What is securitisation?
Securitisation is a financing tool. It involves creating, combining and recombining categories of assets and securities into new forms. Assets, loans, receivables, etc, from multiple obligors, and many times from more than one seller, are pooled and repackaged, underwritten and sold in the form of asset-backed or other securities. Securitisations provide financing for the sellers of the assets. These ‘asset-backed securities’ (‘ABS’) are collateralised or ‘backed’ by the pooled assets and are not considered general obligations of the asset sellers. While securitisation structures can vary significantly, in general, the investor in an asset-backed security is entitled to receive a pass through of the timely payment of interest and principal on the pooled assets. The investor, therefore, looks to the cashflow from the purchased assets for repayment.

A typical securitisation involves the creation of a bankruptcy remote special purpose vehicle (‘SPV’) that issues multiple classes of equity and debt securities consisting of one or more tranches of investment grade debt and one or more tranches of non-investment grade debt and/or equity. The risks associated with the underlying asset pool are allocated among the various tranches utilising various forms of credit enhancement.

Why securitise?
The securitisation process allows the company to separate financial assets from credit, performance and other risks associated with the company itself. As a result, the amount of capital required to finance the pooled assets may be proportionally less than that for the company as a whole, because the company’s overall capital costs must take into account all of the collective risks and uncertainties associated with its business operations.

In addition, securitisations convert illiquid loans or assets that cannot be easily sold to third party investors into liquid, marketable securities. Some
commentators have called the securitisation process the slicing and dicing of cashflows and credit risks. Thus, securitisations allow the movement of investments from less efficient debt markets to more efficient capital markets, resulting in lower funding costs. This shift in the focus of the investor from the company as a whole to the isolated assets and specific controllable actions is a key source of the benefits of asset securitisation to the issuer.

Securitisations can achieve four objectives for the asset originator:

(i) removal of the applicable financial assets and related indebtedness (financing costs) from the seller’s balance sheet;

(ii) the attainment of funding at lower costs than available through alternate means of financing as a result of isolating the assets from potential bankruptcy risk of the originator;

(iii) the improvement of the originator’s liquidity (including by means of expanding the range of investors available to the originator); and

(iv) matching maturities assets and liabilities.

The particular securitisation structure for accomplishing these goals and the issues to be addressed in the securitisation process depend, among other things, on the nature and characteristics of the assets to be securitised.

Why are securitised assets attractive to investors?
ABS provide diversification alternatives to traditional fixed income investments. Investors need not rely on the company’s operating cashflow to achieve necessary debt service or investment return. Since many tranches of asset-backed securities carry high credit ratings, credit risk can be managed or reduced by investing in asset-backed instruments with differing credit and payout characteristics. The credit ratings are also often higher than that of the asset’s originator. Other benefits include greater liquidity for investors than traditional debt instruments and the ability to rely on the analysis performed by rating agencies and to choose, if so desired, investments that have a high level of certainty and predictability of cashflow without having to evaluate the likelihood that the company will be able to repay its debts or create residual value for investors.

What does a securitisation structure look like?
The right securitisation structure will depend on the nature of the assets being securitised, particularly the cashflow, and the timing and consistency of such flows. In a typical securitisation structure, financial assets are transferred from one or more originators to a trust or an SPV that is structured in such a way as to be isolated from any bankruptcy or insolvency of the seller(s). The securitisation vehicle in turn issues multiple classes or tranches of securities representing the right to receive different slices of the payment streams arising from the pooled assets. The performance, or certainty of return, for the different tranches can vary significantly and can be enhanced through different forms of credit enhancement. Rating agencies give higher ratings to tranches that enjoy greater priority of payment and benefit from credit enhancement. The priority and greater certainty of payment for certain tranches is balanced by lower yield. An example of a basic securitisation structure is shown in Figure 1.

What are some of the different types of securitisations?

Fully amortising
Securitisations can be fully amortising, meaning principal is returned to investors throughout the life of the securitisation. Fully amortising structures are intended to closely track the repayment of the underlying loans, such as auto loans that amortise through scheduled principal and interest payments. As a result, this structure may face greater prepayment risk if the underlying loans are prepaid sooner than expected.

Controlled or revolving amortisation
Revolving debt, such as credit card or trade receivables work well with controlled or revolving amortisation structures. During a revolving period, only interest payments are made. Proceeds from repayments of the underlying receivables are used to purchase additional receivables. This structure is intended to provide investors with a relatively predictable payment stream. Once the revolving period has ended, investors receive defined periodic principal payments. This structure can, however, create potential early amortisation risk. In a variation of this structure, principal is returned to investors after the revolving period in a single bullet payment. Following the revolving period, principal payments on the underlying receivables flow into an escrow account, rather than being used to purchase additional receivables.

Floaters
Under this structure securities are sold with periodically adjusting floating interests rates. The structure can be used for both amortising assets and revolving assets. It often incorporates interest rate swaps to protect against mismatches in the interest rates for the ABS and the underlying assets.
Sequential pay
A sequential pay securitisation creates multiple tranches with varying maturities. Typically the shortest average life tranche receives 100 per cent of principal payments until the tranche is repaid in full. Then the next tranche is paid, and so on. In variations of this structure, at some point over the life of the securitisation, payments shift from sequential to pro rata or from pro rata to sequential upon the occurrence of certain credit events.

CDOs
A collateralised debt obligation (‘CDO’) is a type of securitisation consisting of a pool of bonds or loans. In CDOs, to a much greater extent than many other securitisations, the underlying pool of bonds or loans are often actively managed and traded by professional collateral managers. CDOs fall into two broad categories: cashflow and market value. In cashflow CDOs, the ratings of the various tranches of offered securities are based primarily on the underlying pool’s ability to generate sufficient cashflows to pay interest and principal on the issued securities. By contrast, market value CDOs are rated based on the market value of the underlying pool of bonds or loans. Market value CDOs maintain an overcollateralisation ratio that is marked-to-market on a regular basis to assure sufficient collateral to pay interest and principal.

Asset-backed commercial paper/multi-seller commercial paper conduits
Asset-backed commercial paper (‘ABCP’) programmes can be either single or multi-seller conduits used to finance the assets of one or more sellers. A financial institution or other highly rated entity typically sponsors the conduit. ABCP programmes issue short-term commercial paper, but may nevertheless hold assets with much longer maturities. As a result, credit enhancement and liquidity facilities play important functions in these programmes. The credit enhancement facility (which can be in the form of a loan commitment, collateral account, letter of credit, derivative or other similar facility) will provide either full or partial coverage of credit, liquidity, interest rate and legal risks present in the conduit. Partial protection functions at two levels: loss at the asset level and loss on a programme wide basis on any asset pool. Liquidity facilities in the form of a liquidity loan agreement or liquidity asset purchase agreement are used to protect investors from timing differences in cashflows since ABCP conduits do not typically match fund their assets and liabilities. Liquidity facilities also cover commercial paper rollover risk.

What are some of the asset classes that can be securitised?
Table 1 gives some examples of asset classes.
Who are the players?

**Asset originator**
The asset originator transfers the assets to the securitisation entity and may continue to service the assets. For example, a corporation that sells its receivables into a securitisation may continue to service, that is, collect its receivables on behalf of the securitisation vehicle.

**Issuer**
Issuers of ABS typically are passive SPVs or trusts, created for the limited purpose of acquiring the underlying assets and issuing securities, and any activities incidental thereto. Most have no employees, but have third parties acting as agents that perform the issuer’s necessary day-to-day functions.

**Rating agencies**
Rating agencies may be the single most important players in the securitisation process. Most securitisations will contain multiple tranches, most of which will be rated by one or more rating agencies. By creating different tranches with different ratings, the securitisation can appeal to a wider variety of investors. Pension funds and life insurance companies, for example, may be limited by regulations from purchasing non-investment grade securities. Other investors are happy to accept the risk of lower rated tranches in exchange for higher potential returns.

**Credit enhancement provider**
Depending on how a securitisation is structured, highly rated credit enhancement providers are used to provide high credit ratings to the securitisations’ senior tranches.

**Liquidity facility provider**
Certain securitisation structures benefit from access to a liquidity facility provided by a financial institution in the form of commitment to lend, a commitment to purchase assets or a letter of credit. Liquidity facilities are used in structures to cover potential time lags between inflows of revenue from the securitisation’s asset pool and its payment obligations under the ABS.

**Underwriter**
The underwriter assumes responsibility for both pricing and marketing the rated tranches in a securitisation. Accordingly, the underwriter takes a leading role in structuring securitisations based on what the underwriter believes will attract the greatest number of potential investors.

**Servicer**
The servicer (which may be the asset originator) is responsible for routine asset portfolio administration duties, such as making and processing collections, temporarily reinvesting asset proceeds and administering the day-to-day operations of the issuer.

**Administrator**
Administrators play important roles in CDOs and ABCP programmes. The administrator may be the securitisation sponsor. In a CDO securitisation, the administrator actively manages and trades the underlying loan pool. In an ABCP programme, the administrator’s role is to originate and refer new clients to the ABCP conduit, negotiate with third parties and monitor the portfolio.

**Trustee**
The trustee’s primary role involves holding the securitisation cashflows in segregated accounts and notifying rating agencies and investors of events of default and covenant breaches.

**How does a company ‘remove’ assets from its balance sheet for securitisation purposes?**
Assets cannot successfully be removed from the originator’s balance sheet unless they are considered sold for accounting purposes. For example, under US generally accepted accounting practices, when a company wants to remove receivables from its balance sheet and have the removal treated as a sale for accounting purposes, three conditions must be met:

1. The company must surrender control of the future economic benefit arising from the receivables. The company can neither retain the right to receive

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<table>
<thead>
<tr>
<th>Table 1: Asset classes that can be securitised</th>
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<tbody>
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<td>Fixed-rate mortgages</td>
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<td>Home equity loans</td>
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<td>Credit card receivables</td>
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<td>Vacation time shares</td>
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<td>Lesser developed country debt</td>
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<td>Franchise loans</td>
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<tr>
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collections from the receivables nor the right to reacquire the receivables in the future.

(2) As a corollary of the first condition, except under very limited circumstances, the company cannot be obligated to repurchase the sold receivables.

(3) The company must be able to determine its recourse obligations with respect to repurchases of non-performing receivables.

How is bankruptcy remoteness achieved?

One of the objectives of securitisation is to assure that the creditors of a company that has sold assets to a securitisation vehicle such as an SPV will not have a claim against the SPV in the event of the company’s bankruptcy. In order to isolate the securitised assets from the seller’s potential bankruptcy, in the US, the securitisation vehicle must be ‘bankruptcy remote’ from the originator and the transfer of assets to the trust or SPV must be accomplished by means of a ‘true sale,’ a transfer that accomplishes, for the purposes of bankruptcy law, the removal of the transferred assets from the transferor’s bankruptcy estate.

Bankruptcy-remote vehicles

Where the SPV is owned or controlled by the originator, it must meet certain requirements to assure that its assets are isolated from the bankruptcy risk of the originator.

(1) The SPV’s business activities must be strictly limited to those necessary to carry out the securitisation.

(2) The SPV must have its own board with independent directors, and the SPV’s organisational documents must restrict its ability to place itself into bankruptcy without approval by a requisite number of independent directors.

(3) The SPV must maintain separate assets, bank accounts and recording keeping.

(4) The SPV must pay its own expenses out of its own funds.

(5) The originator must disclose to its creditors that the assets of the SPV are separate and not available to satisfy their claims.

(6) There should not be inter-company guarantees, and all other dealings between the originator and the SPV should be conducted on an arms’ length basis.

Bankruptcy risk is reduced when the SPV is neither owned nor controlled by the originator. An independent third party, such a charitable institution, for example, can act as owner of the SPV. Two-tier structures represent another means of reducing bankruptcy risk. In a two-tier structure, the asset originator transfers assets to a wholly owned bankruptcy remote SPV and makes a capital contribution (for collateral purposes) to the SPV. This structure allows the originator to provide credit enhancement through overcollateralisation. However, under US tax law, this SPV would still be part of the originator’s consolidated tax group and any debt issued by the SPV would need to remain on the originator’s balance sheet. Therefore, the first SPV must, in turn, transfer the assets to a second bankruptcy remote SPV. The assets are transferred in such a manner that achieves sales status for accounting purposes, but constitutes a secured loan for tax purposes. The securities issued by the second SPV do need to be recorded on the originator’s balance sheet. Since this structure constitutes a loan for tax purposes, after investors have been paid in full, the originator, through the parent SPV, would be entitled to any remaining upside.

In lieu of SPVs, trusts can be used to hold the assets being securitised. This structure allows the originator to receive compensation in exchange for transferring assets to the trust and also to retain a residual interest in the trust assets.

True sales of assets

Simply structuring the securitisation vehicle to be bankruptcy remote does not ensure that its assets will be secluded from those of the seller in the event that the seller becomes subject to a bankruptcy proceeding. The transfer of the underlying assets must be an absolute assignment, or ‘true sale,’ of those assets. The transfer of assets must, therefore, constitute a sale for accounting purposes to assure that the securitisation vehicle will be entitled to future cashflows from the receivables even if the seller becomes bankrupt. Generally, recourse to the seller is the most important factor in determining whether a transfer is a sale or merely a loan by the seller or a pledge of the seller’s collateral (although not all recourse to the seller is fatal to this analysis).

What are the factors that go into rating a securitisation?

A securitisation sponsor can theoretically structure the securitisation to get any rating(s) it wants. Rating agencies will rate tranches of ABS based on expected losses for the different tranches under both normal conditions and worst-case scenarios. The factors that rating agencies look at vary according to the type of assets being securitised.

Availability of precise details of how assets ‘behave’ in terms of financial performance—payments and defaults—when
pooled allow the assets and the risk and rewards of those assets to be isolated from the originator. As a result, databases of historical statistics on asset performance may be the single most important factor that makes a particular asset class eligible for securitisation. Historical performance data allows rating agencies to subject potential asset pools to a range of stress tests to determine how the assets are likely to perform under different economic circumstances. Historical performance data also helps determine the level of credit enhancement needed to augment the credit ratings of senior tranches.

For an asset category to be a good securitisation candidate, historical data must be readily available on the performance characteristics of the asset class, such as frequency of defaults and severity and size of losses, length of time for recoveries and recovery percentages.

Credit enhancement can be used to give different tranches different credit ratings. The rating agencies will look at the forms of credit enhancement being provided and the different classes of securities being issued in determining the credit rating to be given to each class.

Rating agencies pay careful attention to the legal structure being used in the securitisation. They will typically seek assurance that the securitisation is a bankruptcy remote vehicle. In the US, rating agencies will require a legal opinion to the effect that the assets being securitised have been transferred to the securitisation vehicle pursuant to a ‘true sale’ and will not be considered part of the originator’s estate in the event that the originator becomes bankrupt.

Although the securitisation process is intended to isolate the credit worthiness of the asset originator from ongoing asset performance, rating agencies will nevertheless closely scrutinise an originator’s operations and its policies and procedures in areas such as lending criteria and underwriting standards, the provision of extensions to payment schedules, renegotiation of contracts and the granting of grace periods.

Ongoing asset servicing is an equally important component of the rating process. Rating agencies will conduct a careful review of the servicer’s operations and demand adequate assurance as to procedures and capabilities on the part of the servicer for collections and billing, data processing and maintenance, disaster recovery and record keeping and reporting capabilities. Rating agencies will also require that backup servicing be lined up in the event of bankruptcy or other problems involving the primary servicer.

What is credit enhancement?
An asset-backed security is said to be ‘credit enhanced’ if there is some feature present in the transaction that makes it more likely that the holder of the security will receive payments when due. Credit enhancement accomplishes two goals:

- It provides a source of funds to supplement payments on the underlying assets in the event collections on the assets are insufficient to pay scheduled interest and/or principal.
- It allows different tranches within the securitisation to achieve desired ratings, even in cases where the asset originator or the assets themselves cannot support such a rating.

How does credit enhancement work?
There are a number of types of credit enhancement – internal or external – that can be used in securitisations to give different tranches different and higher credit ratings.

Senior/subordinate structure
A senior/subordinate structure allows the use of overcollateralisation to protect senior tranches from a certain level of loss. For example, in a US$100 million mortgage pool, the issuer might create a senior tranche of US$90 million and a first-loss subordinated tranche of US$10 million. Through overcollateralisation, the entire pool can incur losses of US$10 million without the senior tranche being adversely affected.

The senior tranche can be sold to investors willing to accept a lower yield in exchange for a highly rated, more conservative investment. In turn, the subordinated tranche can either be sold to investors willing to accept higher risks in exchange for the possibility of higher yields, or, alternatively, can be retained by the issuer. By definition, investors in the subordinated tranche understand that they will not receive repayment of the full US$10 million as a result of almost certain losses. However, the pricing of such subordinated tranches is intended to reflect this higher risk.

Spread account
A spread account works in a manner similar to a senior-subordinate structure and works particularly well for certain classes of assets such as credit card receivables. For example, the total cost to a bank for issuing credit cards might be 15 per cent consisting of funding costs of 10 per cent, losses of 3 per cent and servicing and securitisation costs of 2 per cent. If the average interest rate paid by the bank’s credit card holders is 19 per cent, there is a difference or spread of 4 per cent between the bank’s total costs and what it is receiving. In a credit card receivables securitisation, that spread can be held in reserve as
a form of credit enhancement to protect the senior tranche investors against higher than expected losses.

**Revolving/amortisation structures**

The reserves created from using spread accounts as described above, are often coupled with a revolving/amortisation securitisation structure. Using again the example of a credit card receivables securitisation, the issuer uses repayments received from credit card holders to purchase additional credit card receivables from the bank. However, if credit card losses exceed a specified level, the issuer is precluded from purchasing additional receivables. Instead, the then existing pool of credit card receivables must be amortised. No more revolving is permitted and all repayments from credit card holders are used to pay down the rated tranches of securities.

**Monoline insurance**

Issuers can use guarantees from monoline insurance companies as a form of credit enhancement. Monoline insurance companies are generally highly rated, and the tranches of ABS they insure will carry a similarly high rating. The premium paid by the issuer to a monoline insurance company is offset by the lower interest rate paid to investors investing in the tranches of securities being insured.

**Cash collateral loans**

Lenders can provide securitisation vehicles subordinated loans that can be used to cover certain losses. Rating agencies will determine the size of the cash collateral account required for the desired ratings of different tranches in the securitisation. The lender makes a loan to the cash collateral account. The loan proceeds are pledged as collateral for the covered tranches and losses are funded from this account. Conversely, cashflow from the securitised assets goes into the cash collateral account, and, to the extent that the cash in the collateral account exceeds the level specified by the rating agencies, the excess is paid to the lender.

**Letters of credit**

Letters of credit function in a manner similar to cash collateral accounts, or monoline insurance. Letters of credit provide first-loss protection allowing the securitisation issue to make draws under the letter of credit to cover certain losses. The tranches protected by the letter of credit carry a credit rating that is the same as the issuing bank.