

ASSET TRANSFERS AND SECURITISATION (September 1992)

This report¹ reviews some aspects of asset transfers and securitisation from a supervisory perspective by focusing largely on the transferor or issuer of asset-backed securities rather than on the purchaser or investor. It describes the mechanics of the securitisation process, the incentives for securitisation and the risks associated with it, and considers some of the factors that influence supervisors' response.

1. Introduction

In recent years banks have been increasingly active in the process of transferring loans or other assets, whether in part or in whole and, more recently, in issuing securities backed by these assets. Transfers of loans or participations in loans are now common in most G-10 countries. Securitisation is more complex, is therefore less common, and in some countries is not permitted by existing legal arrangements.

Asset securitisation has become most popular in the United States particularly with regard to mortgage loans where about 40% of the outstanding residential mortgage debt has been securitised. This process has undoubtedly been encouraged by the support of federal government agencies which provide credit enhancement to investors. However, the process is now being used for other types of loans, such as credit card receivables and other consumer loans, and substantial increases in market volume have been recorded. Outside the United States significant amounts of mortgage-backed securities have been issued in Canada and the United Kingdom and interest is growing by banks and financial institutions in other countries who wish to participate in the securitisation business.

Asset securitisation in its basic form consists of the pooling of a group of homogenous loans, the sale of these assets to a special purpose company or trust, and the issue by that entity of marketable securities against the pooled assets. The payment of interest and principal on the securities is directly dependent on the cash-flows arising from the underlying pooled assets. Asset-backed securities are attractive to investors as their returns tend to be high relative to the credit risk; credit enhancement is normally provided for a portion or the whole amount of the issue. Moreover, denominations and cash-flows can be structured to meet the cash flow and other needs of particular types of investor.

However, asset securitisation schemes are not static. Many securitisation techniques have been invented relatively recently and the pace of innovation appears to be accelerating. Some of the new models involve not only complex and sophisticated structures

¹ Although not formally approved by the Basle Committee, this analysis by a Committee working group was made available to other supervisors for information.

but also seek to enlarge the type and composition of loans suitable for pooling and securitisation. Although credit losses have been negligible so far, some of the newer techniques have not yet been fully tested in times of stress or disruption in the securities markets.

For banks the process provides a number of benefits in respect of prudential requirements, asset and liability management, and profitability, and these provide the incentive to participate in the securitisation process. In addition non-bank financial institutions increasingly participate, as the process separates the exercise of functions normally carried out by a lending bank, thus enabling these institutions to enter the business of financial intermediation more easily.

A number of concerns have been raised in connection with asset securitisation. The main ones are that credit risk could remain with the bank if a clean sale does not take place and that securitisation could damage the asset quality of a bank if it is a bank's best assets that are securitised. Moreover, certain structures can lead to credit flowing directly from end-investors to end-borrowers, changing and perhaps lessening the role of banks in the intermediation process.

The impact of asset securitisation on the overall risk profile of a bank therefore demands close attention by bank supervisors in order to ensure that banks conduct this business in a prudent manner. There are also implications for banks in the similar activities of non-bank participants who can take the same risks but who may not be as adequately supervised.

2. Mechanics of the asset securitisation process

(a) Packaging, sale and administration

To initiate the securitisation process a pool of homogeneous assets such as mortgages, credit card receivables or automobile loans is created. Homogeneity is necessary to enable a cost-efficient analysis of the credit risk of the pooled assets and to achieve a common payment pattern. The originator of a securitisation scheme can be a bank or another financial institution. If a bank is the originator it may take the assets from its own loan portfolio, but securitisation of assets that are purchased from a third-party bank or that are non-bank assets (e.g. receivables of commercial companies) is becoming more prevalent.

In the second step the pool is sold to a special purpose vehicle (SPV) which finances the purchase by issuing securities backed by the pool of assets and which are the sole assets of the SPV. At that stage further parties, together with a rating agency, are often involved to give advice to the originator, analyse the credit quality of the portfolio, and structure the transaction. If an underwriter participates in the scheme the securities may pass through his books before being sold to investors.

To facilitate the securitisation process a servicer and a trustee are normally involved. The servicer - who in many instances is the originator - is responsible for the collection of interest and principal repayments deriving from the pooled assets and the remittance of these funds to the trustee. The servicer is entitled to receive a fee for these services and in addition may benefit from the temporary investment of the funds collected pending periodic onward transmission. Its servicing capacity and expertise will be reviewed by the rating agencies. The rating of the originator/servicer, along with the rating agency's assessment of the quality of the underlying assets and the structure of the scheme, will affect the extent of the credit enhancement that may need to be provided or arranged, especially if the rating of the assets is lower than that desired by potential investors.

The trustee acts on behalf of the investors. In that capacity he must have a priority interest in the assets supporting the security issue, an ability to oversee the performance of the other parties involved in the transaction including the servicer, review periodic information on the status of the pool, superintend the distribution of the cash flows to the investors and, if necessary, declare the issue in default and take the legal actions that are necessary to protect the investors' interests.

(b) Credit and liquidity enhancement

As investors are not normally prepared to take on all the credit risks associated with a pool of loans, asset-backed securities are usually provided with credit enhancement by a third-party bank or insurance company and sometimes by the originator. Often different forms of enhancement may be combined. The simplest form of enhancement would be a recourse arrangement providing the buyer of the assets with the right to receive payment from the enhancer if the obligor fails to pay when due. However, such an arrangement would be regarded as shifting the credit risk fully to the provider of the recourse and is not therefore often used.

To determine the appropriate enhancement the estimated credit risk in the pooled assets is assessed together with its historic loss profile. Usually this results in an enhancement that covers, by a multiple of several times, the historic default rates of the underlying assets. The most common forms of such credit enhancement are: irrevocable letters of credit, third-party insurance, spread accounts, cash collateral accounts, over-collateralisation and senior-subordinated structures.

An irrevocable *letter of credit* may be issued by a third-party bank to cover a portion of the assets normally equal to the estimated loss profile and is often subordinated to the other enhancements.

Non-bank insurance companies have also been active in the United Kingdom by providing a *third-party insurance* against the first portion of default risk.

A *spread account* is a deposit typically built up from the spread between the interest paid on the pooled assets and the lower interest paid on the securities issued. The servicer, instead of passing the spread back to the originator, passes on all funds collected to the trustee where the spread is accumulated up to the level required for the credit enhancement. After having reached this level all future spread earnings can be passed back to the originator. To provide for early losses the originator normally has to deposit funds in the spread account in advance. The account is used to cover any losses occurring on the pooled assets, and any balance left over in the spread account when the securities are redeemed reverts to the originator.

A *cash collateral account* is a deposit equal to the necessary credit enhancement which is held for the benefit of the holders of the securities. The account will be drawn down if and when losses occur. Cash advances are made to this cash account by the originator or a third-party lender.

Over-collateralisation means that the value of the underlying assets in the pool exceeds the amount of the securities issued. In such schemes the excess collateral must be maintained at a level sufficient to provide the agreed amount of credit enhancement. If the value declines below that level the enhancer must fill the gap with new collateral.

Where credit enhancement is provided by a *senior-subordinated structure* at least two classes of securities are issued. The senior tranche has a prior claim on the cash flows from the underlying assets so that all losses will accrue first to the junior securities up to the amount of this particular class. If for example an issue consists of 90% senior and 10% junior securities the holders of the junior securities will carry all the losses up to 10% of the total assets in the scheme.

At first glance all these forms of credit enhancement appear to support only a portion of the total portfolio but in reality they consist of highly condensed credit risk. Normally, the credit enhancements, which as noted above are often used in combination with one another, will effectively cover several multiples of expected losses in the total portfolio and the provider is therefore in the same position as if he had owned all the assets. Where there are several enhancements the losses will be shared among them in a predetermined order. These factors need to be taken into account when applying capital requirements to the credit enhancers themselves (see section 5(c)).

Another enhancement technique that may be used for the issue of asset-backed securities is *liquidity support*. It is particularly common for asset-backed commercial paper programmes. These issues include in the pool of underlying assets different types of receivables. However, the maturity of the receivables usually does not match that of the commercial paper which therefore has to be rolled over or replaced by new issues.

To cover the risk that the issuer cannot renew the paper as it falls due the liquidity enhancer agrees to provide the funds required. Although formally the liquidity enhancer is not

guaranteeing the securities but is providing a short-term loan facility to the issuer, he effectively takes on the residual risk beyond that taken by the credit enhancement of the underlying receivables which are the sole assets of the issuing special purpose vehicle. Therefore, whether the liquidity support can be regarded solely as a pure liquidity line depends on any enhancement being subordinated to the liquidity line in the event of liquidation.

3. Incentives for asset securitisation

The main benefit from asset securitisation is that it enables banks to pass the risks of lending on to other parties, thus freeing capital resources to back new lending which would otherwise be beyond their capacity. The funding and liquidity benefits of the securitisation process derive from the conversion of illiquid assets into liquid funds available for additional lending. Because of the credit enhancements, the rating of asset-backed securities is often higher than that of the originator who is therefore able to tap funding sources not normally accessible to him.

Asset securitisation also helps banks in their asset and liability management. Interest rate risk can be reduced by passing it on to the investors. A bank wishing to extend its lending but not having funds of adequate maturity can avoid a maturity mismatch by securitising the new loans. Securitisation offers a bank which is heavily exposed to a particular region or economic sector an ability to transfer part of its loan portfolio and also to purchase with the proceeds other types of ABS thus achieving a more diversified loan portfolio.

Banks engaging in one or more of the securitisation roles, such as lender, servicer, trustee, or enhancer, can increase and diversify their sources of fee and interest income. By transferring assets banks can continue their existing types of lending or invest the proceeds in other lines of business and avoid concentration in a single type of credit risk.

Asset securitisation can also have important benefits for borrowers. Since such securitisation generally helps to improve the liquidity of credit markets, it can increase the availability of credit to borrowers and can allow borrowers to obtain funds at a lower cost.

4. Implications of asset securitisation

(a) Risks for banking organisations

The securitisation process, if not carried out prudentially, can leave risks with the originating bank without allocating capital to back them. While all banking activity entails operational and legal risks, these may be greater the more complex the activity. But the main risk a bank may face in a securitisation scheme arises if a true sale has not been achieved and the selling bank is forced to recognise some or all of the losses if the assets subsequently cease to perform. Funding risks and constraints on liquidity may also arise if assets designed to be securitised have been originated, but because of disturbances in the market the securities

cannot be placed. There is also at least a potential conflict of interest if a bank originates, sells, services and underwrites the same issue of securities.

A bank that has originated and transferred assets effectively may nonetheless be exposed to moral pressure to repurchase the securities if the assets cease to perform. The complexity of securitisation schemes could contribute to such pressure. After having completed the securitisation transaction the seller does not in general disappear but exercises other functions in the process. These functions and the fact that the investors are well aware of the identity of the provider of the assets backing the securities may give rise to links between seller and investors that could, at least morally, cause the seller to be under pressure to protect its reputation and to support the securitisation scheme.

The risks for banks acting as a servicer are principally operational and are comparable to those of an agent bank for a syndicated loan. However, the number of the loans in the portfolio and the different parties involved in a securitisation scheme mean that there are higher risks of malfunction for which the servicer might also become liable. Thus, servicers need to engage sophisticated personnel, equipment and technology to process these transactions in order to minimise operational risk.

It is sometimes contended that banks in seeking a good market reception for their securitised assets may tend to sell their best quality assets and thereby increase the average risk in their remaining portfolio. Investor and rating agency demand for high quality assets could encourage the sale of an institution's better quality assets. Moreover, an ongoing securitisation programme needs a growing loan portfolio and this could force a bank to lower its credit standards to generate the necessary volume of loans. In the end a capital requirement that assumes a well diversified loan portfolio of a given quality might prove to be too low if the average asset quality has deteriorated.

Such arguments are not easy to support with empirical evidence. Banks that have securitised large amounts of assets do not exhibit signs of lower asset quality. It should also be noted that banks which constantly securitise assets are necessarily interested in maintaining the quality of their loan portfolio. Any asset quality deterioration would affect their reputation and their rating and indeed the capital adequacy requirement imposed by their supervisors.

The securitisation of revolving credits such as credit-card receivables is a particularly complicated example which involves the issue of securities of a fixed amount and term against assets of a fluctuating amount and indefinite maturity. A portfolio of credit-card receivables fluctuates daily as the individual accounts increase and decrease, and because of the different repayment patterns by credit-card users (e.g. by fast and slow payers). It is also likely that as a scheme matures the security-holders will be repaid out of a fixed share of gross flow on the accounts in the pool, so deriving repayment principally from fast payers who resolve their debts quickly. Such schemes need a structure adequate to ensure control of the

amortisation process and to ensure appropriate risk-sharing during amortisation by the security-holders.

(b) Implications for financial systems

The possible effects of securitisation on financial systems may well differ between countries because of differences in the structure of financial systems or because of differences in the way in which monetary policy is executed. In addition, the effects will vary depending upon the stage of development of securitisation in a particular country. The net effect may be potentially beneficial or harmful, but a number of concerns are highlighted below that may in certain circumstances more than offset the benefits. Several of these concerns are not principally supervisory in nature, but they are referred to here because they may influence monetary authorities' policy on the development of securitisation markets.

While asset transfers and securitisation can improve the efficiency of the financial system and increase credit availability by offering borrowers direct access to end-investors, the process may on the other hand lead to some diminution in the importance of banks in the financial intermediation process. In the sense that securitisation could reduce the proportion of financial assets and liabilities held by banks, this could render more difficult the execution of monetary policy in countries where central banks operate through variable minimum reserve requirements. A decline in the importance of banks could also weaken the relationship between lenders and borrowers, particularly in countries where banks are predominant in the economy.

One of the benefits of securitisation, namely the transformation of illiquid loans into liquid securities, may lead to an increase in the volatility of asset values, although credit enhancements could lessen this effect. Moreover, the volatility could be enhanced by events extraneous to variations in the credit standing of the borrower. A preponderance of assets with readily ascertainable market values could even, in certain circumstances, promote a liquidation as opposed to going-concern concept for valuing banks.

Moreover, the securitisation process might lead to some pressure on the profitability of banks if non-bank financial institutions exempt from capital requirements were to gain a competitive advantage in investment in securitised assets.

Although securitisation can have the advantage of enabling lending to take place beyond the constraints of the capital base of the banking system, the process could lead to a decline in the total capital employed in the banking system, thereby increasing the financial fragility of the financial system as a whole, both nationally and internationally. With a substantial capital base, credit losses can be absorbed by the banking system. But the smaller that capital base is, the more the losses must be shared by others. This concern applies, not necessarily in all countries, but especially in those countries where banks have traditionally been the dominant financial intermediaries.

5. Supervisory considerations

Supervisors of individual institutions need to assess carefully whether the risk associated with a particular securitisation scheme has been effectively transferred to the investor or the credit enhancer, in full or in part, and satisfy themselves that the scheme is managed in a prudent manner so that the operational risks are kept to an acceptable level.

(a) The concept of a true sale

As a first step, supervisors need to assess whether or not a true sale of the assets, covering both the legal and, to the extent practical, the moral aspects, has been achieved. Where a true sale has not been achieved, capital support clearly continues to be required.

A bank selling its assets to an originator of a securitisation scheme or originating a scheme by pooling its own assets or assets purchased from a third party could be presumed not to have executed a true sale if there is, inter alia, any obligation:

- to repurchase or exchange any of the assets;
- for any kinds of legal recourse through which any risk of loss from the assets sold could be retained or put back to the selling bank;
- to any party for the payment of principal or interest on the assets sold (other than those arising as services).

In any of these three cases the assets normally should remain as a claim on the capital of the bank.

There would also be doubts whether a true sale of own or third-party assets has been accomplished if the selling bank has ownership or exercises any equity or management control for the benefit of the bank over the special purpose vehicle that owns the pooled assets and issues the securities, or is required to consolidate the SPV as a subsidiary in its financial statements. A further indication that there may be strong links between the selling bank and the scheme is the inclusion of the name of the selling bank in the name of the vehicle.

Furthermore, any credit enhancement (and possibly some liquidity enhancements) provided by the selling bank may be indicators that the bank has accepted a liability on recourse and therefore no true sale has been achieved. This would also include the retention of any subordinated class of securitised assets.

There might be some exceptions. In some countries a spread account could be regarded as not being provided by the originator but by the scheme itself. Alternatively, initial payment into such an account by the originating bank could be reasonable, if the initial payment was deducted from capital. Liquidity support provided by the seller together with a significant credit enhancement by a third party, subordinated to the seller, could be regarded as a credit line. In these cases the enhancements could be regarded as not obstructing a true sale. No capital support for credit risk would therefore be needed, but capital support would continue to be required in those cases where risk remains with the bank.

(b) Administration of securitisation schemes

A bank which is involved in the administration of a securitisation scheme merely as a servicer or trustee may nonetheless be exposed to some form of moral obligation to offer recourse. The element of moral hazard may be greater if the servicer is also the originator. Therefore, in order to avoid a capital charge as a result of its administrative responsibilities, the bank generally needs to ensure that any offering circular contains a highly visible, unequivocal statement that it does not stand behind the issue or the vehicle and will not make good any losses in the portfolio. For servicing the scheme the bank may of course receive a benefit from the transaction but this ought clearly to be seen as a fee for services provided and not as a reward for incurring risk of ownership.

A bank may be closely connected to the pool and become exposed to credit risks by virtue of its administrative duties. Indications of the existence of such a commitment are, as already mentioned, a requirement to consolidate the special purpose vehicle or the inclusion of its name in the name of the vehicle.

Other indications of possible credit support are:

- an obligation to provide support to the vehicle or the scheme, for example, by covering losses of the issue;
- an obligation to remit funds to the buyer before they are received from the obligor, or to cover cash shortfalls arising from delayed payments or non-performance of assets being administered, unless these are solely tools to facilitate the timing of cash flows.

In all these cases there must be a strong presumption that the bank is exposed to credit risk in some form and such risk deserves to be supported by the holding of appropriate capital.

(c) Credit enhancement or liquidity support by a third-party bank

Credit enhancement for a securitisation scheme provided by a third-party bank is comparable to an off-balance-sheet exposure and is generally treated as a direct credit substitute. One supervisory response might be for the whole amount of the pooled assets to be taken into account and risk weighted, particularly if the bank's enhancement is supporting the first losses that arise or if the amount of loss covered is significant by reference to historical loss experience. An alternative approach would be for the enhancement to be deducted from the providing bank's capital.

Liquidity support given in cases where there is no significant third-party credit enhancement, and the liquidity support is in fact providing credit enhancement to the scheme, ought to be regarded as effectively a guarantee of the securities and be treated in a way similar

to a credit enhancement given by a third-party bank. Pure liquidity support given in cases where there are separate arrangements for significant credit enhancement can generally be treated solely as a liquidity facility and as a commitment for capital adequacy purposes.