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Securitisation: A Public Policy Tool?

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TREASURY WORKING PAPER

00/8

SECURITISATION: A PUBLIC POLICY TOOL?

Nick Davis

ABSTRACT

This paper is a primer for policy analysts on the securitisation of assets and liabilities. It describes key elements of a typical asset securitisation; outlines the reasons for securitising assets; discusses the types of assets that can be securitised; describes the requirements for a successful asset securitisation; examines whether New Zealand's financial infrastructure presents any barriers to securitisation; discusses the issues surrounding the securitisation of liabilities; and analyses the potential public policy uses of securitisation. The paper does not aim to review sovereign securitisations that have occurred to date.

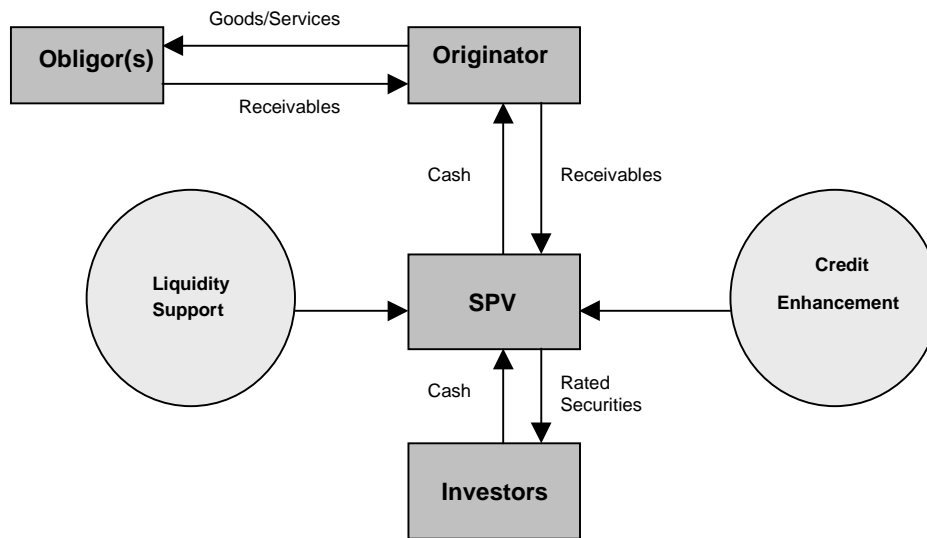
The potential public policy benefits include more efficient financing, improved balance sheet structure, better risk management and improved fiscal credibility. However, the Crown's low borrowing costs and diversity of financial exposures limits the extent to which benefits are achievable and measurable. There is scope for securitisation to enhance fiscal credibility, particularly in the area of superannuation where policy credibility is a key determinant of a successful policy outcome.

An appendix to the paper examines the costs and benefits of securitising the Crown's student loans portfolio. It concludes that further work could be done to quantify the costs and benefits but notes that the benefits would have to be significant in light of the additional costs associated with securitisation.

Disclaimer: The views expressed are those of the author and do not necessarily reflect those of the New Zealand Treasury. The Treasury takes no responsibility for any errors or omissions in, or for the correctness of, the information contained in this working paper.

1 What is Securitisation?

Securitisation is “the issuance of marketable securities backed not by the expected capacity to repay of a private corporation or public sector entity, but by the expected cash flows from specific assets” [OECD (1995)]. The concept of securitisation is best understood by considering a typical transaction. The glossary below provides definitions for those unfamiliar with the jargon.



In a securitisation, the **originator** sells receivables to a **special purpose vehicle** (SPV) established to isolate the receivables and to perform other functions (eg, restructuring of cash flows and provision of credit enhancement and liquidity support). The SPV is usually structured as a bankruptcy-remote trust or incorporated entity.

The SPV finances the purchase of receivables by issuing securities (usually notes, commercial paper, bills, bonds, or preferred stock) to **investors**. Legal agreements delineate the rights and obligations of all parties to the transaction, including the appointment of an administrator to manage the receivables where necessary.

One or more financial institutions are usually involved in structuring and marketing the securities issued by the SPV. To facilitate investor demand, credit rating agencies assess the likelihood that the SPV will default on its obligations and assign an appropriate credit rating. **Credit enhancement** and **liquidity support** is usually obtained by the SPV to ensure a high rating for the securities.

Glossary of Securitisation Terms

Obligor: An obligor is a customer of the originator who is obliged to pay on a contractual basis for goods or services provided by the originator (eg, a trade debtor or a home loan borrower).

Originator: The seller of assets, called the originator, transfers ownership of the assets to the SPV and usually continues to service the assets in exchange for a management fee.

Special Purpose Vehicle (SPV): When receivables are securitised their ownership is transferred to an SPV. SPVs usually take the form of a bankruptcy remote trust or incorporated entity. In both cases, the appointed trustees or the board of directors have a fiduciary duty to protect the interests of investors.

Bankruptcy remote: If an SPV is bankruptcy remote it has legal protection against claims arising from the bankruptcy of the originator, limiting the credit risk faced by investors to the assets of the SPV.

Investors: Investors, usually institutions, purchase securities issued by the SPV. The securities are usually rated by external credit agencies and take the form of notes, commercial paper, bills, bonds or preferred stock.

Credit Enhancement: Credit enhancement usually consists of third-party guarantees, subordinated debt, over-collateralisation, or cash deposit. The provision of credit enhancement protects investors against the prospect of losses resulting from the securitised assets.

Over-collateralisation: The holding of assets of greater value than is needed to support contractual payments, so that the investor is protected in the event of a shortfall in expected payments.

Liquidity Support: Liquidity support is provided to a SPV to assist meeting payments to investors in the event of there being insufficient cash flow from the receivables. This service is usually provided by a financial institution, such as a bank, and is required by credit rating agencies and investors.

Off Balance Sheet Sale Treatment: Securitisation transactions may be structured such that the assets are removed from the originators' balance sheet for accounting and regulatory purposes.

Rated Securities: A financial instrument, usually a debt security, that has been assigned a rating of default risk by one or more credit rating agencies.

2 Why securitise assets?

The potential benefits of securitisation to the originator are:

- more **efficient** financing

For some private-sector institutions, securitisation is used to lower the firm's weighted-average cost of capital. This is possible because equity capital is no longer required to support the assets and highly rated debt can be issued into deep capital markets with investor demand driving down financing costs.

- improved **balance sheet structure**

Securitisation can enhance managerial control over the size and structure of a firm's balance sheet. For example, accounting de-recognition of assets (ie, removal from the balance sheet) can improve gearing ratios as well as other measures of economic performance (eg, Return on Equity). Financial institutions use securitisation to achieve capital adequacy targets, particularly where assets have become impaired¹.

Securitisation also releases capital for other investment opportunities. This may generate economic gains if external borrowing sources are constrained, or if there are differences between internal and external financing costs.

- better **risk management**

Securitisation often reduces funding risk by diversifying funding sources. Financial institutions also use securitisation to eliminate interest rate mismatches. For example, banks can offer long-term fixed rate financing without significant risk, by passing the interest rate and other market risk to investors seeking long-term fixed rate assets. Securitisation has also been used successfully to give effect to sales of impaired assets.

Securitisation also benefits investors. It enables them to make their investment decisions independently of the credit-standing of the originator, and instead to focus on the degree of protection provided by the structure of the SPV and the capacity of securitised assets to meet the promised principal and interest payments.

Securitisation also creates more complete markets by introducing new categories of financial assets that suit investors risk preferences and by increasing the potential for investors to achieve diversification benefits. By meeting the needs of different 'market segments', securitisation transactions can generate gains for both originators and investors.

¹ An impaired asset is one that is currently in default or is returning well below the original yield promised by the asset.

3 What types of assets can be securitised?

Any type of asset with a reasonably predictable stream of future cash flows can be securitised. The assets that are easiest to securitise are those: that occur in large pools; for which past experience can be used to predict default rates; for which documentation is standardised; and for which ownership is transferable.

Residential mortgages are the most commonly securitised asset. The US market in **Mortgage Backed Securities** (MBS) is huge with some 55-60 percent of total United States residential mortgages now securitised. Recent market innovations include **Collateralised Mortgage Obligations** (CMOs) which provide investors with an improved capacity to deal with pre-payment risk. In the United States, MBS issues are government guaranteed and, hence, are classified as a form of government paper [OECD (1995)].

In view of the success of the MBS market, financial institutions began experimenting with securitisation of other assets. **Asset Backed Securities** (ABS) is the catch-all nomenclature used to describe non-mortgage-backed securitisations. The most widely used collateral for ABS are credit card receivables, automobile loans, commercial mortgages (single properties and pools), leases and trade receivables. The outstanding volume of publicly traded ABS in the United States was recently estimated at \$200 billion [OECD (1995)].

In the Australasian market, during 1998, Standard and Poors assigned ratings to A\$21.9 billion of MBS and ABS supported by Australian and New Zealand assets. A total of A\$46.8 billion of rated securities remained outstanding at the end of 1998. Of these, 56% were backed by residential mortgage pools; 21% by financial securities; 9% by corporate receivables, with the rest backed by a mix of corporate loans, commercial property, credit card and trade receivables [Standard and Poors (1999)].

4 What is required for a successful asset securitisation?

Two conditions are required for a successful securitisation:

- (i) a **robust financial infrastructure**, which enables the efficient transfer of assets from the originator to the SPV while protecting the interests of investors; and
- (ii) strong **investor demand**, which facilitates lower financing costs for the originator. The level of investor demand will depend *inter alia* on the risk characteristics of the securities on offer, and on the credit rating assigned by the ratings agencies.

4.1 Characteristics of a Robust Financial Infrastructure

A country's financial infrastructure comprises the legal environment, the accounting environment, the regulatory environment, the taxation environment, and back-office systems. A robust financial infrastructure facilitates securitisation transactions by not imposing significant compliance or administrative costs on the originator, while also providing adequate protection to investors. The following sub-sections discuss the characteristics required for a robust financial infrastructure. The New Zealand environment is assessed against these characteristics in section five.

4.1.1 The Legal Environment

The legal status of an SPV is closely tied to the concept of a “trust”. Through a trust, the ownership (i.e., legal title) in certain assets can be transferred to one or more trustees who are obligated under the terms of the trust agreement to manage the assets for the benefit of one or more beneficiaries. A key question in assessing whether the legal environment is conducive to securitisation is to determine whether the ownership of receivables can be transferred efficiently.

Even where the law allows transfers of title, some legal environments (eg, Italy) require that debtors be given the power to veto sales of receivables, or may require that debtors be formally notified. In some cases, notification of all debtors may be impractical. There may also be debtor privacy and consumer protection issues. In cases where existing laws prevent transfer of ownership, it may be possible to modify future contracts to allow receivables to be bought and sold.

Legal criteria determining whether a “true sale” has occurred differ between jurisdictions. Most legal systems make a distinction between the “sale” of assets and the “financing” of assets. Legal systems may not recognise the “bankruptcy remote” status of an SPV, or may not give investors sufficient protection in the case of delinquency by the debtors. There may also be uncertainties relating to the protection accorded the investor in the event of insolvency of the servicer.

4.1.2 The Accounting Environment

In the private sector, some of the benefits of securitisation (eg, improved balance sheet structure) require off-balance sheet treatment of the securitisation transactions. The most important accounting question, therefore, is whether the assets being securitised qualify for de-recognition for financial reporting purposes.

Achieving de-recognition requires the securitisation transaction to be treated as a sale rather than a financing transaction. The distinction is subtle and depends on the extent to which the originator relinquishes claims over the assets as well as the degree of recourse to the originator in the event of failure of the SPV².

Accounting practices can differ in the way in which residual liabilities are valued and reported. Similarly, accounting treatment can vary with regard to the valuation of interests in collateral that have been removed from the balance sheet but which continue to produce earnings. Other accounting issues include the way in which the positions of originators (or servicers) are reported on balance-sheets, and the way in which originators' account for interests in subordinated tranches.

4.1.3 The Regulatory Environment

The regulatory environment consists of an array of laws and regulations relating to, but not limited to, company formation and governance, trust establishment and the fiduciary duties of trustees, financial reporting requirements, and securities law. While regulatory environments differ substantially between jurisdictions, most regimes involve a combination of information disclosure requirements, the imposition of fiduciary duties on trustees and board directors, and the application of capital adequacy and solvency rules.

In some jurisdictions, the regulatory environment (particularly relating to banks) presents significant impediments to securitisation through either outright prevention or the imposition of high compliance costs. In recent times, however, there has been a trend in financial market regulation towards less stringent controls and a greater reliance on information disclosure and competition as a means of protecting investors. The cost of complying with regulatory requirements is likely to be a key determinant of the success of securitisation transactions.

4.1.4 The Taxation Environment

In the private sector, issues of taxation can be highly significant. Some jurisdictions levy taxes on the transfer of assets and on cash flows (eg, payments by obligors into the SPV or payments by the SPV to investors). Taxes may also be imposed on profits earned by investments inside the SPV.

² This issue is similar to the legal issue of determining whether a "true sale" of receivables has occurred.

Taxes may make securitisation uneconomic compared to other financing instruments.

Taxation issues are largely irrelevant when securitisations are undertaken by a government since tax paid remains within the public-sector. However, taxation may add costs to the securitisation process if governments conduct their securitisation activities offshore. Offshore securitisations are often used by private firms to get around impediments posed by the domestic regulatory and accounting environments.

4.1.5 Back-office Systems

A final issue of financial infrastructure is the adequacy of documentation and "back-office" systems to support securitisation. The terms of receivables and the documentation supporting them must be sufficiently standardised to permit the assembly of pools of homogeneous assets. There have been examples of practices in various countries that do not meet this criteria, particularly in respect of residential mortgages, commercial real estate loans, and consumer loans.

If considerable effort is required to study each proposed receivable sale in detail, pooling receivables from different originators may not be feasible. Furthermore, it is important to be able to monitor payments, identify delinquencies, and establish standard procedures to deal with delinquency if investors are to purchase assets with reliable cash flows. Credible histories of payments on specific categories of assets are also needed.

4.2 Factors Contributing to Strong Investor Demand

A key determinant of the economic benefits from securitisation is the extent to which the market is "issuer driven" or "investor pulled". Key determinants of investor demand include the expected risk and return characteristics of the security on offer, the degree of protection provided by the structure of the SPV, and the credit rating assigned to the securities by the ratings agencies.

Since investors in asset-backed securities have no recourse to the originator, it is important to ensure that:

- receivables are sufficient to meet the payments promised by the SPV;
- safeguards exist to provide for shortfalls in cash from receivables; and
- investors have clear legal claims on the income from receivables and have adequate protection in the case of delinquency.

Two major developments have arisen to facilitate the reduction and assessment of credit risk: the use of credit enhancement and a greater role for the credit-rating agencies.

4.2.1 Credit Enhancement

Credit enhancement provides a degree of protection to investors against losses resulting from the underlying portfolio of assets. A number of different forms of credit enhancement exist:

- Third party guarantees - an external party, often an insurance company or a bank, provides a guarantee over the debt issued by the SPV. A number of specialised companies called “monoline insurers” have emerged. Their sole function is to offer credit enhancement for fees. The guarantee can be for 100 percent of payments (called “wraparound”) or for some lesser amount;
- Subordinated debt - by creating a “senior/subordinated” structure, the SPV can provide for investors with preferences for differing levels of credit protection. Essentially, some creditors agree to grant priority to other creditors in exchange for higher rates of return. One possibility is for the originator to retain a subordinated tranche but this may create legal and regulatory difficulties in terms of determining whether or not a “true sale” of receivables has occurred. Assets securitised in this way may not qualify for off-balance-sheet treatment. Subordinated tranches will often be assigned lower credit ratings than senior tranches. In some cases, subordinated tranches of securities can be privately placed while the senior tranches are offered publicly.
- Over-collateralisation - the assets put into the pool can be of greater value than is needed to support the contractual payments, so that the investor is protected in the event of a shortfall in expected payments. The excess collateral is often held in a subordinated tranche or special account.
- Cash collateral accounts - a cash deposit can be held in a special account that can be used for payments in the event of a shortfall in cash from receivables. A slight variation is the “spread account”, which represents the difference between the margin received by the originator and that of the investor. The originator will receive payment from the spread account once the other creditors have been paid in full. Cash collateral or spread accounts can be used in conjunction with a senior/subordinated structure.

4.2.2 The Role of the Credit Rating Agencies

A central role for providing investors with assurances about credit risk has devolved to the credit rating agencies. Prior to each issuance of securities, one or more credit ratings agencies examine the receivables, additional collateral³, proposed securities, and the structure of the SPV, and assign a rating to the

³ The rating agencies usually apply the “weak link” principle when assessing externally provided credit enhancements, meaning that the rating of a security can be no higher than the rating of an external provider of enhancements.

securities as an indication of their creditworthiness. The investor must devise other methods of assessing non-credit risks, such as interest rate, exchange rate, and prepayment risk.

The rating agencies examine the historical performance of the receivables and perform “stress testing” on the underlying cash flows. For example, the historical rates of delinquency on receivables will be analysed and simulations undertaken to determine the impact on the portfolio of an extremely unfavourable event, such as the worst sustained period of poor performance in recent history. Based on this analysis, the ratings agencies will indicate the amount of credit enhancement that is required to achieve a desired rating. Negotiations take place between the investment banks and the ratings agencies regarding hypothetical structures and their associated ratings.

The ratings agencies will also look at internal mechanisms for transforming cash flows, whether adequate information systems are in place to accurately track payments and to identify delinquencies, as well as processes for dealing with delinquent payments.

5 Does New Zealand Have a Robust Financial Infrastructure?

In New Zealand, no real impediments exist from a legal, regulatory, tax, or accounting perspective. In fact, the regulatory environment has meant that existing securitisation models from the US and UK have been easily adapted for use in New Zealand.

Two constraints do exist, however. First, the lack of depth of the local debt markets has meant that liquidity and pricing issues can arise, depending on the size of the programme. However, the introduction of the 2% approved issuer levy, coupled with the depth of the FX swap market, has meant that programmes can now be funded offshore on a cost efficient basis.

The second constraint relates to the availability of securitisable asset pools. Most of the traditional assets, particularly residential mortgages and finance receivables, that have not already been securitised are locked up in the trading banks (and their finance subsidiaries). There does not appear to be any present need (either from a balance sheet or competitive perspective) for the banks to securitise these assets themselves. The growth in securitisation activity, therefore, is expected to come from non-traditional assets, such as property or other capital and infrastructure assets.

There is also a range of structural issues that require unique treatment in New Zealand because of idiosyncrasies in our financial infrastructure. These issues relate to designing mechanisms for achieving insolvency remoteness, techniques for avoiding application of the Chattels Transfer Act 1924, and rules for achieving de-recognition under New Zealand GAAP. Such technical issues are beyond the scope of this paper. The surge of securitisation transactions in New Zealand in recent years is evidence enough that New Zealand's financial infrastructure does not create undue barriers to securitisation.

6 Can Liabilities be Securitised?

While much of the previous discussion has focussed on the securitisation of assets, securitisation techniques can also be used to make implicit liabilities⁴ more explicit. For example, securitisation has been used by governments as a means of addressing expenditure arrears problems [Ramos (1998)].

On occasions, governments have unilaterally borrowed from taxpayers, superannuitants, public servants, welfare beneficiaries, and the suppliers of goods and services by running into payment arrears. When governments have expenditure arrears, agents end up with implicit claims on the government for which they have no title and which will be honoured, at best, at some unspecified future date and for an uncertain amount. Having no title to their claim seriously limits creditors' financial management capacity, since they cannot trade or enforce their claims.

In the past securitisation has been used as a means of formalising these implicit debt obligations providing a degree of certainty to creditors and enhancing fiscal credibility (eg, Argentina's issuance of bearer consolidation bonds (BOCONs) to creditors in 1991). Securitisation of implicit debts also enables marketability, which can improve creditors' welfare by allowing them to reallocate their resources in an equitable, transparent, and efficient manner.

⁴ Implicit liabilities are obligations not backed by a contractual agreement.

7 Securitisation as a Public Policy Tool

The main benefits from asset securitisation are more efficient financing, improved balance sheet structure, and better risk management. Securitisation has been used to enhance sovereign credibility. Scope may exist for New Zealand governments to achieve similar benefits, although the trade-off between costs and benefits is likely to be a matter of judgement rather than an outcome from quantitative analysis⁵.

7.1 More Efficient Financing

One of the main advantages that can arise in the private sector when assets are securitised is a reduction in the originator's cost of funds. It is difficult to envisage similar benefits for the Crown since, in most cases, the financing costs of the SPV are expected to be greater than the Crown's overall cost of capital. Essentially, the Government's power to tax its citizens provides the Crown with low borrowing costs since creditors face little risk of default⁶. Even with a high degree of credit enhancement, investors in securitisation vehicles still face some risk that the securitised assets will fail to perform.

A possible exception where securitisation might be an efficient form of Crown finance would be if the country had high and increasing levels of external debt. In such circumstances, the Crown would have a low credit rating and its borrowing capacity may be compromised⁷. It is conceivable that during a period of fiscal stress certain Crown assets (eg, student loans) could be securitised (and financed "off balance sheet") at a cheaper cost than the interest rate on Crown borrowings.

Another issue to consider is whether the deadweight costs of taxation should be quantified and factored into an assessment of the costs of securitisation. It could be argued, for example, that the capital released as a result of a securitisation transaction could be used to fund tax cuts, which would have a flow on affect in terms of lowering the economic costs that taxes impose on the economy. This argument hinges on whether a securitisation transaction provides net fiscal savings, for example, due to improved asset management. Conceivably, securitisation could detract from economic efficiency if any capital released is used for unproductive purposes or to finance unsustainable tax cuts.

⁵ A combination of diverse government activities, concerns with equity as well as efficiency, and information problems prevent a purely quantitative approach to cost/benefit analysis.

⁶ Since governments require permanent access to capital markets and usually have some form of floating rate debt, they cannot escape punishment if they default.

⁷ This is not dissimilar to the financial situations observed in Argentina in 1991, in Russia in 1997/98, and in some South-East Asian countries during 1998/99.

7.2 Improved Balance Sheet Structure

In the private sector, securitisation is used to manipulate balance sheets, for example by improving gearing and profitability ratios. Such activity is often structured to comply with regulations, such as the need to meet capital adequacy requirements. The Crown does not face the same regulatory pressures, although its balance sheet structure is influenced by the Fiscal Responsibility Act 1994 and the Government's published fiscal targets.

One potential benefit for the Crown is the use of securitisation to release large amounts of capital. In this sense, securitisation provides the Government with additional means of achieving its published debt targets⁸. This additional flexibility is not necessarily good from an economic perspective since securitisation is expected to be a relatively inefficient form of Crown financing in most fiscal circumstances.

7.3 Better Risk Management

Securitisation is fundamentally a risk management tool. It enables corporations to separate commercial and business risks from the risks associated with financing their operations. In terms of financing risks, securitisation enables private sector companies to shed funding risk, by making new sources of funding available, as well as reducing interest rate and foreign exchange risk. Securitisation has also enabled some organisations, particularly banks, to remove impaired assets from their balance sheets. Again, this is often done in the case of insolvency or to meet capital adequacy requirements.

In the Crown context, risk management is typically undertaken to improve the strength of the Crown's overall financial position, thereby limiting the need to raise tax rates in response to various economic shocks. However, the multitude and diversity of financial exposures that affect the Crown's balance sheet make it difficult to identify and quantify the risk management benefits of securitisation. Such issues are closely tied to the Government's fiscal policy and the size of the buffer required to maintain fiscal credibility.

It has been suggested that securitisation of student loans might generate risk management benefits for the Crown⁹. This is because the value of loans outstanding is expected to reach \$19 billion by 2024 (at which time it will represent a substantial component of the Crown's entire balance sheet). It will be important, for example, to establish whether differences between the interest rate setting formula and the Crown's borrowing program create an interest rate mismatch for the Crown and, if so, how this should be managed.

⁸ Alternatively, the Government could choose to use the proceeds of securitisation to increase investment without raising taxes or resorting to additional borrowing.

⁹ A fuller discussion of the costs and benefits of securitising student loans is attached as an appendix to this paper.

Securitisation may also be beneficial if it results in an improved credit rating for the Crown. A higher Crown credit rating can generate positive externalities for the economy as a whole, since the Crown's credit rating represents a ceiling for the credit ratings of New Zealand companies.

7.4 Enhanced Fiscal Credibility

Securitisation of implicit debt obligations (ie, obligations not backed by a contractual agreement) has the potential to enhance fiscal credibility by increasing transparency, signalling the government's commitment to honour its obligations, and allowing the transfer of legal title. Since market mechanisms enable the punishment of governments who default on their debt obligations, renegeing on policy commitments becomes costly and represents a binding constraint on the government.

The IMF argues that such arrangements are credible since default on these securities will be as damaging to internal and external credibility as defaulting on any other transparent claim. They argue that the need to maintain credibility in financial markets provides governments with major incentives to increase transparency in their financial dealings.

Of course, a pre-requisite for enhanced credibility is fiscal affordability. In public finance parlance, the Intertemporal Budget Constraint must be satisfied. Without this, the securitised debt may be perceived as *Junk* resulting in a steep discount in the secondary market. Securitisation has been used successfully in the past to enhance fiscal credibility where governments have fallen into expenditure arrears.

Securitisation of public financial assets might also help fiscal credibility. For example, one option open to the Crown to help manage its future demographic expenditure pressures is to pre-fund (by running surpluses and building up financial assets). In order to achieve a credible pre-funding policy, it will be necessary to protect these assets from political mismanagement. One way of achieving this may be to securitise the assets, and to have the SPV issue securities to the Crown with a payoff profile that mirrors the demographic expenditure profile. However, securitisation of future expenditures in areas such as superannuation and health would raise serious policy and design issues.

8 Summary and Conclusion

Securitisation techniques have a number of potential public policy uses. These include more efficient financing, improved balance sheet structure, better risk management and improved fiscal credibility. However, two factors limit the extent to which these advantages are achievable.

First, the sovereign power to tax provides the Crown with low borrowing costs that, under most foreseeable fiscal circumstances, make securitisation a relatively expensive financing option. Second, the multitude and diversity of financial exposures that affect the Crown's balance sheet make it difficult to quantify the risk management benefits of securitisation.

There is scope for the use of securitisation to enhancing fiscal credibility, particularly in the area of superannuation where sustainability and policy credibility are crucial determinants of a successful policy. A pre-requisite for successful securitisation of the government's pension liabilities will be a fiscally sustainable expenditure profile and efficient management of any supporting assets.

9 References

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APPENDIX ONE

COSTS AND BENEFITS OF SECURITISING STUDENT LOANS

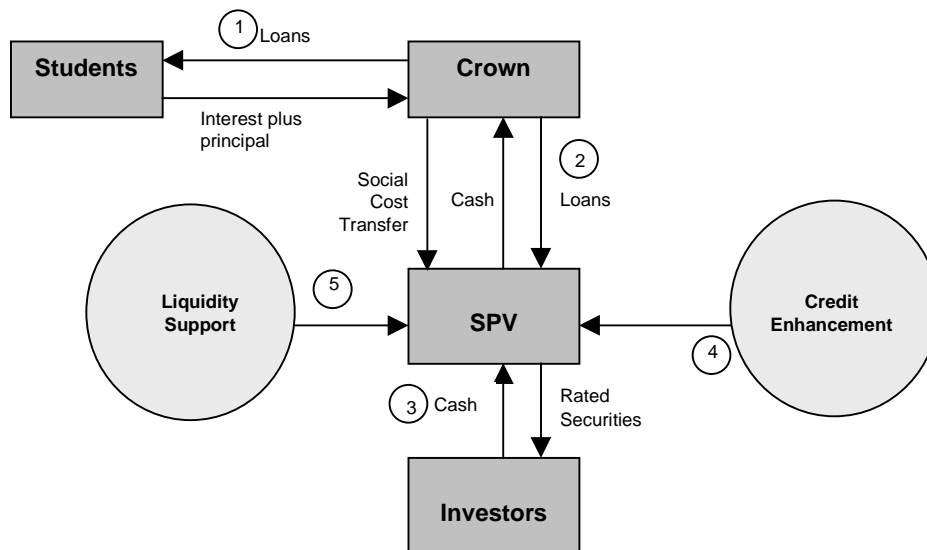
Introduction

A number of financial institutions have approached the Crown with proposals to securitise the student loans portfolio. The proposals are generally based on the premise that the loans scheme performs both commercial roles (ie, the provision of the loans themselves) and social roles (ie, concessionary interest rates, non-commercial origination criteria, and income-contingent repayment rules) and that these roles can be separated and managed individually.

Most proposals maintain that the commercial risks would be better managed in the private sector but that the Crown should continue to retain the social risks implicit in the student loans scheme. This paper assesses the costs and benefits associated with securitising student loans.

Structural Issues

While the proposals vary in terms of specific structural features, most are consistent with the following generic diagram:



1 *Borrowing Relationship*

The relationship between the Crown and the students would be maintained. The Crown would retain the right to determine scheme parameters, such as the interest rate setting mechanism, the repayment rules, and the write-off provisions. The primary interface with borrowers would also be maintained, with both the Student Loan Accounts Manager (SLAM) and the Inland Revenue Department (IRD) retaining their existing administrative functions. These entities would receive a commercial fee for their services.

2 *Sale of Loans*

The Crown would sell loans to a bankruptcy remote SPV. Credit enhancement, loan selection criteria, and transfer pricing would be used to ensure that the transaction remains attractive to investors.

Legal agreements would delineate the rights and obligations of all parties, including the appointment of IRD as the collection agent. The Crown would be required to compensate the SPV for providing concessions to borrowers (including the costs necessary to hedge risks created by the non-commercial features). Elements of the scheme likely to require compensation include¹⁰:

- The effective interest rate subsidy;
- The interest rate risk created by differences in the reset frequency of the loans (annually) and the term of reference rate (10-year government bonds);
- Principal write-off upon death of a borrower; and
- Base interest write-offs, when the borrower's annual repayments do not cover the annual real interest charge on the debt.

Changes to scheme parameters, resulting from changes in Government policy, could be accommodated by entering into new or varied social cost transfer arrangements. Independent expert advice would be sought to ensure that the compensation arrangements were fair to all parties involved.

3 *Debt Financing*

The SPV would finance the purchase of the loans by issuing rated debt securities into the capital markets. To ensure efficient risk-sharing, the securities would be structured to reflect the long duration and uncertain repayment characteristics of the loans. Depending on the risk appetite of investors, the SPV could either issue "pass-through" bonds, thereby transferring the repayment risk directly to investors, or it could issue multiple tranches of debt, each with different maturity characteristics, designed to reflect the expected repayment profile.

A dual issuance into both domestic and offshore markets would be required because of the limited size of the domestic debt market and the large size of the loans portfolio. To the extent that there is greater demand for the SPV's debt from offshore, issuing into offshore markets is likely to reduce the cost of

¹⁰ The other social features, such as the non-commercial origination criteria and the long-term income-contingent nature of the loans, could be addressed within the structure of the SPV without requiring direct compensation by the Crown.

securitisation to the Crown. The Crown would not guarantee the debt issued by the SPV.

4 *Credit Enhancement*

To ensure an adequate credit rating for the SPV's debt, the Crown and other third parties will be required to provide credit enhancement. Factors affecting the level of credit enhancement include:

- The price paid for loans by the SPV
- The risk of the portfolio, which is a function of:
 - the non-commercial origination criteria;
 - the income-contingent repayment rules;
 - the SPV's loan selection criteria;
 - the strong collection mechanism, being compulsory deductions via IRD; and
 - the difficulty in collecting repayments from borrowers residing offshore
- The requirement for a strong credit rating to enable the issuance of large volumes of securities at an adequate cost-of-funds.

Most proposals would have the Crown providing "first loss" credit enhancement (generally capped at a fixed percentage of the portfolio value). This could take the form of a loan loss insurance facility, letter of credit, or subordinated debt. The "first loss" support would reflect both the special credit characteristics of the loans and the normal credit risk of the loans. Alternatively, a portion of the "first loss" support could be provided by third parties (eg, banks and monoline insurers) for an appropriate price¹¹.

Third parties would provide "second loss" credit enhancement sufficient to achieve the desired credit rating of the securities. This would probably be in the form of subordinated debt securities that could be sold to investors seeking higher yields. This "senior/subordinated" structure allows more efficient risk-sharing by parcelling up different types of risk and marketing it to those most willing to bear it.

¹¹ The cost of externally sourced credit enhancement would ultimately be borne by the Crown through the compensation arrangements agreed between the Crown and the SPV.

5 *Liquidity Support*

Liquidity support would be provided to the SPV to assist it in managing any cash flow timing differences that may arise. This is usually provided by a financial institution and is expected to represent only a very small percentage of the total quantum of securities issued.

Benefit Assessment

A number of arguments have been put forward in support of securitisation:

- Enables debt reduction;
- Reduces balance sheet exposure;
- Results in divestment of commercial activity;
- Improves transparency;
- Protects the sovereign credit rating;
- Enhances political flexibility; and
- Continuity of origination, collection and servicing functions.

Of these, the potential risk management benefits and the consequent release of capital (assuming it is used more productively) discussed in Section Two, are the most compelling. Some of the potential benefits, such as improved transparency, are merely by-products of the securitisation process and could be achieved through other means.

The following paragraphs comment on the proposed benefits in greater detail. Where relevant, outstanding issues have been highlighted and questions raised to prompt further discussion. The discussion has been ordered from the least compelling reasons for securitisation to the more convincing. Some of the arguments have been grouped for reasons of brevity.

Transparency and Continuity

The benefits of transparency and continuity, while not disputed, are not considered in this paper since these two objectives are achievable through other means. However, to the extent that securitisation is considered beneficial for other reasons, the benefits of transparency and continuity should not be overlooked.

Divestment of Commercial Activity

Divestment of commercial activity is a means of enhancing economic efficiency rather than an end in itself. The gains from divesting Crown commercial assets arise from improved managerial decisions, better incentives and stronger accountabilities, rather than from a reduction in commercial risk or the release of capital for debt repayment.

The student loans portfolio is less susceptible to mismanagement than other Crown commercial activities, since managerial discretion regarding the loans portfolio is limited and the scheme parameters are clearly specified in legislation. As such, I expect the efficiency gains from securitisation to be relatively minor.

Protection of Sovereign Credit Rating

The Crown should only be concerned with its credit rating to the extent that it impacts on social welfare, for example, through a strong link between the Crown's credit rating and the cost of borrowing within an economy. Assuming that the Crown's credit rating is currently below that required to maximise welfare, securitisation of student loans may be beneficial if it results in an improved credit rating. Without supporting evidence, a number of "leaps of faith" are required to conclude that securitisation is beneficial on these grounds.

However, I am sympathetic to this line of reasoning, particularly in light of the growth that is projected in the loans portfolio over the medium term. The Crown's credit rating is closely linked to perceptions of fiscal sustainability and Crown risk more generally. I consider that this is an avenue for further work.

Debt Reduction

Securitisation of student loans would release a large amount of capital for other uses. At issue is whether those other uses represent more productive uses of capital once the costs of securitisation are taken into account.

The Government currently has a policy of reducing both gross and net debt. In addition, the proceeds of asset sales are typically earmarked for debt repayment. However, as discussed earlier, releasing capital is not the primary motivation for selling Crown-owned businesses. Rather, having made the decision to sell an asset on efficiency grounds, debt repayment has been considered to be the most appropriate use of the free cash flow created. Other potential uses of free cash flow include tax cuts and increased public expenditure.

In most circumstances, the costs to the Crown of securitisation can be expected to be greater than the Crown's overall cost of capital¹². As long as this remains true, at the margin, it is difficult to envisage significant benefits from using the proceeds of securitisation to finance debt reduction. It is also difficult to assess the relative benefits of other options, such as tax cuts, without further detailed analysis.

Reducing Balance Sheet Exposure

The value of outstanding loans is expected to reach \$19 billion by 2024. At this level, the portfolio is expected to dominate the Crown's balance sheet (under current policy settings) and the issue of risk management will become more important. For example, it will be important to determine whether the interest rate setting mechanism exposes the Crown to an interest rate mismatch and, if so, whether that should be actively managed or not. Similar questions should be asked about the degree of credit risk exposure faced by the Crown.

So far little has been done to quantify and assess the Crown's actual risk exposure to the student loans portfolio. While I accept that there are potentially significant benefits to the Crown from improved risk management, I would require additional information (and, if possible, quantification) on the nature of those benefits and on the costs of securitisation, before I could make a judgement on the merits of securitisation.

It would also be surprising if securitisation was the only means of managing these exposures. Interest rate swaps and credit risk options, for example, may also be useful tools for achieving the desired levels of interest rate and credit risk. Other options would be unlikely to result in de-recognition of the loans. The risk management benefits of securitisation will need to be assessed against other risk management techniques.

Assessment of Potential Disadvantages

- Releasing Capital for Unproductive Uses

Although debt repayment may present little scope for financial mismanagement, there remains scope for efficiency losses if the cash is used for other purposes. In this sense, the Crown's holding of a relatively non-fungible loan asset may be preferred to a highly fungible cash asset, particularly if the loans are reported as part of net debt.

- Increased Cost of Funds

Tentative indications of the operating costs of securitisation have been provided by a number of financial institutions. These costs range from 50 to 150 basis

¹² A possible exception would be if the Crown's credit rating was substantially lower, or if securitisation was perceived favourably by the financial markets.

points above the Crown's cost of borrowing and do not include the cost of providing credit enhancement. The risk management and other benefits from securitisation would need to be significant to outweigh the increase in the Crown's cost of funds.

Overseas Student Loan Securitisations

It is worthwhile considering the reasons for securitisation of student loans in other jurisdictions, notably the UK and the US, and whether similar circumstances apply in New Zealand.

United Kingdom

In March 1998, the UK Government successfully completed a securitisation of \$1.0 billion of student loans. The transaction involved the issuance of pass-through bonds in six tranches. The UK Government provided first loss credit protection for student loan defaults, in the form of cover for loans which have been in arrears for over 24 months, up to a maximum of 4.75% of the portfolio. A further proposed transaction was announced in June 1998.

The transaction was motivated by a "manifesto pledge" to stay within the UK Government's published spending plans. The Government indicated that it was keen to transfer the default risk associated with the unsecured loans to the private sector, arguing that the private sector is better placed to manage that risk. The Government also argued that securitisation will enable markets to develop a better understanding of the student loan product, possibly permitting a greater role for private sector financing in the future [Department for Education and Employment Press Release, 1998].

The scheme parameters, such as deferment rights, the interest rate setting mechanism, and the repayment terms, were fixed upon settlement and cannot be changed unilaterally by the purchaser, the administrator, or the government without violating the terms of the agreement. The securitised loans were not income-contingent and the government has announced that it has no intention of selling the income-contingent loans [Student Loan Debt Sale - Question's and Answers, 1998].

The concessionary nature of the schemes means that the UK Government will have to pay additional subsidies to the purchaser. The present value of these subsidies is in the order of \$350 million, compared with an estimated cost of \$300 million if the loans had remained in public ownership. This represents an increase in cost of almost 17 per cent.

It was previously identified that potential improvements in risk management were likely to be the most compelling argument for securitisation of student loans. Risk management benefits were certainly claimed in the UK case, however, fiscal constraints also appeared to be a significant factor.

United States

The US environment is considerably different than New Zealand. In the US, funding of student loans is typically provided by private institutions, albeit in a regulated environment, at rates that are less concessionary than the New Zealand scheme. Many of these loans are then purchased by Sallie Mae, a government-sponsored financing intermediary. The loans are usually guaranteed by the Department of Education.

Until recently, Sallie Mae has been financing loan purchases by issuing debt to the Federal Financing Bank. A constraint on this source of funds, in 1996 and 1997, caused Sallie Mae to complete four securitisations involving USD 15.4 billion of student loans.

Two elements of the US environment are sufficiently different to prevent direct comparisons with the New Zealand situation. First, loan finance is privately provided, and so the additional costs of securitisation are unlikely to be as significant because of the narrower spread between the funding rates of the loan originator and the SPV. Second, the loans are provided at less concessionary rates, so the financial costs to the government of the social goals of the scheme are much smaller.

Summary

While the various securitisation proposals appear to be feasible, it is not clear from a cursory analysis that the benefits would exceed the costs. Indeed, the benefits would have to be quite significant given the additional costs associated with securitisation relative to other forms of Crown finance.