3) by using credit derivatives; and (4) by securitizing loans (securitizing either the loans themselves or also the credit risk of those loans, synthetic securitizations).<sup>1</sup> Methods (2) to (4) have been used increasingly in recent years, with (2) loan syndication and (4) securitization proving particularly popular. The rest of this section deals with methods (2) to (4).

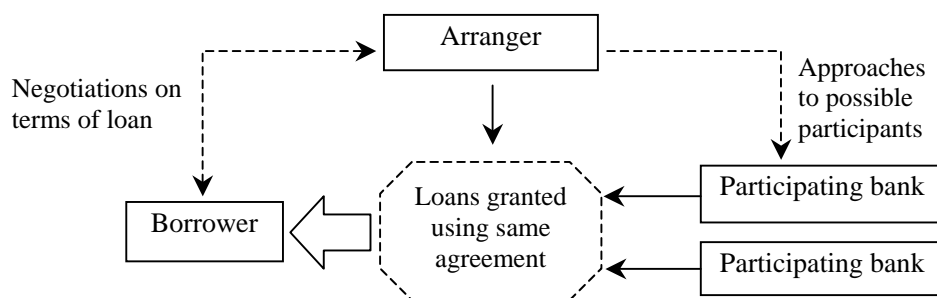
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<sup>1</sup> Another well-tried method is loan participation, which involves selling participation rights in the principal and interest portions of a loan without transferring the actual loan. It will not be dealt with in this report.

## (1) Syndicated loans

Loan syndication involves inviting the participation of other banks in a loan on the same terms and by signing the same agreement (Figure 1), thereby enabling the bank in charge (the "arranger") to reduce its own commitment and to earn a fee for arranging the loan.

**Figure 1 Schematic Diagram of a Syndicated Loan**



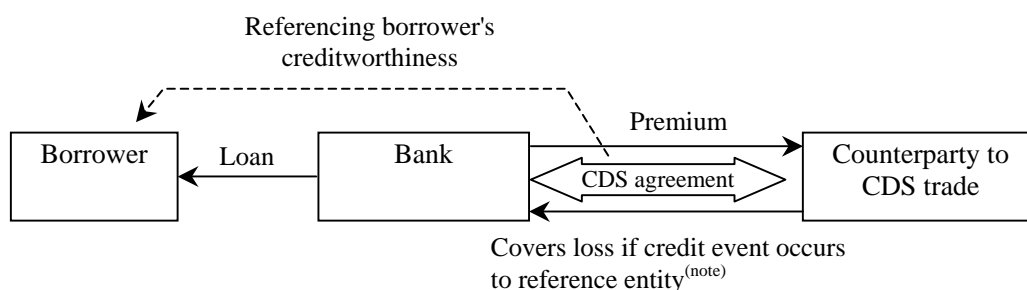
Source: NRI.

## (2) Credit derivatives

A credit derivative is a contract between two parties where one party agrees, for a fee, to guarantee the returns in a credit-based transaction. The commonest type is credit default swaps (CDSs).

By paying a premium, the purchaser of a CDS referenced to the creditworthiness of a specified company (the "reference entity") will receive an amount calculated by a predetermined method from the counterparty to the swap if certain credit events occur in the reference entity. By entering into such contracts, banks can transfer the credit risk of their loans to third parties (Figure 2).

**Figure 2 Schematic Diagram of a Credit Default Swap (CDS)**



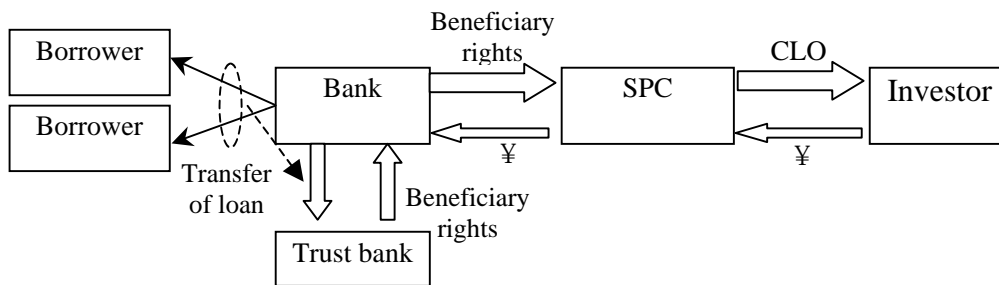
Note: Examples of credit events are bankruptcy, failure to pay, restructuring, obligation acceleration, and repudiation/moratorium.

Source: NRI.

### (3) Loan securitization

The commonest way for a bank to securitize a loan is to transfer (sell) it to a trust bank and then to transfer the beneficiary rights issued in return to a special-purpose company (SPC), which, in turn, issues securities backed by these rights (Figure 3). Such securities are called collateralized loan obligations (CLOs; or cash CLOs).

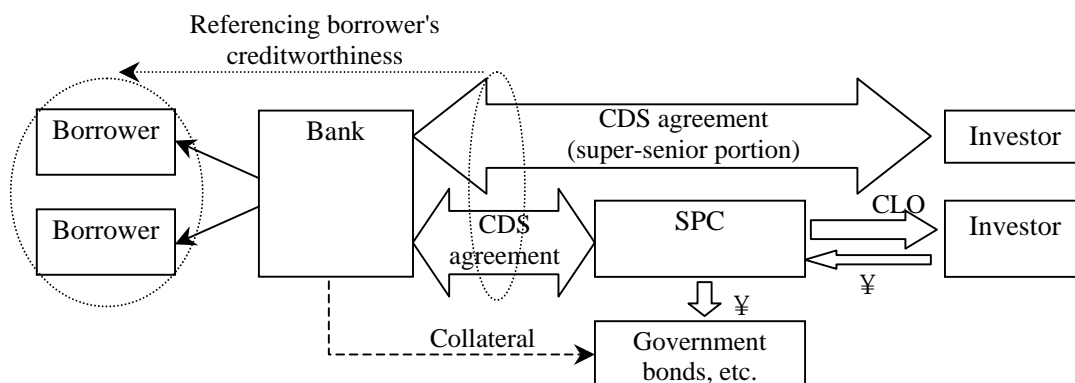
**Figure 3 Schematic Diagram of a Collateralized Loan Obligation (CLO)**



Source: NRI.

One type of CLO that has attracted growing interest is synthetic CLOs. Unlike cash CLOs, synthetic CLOs transfer only the credit risk attached to loans to the SPC by means of CDSs (Figure 4). As the relationship between the borrower and the lending bank remains unaffected, this method is superior to cash CLOs as it avoids the problems associated with transferring loans (see 3. 2). In addition, the fact that the SPC can spread the risk among a large number of investors widely in the form of securities enables more credit risk to be transferred than when a private-treaty CDS is used, as in method (2).

**Figure 4 Schematic Diagram of the Origination of a Synthetic CLO**

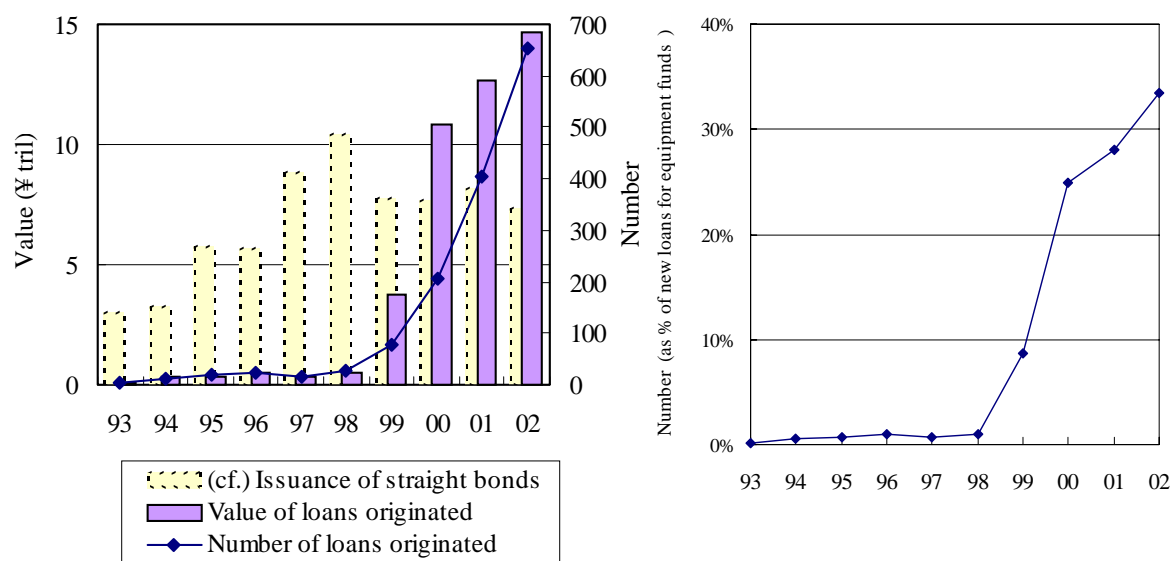


Source: NRI.

## 2) Current state of credit risk transfer transactions

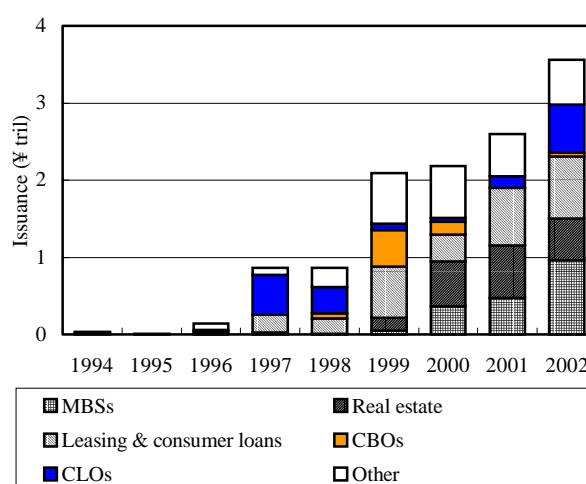
Figures 5, 6 and 7 show the amounts originated by syndicated loans, the amounts issued in the form of asset-backed securities and the notional amounts of credit derivatives traded in Japan. The recent increase in syndicated loans and CLOs is particularly striking.

**Figure 5 Growth in Syndicated Loans in Terms of Value and Number**



Source: NRI, from International Finance Review, Bank of Japan, "Financial and Economic Statistics Monthly," and Japan Securities Dealers Association data.

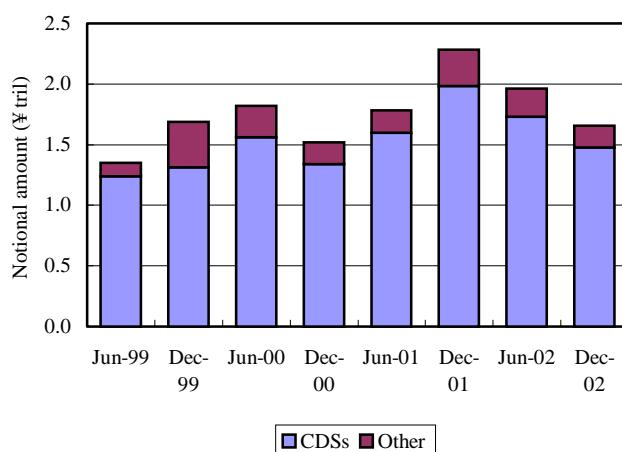
**Figure 6 Growth in Issuance of Asset-Backed Securities in Japan**



Note: Asset-backed commercial paper and the super-senior portion of synthetic deals are not included.

Source: NRI.

**Figure 7 Growth of Credit Derivatives in Japan**



Source: Bank of Japan, "Regular Derivatives Market Statistics."

## 2. Situation in the United States and Europe

### 1) Syndicated loans

#### (1) Global overview of syndicated loan market

In 2002 \$1,870 billion in syndicated loans was originated worldwide. Top was the United States with more than half (\$1,033 billion), followed by Europe with \$513 billion. Although the Japanese syndicated loan market is growing rapidly, it is still relatively small.

**Figure 8 Growth in Value of Syndicated Loans Originated Worldwide**

(\$ bil)

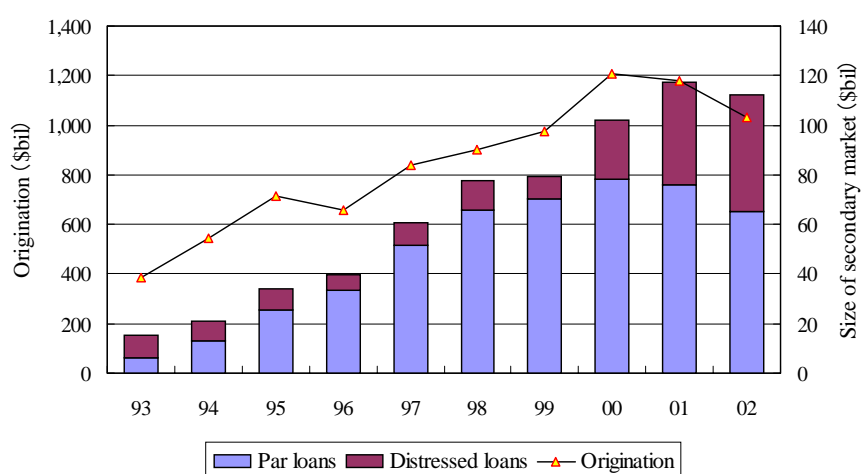
	1999			2000			2001			2002		
	Origination	Average deal		Origination	Average deal		Origination	Average deal		Origination	Average deal	
	%	size (\$ mil)		%	size (\$ mil)		%	size (\$ mil)		%	size (\$ mil)	
Japan	36	2%	47	95	4%	46	97	5%	24	124	7%	19
( ¥ tril)	(4)	—	—	(11)	—	—	(13)	—	—	(15)	—	—
United States	976	59%	27	1,207	53%	27	1,179	60%	44	1,033	55%	38
Western Europe	480	29%	39	708	31%	44	447	23%	59	513	27%	63
Total	1,662	100%	28	2,264	100%	30	1,977	100%	41	1,870	100%	36

Source: NRI, from International Finance Review.

## (2) US syndicated loan market

In the United States, the use of syndicated loans as a source of general funding (rather than specialized funding for developing countries or for M&A) began to increase in the 1990s. In addition to the primary market there is an active secondary market, with \$110 billion in loans currently traded.<sup>2</sup> There is also active participation in the market by institutional investors, as well as a loan index and dealers quoting two-way prices for loans. Likewise, there is active trading in distressed loans in recognition of the large number of leveraged (i.e., low-quality) loans that are originated.<sup>3</sup>

**Figure 9 Growth in Value of Syndicated Loans Originated in the United States and Size of Secondary Market**



Source: International Finance Review and Loan Pricing Corporation.

## 2) Loan securitization (development of the CDO market<sup>4</sup>)

It was not until the mid-1990s (i.e., relatively recently) that loan securitization came into its own in the United States and Europe. Initially CDOs were used by banks mainly to provide capital relief by reducing minimum capital requirements on credit exposure, and it was only later that CDOs were issued on a large scale as an

<sup>2</sup> According to the International Financial Review, the average number of deals per market participant per day in the first half of 2002 was 5.4 for performing loans and 2.5 for nonperforming (or distressed) loans.

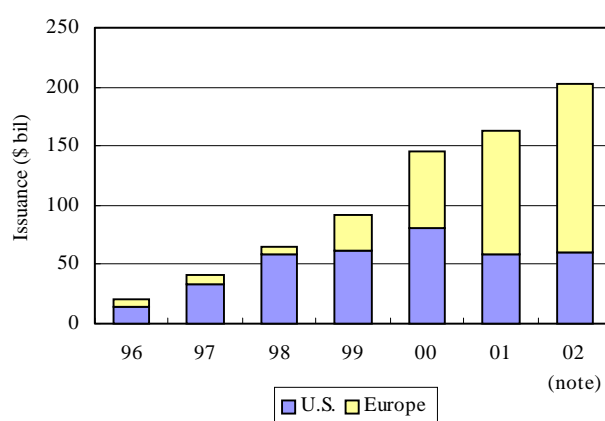
<sup>3</sup> According to the 4 April 2002 number of American Banker, leveraged loans accounted for about 40% of the new syndicated loans originated in the first quarter of 2002.

<sup>4</sup> Collateralized debt obligation (CDO) is a broad term covering collateralized bond obligations (CBOs) as well as CLOs. There are three main different categories of CDO: (1) according to the assets used as collateral—either the cash flow from the debt (cash-flow CDOs) or the market value of the debt (market-value CDOs); (2) according to the purpose for which they are issued—either to provide capital relief by reducing minimum capital requirements on credit risk exposure (balance-sheet CDOs) or to meet the needs of investors (arbitrage CDOs); and (3) according to the method of origination used—either by transferring the actual debt to an SPC (cash CDOs) or by using credit derivatives (synthetic CDOs).

investment product backed by bonds and loans purchased on the secondary market ("arbitrage CDOs"). The CDO market then expanded further in parallel with the market in credit derivatives as banks used these to originate large issues of synthetic CDOs.

Total issuance of CDOs in the United States and Europe in 2002 is estimated to have been in the region of \$200 billion (Figure 10). Demand for synthetic CDOs is even greater in Europe than in the United States (Figure 11). This is apparently mainly because European markets in loans and other financial assets are less liquid than the corresponding US markets and because CDOs (and especially synthetic CDOs, which have no effect on banking relationships) are in growing demand by banks that want to provide capital relief by reducing minimum capital requirements on credit risk exposure. Synthetic CDOs are estimated to account for some 50%-60% of total CDO issuance.

**Figure 10 CDO Issuance in the United States and Europe (including synthetic CDOs)**



Note: The figure for 2002 is a projection.

Source: Iftikhar Hyder, "Collateralised debt obligations and the role of monoline insurers" (from Moody's Investors Service).

**Figure 11 Growth in Issuance of Synthetic CDOs**

	2001		2002	
Static Synthetic CDOs	47.3	86%	92.1	77%
U.S.	21.8	40%	38.2	32%
Europe	25.5	46%	53.9	45%
Managed Synthetic CDOs	7.9	14%	27.6	23%
U.S.	4.0	7%	17.5	15%
Europe	3.9	7%	10.1	8%
Total	55.2	100%	119.7	100%
U.S.	25.8	47%	55.7	47%
Europe	29.4	53%	64.0	53%

Source: Euromoney, April 2003 (from Goldman Sachs).

### **3) Credit derivatives**

In both the United States and Europe credit derivatives are widely used as a means of transferring credit risk. The total notional amount outstanding worldwide was \$2 trillion as of the end of 2002—roughly 140 times the amount outstanding in Japan. The global credit derivatives market is still growing and is expected to reach ¥4.8 trillion by the end of 2004.<sup>5</sup> The largest national market is the UK (London), which accounts for some 50% of the worldwide total.

## **3. Issues Concerning Credit Risk Transfer Transactions in Japan**

As we have seen, the markets for the transfer of credit risk in the United States and Europe are both much bigger and more mature than that in Japan. One of the reasons for the fact that Japan lags behind the United States and Europe in this field is the existence of a number of problems peculiar to Japan.

### **1) The fundamental problem: the level of interest rates on loans subject to credit risk transfer**

In Japan banks have not necessarily set their lending rates according to the creditworthiness of borrowers. In general, lending rates are determined by a number of factors, including the creditworthiness of the borrower, the liquidity of the loan, and the prospects for a long-term relationship. In Japan, however, it is the third factor which has tended to dominate at the expense of the others. As a result, lending rates have tended to be lower than they should have been, giving lenders insufficient protection against credit risk. To make matters worse, these structural problems also tend to surface when lenders attempt to transfer credit risk.

First, banks risk incurring a loss when they attempt to transfer credit risk. Whoever underwrites that risk will expect to receive an adequate return. If the lending rate set by the bank trying to transfer the risk does not provide such a return, it will find itself having to make good the difference. This is likely to make banks seeking to transfer credit risk for reasons other than to provide capital relief think twice about doing this on a larger scale.

Second, borrowers benefit little from transfers of credit risk. In cases where the transfer of credit risk involves transfer of the loan itself, for the reasons explained in 2) below borrowers still tend to be reluctant to agree. There are no advantages to

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<sup>5</sup> British Bankers' Association, Credit Derivatives Report 2002, executive summary.



offset all the disadvantages. For example, borrowers will have to monitor who will be their true creditors more carefully, and by transferring loans, the order of their borrowing banks will change, of which they traditionally make much.. Although there has been much talk of granting borrowers favorable rates in exchange for greater liquidity and being allowed to transfer loans, the fact that lending rates in Japan tend to be too low, anyway, will make this difficult to achieve.

## **2) Problems concomitant with the transfer of loans**

Recently many banks have begun to utilize the loan syndication method when their customer companies are in need of new funds, in order to reduce their own commitments. But, for more positive credit risk management, not only primary loan syndication but also secondary loan trading must be promoted. With regard to the transfer of loans, there are several difficult legal and practical problems.

First, many existing loan agreements do not assume that the loan will be transferred and require the borrower's "unreserved agreement" in order to avoid any disputes with the borrower should the loan be transferred<sup>6</sup> (Section 468 of the Civil Code). However, securing the necessary agreement of each and every borrower is a time-consuming process, so the transfer of an existing loan is likely to be fraught with difficulty.

Second, borrowers still tend to be reluctant to agree to the transfer of a loan even when such a transfer is assumed in the loan agreement, as in the case of a syndicated loan. According to a February 2003 survey by the Japan Syndicated Loan Association (JSLA), 23% of respondents objected to the idea that loans might be transferred, while only 6% accepted the idea.

Third, there have been cases where the question how much information about the borrower should be disclosed to the transferee has caused problems concerning client confidentiality.<sup>7</sup> Banks therefore tend to be reluctant to transfer loans, especially by private treaty, if they want to maintain their relationship with a client. However, this is rarely a problem with CLOs, where all the loans are transferred to a special-purpose company *en bloc*.

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<sup>6</sup> The borrower reserves the right to offset its loan by any deposits or other assets deposited with the bank trying to transfer a loan without its unreserved agreement against that loan. This is referred to as "reverse offset risk."

<sup>7</sup> According to a report by a subcommittee of the Japanese Bankers Association, such problems have been particularly common with unlisted companies.

### 3) Japanese predilection for high-quality loans

While it is common for banks in the United States and Europe to transfer the credit risk of low-quality loans, most examples of credit risk transfer in Japan involve high-quality loans (Figure 12).

**Figure 12 Comparison of Quality of Underlying Assets Used in Recent Securitizations**

(¥ 100 mil)

Issuer (Originator)	Amount	Details of underlyings <sup>(note)</sup>
Ruby Capital One Limited (UFJ)	10,000	Loans to borrowers rated 5 or better internally
Hyper Funding Corporation (SMBC)	3,300	Loans to borrowers rated 4 or better internally
Laputa Funding III Corporation (UFJ)	1,316	Loans to borrowers rated 4 or better internally
No. 1 SMBC CLO (SMBC; incl. No. 1 Osaka Prefecture CLO)	1,510	Loans to borrowers with a minimum internal rating and meeting all three of the following criteria: (1) net asset value ≥ ¥50 mil; (2) recurring profit in most recent reporting period; and (3) turnover period for interest-bearing debt ≤ 9 months.
No. 2 SMBC CLO (SMBC; incl. No. 2 Osaka Prefecture CLO and Fukuoka Prefecture CLO)	997	Loans to borrowers with a minimum internal rating and meeting all three of the following criteria: (1) capital account ÷ share capital ≥ 1; (2) recurring profit in most recent reporting period; and (3) turnover period for interest-bearing debt ≤ 9 months.

Note: UFJ uses a 10-level internal rating system (1-7 for performing loans), while SMBC uses a 10-level internal rating system (1-6 for performing loans).

Source: NRI, from data produced by credit-rating agencies.

One of the most effective ways of transferring low-quality credit risks is to utilize the securitization method (e.g., cash or synthetic CLOs). This has the advantage not only of diversifying risk by pooling a large number of loans but also of appealing to investors with a wide range of needs by creating senior and junior structures and issuing securities with different credit ratings. Indeed, there are signs that the situation in Japan is changing as CLOs for small businesses have been originated. More transfers of low-quality credit risk will have to take place if Japanese banks are to manage their credit risk properly and restore their balance sheets to health.

### 4) The problem of disclosing risk information

In Japan disclosure about syndicated loans and securitized products is still inadequate in a number of respects to do with investor protection.

As far as syndicated loans are concerned, there is a need for greater use of credit ratings and bank meetings as in the United States and Europe. Although there has been an increase in the number of cases where corporate borrowers have held bank meetings for syndicate members in the hope of reducing their cost of funding, many

of these cases have apparently been one-offs. It would be preferable if information could be disclosed more regularly.

As far as securitized products are concerned, the fact that the assets used are a pool of loans (or credit derivatives) rather than loans to a particular company means that the risk information is more complicated. There therefore need to be unified rules governing disclosure, and issuers need to continue to monitor the risk of the assets in their CLOs and to disclose information should the situation change.

## **5) Accounting problems concerning derivative-embedded ("synthetic") products**

Just as the fact that synthetic CLOs use a combination of credit derivatives and securitization enables banks to avoid disputes with borrowers when transferring loans (see above), the fact that they are securities means that the risk can be spread among a large number of investors. While both these facts mean that CLOs can be used to transfer large amounts of credit risk, the complicated way in which they must be accounted for is a headache for investors.

Under present Japanese accounting rules, securitized products that use credit derivatives must normally be treated as hybrid instruments. If they have been purchased for trading purposes, the bond element and the derivative element must be treated as one for accounting purposes (i.e., the investor has to post any valuation gains or losses to his profit and loss account). If they have been purchased for another purpose, they must be treated separately (i.e., any valuation gains or losses on the derivative element must be posted to the profit and loss account while any valuation gains or losses on the bond element must be treated in the same way as those on a straight bond, depending on the purpose for which it was purchased). Treating synthetic CLOs in this way produces the following problems.

First, the standards on what constitutes a hybrid instrument are not clear.<sup>8</sup> Different audit corporations have different views on whether synthetic CLOs should be treated as such. In contrast, there is a consensus that credit-linked notes,<sup>9</sup> which use credit derivatives in the same way, are hybrid instruments and that their component elements should each be accounted for separately.

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<sup>8</sup> If a synthetic CLO is not regarded as a hybrid instrument, it is subject to the same accounting standards as a straight bond.

<sup>9</sup> These are combinations of a CDS on a specified reference entity (with the premium being paid to the SPC) and a portfolio of government bonds (held as collateral for the CDS). Investors in a credit-linked note obtain the same economic effect as if they had purchased bonds issued by the reference entity.

Second, it is not clear exactly how the different elements are supposed to be accounted for separately. In the case of a synthetic CLO, for example, the value of which is the combined values of its government bond and credit derivative elements, the effect on an investor's profit and loss account will depend on which of various separate accounting methods is used. In spite of this, however, it is not clear whether, for example, the government bond element should be separated on the basis of its par value or its market value.<sup>10</sup>

## **6) Problems concerning ownership of the first loss portion of a securitized product**

In most cases where credit risk is transferred by means of securitization the bank retains ownership of the first loss portion. As has been pointed out, however, this means that the bank is left with most of the credit risk.

This issue has also been raised by the Bank of International Settlements' Basel Committee on Banking Supervision in the revised version of its current set of capital adequacy requirements (Basel II, due to be adopted by the end of 2006).<sup>11</sup> The proposal is that the requirements for securitized products should be made more stringent by requiring banks holding the first loss portion to deduct this from their regulatory capital; but this would probably offset one of the intended effects of the securitization (i.e., to enable the banks to reduce their regulatory capital). Many banking professionals take the view that the Committee is overestimating the risk involved, and it remains to be seen what the outcome of the negotiations will be.

## **4. Conclusion**

Improving credit risk management is one of the most important challenges facing Japanese banks. The various methods of transferring credit risk explained in this report are effective ways of doing this. Moreover, banking organizations and banks that are likely to be party to credit risk transfers have made various attempts to set up a secondary loan market. As was pointed out in the previous section, however, although there have been some initial signs that the situation surrounding bank lending is improving, banks are still not always setting their lending rates (i.e., the price of the credit risk they accept) at levels that would be acceptable on a secondary market, and this could offset any economic benefits to both lender and borrower from transferring credit risk. Banks therefore also need to price their loans more appropriately.

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<sup>10</sup> Both the US accounting standards and the international accounting standards require that the hybrid instrument be accounted for separately in certain circumstances.

<sup>11</sup> Basel Committee on Banking Supervision, Second Working Paper on Securitisation, October 2002.

One of the methods we explained for transferring large amounts of credit risk very easily was synthetic CLOs. However, only a relatively small number of such deals have so far been concluded in Japan. If more such deals are to be originated and synthetic CLOs are to become as commonplace as in the United States and Europe, the two problems mentioned above (i.e., disclosure and accounting) will have to be addressed. Similarly, much will depend on the outcome of the negotiations at the Bank for International Settlements on new capital adequacy requirements. Much will also depend on what individual banks decide to do as well as on the outcome of the negotiations on how the current system should be reformed.