

# Securitisation

---

Margaret Griffin, Banking System Department

*This article explains how securitisation works and describes the benefits and risks banks can face as a result of their involvement in securitisation. It also describes the supervisory requirements applying to securitisation activities carried out by New Zealand banks.*

## I Introduction

Securitisation is a process whereby a pool of similar loans (eg, residential mortgages) or other financial assets is packaged and sold in the form of marketable securities. This has the effect of transforming long-term illiquid assets into tradeable liquid assets.

Typically much of a bank's business relates to the borrowing and lending of money. Banks take deposits, and lend the proceeds to customers at a higher interest rate, thereby making a profit. In most cases the bulk of a bank's borrowing will be in the form of short-term deposits, while its loans will be for relatively long terms, eg, residential mortgages which have a nominal term of, say, 20 years. Interest rates on some products will be floating, ie, able to be adjusted at any time. On other products the rates will only be able to be adjusted after a specified period.

Banks face a number of risks from this type of business. These include credit risk (the risk that borrowers will not repay the money they have borrowed), interest rate risk (the risk that the relationship between the interest rate on lending and borrowing will shift because asset and liability repricing dates differ) and funding risk (the risk that deposits cannot be replaced as they mature or are withdrawn, leaving the bank with insufficient funds to finance long-term loans).

Banks, particularly those in the United States, are increasingly reducing their involvement in traditional "on balance sheet" borrowing and lending in favour of securitisation. This allows them to reduce the risks which arise from traditional bank borrowing and lending activities and enables them to concentrate on activities such as loan origination.

In New Zealand, a number of securitisations involving banks have taken place, although in most cases the loans were not bank loans but were purchased from a third party. However, if overseas trends are followed we can expect securitisation to become increasingly important in the future.

## II The securitisation process

There is no standard method of securitisation and new techniques are being developed all the time. However, most securitisations involve the following steps:

### (a) Selection of a pool of loans

The first stage of the process is the selection of a homogeneous pool of loans, eg, credit card receivables or residential mortgages. It is essential that the pool contains a large number of loans and that the loans are as similar to each other as possible. This allows statistical predictions about future behaviour to be made. In particular, it enables reasonably accurate predictions of default rates to be made. This allows the securities to be structured in a way which largely insulates investors from credit risk.

Banks can securitise their own loans, or they may securitise loans purchased from a third party, in which case the third party would be the originator rather than the bank.

### (b) Sale to a special purpose vehicle

The pool of loans is sold to a special purpose vehicle which is usually either a trust or a company.

### (c) Issuing of securities

The special purpose vehicle issues securities to fund the purchase of the loans from the bank. The securities are structured so that interest and principal payments are supported by cashflows from the underlying pool of loans. However, typically the interest rate on the securities will be linked to wholesale interest rates rather than to the interest rate on the underlying assets. Where wholesale interest rates are lower than retail rates, funding costs can be reduced.

### (d) Provision of credit enhancement

To make the securities issued by the special purpose vehicle attractive to investors and to enable funding to be obtained at favourable interest rates, it is necessary to ensure that there is little risk of investors losing money.

Usually this is achieved by provision of one or more credit enhancements. A credit enhancement is simply an arrangement which provides protection against credit risk (ie, the risk that borrowers will not repay the funds borrowed). Normally credit enhancements will cover losses up to a level which is several times the level recorded historically, so that the likelihood of any loss for investors is very low. Commonly used credit enhancements include the following:

- third party insurance;
- over-collateralisation - this occurs when the face value of the loans held by the special purpose vehicle exceeds the value of the securities it has issued;
- issuing subordinated securities. Holders of the subordinated securities take most or all of the credit risk on the loans because they receive payment only after other security holders have been paid;
- a guarantee from a third party;
- the bank being obliged to take back non-performing loans;
- a one-off gift to the special purpose vehicle to provide a buffer against which losses can be written off.

#### (e) **Liquidity support**

Some form of liquidity support (eg, an overdraft facility) is usually arranged so that security holders receive interest payments on time even if some borrowers are a little late in making payments.

#### (f) **Protection against basis risk**

Unless returns for investors are linked to the rate of interest on the underlying assets, there is a risk that the relationship between the rate paid on the underlying assets and that paid on the securities will differ over time. Normally a swap will be arranged to protect against this risk.

#### (g) **Servicing of loans**

Someone will be appointed to service the loans in return for a fee. This involves administration of the loans including the collection of interest and principal payments from the borrowers and the instigation of action to realise security where necessary. In most cases the bank which originated the loans will carry out the servicing role. This means that the customer's relationship with the originating bank remains undisturbed and customers will be unaware that their loans have been securitised.

### III Benefits of securitisation

Securitisation can bring a number of benefits to banks which use it, which is why it is becoming an increasingly popular technique. Potential benefits include the following:

- **Access to a wider investor base and cheaper sources of funding** - Securities issued by a special purpose vehicle will normally have a good credit rating. Consequently the cost of obtaining funding can be lower than it would be if the bank raised funds directly by taking deposits. Also, the securities are likely to be attractive to investors who would not wish to invest in bank deposits.
- **Freeing up of capital and improvement in return on capital** - Securitisation removes assets from the originating bank's balance sheet so it frees up capital for other uses. It should also improve the return on capital as the bank will continue to earn fee income on the securitised assets.
- **Assistance in management of asset/liability mismatches** - With traditional on-balance sheet borrowing and lending, the maturity of assets tends to be much longer than that of liabilities. With securitisation the maturity of the securities issued should be the same as that of the underlying assets thus eliminating maturity mismatches.
- **Reduction of credit risk, interest rate and liquidity risk** - Where a securitisation is structured appropriately the originating bank can transfer credit, interest rate and liquidity risks to third parties.
- **Generation of fee income** - By securitising its assets but retaining responsibility for servicing them, a bank can earn fee income. This can provide an income stream which is unaffected by shifts in interest rates.
- **Economies of scale** - A bank which does not have the capacity to increase its loan book may nevertheless be able to take advantage of economies of scale in its loan origination and servicing operations if it can increase throughput by securitising assets, but continue to service them in return for fee income.

### IV Disadvantages and risks

Securitisation can give rise to disadvantages and risks as well as benefits. Risks and disadvantages arising from securitisation schemes include the following:

- **Retention of credit risk** - Third party credit enhancements can be expensive. Thus banks will often provide credit enhancements themselves. In some cases this may leave the bank with as much credit risk as it would have had if it had retained the loans itself. This is because only a certain proportion of borrowers can be expected to default on their loans. If say, 3 percent of borrowers normally default and the originating bank guarantees losses up to say 10 percent of the portfolio, the bank's credit risk has not been reduced. It will be obliged to make good all expected losses. Only if losses rise well above historical levels, will the bank be better off than it would have been if it had retained the loans itself.
- **Complexity** - Securitisation schemes can be extremely complex. This can make it difficult for banks to ensure that all risks arising from securitisation are recognised and appropriately managed.

Where banks do retain the credit risk on securitised loans it is important that this risk is monitored and managed appropriately.

- **Provision of services on other than arm's length terms** - Banks which have securitised loans often provide various administration and banking services to the special purpose vehicle which holds the loans. Where such services are provided on more favourable terms and conditions than those which would apply to an unrelated party, the bank may be effectively absorbing credit losses on the loans without explicitly recognising that this is what is happening.
- **Implicit risk** - If a securitised pool of loans does not behave as expected and losses rise to a level where security holders could lose money, the bank may feel morally obliged to bail out the special purpose vehicle or to make good investors' losses even though it is not legally obliged to do so. This can occur because the bank wants to protect its good name and its relationships with customers.
- **Reduction in asset quality** - There is a risk that banks will securitise all of their best assets, thereby lowering the overall quality of assets on the balance sheet, since the better quality assets are more likely to be suitable for securitisation.
- **Costs** - Securitisation schemes can be expensive to set up and operate, particularly where the volume of assets to be securitised is not large. In practice this can make securitisation uneconomic.
- **Limitations on operational flexibility** - Procedures for managing the loans and dealing with arrears must be agreed in advance. This limits the bank's flexibility in managing customer relationships and carrying out administrative procedures.

## V Supervisory requirements

The Reserve Bank is responsible for the prudential supervision of registered banks. The system of supervision adopted by the Bank aims to encourage banks to monitor and manage their own risks appropriately. In the Bank's view this is likely to be more effective than more traditional methods of supervision which rely primarily on detailed requirements and guidelines applying to all banks regardless of their individual circumstances.

In line with this philosophy, supervisory requirements relating to securitisation have two main strands:

- disclosure of information about securitisation activities;
- ensuring that credit risk arising from securitisation activities is taken into account in the measurement of banks' capital adequacy ratios.

### Capital adequacy framework

The Reserve Bank's capital adequacy framework, which is based on the internationally agreed Basle Capital Accord, requires registered banks to maintain a minimum ratio of capital to risk weighted credit exposures. The framework requires banks to take into account off-balance sheet credit exposures (eg, guarantees and commitments) as well as credit risk arising from loans and other on balance sheet exposures. The framework requires a bank to hold capital against the assets of associated securitisation activities if:

- there is insufficient separation between the bank and its securitisation activities. Where separation is insufficient there is a much greater likelihood that the bank will feel morally obliged to make good any losses suffered by security holders, even although it is not legally obliged to do so;
- the bank has provided some form of credit enhancement to an associated scheme. This may mean that the bank's credit risk remains much the same as it was prior to the sale of the loans;
- there is a mismatch between the maturity of the securitised assets and the securities issued. Where

this occurs there is a risk that the bank will need to take the loans back on to its books once the securities have matured. In other words, there is a risk that the loans have not been permanently removed from the bank's balance sheet.

## **Disclosure**

Banks are required to disclose the following information about their securitisation activities:

- the nature and amount of the bank's involvement in the origination of securitised assets, and in the marketing or servicing of securitisation schemes;
- information about arrangements made to ensure that difficulties arising from securitisation activities would not impact adversely on the bank or other companies in the banking group;
- a statement as to whether financial services provided to special purpose vehicles are being provided on arm's length terms and conditions and at fair value;
- a statement as to whether any assets purchased from special purpose vehicles have been purchased on arm's length terms and conditions and at fair value;
- information about any funding provided to special purpose vehicles.

These requirements should ensure that information about the risks which may arise from banks' involvement in securitisation is made available to customers and potential customers.

## **VI Conclusion**

If overseas trends are followed in New Zealand, it is likely that securitisation will become increasingly popular in the future. However, securitisation schemes are very costly to set up and currently interest margins in New Zealand are narrower than in some other countries. This probably accounts for the relatively small number of securitisations so far.

Securitisation has the potential to reduce banks' credit, interest rate and liquidity risk and increase the return on capital. It also creates an attractive low-risk investment product which is likely to appeal to a wide range of investors. However, securitisation also involves risks, some of which are explicit and some implicit. Thus the Reserve Bank has introduced supervisory requirements aimed at encouraging banks to recognise those risks and to manage them appropriately.

