

# AN ANALYSIS OF THE CONCEPT OF MORTGAGE-BACKED SECURITIES

## AN ECONOMIC AND LEGAL PERSPECTIVE

PELMA JACINTH RAJAPAKSE

This article examines the concept of mortgage-backed securities (MBS) issued in the securitisation programs in a theoretical context. First, it outlines a general explanation of the securitisation process, focusing particularly on MBS programs, within a context of microeconomic theory. Second, the incentives for participants in the MBS programs are outlined within a contractarian framework, which includes the agency theory<sup>1</sup>, and provides a framework to analyse the incentives of the various participants at each stage of, or contract in, the overall securitisation process. Finally, suggestions are made concerning some of the key features that might characterise a theoretically optimal regulatory regime for mortgage-backed securities.

## SECURITISATION EXPLAINED <sup>2</sup>

There is no universally-accepted definition of securitisation. According to Professor Odith, 'Securitisation is a buzz word lacking any technical meaning' — essentially, '... a market usage which can mean different things to different people'.<sup>3</sup> The term is typically defined by reference to its purpose, its outcomes, or as a process. A typical purpose-based definition is given by the Oxford Dictionary, which defines securitisation as 'convert[ing] an asset (especially a loan) into marketable securities, typically for the purpose of raising cash'.<sup>4</sup>

On the other hand, a typical outcomes-based definition is provided by s 6(1) of the *Privacy Act 1988* (Cth), which defines a 'securitisation arrangement' as 'an arrangement involving the funding, or proposed funding of, loans that are provided by a credit provider, or the purchase of loans by a credit provider, by issuing instruments or entitlements to investors and under which payments are principally derived, directly or indirectly, from such loans.'

Like some other definitions enshrined in statute, such outcomes-based definitions tend to be useful for those who already know what securitisation is. For those who do not, it is perhaps more helpful to explain securitisation by focusing on the process, rather than the outcomes.

The process begins when borrowers, who demand funds from the financial markets, enter into loan contracts with credit institutions. For the purposes of this article, securitisation is the process by which the credit institution — either a bank or an independent mortgage provider (IMP) — sells<sup>5</sup> assets on its loan book — specifically, accounts receivable on its loan book — to another financial intermediary, a special purpose vehicle (SPV), which then funds its holdings by issuing asset-backed securities to investors. By this process, the original illiquid asset (for example, a mortgage loan, credit card receivable, or motor vehicle lease) is transformed into a tradeable, more liquid debt security.<sup>6</sup>

The principal and interest repayments made by the initial borrowers constitute cash flows that are ultimately received by the financial intermediary, with the value of the mortgaged property forming a contingent receivable in their accounts.<sup>7</sup> It is by using these incoming cash flows as revenue that the financial intermediary is able to issue asset-backed bonds to investors (or lenders), who supply funds to

the financial markets, at attractive interest rates. The financial intermediary earns a profit on the transaction, provided its net interest income exceeds its interest and other expenses, including transactions costs.

Receivables that are particularly suitable for securitisation<sup>8</sup> are those that are, among other things:

- readily realisable, if necessary — for example, home mortgage loans typically have better recovery rates than unsecured credit card receivables, which are individually smaller in value, and easier for the bank to write off;
- marketable, or potentially marketable, to investors;
- relatively homogeneous, in terms of the underlying asset type (for example, houses vs home units vs motor vehicles vs aircraft); the geographic location of each underlying asset type (for example, all housing properties from the north shore of Sydney); the value and liquidity of the asset type (for example, houses whose market value exceed \$1 million vs. houses whose market value is less than \$250,000); documentation (for example, it is cheaper for legal advisors to study one mortgage document than many different mortgage documents); the duration and term of the receivable stream (for example, home mortgage loans frequently have a nominal life of 25 to 30 years, but an average life of four years because of prepayments<sup>9</sup>, whereas many motor vehicle loans and leases have terms of 3–5 years); and the socio-economic status of borrowers (for example, high net wealth individuals vs middle-income professionals);
- simple, in terms of their payment structure — for example, home mortgage loans are simpler to securitise than complex project finance loans;
- characterised by a stable history of low default risk (or high borrower creditworthiness<sup>10</sup>); high prepayments and low repayment arrears; and stable loan interest rates;
- sufficiently diversified across geographic markets and borrower profiles;<sup>11</sup>
- sufficiently numerous, in the sense that they are based on a large number of security properties and borrowers;
- are capable of credit enhancement — for example, the original credit institution's lending criteria must be capable of being assessed and approved by mortgage insurers and credit rating agencies;
- if secured, secured only by a first mortgage or charge, which is preferably registered (for example, in the State Registrar of Titles, or with the Australian Securities and Investment Commission) to avoid competing claims for priority by other mortgagees;

and

- not subject to any prospective legal claim against the underlying asset — for example, because there are construction defects in the underlying house property, or design faults and mechanical defects in a leased motor vehicle.<sup>12</sup>

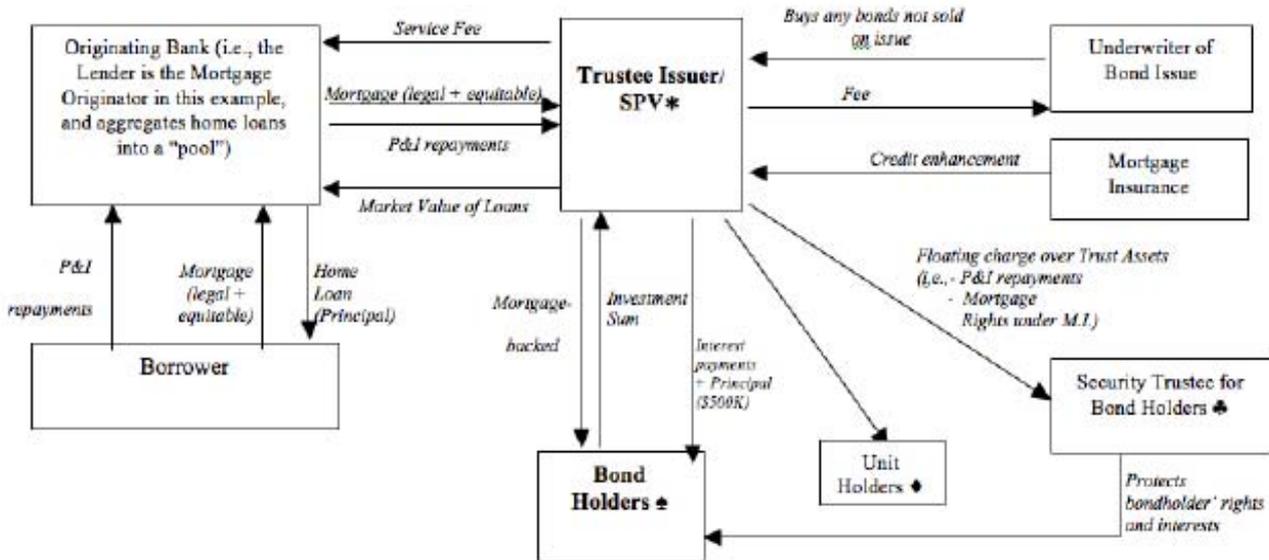
### MORTGAGE-BACKED SECURITIES (MBSs)

Mortgage-backed securities or MBSs (ie. those based on mortgage loans) are a particular form of asset-backed securities, and residential mortgage-backed securities are simply a particular type of MBS — viz, those based on residential, as distinct from non-residential mortgages such as company charges.

From a theoretical perspective, MBS programs are simply an application of the securitisation principles outlined earlier. In essence, individuals borrow from their banks or IMPs in order to finance the purchase

of a residence, whether for home or investment purposes. The banks or IMPs aggregate loans with similar characteristics into a ‘mortgage pool’, and then sell or in effect transfer<sup>13</sup> their legal rights in the pool (for example, to receive repayments, and exercise power of sale as mortgagee over those residences included in the pool) to other financial intermediaries, which often are established specifically in order to facilitate the MBS program. The structure of a typical mortgage securitisation program is illustrated in the following diagram.

### STRUCTURE OF A TYPICAL MORTGAGE SECURITISATION PROGRAM



- \* Depending on the context, the issuer of the securities is also termed the Special Purpose Vehicle (SPV), the Special Purpose Entity (SPE), or simply the trustee.
- ♠ The bonds or notes are issued in a unit trust structure. The bonds themselves comprise principal and interest components. Usually there are a number of classes of bondholders, whose rights vary with the class of bonds held. For example, Class A bondholders may have priority rights to interest or principal distributions over Class B bondholders.
- ♦ Unit holders in the trust are generally subsidiaries of the sponsoring bank, and may be capital unit holders or income unit holders. Capital unit holders are those who hold capital units, and are entitled, generally on winding up of the trust, to any residual trust capital or ‘corpus’. Income unit holders are those who hold income units, and are entitled to net trust income, if any exists, generally up to a maximum ‘toke’ amount (for example, \$1,000) which is specified in the trust deed.
- ♣ The Security Trustee holds a floating charge over trust assets on behalf of the bondholders. The trust assets include the right to principal and interest repayments (ultimately from borrowers on the initial housing loans), the right to exercise power of sale under those mortgages, and any rights to mortgage insurance payouts.

As noted earlier, the housing loan borrowers' principal and interest repayments ultimately provide cash flow for these other intermediaries, and the value of the borrowers' mortgaged property forms a contingent receivable in the intermediaries' accounts. Using the incoming cash flows as revenue, the intermediaries then issue bonds to investors (or lenders), who supply funds to the financial markets. So long as their net interest income exceeds their interest and other expenses (including transactions costs) at each stage of the process, each intermediary earns a profit.

In a mortgage-backed securities issue, investors receive income through regular interest coupon payments, as well as scheduled (and sometimes unscheduled) repayments of principal.

In the terminology of the MBS markets overseas (for example, the United States), MBS programs are either 'pass-through' or 'pay-through' in character. 'Pass-through' programs comprise issues of debt securities, such as bonds, in which the interest and principal repayments are 'passed through' a trust to the investors on a scheduled 'periodic payment' basis, at about the same time as they are received from the pool of initial borrowers.

'Pay-through' issues may be debt securities (e.g. bonds) or equity securities (e.g. ordinary shares). In the case of bonds, the interest and principal repayments are 'paid through' a corporate SPV (not a trust) to the investors on a sometimes scheduled (i.e. regular), and sometimes unscheduled (irregular) basis, from the pool of initial borrowers.

In the case of shares, the principal and interest repayments made by the initial home loan borrowers are paid to a corporate SPV, which then pays them out again to investors in the form of dividend payments on the shares. These dividend payments may be regular (e.g. if the securities issued were preference shares that guarantee investors a regular dividend), or irregular, as in the case of dividends paid to ordinary shareholders. In this case, it would be unusual for the investors (ordinary shareholders) to receive their dividend payments at or about the same time as they are received from the pool of borrowers.

As the term is used in this sense, there have not, to date, been any equity 'pay-through' issues in Australia. All of the MBS issues in Australia thus far have been debt issues. Most of these have been 'pass-through'

programs in the sense described here, although some have had some 'pay-through' characteristics.

## RISK MANAGEMENT

As with many financial transactions, there are a number of risks inherent in an MBS program. These include:<sup>14</sup>

- credit or default risk — the risk that the borrowers, or a significant proportion of them, will be unable or unwilling to make their repayments when due;
- prepayment risk — the risk that the borrowers, or an upstream intermediary, will make a payment before it is legally due<sup>15</sup> (for example, in order to bring forward the tax deduction for interest paid, to an earlier income year than would otherwise be the case<sup>16</sup>);
- servicer performance risk — the risk that the entity responsible for servicing the housing loans (or the debt derived from them) is unable or unwilling to perform its payment obligations;
- guarantor risk — the risk that the guarantor will fail to pay any unpaid amounts owing;
- liquidity risk — the risk that arises from a mismatch between the final maturities of on-balance sheet assets and liabilities, and/or between the timing of cash inflows and outflows for off-balance sheet items; and
- legal risk — the risk that some aspect of the MBS program will involve at least one of the stakeholders in a contravention of the law.<sup>17</sup>

Ways in which these risks are managed include credit enhancement, and simple cash flow reallocation.<sup>18</sup> Credit enhancement is the process of effectively 'insuring' against the risk associated with funding by way of a securitisation process — for example, by mortgage insurance, or by obtaining the guarantee of a larger, less risky bank.<sup>19</sup>

## RINGFENCING

In order to ensure the perception of a 'true sale' by the regulatory authorities, the SPV must be 'ringfenced' from the originating bank or mortgage originator. That is, the SPV structure must be legally separated from the originating lender and its management. For a similar reason, the credit quality of the bonds issued by the SPV must be, and must be perceived by the regulatory authorities to be, separate and distinct from the credit quality of the selling bank or mortgage originator.<sup>20</sup>

## ON-BALANCE SHEET AND OFF-BALANCE SHEET FINANCING

For capital adequacy purposes, loans classified as 'on-balance sheet' items are taken into account by the relevant regulatory authority — ie. the Australian Prudential Regulation Authority (APRA) — when calculating the level of capital which a bank is required to hold against that loan exposure. The calculation itself is risk-weighted, according to the perceived riskiness of the particular loan asset. For example, housing loans in respect of owner-occupied dwellings, which are on-balance sheet, are risk-weighted at 50 per cent so that, for example, against a housing loan asset of \$100,000, the originating bank will be required to hold net capital of \$50,000. In contrast, loans which are classified as 'off-balance sheet' items are not taken into by APRA for capital adequacy purposes, so that the bank need not hold any capital against that exposure. Banks and other financial institutions subject to prudential regulation requirements therefore face a direct incentive, to convert on-balance sheet assets to off-balance sheet items.<sup>21</sup>

## STAKEHOLDER INCENTIVES

From a commercial point of view, the entire securitisation process can be characterised as a series of contracts or agreements, which are motivated by each participant's desire for financial gain or profit.<sup>22</sup> For example, there are loan contracts between borrowers and the originating credit institution; contracts between the originating credit institution and other financial intermediaries to whom it assigns its mortgagee rights; and contracts between the SPV<sup>23</sup> and the institutional investors. There are also a number of side-contracts, such as those between the SPV and:

- the mortgage or trust manager, who manages the mortgage and other assets of the trust;
- the 'guarantor', liquidity facility provider,<sup>24</sup> and/or back-up servicer;
- the mortgage insurer;
- the credit rating agency (for example, Standard and Poor's, or Moody's)
- the bank responsible for the collections account, if any;
- the security trustee;
- and any hedging providers (for example, larger banks with whom the SPV engages in an interest rate swap); and
- the custodian, if any, which provides documentation

services (for example, loan contracts and mortgage documents).

Contractarian theory, which encompasses the agency theory often cited in the accounting and financial economic literatures,<sup>25</sup> provides a framework within which to analyse the incentives of the various stakeholders at each stage of, or contract in, the overall securitisation process.

From a theoretical perspective, asset securitisations such as MBS issues may alleviate the agency costs of primary debt lending, by lowering the costs of monitoring borrower behaviour.<sup>26</sup> The reason is that, if a 'true sale' has occurred, the originating lender's rights and obligations have been transferred to a legally separate entity.

In practice, MBS issues offer the following incentives to each of the key stakeholder groups:

- For banks, IMPs and other originating financial institutions, MBS programs provide the following additional opportunities:

➤ off-balance sheet financing: the originator may have to raise extra capital to comply with risk-based capital adequacy guidelines rules in order to support the total assets retained on-balance sheet. However, the need to do this may be avoided if the assets are sold via a securitisation. Because a securitisation is usually viewed for accounting purposes as a sale of assets/loan receivables rather than as financing, the originator does not record the transaction as a liability on its balance sheet. The proceeds from the sale of loan receivables are used to pay the originating (selling) institution's liabilities, so that (so long as APRA agrees) originator's capital-to-assets ratio increases and, other things being equal, it has greater scope for borrowing. Its return on capital is also improved, because the originating (selling) institution has removed the liability from its balance sheet, but still retained the profit;<sup>27</sup>

➤ fee income: for example, the originating institution may earn fees from the SPV for acting as 'servicer' or 'collections account' manager of the receivables. Fee income is desirable for three reasons: (1) it is independent of interest rates; (2) there is limited credit risk; and (3) it can be claimed as income immediately for accounting purposes. Traditionally, bank income was based on returns from loans and

a lesser proportion from trading in government securities and currencies service fees and management fees. However, increased competition in conjunction with more volatile interest rates and costs has made reliance on spread income uncertain<sup>28</sup>;

➤ transforming illiquid assets (i.e. home mortgage loans) into tradeable securities: for example, assets can be liquidated at a rate based, not on the originating institution's credit quality, but on the inherent or enhanced credit quality of the assets themselves. Institutions with a below-investment grade credit quality can securitise their loans at the higher credit rating categories, making them easier to sell to investors<sup>29</sup>;

➤ arguably, the transfer of risk;

➤ obtaining additional liquidity: for example, the originator raises capital immediately, rather than having to wait for the mortgage receivables to be paid;

➤ reducing costs through economies of scale and scope<sup>30</sup>.

• For institutional investors<sup>31</sup>, MBS programs provide additional opportunities for:

➤ diversification: mortgage pools reduce risk for investors by partial diversification, in that the pools hold loans of the same kind but diversify in terms of the borrower location, collateral, or various other factors. Moreover, investors which desire particular types of loans can buy shares in pools that hold such loans, and at the same time diversify the risk from failure of any particular pool by holding the securities of different pools<sup>32</sup>;

➤ An investment that is tailored to investor preferences: for example, investors looking for a high grade (low risk) investment can pick up senior or mostly "AAA"-rated instruments, while those looking for a greater risk and a commensurably higher rate of return, can opt for a instruments with a "BB+" credit rating (using the Standard and Poor's nomenclature);

➤ An investment that is secured, over real property; and

➤ Investment at yields that tend to be attractive, compared with those of other debt instruments of similar risk<sup>33</sup>.

Currently in practice, of course, most borrowers in

Australia are uninformed about the likelihood that their loans may be securitised, and the possible legal consequences that flow from that.

Stakeholders are therefore likely to face competing or inconsistent incentives, which in contractarian theory are resolved by achieving an equilibrium or 'balance' between the various competing interests.<sup>34</sup> The precise point of this balance or equilibrium position depends directly upon the bargaining power of the various competing stakeholders, and is reflected in the pricing and terms of each contract made.

## MARKET REGULATION

### Rationales for regulation

In terms of economic efficiency, this contracting process will be privately and socially optimal, so long as there are no external<sup>35</sup> or public goods<sup>36</sup> effects. Of these two, there is at least the potential for external effects, the chief externality being driven by moral hazard.<sup>37</sup> In this context, moral hazard would relate to the potential for banks or IMPs to approve housing loans too readily, in the belief that they can shift the risk (including the risk of liability for breach of contract<sup>38</sup>) to other legal entities.

This potential moral hazard problem is compounded by information asymmetry. In a theoretical world of perfect information, any information asymmetry between stakeholders would be reflected in the contract prices at each stage of the process.

As noted earlier, in practice, most borrowers are oblivious to the risk that their homes (or investment dwellings) could be sold by downstream financial intermediaries who have 'purchased' the bank's or IMP's mortgage rights, not due to a failure to pay on the part of the borrower, but as a result of some act or omission by downstream financial intermediary in the supply chain.

Once some borrowers are alerted to this risk and impart the information to others (thereby reducing the information asymmetry 'gap' between borrowers and originating lenders), the information becomes a public good. The reason is that no stakeholder can claim exclusive property rights to it.

It is an economic issue whether these risks are efficiently priced into all contracts included in the securitisation process. If such risks are not priced efficiently into all contracts in the securitisation process, there could

be external costs that ‘spill over’ into the community, or at least that part of the community that borrows housing loans to finance the purchase of residences.

From a societal perspective, precisely how the courts or the legislature will allocate these risks or rather, the liability flowing from them, will be interesting. It is even conceivable that some different form of government regulation may ultimately be required in order to achieve net benefits to the public and ‘just’ outcomes across all stakeholders. In either event, the courts will somehow be involved as arbiters in the risk allocation process, whether as adjudicators in the case of prospective plaintiffs (for example, borrowers) who seek to rely on the current state of the law, or as interpreters of any new industry law or regulation that may be introduced by the legislature.

#### A COST-BENEFIT APPROACH

In Australia, if the legislature decides to enact new legislation to govern the industry, either now or in the future, it seems clear (assuming economic efficiency is at least one of the objectives) that the proposed legislative regime and its alternatives must be subjected to a social cost-benefit analysis, in order to compare and evaluate the alternative proposals with reference to the net social benefits that each is likely to yield.

Such a procedure is not so strange as it might at first appear to lawyers. In Australia, since the National Competition Policy reforms of the early-mid 1990s<sup>39</sup>, the State and Commonwealth Governments have been compelled to evaluate all new Acts of Parliament, and some subordinate legislation, in terms of economic cost-benefit analysis.<sup>40</sup>

Plainly the specific costs and benefits of any proposed new industry regulation, and the stakeholders who bear them or to whom they accrue, will depend on the precise nature of the new regulation. It is impossible to foretell, with any precision, the nature or timing of any new regulatory regime. Nevertheless, some useful comment can be made about the general form that any such regulation would be likely to take.

#### TOWARDS AN OPTIMAL REGULATORY REGIME FOR THE MBS MARKET?

Provided the social benefits outweighed the social costs, one way of helping a beneficial ‘public goods’ effect to evolve in the community could be to compel lenders by legislation to inform their borrowers about the risks of losing their residences once their loans

are securitised, through no fault of their own.<sup>41</sup> In a theoretical world in which all lenders securitised their housing loans, it would be difficult from the point of view of consumer sovereignty to see borrowers having any real difficulty if this was disclosed to them, perhaps at the time of the initial housing loan interview.<sup>42</sup> Of course, since in practice not all financial institutions securitise their housing loans, it is possible that borrowers would seek to obtain their housing finance from those other institutions whose loans do not expose borrowers to the risk of losing their residences because of a downstream intermediary’s error or default.

However, from the point of view of producer sovereignty (and producer surplus), the mandatory disclosure of such risks is likely to be suicidal for those banks and IMPs that do securitise their loans by way of MBS programs, unless they were to offer borrowers a compensatory reduction in the housing loan interest rate, or some other benefit.

Ultimately, if the Government does introduce new regulation governing the MBS industry at some point in the future, it would not be surprising if the courts, after all claims on mortgage insurers have been settled or paid out, and left with limited resources for achieving a ‘just’ outcome, resort to finding against the defendants with the ‘deepest pockets’ — viz, the banks.

This would indeed be ironic, if the banks have initiated securitisation programs of this type in order to transfer the risk of precisely such an outcome to other entities.

#### CONCLUSION

From a theoretical perspective, MBS programs can be depicted as follows. Borrowers, who demand funds from the financial markets, contract with banks or independent mortgage providers (IMPs), which sell the borrowers’ secured loans to other financial intermediaries. The principal and interest repayments made by the borrowers then constitute cash flows that are ultimately received by these other intermediaries, with the value of the mortgaged property forming a contingent receivable in their accounts. Using these incoming cash flows as revenue, the intermediaries then issue bonds to investors (or lenders), who supply funds to the financial markets. This whole process is known as securitisation. Provided their net interest income exceeds their interest and other expenses

(including transaction costs) at each stage of the process, each intermediary earns a profit.

In practice, many (if not most) borrowers are unaware that financial intermediaries have the right, under mortgage securitisation agreements, to sell their residences, despite no default on their part. Once some borrowers become aware of this risk and communicate it to others (thereby narrowing the information asymmetry between borrowers and lenders), there is the potential for a significant public goods effect. Specifically, no stakeholder can claim the property rights to this information, which is — or becomes — a public good.

A logical question arising is whether the industry needs to be regulated more closely, and if so, by whom. Assuming the provision of economically efficient and 'just' outcomes to be the relevant policy objectives, the temptation to blithely prescribe industry regulation without a detailed economic analysis should be resisted. Nevertheless, some useful comment can be made about the form that any such regulation would be likely to take.

One way of facilitating a beneficial public goods effect could be to mandate by regulation (provided the social benefits outweigh the social costs) that borrowers be informed about the risk of losing their residences, despite no default on their part. From the point of view of consumer sovereignty, it is difficult to see any real disadvantage to borrowers if this was disclosed to them — for example, at the time of the initial housing loan interview.<sup>43</sup> However, from the point of view of producer sovereignty (and producer surplus), mandatory disclosure of such risks is likely to be suicidal for those banks and IMPs that securitise their loans in this manner, unless they were to offer borrowers a compensatory reduction in the housing loan interest rate, or some other benefit.<sup>44</sup>

## NOTES

<sup>1</sup> See, for example, M Jensen and W Meckling, 'Theory of the Firm: Managerial Behaviour, Agency Costs and the Ownership Structure' (1976) *Journal of Financial Economics* 305. This article spawned a huge literature on agency theory and the role of agency costs in financial markets.

<sup>2</sup> This section provides a brief overview of the securitisation process. For a more comprehensive

discussion of securitisation, see R E Kravitt and J H P Johnston, *Securitisation of Financial Assets* (Aspen Law and Business, 2nd ed, 2002).

<sup>3</sup> F Oditah, 'Selected Issues in Securitisation' in F Oditah (ed), *The Future for the Global Securities Market: Legal and Regulatory Aspects* (Clarendon Press, 1996) 84.

<sup>4</sup> See *Concise Oxford Dictionary* (Oxford University Press, 10th ed, 2001).

<sup>5</sup> Alternatively, funding may occur by sub-participation. In a sub-participation, investors lend to the financial intermediary (for example, the SPV), which then on-lends to the original credit institution an amount typically equal to the market value of the pool of assets (in order to show regulatory authorities that the transfer is bona fide and 'at arms length'). Sub-participation does not remove the investors' credit exposure to the original credit institution. For a more comprehensive discussion of sub-participation, see T Frankel, *Securitization: Structured Financing, Financial Assets Pools and Asset-Backed Securities* (Little Brown & Co, 1991) Part III.

<sup>6</sup> Theoretically, any income-producing asset can be securitised. For example, assets that have been securitised in the United States include home mortgage loans, commercial property mortgages, consumer receivables (car boat and truck loans, credit card receivables, TV rentals, mobile home loans, student loans, health care receivables, telephone charges), trade receivables, equipment leases (for example, aircraft leases), bank loans (sovereign debts, even project finance loans), bond portfolios, and third world debt: see R Pollsen, J Hu and J Elengical, 'A Record Year for Residential MBS' (April 2002) 62 *Mortgage Banking* 36, 36–45; J C Shenker and A J Colletta, 'Asset Securitisation' (1991) 69 *Texas Law Review* 1369, 1380; and G Salathe, 'Reducing Health Care Costs through Hospital Accounts Receivables Securitization' (1994) 80 *Virginia Law Review* 549.

In Australia, the most commonly securitised asset to date has been residential mortgages. Other assets that have been securitised in Australia to date include commercial mortgages and leases (office buildings, shopping centres and warehouses), credit card receivables, share loans, corporate loans, utility receivables, trade receivables, automobile loans and

consumer finance receivables, infrastructure assets such as pipelines, toll roads, ports, water treatment plants, electricity transmission assets, employee share scheme loans: see Macquarie Bank Homepage at <http://www.macquarie.com.au>; and Standard and Poor, 'RMBS, CDO Activity Lead Australian Securitisation Issuance Growth in 2003' *Credit Ratings Commentary and News* (July 2003).

<sup>7</sup> Whether or not this contingent receivable is formally recognised in the financial intermediary's books of account depends on the Australian Accounting Standards. Currently, contingent receivables must be noted in the Notes to Financial Statements, although they need not be formally brought to account: see 'AASB 1044 Provisions, Contingent Liabilities and Contingent Assets' in *Accounting Handbook* (CPA Australia, 2003) v 1, [3.1.16].

<sup>8</sup> For further detail, see Deutsche Bundesbank, *Monthly Report* (Frankfurt, July 1997) 55–6; and I H Giddy, 'The Securitisation Process' delivered at *Workshop on Asset-Backed Securities* (February 2001) Stern School of Business, New York University <<http://www.giddy.org/abs-hypo.htm> and <http://www.globalsecuritization.com/>> (25 August 2003).

<sup>9</sup> See Standard and Poor's, *An Investor Guide to Australia's Housing Market and Residential Mortgage-Backed Securities* (January 2003) 25, 27, 37.

<sup>10</sup> For example, in Australia, cash flows derived from long-term leases of commercial or industrial property to stable and substantial tenants such as government bodies form a good base for securitisation. As commented by Standard and Poor's Ratings Group, 'These leases, which are often a 'triple net' nature, where the lessee is responsible for all costs and outgoings associated with the building, provided high quality cash flow streams which service, and in some cases repay, the principal of the securities issued': Standard and Poor's Ratings Group, 'Securitisation Market Continues to Expand' (Melbourne, 1 July 1994) 6. In Queensland, Suncorp Ltd securitised two Brisbane CBD towers in 1993 on the strength of 22 and 24-year leases to government tenants: K MacDermott, 'Suncorp's Triumph in Bond Deal May Be A Thing of the Past', *The Australian Financial Review* (Sydney), 30 June 1994, 52. A further example is the issue of asset-backed securities by Prime Asset Entity Ltd, whose

underlying assets were properties leased to the state government of New South Wales and Australian Tax Office in Sydney and Wollongong: see Standard and Poor's, 'Securitisation Market Continues to Expand'. Similar United States examples include the 1981 securitisation by Goldman Sachs of its New York headquarters through a commercial paper facility, and the 1984 Olympia & York securitisation of three multi-tenanted Manhattan office buildings through a US\$970 million placement of notes: see J C Shenker and A J Colletta (1991) 1399–403.

<sup>11</sup> For example, a pool of assets, such as commercial leases, derived solely from one geographic area runs the risk of local economic decline and forfeiture of underlying income streams. The consequences of such diminution in the underlying income streams can be severe for the issued securities. For example, a charter which targeted borrowers with specific but inappropriate socio-economic characteristics contributed significantly to the problems experienced by Australia's once-leading securitiser, FANMAC, in its early securitisation programmes: see A Boyd, 'Securitisation Market Shrank 14% Last Year', *The Australian Financial Review* (Sydney), 24 February 1994, 30.

<sup>12</sup> For more details, see J D Smallman and M J Selby, 'Asset-Backed Securitisation' in D C Bonsall (ed), *Securitisation* (Butterworths, London, 1990) 242–8.

<sup>13</sup> For example, by sub-participation.

<sup>14</sup> This discussion draws heavily from I H Giddy, above n 8, 4. All of these risks are interrelated, and some overlap with each other. The definitions given are loosely based around those provided in the *Butterworths Business and Law Dictionary* (Butterworths, Sydney, 1997).

<sup>15</sup> Investors in pools that hold housing mortgages are exposed to the risk that borrowers will prepay their loans. Usually, borrowers are legally entitled to prepay their loans at any time, sometimes without penalty. When interest rates fall, housing loans will be prepaid at a higher rate than otherwise.

<sup>16</sup> See ss 82KZL–82KZO of the *Income Tax Assessment Act 1936* (Cth).

<sup>17</sup> Other risks inherent in some MBS programs include interest rate and currency risk (that is, respectively, the risk of an adverse interest rate

change, and the risk of an adverse exchange rate change); swap counterparty risk (ultimately, the risk that a counterparty to a swap transaction will default on its payment obligations under the swap contract); and sovereign risk (or 'country risk' — the inherent riskiness of investing in assets in one country such as Iraq, as distinct from another country such as Australia). For a more detailed discussion of interest rate and currency swaps, see T Valentine, G Ford and R Copp, *Financial Markets and Institutions in Australia* (Pearson Education Australia, Sydney, 2003) Ch 14; and J Copp and R Copp, 'Foreign Exchange' in K C D Wilde (ed), *International Transactions: Trade and Investment, Law and Finance* (Law Book Company, Sydney, 1993) Ch 5.

<sup>18</sup> Other methods include interest rate and currency hedges (for example, interest rate swaps or cross-currency interest rate swaps), and sovereign protections.

<sup>19</sup> See the definition in s 6(1) of the *Privacy Act 1988* (Cth). Credit information is essentially a mechanism for narrowing the information asymmetry that inevitably exists between investors and the SPV. See below for further discussion of the concept of information asymmetry, particularly as it relates to borrowers.

<sup>20</sup> Deutsche Bundesbank, *Monthly Report* (July 1997) 56.

<sup>21</sup> For a more comprehensive discussion of capital adequacy requirements, see T Valentine, G Ford and R Copp, above n 17, Ch 6. In addition, Reuven and Plautt have conducted an empirical study of substitutability between on and off-balance sheet liquidity for the business sector. They argue that off-balance sheet contingent liabilities of financial institutions (for example, loan commitments) serve as a substitute for on-balance sheet money, and that off-balance sheet liquidity, like unused credit lines, should be taken into account in determining debt-equity ratios for prudential regulation purposes. See G Reuven and S Plautt, 'Money Demand and Off-Balance Sheet Liquidity: Empirical Analysis and Implications for Monetary Policy' (1989) 1 *Journal of Accounting Auditing and Finance* 147; P Rajapakse, 'Assessment of Law and Practice Relating to the Mortgage Origination Process in Securitisation Programs' (2006) 5 *Journal of Law and Financial Management* 18, 18–39.

<sup>22</sup> In a broad sense, this even applies to the borrowers, who anticipate that ultimately the value of the property they have borrowed to purchase increases sufficiently to more than compensate them for their investment outlay and net borrowing costs.

<sup>23</sup> Strictly, these contracts are between the trustee issuer of the SPV and the bondholders.

<sup>24</sup> As noted earlier, these roles are described by a variety of different names.

<sup>25</sup> See, for example, M Jensen and W Meckling, 'Theory of the Firm: Managerial Behaviour, Agency Costs and the Ownership Structure' (1976) *Journal of Financial Economics* 305.

<sup>26</sup> See B Minton, T Opler and S Stanton, 'Asset Securitisation Among Industrial Firms' (Working Paper, Fisher College of Business, Ohio State University, November 1997). Securitisations may also enable institutional investing firms to expropriate existing bondholders' or shareholders' wealth, although such expropriations are of less relevance in the present context: see Minton, Opler and Stanton, 6, 8–10; and J Kensinger and J D Martin, 'Project Finance, Raising Money the Old-Fashioned Way' (1988) 1 *Journal of Applied Corporate Finance* 69; A Borzi, 'Securitisation: It's Made Its Mark: How It Beat the Odds in the Eighties' (1991) (1) *JASSA* 7; R Cutler, 'Remodelling the Mortgage' (1994) 64(7) *Australian Accountant* 35; C Dalton, 'Resurgence of Securitisation' (1992) 106 (4) *Australian Banker (Melbourne)* 177.

<sup>27</sup> For more details (albeit in the context of the United States and other countries overseas), see L Bryan, 'The Risks, Potential and Promise of Securitisation' in L T Kendall (ed), *Primer on Securitisation* (MIT, Cambridge, 1996) Ch 14; S Din, 'Understanding Securitisation in the Context of Corporate Recapitalisations and Acquisitions' (2000) 15(6) *Journal of International Banking Law* 128.

<sup>28</sup> See F Oditah, above n 3, 91–2. Indeed, a number of commentators predict that the future for financial institutions will involve moving away from the traditional role of financial warehouses, to concentrating primarily or even exclusively on being originators and servicers in return for fees: see T Frankel, above n 5, 145–6; J C Shenker and A J

Colletta, above n 6, 1395–6. Such a system would allow lenders to continue the business of lending while sending much of the risk downstream in the securitisation process. In the United States, several banking institutions — NationsBank, the First National Bank of Boston, Wells Fargo, and Barnett Banks — have publicly embraced this strategy by announcing the formation of ‘conduits’ to enable the banks to originate various types of commercial mortgage loans and periodically securitise them through Wall Street underwriting firms: see Anon, ‘Conduits Set Ambitious Goals for 1995’ (February 1995) *Commercial Mortgage Alert* 6.

<sup>29</sup> See S L Schwarcz, ‘The Global Alchemy of Asset Securitisation’ (1995) 14 *International Financial Law Review* 30, 32.

<sup>30</sup> In addition, securitisation may be used by the originator in order to match the cash flows of its assets and liabilities. This is easier where the receivables are exactly used to repay the funding loan, because there is minimal mismatch in the timing of receipts and payments. Moreover, if the payments are structured on a pass-through basis, there is less risk of having to make repayments before the receivables are collected.

<sup>31</sup> In Australia, as in the United States, mortgage securitisation market have attracted a large cross section of institutional investors, including banks, superannuation funds and insurance companies: see for example, E Carew, *Fast Money 4* (Allen and Unwin, Sydney, 1998) 243; and *The Issues Facing the Global Australian RMBS* (June 2001) *Asiamoney* 55.

<sup>32</sup> See A Finch, ‘Securitisation’ (1995) 6 *Journal of Banking and Finance Law and Practice* 247; and V Kothari, *Securitisation: The Financial Instrument of the New Millennium* (Academy of Financial Services, Calcutta, 2003) Ch 3.

Nor are investors the only stakeholders who benefit from the ability to diversify. The originator also has access to a wider range of funding sources. For example, securitisations by smaller regional banks, building societies, credit unions or IMPs are sometimes a reaction to a tightening of bank credit — for example, banks may offer less credit or only offer short-term credit, or insist on onerous loan covenants, or additional security or guarantees: see G Benston, ‘The Future of Asset Securitization: The Benefits and Costs of Breaking Up the Bank’

(1992) 5 *Journal of Applied Corporate Finance* 73. In these circumstances, an originating smaller regional bank, building society, credit union or IMP may not itself have a credit-standing for a bond issue, but the SPV could issue bonds secured on the mortgage receivables which have a higher rating than the originator (particularly if the financial guarantee of a larger bank is obtained). Hence, the originator diversifies its sources of funds, and is less reliant on traditional bank borrowings. Funding from international investors may also replace that of domestic banks.

<sup>33</sup> See Deutsche Bundesbank, *Monthly Report* (July 1997) 56; G Benston, above n 32, 72–4; and Financial Security Assurance Inc, *A Guide to Insured Asset-Backed Securities* (NY, FSA, 1999).

<sup>34</sup> A corporate firm is a ‘web of agency relationships’: F H Easterbrook and D R Fischel, ‘Corporate Control Transactions’ (1982) 91 *Yale Law Journal* 698, 700. In reallocating funds between transacting parties, an agency problem arises between corporate managers and investors (shareholders), and between lenders and borrowers, because of the conflicting interests of the parties.

<sup>35</sup> An external effect is a benefit or cost falling on a third party or the community, who cannot pay or be compensated for it through the market mechanism: see *Butterworths Business and Law Dictionary*, 1997.

<sup>36</sup> A public good is a good for which property rights cannot be exclusively defined (ie. it cannot be exclusively ‘owned’), and the provision of which to additional users costs nothing extra (ie. its marginal supply cost is zero). For a more comprehensive explanation, see R Pindyck and D Rubinfeld, *Microeconomics* (5th ed, Prentice Hall International, 2001) Ch 15 and 17; and M Obstfeld and K Rogoff, *Foundations of International Macroeconomics* (MIT Press, Cambridge, 1999) 407–27.

<sup>37</sup> In an insurance context, moral hazard is the risk that, when one party is fully insured and cannot be accurately monitored by an insurance company with limited information, its behaviour may change after the insurance has been purchased. It occurs when the party to be insured cannot influence the risk or magnitude of the event that triggers payment of the insurance: see R Pindyck and D Rubinfeld, above n 36, Ch 16. For a judicial discussion of the concept, see also *Locker and Woolf Ltd v Western Australian*

*Insurance Co Ltd* [1936] 1 KB 408; and *Jester-Barnes v Licenses and General Insurance Co Ltd* (1939) 49 Ll L Rep 231.

<sup>38</sup> Transferring the risk to another legal entity would not, of course, necessarily relieve the bank or IMP of any liability in tort (for example, negligence or negligent misstatement). However, the principles of attributing such tortious liability is not only comparatively straightforward in this context, but have already been addressed in great detail (and recently) by others in the scholarly literature. See for example, N A Katter, *Duty of Care in Australia* (Law Book Company, Sydney, 1999).

<sup>39</sup> See, for example, the *Competition Policy Reform Act 1995* (Cth); the Commonwealth-State *Competition Principles Agreement* signed April 1995 between the Commonwealth Government, and all State and Territory Governments; and the raft of legislation spawned by them by the Commonwealth and all State Governments.

<sup>40</sup> See, for example, Queensland Treasury, *Public Benefit Test Guidelines: Approach to Undertaking Public Benefit Test Assessments for Legislation Reviews Under National Competition Policy* (August 1999, Brisbane). All other State Governments have published similar guidelines based on social cost-benefit analysis.

<sup>41</sup> Disclosure can help reduce the cost of monitoring corporate managers' and borrowers' use of corporate assets for self-interested purposes. The modern literature on the firm recognises the importance of such agency problems: see M C Jensen, 'Agency Costs of Free Cash Flows, Corporate Finance and Takeovers' (1986) 74 *American Economic Review* 650. Moreover, rules mandating particular disclosures are common in principal-agent contexts: see for example, P G Mahoney, 'Mandatory Disclosure as A Solution to the Agency Problem' (1995) 62 *The University of Chicago Law Review* 1047; P Little, 'The Policy Underlying Financial Disclosure by Corporations and Its Effect Upon Legal Liability' (1991) 2 *Australian Journal of Corporate Law* 87; R C Merton, 'Financial Innovation and the Management and Regulation of Financial Institutions' (1995) 19 *Journal of Banking and Finance* 461; E Ferran and C A Goodhart, *Regulating Financial Services and Markets in the Twenty First Century* (Hart Publishing, Oxford, 2001) Ch 1 and 2; and E Roca, *Price Interdependence Among Equity Markets in the Asia-Pacific Region* (Ashgate Publishing, Hampshire,

2000) Ch 4.

<sup>42</sup> Theoretically, there might be the risk of slightly higher interest rates on borrowers' housing loan facilities. However, in practice, any increase is likely to be relatively small. The precise extent of such an interest rate increase and the likely flow-on effects (e.g. to housing affordability and bank revenue) are best left to economic researchers with the requisite expertise.

<sup>43</sup> Theoretically, there might be the risk of slightly higher interest rates on borrowers' housing loan facilities. However, in practice, any increase is likely to be relatively small.

<sup>44</sup> Or, in the extreme, if there were no alternatives for borrowers in the market, because all current and prospective housing loan providers in the market were to securitise their loans without informing borrowers that they are doing so.

## A U T H O R P R O F I L E

Velma Rajapakse is a Senior Lecturer in Commercial Law at Griffith Business School, Griffith University, Brisbane. She holds a Masters in Law from Monash University and a PhD in Law from Griffith University. The author wishes to acknowledge the valuable comments provided by Dr Richard Copp, Barrister-at-Law, Inns of Court, Brisbane; Professor Justin Malbon, Faculty of Law, Monash University, Victoria; and Professor Eduardo Roca, Deputy Head, Department of Accounting, Finance and Economics, Griffith Business School.