

**THE CHANGING LANDSCAPE OF THE AUSTRALIAN SECURITISATION
MARKET AND THE ROLE OF CORPORATE TRUSTEES**

July 2010

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This Thesis is presented for the degree of Doctor of Business Administration

Macquarie Graduate School of Management

Professor Richard Petty - Supervisor

CERTIFICATION

I certify that the work in this thesis entitled THE CHANGING LANDSCAPE OF THE AUSTRALIAN SECURITISATION MARKET AND THE ROLE OF CORPORATE TRUSTEES has not previously been submitted for a degree nor has it been submitted as part of requirements for a degree to any other university or institution other than Macquarie University.

I also certify that the thesis is an original piece of research and it has been written by me. Any help and assistance that I have received in my research work and the preparation of the thesis itself have been appropriately acknowledged.

In addition, I certify that all information sources and literature used are indicated in the thesis.

The research presented in this thesis was approved by Macquarie University Ethics Review Committee, reference number HE23JUN2006-D04751 on the 8TH November 2006.

A handwritten signature in black ink, appearing to read 'Robert McCabe', is written in a cursive style.

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ABSTRACT

There are many different definitions for securitisation and there are many different business models for the participants that comprise the market. The rapid growth of the industry and the increasingly complex structured solutions on offer has increasingly blurred the definition and scope of securitisation itself. The mortgage value chain, as the largest component of securitisation, is also undergoing significant change as competition increases and profit margins decline.

Australia's preference for the Trust structure in securitisation has given Corporate Trustees a prominent role in transactions that is unique and central to the Australian industry. The role of the Trustee to act on behalf of investors while also facilitating the complex nature of securitisation funding and financial transaction flows has given it a position that can be seen to act as providing a fiduciary duty while being commercially successful at the same time.

The growth of securitisation and increased level of importance to the provision of asset funding as a means to fund business growth has created opportunities for mortgage manufacturers to avail of and be part of the funding component of the value chain while increasing their overall profits from mortgages. Mortgage Brokers have an increasingly important role in the mortgage industry's distribution channels, and lenders are trying to improve the structure of broker commissions in order to improve loan profitability within this sector. Despite advances in technology and the proliferation of internet and telephone capability in financial services, the proverbial "high street branch" has a very important part to play given the size of the financial transactions involved and the preference that consumer's have for face-to-face contact. Increasingly sophisticated customer requirements, and the desire to contain costs and add efficiency has brought about much change in the

mortgage process. Increasingly, the need to push more of the mortgage processing work closer to the initial contact points with the customer in order to turn information into electronic formats that can be quickly dispersed to other parties, and the desire to quicken funding decisions has taken precedence over having a sequential set of stages in the securitisation value chain of events. The complexity and fragmentation of the Australian securitisation market is fuelling opportunities as well as challenges for its members and participants.

Technology in the securitisation industry 10 years ago was largely centralised and based on in-house systems that were designed to meet the needs of one party. Things have changed since then as technology in the securitisation industry is being driven by the extensive changes taking place at an industry level. Increased competition, value chain fragmentation, demand for improved and increased services, increasingly complex financing structures, and more regulated lending practices are all contributing to the changes in technology use.

The use of integrated technology that is delivered in modules is becoming more important given the need to meet demand quickly, provide electronic data exchange with different stakeholders and provide an efficient service. The fragmentation of the industry means that participants do not have to build end-to-end market solutions to operate in the industry but can instead concentrate on their own area as long as they can link to other parties in the industry. However, industry participants increasingly have to make choices when deciding on their technology strategy and when making decisions as to whether to use technology to outpace, keep up or stay behind the rest of the industry.

Traditionally the Trustee role has been carried by professional Corporate Trustees that were valued for their independence and specialist skills. The expansion and increased complexity

of the securitisation market has allowed the Corporate Trustees to find commercial success and build a specialist outsourced administration service.

The unbundling of the securitisation value chain and the opening up of the administration services part of the market is creating opportunities for parties such as Corporate Trustees to provide more specialist administration services. Administration is no longer tied to securitisation funding, and improvements in technology have allowed Corporate Trustees to provide services that are more closely tied to the value chain.

Corporate Trustees have built up a range of securitisation and administration skills. These skills, along with investments in technology, can be positioned to also add on new administration services creating an attractive outsourcing option for asset funders and product manufacturers. The Corporate Trustee has a unique opportunity to build upon its current position in the securitisation industry, while balancing its fiduciary obligations, to meet the commercial demands that will exist.

The Corporate Trustee business model has played an important role in the Australian securitisation market since its inception. The majority of programs now use a Trust structure.

This research highlights that the current process around securitisation is complex and involves a number of manual steps. As part of the review of this process, this thesis aims to clarify the Trustee's role regarding the steps that should be taken during an on-going securitisation program. This thesis is divided into a number of sections covering the Trustee's legal obligations, the role of the Trustee, the securitisation distribution current process, the role of technology, options for the future, and concluding recommendations.

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GLOSSARY OF KEY TECHNICAL TERMS

COLLATERALISED DEBT OBLIGATIONS (CDO) – This refers to securitisation transactions that are secured by debt assets which are pooled together and then funded by the issuing of debt securities

COLLATERALISED MORTGAGE OBLIGATIONS (CMO) – These are a follow on from mortgage pass-through securities that had first appeared in the early 1970s, and have tranching arrangements collateralised with pools of residential mortgages

COMMODITISATION – Refers to the proliferation of new products in a market that contribute to making existing products more homogeneous

CORPORATE TRUSTEES – These are professional companies that provide the services to establish and maintain Trusts or Special Purpose Vehicles

CREDIT DEFAULT SWAPS (CDS) – Assets in a securitisation collateral pool can range from cash instruments (for example residential mortgages, credit card receivables, loans and bonds) or have a synthetic exposure which are known as credit default swaps

FIDUCIARY DUTY – Corporate Trustees have a general fiduciary duty to act in the best interest of trust beneficiaries, to effectively monitor a company such that is a debt issuer or a fund manager, and to be able to act independently in accordance with the relevant trust deed

MORTGAGE BACKED SECURITIES (MBS) – These are securities that are collateralised by mortgages that are packaged into a securitisation funding program that is then issued through bonds to the capital markets

MORTGAGE MANUFACTURER – This refers to an organisation that designs and offers mortgage products for distribution

OUTSOURCE – This refers to a commercial arrangement where one party will allow another party to perform a service on their behalf which the initial party could have done themselves

RESIDENTIAL MORTGAGE BACKED SECURITIES (RMBS) – These are securitisation transactions that have packed residential mortgages with collateralised obligations issued in the form of bonds

SECURITISATION – This can be defined as a means of providing funding through a process aimed at creating a liquid market for assets, such as mortgages and credit card loans. The relevant assets are pooled into a special purpose vehicle (SPV) or Trust which is funded by issuing securities backed by the cash flows of the asset pool

SERVICE LEVEL AGREEMENTS (SLA) – This refers to an agreement that defines service standards and expectations between different parties

SPECIALISED PURPOSE VEHICLE (SPV) – This is a legal entity, either a company or trust, that is set-up for a specific purpose. In securitisation SPVs are used pool assets which then funded by issuing securities backed by the cash flows of the asset pool

STRUCTURED FINANCE – Can be defined as a form of financial intermediation, based upon securitisation technology, which involves the pooling of assets and the subsequent sale to investors of claims on the cash flows backed by these pools

STRUCTURED FINANCE INSTRUMENT – This usually involves a complex debt instrument involving medium term note which the issuer enters into one or more swap arrangements to change the cash flows it is required to make

TRUSTEE- This usually refers to a relationship in which a person, called a trustee, holds title to property for the benefit of another person called a beneficiary

VALUE CHAIN - The mortgage value chain concept refers to the main end to end activities associated with offering mortgages. Value chain analysis is a technique that disaggregates a firm into its strategically relevant activities in order to understand the behaviour of costs and the existing and potential sources of differentiation.

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ACKNOWLEDGEMENTS

I would like to thank my wife, Julie McCabe, for all her support during the various stages of this work. Her encouragement and love is much appreciated.

I would like to thank my Supervisor, Professor Richard Petty, for all his advice, assistance and direction during the various stages of this work. His guidance is much appreciated.

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CHAPTER ONE – BACKGROUND: CONTINUOUS CHANGE IN THE SECURITISATION MARKET

1.1 Introduction

The aim of this thesis is to present an overview of the changes in the securitisation market and its impact on Corporate Trustees. In addition the thesis sets out to present a concise history of the changes that have taken place in the securitisation industry in Australia, showing how the market continues to change as the mortgage value chain evolves. This context then allows the thesis to discuss opportunities for Corporate Trustees in this market to provide outsourced services that may lead to commercial outcomes and the development of a commercial strategy for Corporate Trustees.

This chapter sets out the significance of the topic for this thesis and the objectives of the research. It also covers an overview of the outline of the thesis, the theoretical thread for the research as well as discussing the main participants in the industry. The chapter highlights the changes taking place in the mortgage value chain which has a big impact on the securitisation market and its participants.

The motivation for doing this research was drawn from my experience in the securitisation market, and in particular during the time spent working for a Corporate Trustee. This chapter sets out the background for the research and provides an outline of the thesis structure.

1.2 Problem and Significance

Securitisation can be defined as a means of funding assets and the securitisation process aims to create a liquid market for assets, such as mortgages and credit card loans. The relevant assets are pooled into a special purpose vehicle (SPV) which is funded by issuing securities backed by the cash flows of the asset pool (Liaw, Alvin and Guy 2000). In Australia most SPV's are set up as Trusts and these are run by professional Corporate Trustee companies that provide the services to establish and maintain the various Trusts.

The Australian securitisation market has increased in size from just over \$16 billion assets securitised in 1996 to over \$180 billion in September 2009 (Reserve Bank of Australia Statistics, 2009). The successful growth of the market has brought benefits for a number of parties; investment banks structuring deals, commercial banks and financial services companies seeking funding, and transaction managers running the securitisation programs. One group that does not steal the headlines but has quietly profited from the growth of the securitisation market are the Corporate Trustees that maintain the legal structures that allowing repackaged assets to transform into bonds issued through the debt capital markets. Corporate Trustees have benefited from the fact that the Australian capital markets have preferred to use the trust structure rather than the special purpose companies more favoured by the Europeans (Salter, 2001).

Some Corporate Trustees have extended their product range to offer ancillary services but it is still the 'Trustee/security Trustee' products that secure their commercial viability. This narrow range of services exposes Corporate Trustees to key product risk, forcing them to depend on the structuring preferences of the financial services market. Currently, there are a number of issues that could impact on Corporate Trustees future including the following:

Internationalisation – Continued Internationalisation of the debt capital markets is evident and the Australian securitisation market now issues over 50% of its bonds overseas. This trend poses significant challenges to domestic Corporate Trustees, as they are required to report to and pay overseas (Michaux, 2002).

Regulatory issues – The release of the BASEL guidelines on capital adequacy requirements in 2007 impact the regulatory reporting of financial institutions. This change will impact the types of assets Corporate Trustees are allowed to administer and the relationship they have with other financial institutions (Australian Securitisation Forum, 2002).

Focus on Core Business – There is increased demand for quality-outsourced services in the financial markets as institutions try to focus on core skills. This presents both an opportunity and a threat to Corporate Trustees.

Technology – Technology advancements impact on operational efficiencies and have a significant role in the type and quality of services Corporate Trustees can offer.

Corporate Governance – After the collapse of energy trading company Enron there has been a significant review of asset transfers and the use of special purpose entities, including trusts, by regulators and investors (Hogan, 2002).

An analysis and search of various information sources reveals a gap in the current literature on Corporate Trustees. Most of the current research discusses the role of Corporate Trustees in the Superannuation industry. The literature that does exist, on Corporate Trustees operating in other industries, tends to be from a legal perspective (Salter, 2001) or from an ethical and Corporate Governance perspective (Monks, 2001). Education courses tend to focus on the

role of Corporate Trustees from a convenience perspective such as outlining the simpler legal structure with less reporting requirements, rather than from a commercial perspective (Australian Securitisation Forum, 2000).

Treating Corporate Trustees as commercial enterprises, with the normal commercial pressures to attract/retain profitable client business and to generate investment returns for shareholders, is not evident from the current literature. It is this gap that this research intends to target, by presenting Corporate Trustees as commercial enterprises facing numerous challenges.

1.3 Research Project Objectives

The objectives of this research project are:

- To present a concise history of change within the securitisation market
- To show how the securitisation market continues to change and how the mortgage value chain changes have occurred
- To evaluate opportunities for Corporate Trustees to provide outsourced services to the Australian securitisation market
- To present a commercial strategy for Corporate Trustees to build a suite of services to offer to the Australian securitisation market

The author has chosen to study a topic that relates to his work environment and has constructed a literature search and review that centres within the Australian securitisation market. There are many other topics relating to securitisation that could be the focus of detailed research, but the role of Corporate Trustees, and, in particular, their future strategies and marketing efforts to provide outsourced services to clients, is of particular interest.

1.4 Thesis Structure

Chapter	Overview
Chapter One – Introduction: Continuous Change in the Securitisation Value Chain	Introduces the relevance of the topic and objectives of the research; Provides an overview of the layout of the thesis, the theoretical thread and the changes taking place in the mortgage industry that are impacting securitisation
Chapter Two – Literature Review	The literature review of the existing material and gaps. Discusses the history of securitisation and how it has changed over time through expansion coinciding with the introduction of greater complexity and then discusses the changes in the industry particularly around outsourcing and the role of the Corporate Trustee
Chapter Three – Data Collection and Research Methodology	Covers the methods used to carry out the research for the thesis showing the participant in the setting and the methods for gathering data
Chapter Four – The Role of Corporate Trustees in Servicing the Australian Securitisation Market	Discusses the role of Corporate Trustees in the Australian securitisation market by examining the legal obligations, operational processes, options for the future and challenges of managing stakeholder expectations
Chapter Five – System Technology Challenges for Corporate Trustees	Outlines the importance of technology in the securitisation market and the future pressures on technology decisions for Corporate Trustees
Chapter Six – Corporate Trustee Strategy Review	Discusses Corporate Trustees strategic options and the types of new commercial services that could be developed with recommendations
Chapter Seven – Conclusion and Follow-up	Outlines the main findings and ties back to the theory used in the thesis; Highlights some of the limitations with this research
Chapter Eight – Future Outlook and Implications	Recommendations for future study

Table 1.1 – Thesis Layout

The table in 1.1 shows an overview of the thesis.

Chapter one covers an introduction to the thesis, overview of the research topic and an outline of the research objectives. It outlines the theoretical thread of the thesis as well as providing an overview of the different roles within the securitisation industry. It focuses on presenting the background material for the thesis especially changes taking place in the mortgage lending chain and some of the parties involved in this chain.

The literature review is covered in chapter two. It defines securitisation and reviews the history of securitisation. The chapter aims to build a picture of the changes that have occurred in the industry over a short period, and how securitisation has changed from being a financial-term with a narrow definition to being more broadly representative of Structured Finance.

After outlining the changes taking place in the industry the chapter focuses on the specific changes around outsourcing taking place and discusses the role of the Corporate Trustee and the gaps in the literature.

Chapter three covers the research methodology used for the thesis and the means used for data collection. This thesis is a qualitative study and the researcher has been a participant in the industry and used this access to gather information and material for the thesis.

An outline of Corporate Trustee's role in the securitisation industry is outlined in chapter four and the issues with that role are discussed. It also presents the operational processes for securitisation distributions that are at the heart of the Corporate Trustee's duties as well as discussing the future options for Corporate Trustees.

Chapter five discusses the impact of technology on Corporate Trustees as well as the choices for use of technology. Chapter six presents a strategic review of the role of Corporate Trustees with a particular focus on some of the future options for Corporate Trustees.

A summary of the findings and conclusions are presented in chapter seven and chapter eight covers implications of the research and offers a perspective on the future for the securitisation industry.

1.5 Theoretical Thread for the Thesis

Stakeholder theory is a theory of organisational management and ethics (Philips, 2003). While it can be said that all theories of strategic management have some moral content it is often implicit stakeholder theory is more explicit and belies that managing for stakeholders involves

attention to more than simply maximising shareholder wealth. Attention to the interests of those who are linked to the achievement of the organisation's objectives is central to the theory.

Given the number of different parties involved in a securitisation transaction and the central role of a Corporate Trustee I have chosen stakeholder theory as the theoretical tread to link the thesis together and to base the research findings. Corporate Trustees have both an explicit fiduciary obligations as well as commercial objectives and balancing these two areas have the potential to be incompatible.

Author	Normative Core
Argandona (1998)	Common Good
Burton & Dunn (1996)	Feminist Ethics
Wicks, Gilbert, & Freeman (1994)	
Clarkson (1994)	Risk
Donaldson & Dunfee (1999)	Integrative Social Contracts Theory
Donaldson & Preston (1995)	Property Rights
Evan & Freeman (1993)	Kantianism
Freeman (1994)	Doctrine of Fair Contracts

Table 1.2 – Normative Justifications for Stakeholder Theory (Phillips, 2003)

Traditionally, the view of organisations was that the shareholders were the prime beneficiaries of the organisation and therefore there was a primary duty to increase value for these stakeholders. Theoretical models of the organisation could use an input-output model to show how the efforts of employees could be used to produce goods that bought by customers thus providing a return to investors for their original capital. Thus those that rely on economic explanations of firm behaviour view stakeholders as having an active value, of helping an organisation achieve its objective of maximise shareholder wealth (see Ansoff, as cited in Freeman [1984]). However, more modern stakeholder theory argues that a broader range of parties should be taken into account including government, competitors, prospective employees and the public at large. This latter view has a more moral context within its arguments and according to Dunn there are two variations to this side of the theory (Dunn, 1996). The utilitarian version (Donaldson and Dunfee, 1999) sees stakeholders as having instrumental value and they help the organisation achieve its aims. However, the deontological version (Evan and Freeman, 1993) relies on Kantian ideas to given stakeholders intrinsic values thus organisations must recognise these stakeholders' rights and not violate them.

Critical Distortions	Friendly Misinterpretations
Stakeholder theory is an excuse for managerial opportunism (Jenson, 2000; Marcoux, 2000; Sternberg, 2000)	Stakeholder theory requires change to current law (Hendry, 2001a; Van Buren)
Stakeholder theory cannot provide a sufficiently specific objective function for the corporation (Jensen, 2000)	Stakeholder theory is socialism and refers to the entire economy (Barnett, 1997; Hutton, 1995; Rustin, 1997)
Stakeholder theory is primarily concerned with distribution of financial outputs (Macoux, 2000)	Stakeholder theory is a competitive moral doctrine (Orts & Strudler, 2002)
All stakeholders must be treated equally (Gioia, 1999; Macoux, 2000; Sternberg, 2000)	Stakeholder theory applies only to corporations (Donaldson & Preston, 1995)

Table 1.3 – What Stakeholder Theory Is Not (Phillips, 2003)

There are some misinterpretations of the theory as well as critics as outlined in table 1.3 and these highlight some of the misunderstandings, friendly or otherwise, about stakeholder theory.

Throughout the thesis, the research is presented in terms of different entities that are involved in the securitisation Industry and this has been a common thread in the material as the changes have been most pronounced when discussed in the context of impact on parties. In particular, for the Corporate Trustee, their role centres on engaging and dealing with other parties as well as managing the demands of their internal stakeholders. These touch points and impacts are very important as the stakeholders for Corporate Trustees are numerous and have different demands and objectives.

The stakeholder view of strategy is an instrumental theory of the organisation, integrating both the resource-based view as well as the market-based view, and adding a socio-political level in order to show the complete environment. However, this thesis does not set out to present a balanced view of all the stakeholders in all organisations, but instead tries to describe the different parties in terms of their interaction with each other in the context of the changing landscape of the securitisation Industry and the impact that the changes are having on Corporate Trustees.

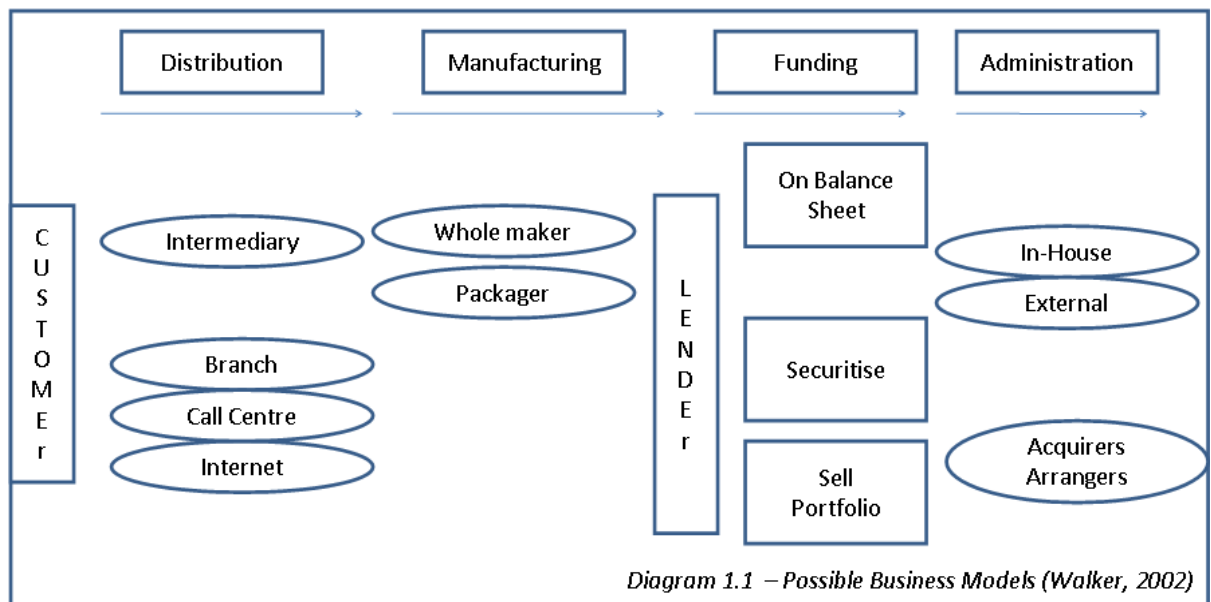
The expectations based on theory is that the thesis will show the challenges for Corporate Trustees to balance all stakeholder needs given the changes in the securitisation industry and the potential conflict between balancing fiduciary and commercial objectives. However, the thesis is also expected to show that the fiduciary and commercial objectives can be met through having a good strategic plan.

1.6 The Mortgage Value Chain

As mortgages make up the largest portion of all bonds issued in the Australian securitisation market, the mortgage industry has a very big influence on the market. The mortgage industry has become more competitive in recent years as barriers to entry and exit have reduced. Arguably the most explicit example of these developments in Australia has been the rapid success of the non-bank mortgage managers. These organisations obtain wholesale mortgage funding from securitisers and were able to lend at much cheaper interest rates than the banks and attract significant market share (Walker, 2002).

Barriers to entry in the industry are being challenged through the increasing importance of phone and internet distribution channels supported by growing technological advancements, the growing availability of outsourcing options reduces capital requirements, and wider availability of funding options. While a traditional financial services brand is no longer a pre-requisite to offering financial services as a number of supermarkets and other retailers have launched financial services offerings, extending their established brands and exploiting their existing customer relationships (Walker, 2002).

Value chain analysis is a technique that “disaggregates a firm into its strategically relevant activities in order to understand the behaviour of costs and the existing and potential sources of differentiation.” (Shank, 1998). The mortgage value chain concept refers to the main end to end activities associated with offering mortgages. These include, funding, manufacturing, administration and distribution. Industry participants are faced with an increased number of options at each stage in the value chain.



The Australian mortgage value market is a complex and dynamic structure which allows borrowers numerous points of access to lenders, and offers lenders a variety of options at each stage of the value chain. Parts of the value chain in the mortgage market have also unbundled as specialists concentrate on key parts of the process and others outsource parts of their services to others. There has been a gradual move in this direction in the Australian market in recent years with the growth of specialised Third Party Administrators, packagers and mortgage sourcing companies, providing good examples of this shift.

In comparison to the US/UK markets, the Australian market would be closer in make-up to the UK market where the loan products have similar features and the types of parties are similar in nature. The main difference with the UK market is the range of features associated with Australian mortgages tends to be wider and rules around property ownership and transfer vary to a degree as well which gives rise to differences in legal documentation. The US market's mortgage product differs again to both UK and Australia mainly due to the longer terms with which loans can be fixed while institutions both in the UK and Australia tend to prefer relatively shorter fixed terms that do not cover the entire period of the loan.

		Funding	Manufacturing & Packaging		Fiduciary & Administration	Distribution	
Model	Example		Product	Brand		Own Loans	Others' Loans
Banks	CBA, BOQ	✓	✓	✓	✓	✓	✓
NBFI (product)	Liberty, Bluestone	✓	✓	✓	✓	✓	✓
NBFI (franchise)	RAMS	✓	✓	✓	×	✓	✓
NBFI (Wholesale)	PUMA, Mobius, Interstar	✓	✓	×	✓	×	×
NBFI (Hybrid)	Aussie	×	×	✓	×	✓	✓
Mortgage Managers	Mortgage House	×	×	✓	×	✓	×
Aggregator / Brokers	AFG	×	×	✓	×	✓	✓
Brokers	Mortgage House	×	×	×	×	×	✓

Table 1.4 – The Mortgage Value Chain in Australia

Table 1.4 shows an overview of the mortgage value chain. The funding section refers to the parties that offer the initial funds for the assets. Manufacturing refers to the development of mortgage products, and includes the marketing of these products. Parties that provide outsourced services such as loan settlement, arrears management, loan servicing, Trustee administration and custodian services occupy the fiduciary and administration part of the chain. The distribution section of the chain refers to the channels by which the assets are offered to customers.

Traditionally, balance sheet backed lenders with branch networks provided mortgages. However, on the back of the growth of the broker industry and different funding arrangements a wider range of parties has emerged in the industry including a wider range of different types of lender, aggregators that services brokers and origination referrers. Significant change is also occurring as regional banks and non-bank mortgage providers are gaining manufacturing share.

The various changes in the Mortgage value chain is creating different business models in the Australian market. These business models can be grouped together into categories such as; traditional, securitised, outsourced, warehoused and wholesaling categories. It would be misleading to give all companies one of these labels, or to suggest that they all adhere to one particular model as in practice most lenders adopt different elements of the various models across the value chain. However, the categories are useful for describing different approaches to the market.

In its pure form, the traditional model would comprise branch distribution, in-house origination and servicing, and on-balance sheet funding. However, the majority of lenders now employ a multi-distribution strategy, making use of other forms of direct and intermediary distribution to top-up branch business. A number of traditional lenders also make use of mortgage packagers, either accepting the services of mortgage intermediaries to collect and co-ordinate customer information, or using wholesale or packaging companies for specific tranches of business. However, the majority of new business processing is performed in-house.

The key difference between the traditional and the securitised model are that the mortgage assets are converted to bonds and sold on to an institutional investor rather than being funded through the balance sheet. In the majority of cases, the originating lender will retain servicing rights over securitised loans, and will administer the loans on a third party basis in return for an administration fee.

Outsourcing refers to having loans serviced by a third party administrator instead of doing the servicing in-house. A number of larger mainstream lenders adopt this approach in respect of

smaller, discreet portfolios that are often acquired (bought) rather than originated, where outsourcing is simpler and more cost effective than managing the existing book.

Warehousing describes a model under which a lender will generate mortgage business, which does not meet its own lending criteria, with a view to selling on the loans in a discreet portfolio to another lender, or as a precursor to securitisation. The originating lender may deploy all of its usual distribution channels to generate this business. The benefits to the originating lender include utilising spare capacity, extending their service to customers who fall outside normal lending criteria, and making a profit on the sale of the portfolio. Benefits for the acquiring lender are an additional distribution channel and an immediate increase in volume.

Mortgage wholesaling commonly involves products that are designed and distributed by one organisation (the wholesaler), whilst the mortgages are funded and usually serviced by a separate entity (the lender). Typically, the products will be co-branded with the names of both organisations appearing on product literature, although the product can only be accessed via the wholesaler, meaning that it is not available directly from the lender. These products will often be more competitive than the lender's own product portfolio. The mortgage wholesaler will generally also operate as a packager, handing over a completed file the lender for underwriting.

1.7 Funding Changes and the Mortgage Value Chain Movement

Historically, securitisation in Australia was a means for banks to sell parts of their loan book to the debt markets in order to provide alternative source of funding, and also to reduce their balance sheet exposures. Non-Bank Financial Institutions (NBFIs) later emerged during the

early 1990s. NBFIs worked to enter the mortgage market, and required funding to do so. Securitisation became the means to provide up-front financing that could be used by these parties to compete with the main banks. However, the banks also benefited from these new competitors as they provided the securitised funding for ventures. The securitised funds were also conditional on using the bank's mortgage administration services, thus creating additional revenue from positioning along the value chain.

Increased competition and the desire to increase revenue streams has meant that NBFIs are now beginning to move back along the value chain to leverage their strong manufacturing position and to provide their own securitised funding vehicles. This is reducing margins in the funding arena and also re-directing funding margins to manufacturers. The implication of this is that established funders such as Macquarie Bank's PUMA program are facing increased competition in this part of the value chain. In addition, the administration service has been unbundled from the traditional funders and is now an area that other specialists can offer services in.

From the late 1990's, the major banks had reported margin reductions in lending brought on by a range of factors including repricing of existing loans due to increased competition, an increase in the use of third-party broker origination which increased costs, changing product options, and a less favourable funding environment. Decline in margins is likely to continue due to ongoing pricing pressures due to greater competition for market share from regional players and new entrants. The movements in the mortgage value chain and the unbundling of administration services will likely lead lenders in the industry to drive greater efficiencies as a result of back office process re-engineering, an increase in the use of electronic application and submission, and reduced re-work.

1.8 Distribution Channels

Securitisation depends on the generation of cash generating assets. In the mortgage market there are three main distribution channels for lenders; the branch network, direct channels (telephone, post and internet), and intermediaries. The choice of distribution channel or reliance on a specific channel depends upon the type of lender and their chosen business model. Typically, the branch network provides the largest proportion of mortgage business for banks and credit unions due to their strong retail presence, whilst specialist lenders without branch networks are more reliant on direct channels and intermediaries.

Reflecting this variety of channels, mortgage lenders tend to pursue a multi-distribution strategy. Consumers are increasingly taking advantage of this range of channels when applying for their mortgage and when servicing it.

The structural changes observed in relation to the origination of mortgages are expected to continue, albeit gradually. For example, further development of remote distribution channels by lenders and instances of channels increasingly working in partnership to support one another are likely developments.

1.9 Branch Network

The branch network is the traditional face of banking and still the preferred option for many consumers given the scale of the financial commitment and complexity of the mortgage application process. Reasons for this include resistance to change and the security provided by a tangible branch presence.

Internationally, new market entrants recognise the value of a retail branch presence and have tended to widen their initial direct distribution focus and are now seeking physical distribution partnerships with existing high street chains. As well as giving a high street presence, such partnerships have the added advantage of tapping into the partner's existing client base. However, these physical distribution networks are currently being used for less complex products such as personal loans and credit cards rather than mortgages.

1.10 Direct Channels

Telephone and postal banking have become viable additional distribution channels for traditional lenders whilst offering quicker and cheaper entry to the market for new lenders. Customers increasingly use several channels when purchasing new financial services product. This typically takes the form of initial research undertaken using the Internet, the clarification of information via contact with call centres, and branch visits made in completing an application for a mortgage or loan. The phone is perceived as the next best thing to face-to-face advice (Walker, 2002).

For traditional lenders, such as banks, direct non-branch distribution channels can theoretically offer a more cost effective option. Lenders can take advantage of cheaper rents and staffing costs by locating to out of town sites while provide the flexibility of an out of hours service whilst retaining some elements of the personal touch. Direct channels can also offer a more direct route to head office decision-making than via the branch, and have automated screening built into the system and are particularly well suited to experienced buyers, or standard/transition based cases such as remortgages.

The Internet has created a new distribution channel but the evidence suggests that at present it is primarily used for information gathering. Internationally, only an estimated two percent of mortgages are processed online in the UK, a similar level to that evident in the US market. Australia follows these trends as the internet is used gather information, and most applications received on-line require follow-up either with an intermediary or through a branch channel. The Internet's role as an information source facilitates easy access to a wealth of information making it easier for customers to shop around when selecting a mortgage.

There are several reasons for the low penetration of the Internet in terms of mortgage applications. For most people, taking out a mortgage is one of their largest financial transactions and an element of distrust exists amongst consumers who are not yet confident with the Internet. The Internet is perceived as being anonymous and does not have the face-to-face reassurance or advisory capability of other distribution channels. Despite advances in technology the Internet is still in its infancy and service can be slow and erratic which does not match the consumer's high expectation level regarding service and access. If information is difficult to access, a consumer is likely to give up and use an alternative distribution channel.

Competition has increased with the proliferation of financial websites. The Internet has enabled lenders with a regional branch presence to compete nationally, but Internet distribution poses specific problems for established lenders, particularly those with extensive branch networks. Firstly, there is the risk of cannibalisation, wherein those customers who would have used the branch take advantage of the Internet. In addition, just as the Internet presents opportunities for lenders to reach potential customers directly, it also presents opportunities for advisers and intermediaries to extend their reach. Indeed a number of

financial portal sites have emerged which claim a procurator fee from the lender for each case they introduce.

Changing demand patterns are putting the operational systems of many lenders under pressure. Lenders are challenged with the need to develop increasingly flexible and consolidated accounts along the lines of providing payment and other credit services such as credit cards and lines of credit. Differential pricing is becoming increasingly popular with more sophisticated consumers expecting to pay a mortgage rate which reflects their personal circumstances and risk profile. In addition, some lenders are reaching the capacity limits of their existing systems, and are faced with decisions relating to upgrading or replacing their systems.

For many players, it is prohibitively expensive to invest in a new system only to run the risk of obsolescence further down the line, and in many case the existing systems are under so much strain that further development is unlikely to be operationally feasible. In these cases, as the market for mortgage outsourcing (and the market for IT outsourcing) matures, these lenders will have a realistic alternative to their existing options. Faced with entire system replacement, a cost benefit analysis may well present outsourcing as a preferred option.

The evolution of new technologies has facilitated the growth in phone and Internet distribution. While the need for a branch network continues to be important, the lack of a branch network is no longer a key barrier to entry.

The strategic importance of customer data for the purpose of generating sales is importance incentives to maintain the ownership of the end customer. Customer relationship management (CRM) initiatives are increasingly being rolled out by lenders, leading to a customer

relationship rather than a once off transactional view of the customer. Some of the outcomes of the trend, such as product bundling, may lead to increased co-operation between different financial services providers working together to fill gaps in the product range.

However, product bundling and the desire to “own” the customer pose practical and esoteric constraints to outsourcing, and will be important considerations in setting up virtual structures with a number of functional specialists operating in specific roles along the value chain.

Despite the emergence of new-low cost channels, lenders are having mixed success in migrating customers. The convenience offered by remote new channels is in many cases causing the level of simple servicing activity to increase, such as dealing with balance enquiries, whilst customers are continuing to visit branch for more complex servicing needs.

1.11 Mortgage Brokers

The mortgage broker industry has grown rapidly in the last ten years as a result of a perceived need for third-party advice relating to a significant increase in the number and complexity of home loans products. Estimates are that brokers now account for up to 45% of new loans and 30% of existing loans industry wide. However, countries such as the UK and US have higher levels of broker origination with levels of between 60 to 65% evident. . (Johnson and Wiles, 2005).

However, the average profit contribution is lower for broker-originated loans than for branch or direct originated loans (Johnson and Wiles, 2005). The average branch-originated loan breaks even after 11 to 12 months while broker originated tend to take longer (Johnson and Wiles, 2005). The difference is largely due to the upfront and trailing commissions paid to

brokers by the lenders. While the average broker loan is less profitable than the average branch loan, the profit signature of different types of broker loans varies considerably. Profit is concentrated in specific customer segments and specific geographies. Different profit signatures are explained by a combination of factors including loan size, duration, price sensitivity and the fee or commission structure.

Churn is an expression the industry uses to describe the situation where customers are moved from one loan to another in relatively short timeframes. This phenomenon is more pronounced for some categories of broker-originated loans than for branch-originated loans. The main reason the average broker loan is less profitable than the average branch loan is because churn is greater for some categories of loans, especially investment loans and low documentation loans, originated through brokers. This reflects the fact that broker-originated loans tend to be attractive to price sensitive customers, and that some brokers are willing to churn their clients' loans in order to give up an ongoing trail for a new upfront payment. As a result, the major lenders are now moving to address this issue by introducing different commissions on different products in order to change broker behaviour.

There are two main ways in which lenders can improve the profitability of home loans sourced through the broker channel. Firstly, lenders can negotiate commission structures to better align broker payments to profit outcomes. For example the Australian and New Zealand bank (ANZ) and the Commonwealth Bank of Australia (CBA) announced changes to broker commissions in December 2004 (Johnson and Wiles, 2005). St. George Bank had previously announced changes in August 2004 (Johnson and Wiles, 2005). Other industry participants may follow this trend. Secondly, banks need to segment brokers by profit contribution, which would allow them to focus on more profitable customers and will provide more incentive to brokers accordingly.

Each of the major industry lenders have developed different strategies relating to mortgage brokers. ANZ was the first of the major players to embrace the broker channel and still considers it an “important distribution channel”. Brokers accounted for 44% of loans in the second half of 2004, a rise from 36% in the first half of 2003. In addition ANZ was the first of the major banks to announce changes in its commission structures. While CBA initially shunned mortgage brokers, a change in strategy has seen its broker share of originators increase from 24% in the first half of 2004 to 32% in the first half of 2005. There are also signs that CBA is using its dominant market position to change commission structures. CBA followed ANZ in announcing some changes that accounted for approximately 32% of new loans in 2005. (Johnson and Wiles, 2005)

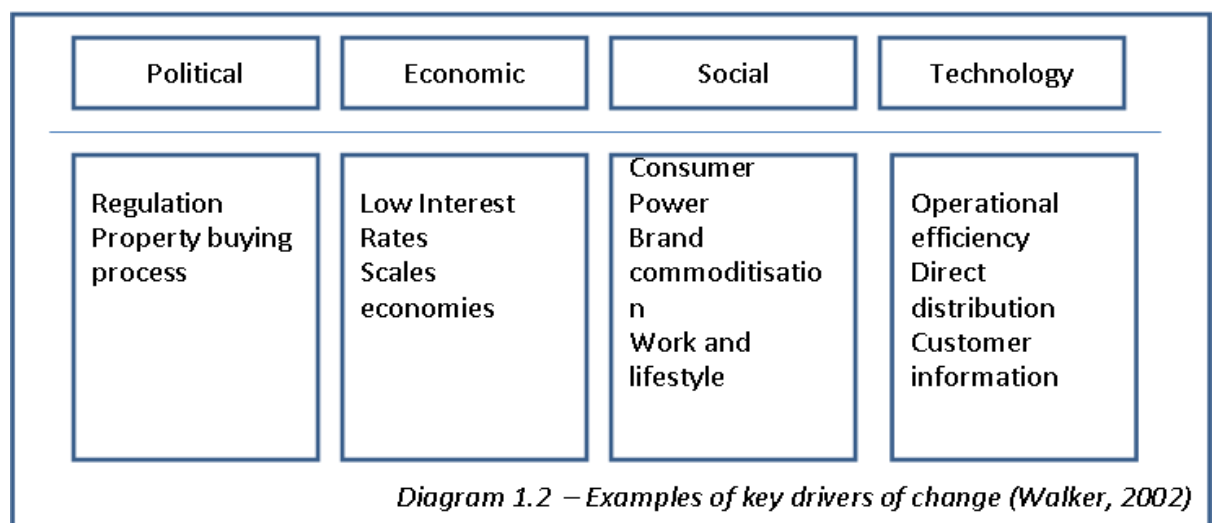
Regulatory oversight is likely to increase in the near-term. Given its recent but rapid emergence, the mortgage broker industry has been subject to a minimum level of regulation. Currently, it is outside the jurisdiction of the Australian Prudential Regulation Authority (APRA) and to date has not been regulated in the same way as financial advisers, who are required to hold an Australian Financial Services (AFS) license. As a result of the rapid increase in demand for brokers, the industry remains highly fragmented. However, regulatory oversight is likely to increase in the near-term. In December 2004, the New South Wales Office of Fair Trading published a regulatory impact statement discussion document entitled “National Finance Broker Regulation” which sets out possible regulatory approaches and proposals for a national regime relating to finance and mortgage broking. Ultimately, financial services are a scale business, with the optimum players achieving economies of scale by leveraging increasingly sophisticated technology.

Currently the third party broker market is largely dominated by five main players including AFG, Mortgage Choice, Aussie Home Loans, Mortgage Find and Mortgage Force. However,

the industry is highly fragmented and there are a large number of independents. Broker consolidation is likely to continue as a result of changes in commission structures, increased scale advantages for the larger players, the introduction of greater regulatory oversight and a slowing housing market. This is likely to see the market strength of the major brokers increase.

1.12 The Lending Process – Commoditisation and Fragmentation

There are a wide variety of factors and influences driving change in the mortgage industry, although their impact on structural changes varies. Commoditisation refers the proliferation of new products that continue to make existing products more homogeneous while Fragmentation refers to the break up of the value chain components into different parts which had previously been held together by either one party or a small number of parties.



Increased regulation threatens to have a profound impact across the mortgage value chain. Australia has enjoyed a sustained period of robust, and relatively stable, economic growth since the early 1990's, providing a favourable background for mortgage lenders in terms of robust asset growth and low levels of arrears. However, the increasingly competitive

mortgage market, rising interest rates, and slowing growth in the property market will increase the demand for greater economies of scale in the mortgage servicing costs.

Levels of customer sophistication are increasing, with customers demanding more flexible products and improved service levels. The increased commoditisation of mortgage products has increased the downward pressure on mortgage prices. Outsourcing different aspects of the value chain to third parties has increased lenders' ability to offer more flexible products.

Regulation can have a profound impact across the mortgage value chain. The impact in Australian has in recent years been marginal, with little intervention. Various state governments have introduced financial incentives for first home buyers; NSW Investment/Property taxes; Stamp duty changes are all examples of legislation that has had a direct impact on the mortgage industry.

The Australian economy has enjoyed a robust period of relatively stable economic growth since the mid-1990s, providing a favourable background for mortgage lenders in terms of robust asset growth and falling levels of arrears and repossessions. A key component in this is a low and less volatile interest rate backdrop. This has been supported by the Reserve Bank of Australia setting clear inflation targets which has meant that interest rates are set pre-emptively in order to achieve the targets.

Levels of consumer sophistication are increasing, with customers demanding more flexible products and improved service levels. Heightened awareness is driven in part by media coverage concerning the pitfalls of financial service offerings including the relatively low interest that is paid on current accounts, mortgage redemption penalties, and ongoing efforts to increase transparency. This has helped consumers to recognise that competitive pressures in

the mortgage market have shifted power in their favour, and customer inertia is decreasing. Loyalty to a particular financial service provider is declining as customers are more willing than ever to look elsewhere if their expectations are not met.

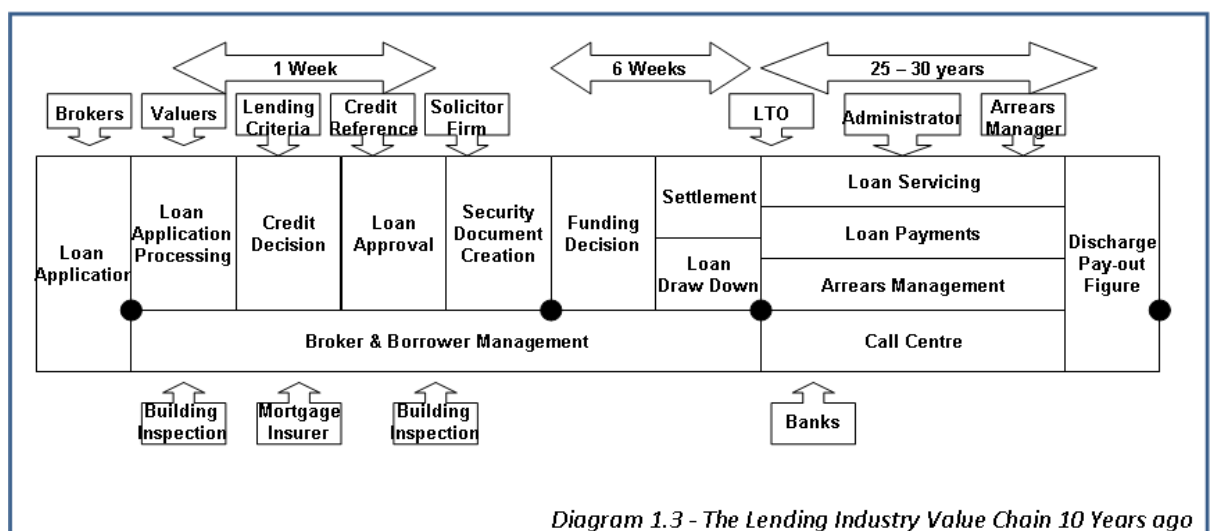
When marketing new products and services, financial service providers are increasingly emphasising the ease of switching from existing providers and are doing everything they can to eliminate the “hassle factor”. As a result, mortgage lenders are faced with rising acquisition and retention costs as they fight to retain existing customers and win new ones.

The brand of a product or service has become increasingly important in Australia, and recent years have seen an influx of non-financial brands breaking out of their market segment (usually retail) into financial services. This has important implications along the value chain, as the structure of the new operations takes specialist input from each party, effectively meaning that each is outsourcing something to the other.

Commoditisation is a commonly discussed trend within financial services generally, and within the mortgage market in particular. As people become increasingly aware of the range of mortgage deals on offer and the ease with which they can remortgage, downward pressure on mortgage prices is increasing.

Consequently, lenders need to be ever more conscious of their cost base. Together with a streamlined margin, cost-consciousness will enable them to keep prices competitive. Increasingly, lenders are looking across their cost bases and considering alternative approaches, which may enable them to cut costs further.

The changing work and lifestyle patterns of consumers, and factors such as reduced job security and higher rates of divorce are having a significant impact on the types of products and services individuals demand. Two key areas where this has impacted relates to increased demand for flexible products, at least at a basic level, and a more flexible approach by lenders in assessing credit. The ability to outsource different aspects of the value chain to third parties has increased lenders' ability to offer more flexible products, with traditional player's legacy systems often seen as a key obstacle to offering such products.



The diagram above shows the journey of a loan from inception to discharge, and the steps along the way to, firstly, approve the loan application, and then to organise settlement before the loan falls into a repayment cycle that could take anything up to 30 years to finalise.

About 10 years ago the lending chain would have been typified by centralised relationships where lenders/funders would have to be able to provide most parts of the chain themselves or/and have dedicated relationships with specialist parties that could provide the service.

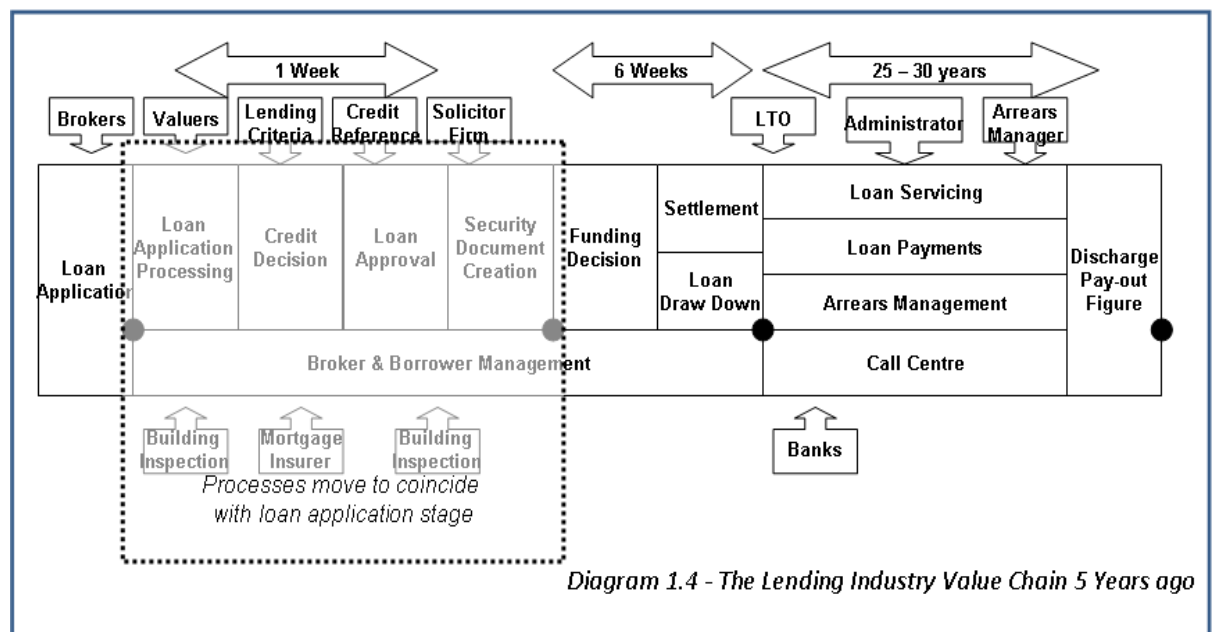
Loan applications were processed on paper applications with associated documentation and this paper trail increased along the lending chain as instructions were passed between each

stage using fax machines and paper based instructions. Data captured electronically was used only at that instance and little exchange of electronic data would take place unless parties specifically requested it.

The centralised relationships of the parties meant that the lending chain was typically controlled by a small amount of parties for each loan with a limited number of service level agreements (SLAs) in place. SLAs were handled in one-on-one relationships and were negotiated separately which prevented any uniformity between parties.

The lending chain was expensive to operate and costs for the service would largely be borne by the borrower either through up-front costs for processing applications or through higher margins on the loans after settlement was finalised.

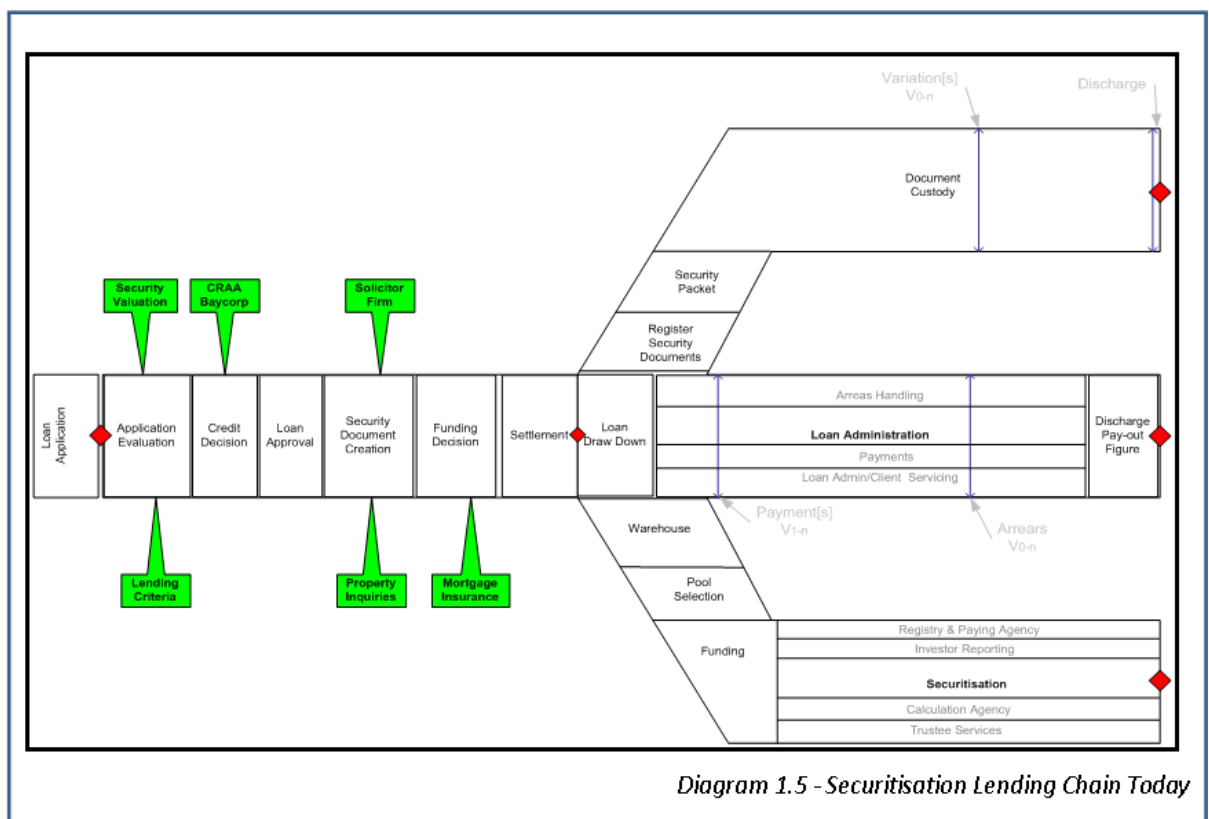
The centralised relationships, market position of participants and ability to pass costs on to borrowers meant that the desire to change processing models was low. The lack of legislative or other governance overheads also meant that external drivers of change were low.



The high margins of the industry slowly attracted new market participants and the lending chain slowly began to change. The structure of centralised relationships did not change, however, as participants tried to establish their own processing models and market positions. Pressure to speed-up processing started to be borne by the industry as booming property markets required quicker settlement periods to keep up with consumer demands. To achieve this streamlining of the loan application process has taken place targeting the number of stages that paper was used and replacing the paper trail with an electronic exchange of information using data. As market participants started to exchange data electronically, and distributors could offer loans from a variety of manufacturers, service level agreements between parties started to emerge and began taking on standardised characteristics.

Competition in the industry also meant that passing costs on to borrowers cannot be done as before and lenders must assume some of the costs as well. Borrower's costs can be passed on through up-front fees and margins but competition is forcing lenders to share costs with borrowers and to manage their cost structure in different ways. The inability to simply pass costs directly on to borrowers is forcing lenders to look at their cost base and to reduce costs where possible. This cost focus is creating a range of effects including the streamlining of operations, the outsourcing of parts of the value chain to specialist service providers, greater levels of automation, and targeted reduction of paper trails.

Regulation in the lending industry has become more important with privacy legislation, consumer credit codes forcing through a set of standards that have to be applied during the loan process. This has put further pressure on the parties in the lending chain to modernise and improve their processes.



The lending value chain today has again changed with the desire for speed, improved cost management and the desire for quality driving requirements for change. These demands are being addressed through improved use of electronic application forms for loans and through the use of data exchange gateways. The use of electronic forms is not revolutionary but what is different is that the requirement to capture data accurately is placed firmly at the start of the process in order to force data quality standards that can then be translated down the rest of the process. In addition the desire to capture all data is being pushed to the front of the value chain so that other parts of the value chain are not slowed by having to request additional data/information. This means that costs associated with capturing data and processing are also being pushed to the front of the value chain. Data captured electronically can then flow through the rest of the chain through the exchange of data using a common schema (usually XML). In recent times, organisations such as the Lending Industry XML Initiative, LIXI, have come into being to define common standards for the industry.

Participants in the Australian mortgage industry will need to focus on more profitable growth and, as growth falls from peak cycle levels, industry participants will not be able to simply track the market. In an environment where volume growth is slowing and margins are under increasing pressure the market participants that are best able to identify the most profitable segments are most likely to outperform. Analysis highlights that, across the industry, profit contribution is skewed towards a small number of loans, 20% of loans contribute almost 100% of the profit and approximately 40% of loans are in fact loss making (Johnson and Wiles, 2005). All of this necessarily means that a more sophisticated ability to assess the contribution of different customer segments and different distribution channels is required in order to be successful.

As lenders organise their business along lines of cost containment, the desire for speed and quality in the lending chain has become fragmented as each part of the chain is reviewed and analysed to get the most out of it. This kind of review starts to change how value chain is structured as each participant starts to concentrate more on specialist parts of the process. By focussing on each part of the lending chain, organisations start to consider options such as outsourcing and also how best to link to third-party service providers. This unbundling of the value chain is a major shift in the business model, as organisations are no longer fuelled by a desire to own all parts of the chain but instead focus on the parts that are most relevant to their business. Specialist service providers have also been provided with opportunities to focus on particular parts of the value chain, and to focus on these parts only. This means that the lending market is not only a place where lenders can profit, but also that specialist providers can profit.

1.13 Conclusion

The rapid growth of the securitisation industry and increasingly complex structured funding solutions being used are in turn increasing the levels of complexity and change within the industry. Increasing levels of change are also evident and unbundling of the mortgage value chain occurs as traditional roles are being transformed. This importance of securitisation as a means to fund business growth rather than merely addressing existing balance sheet lenders has created opportunities for mortgage manufacturers to tap into the funding part of the value chain and to increase their profit margins share and share of market in mortgages.

Mortgage Brokers have an increasingly important role in the mortgage industry's distribution channels as they act as advisers to customers on which loan product to choose and thus have a control on the customer. As a result lenders are trying to control the structure of broker's incentive commission's in order to improve loan profitability within this sector. Despite advances in technology and the proliferation of internet and telephone capability in financial services, the traditional high street branch has still a very important part to play given the size of the financial transactions involved and consumer's preference for face-to-face contact.

Increasingly sophisticated customer requirements, along with the desire to contain costs and enhance efficiency, has put through a large amount of change in the mortgage process. Increasingly, the need to push more of the mortgage process to the front of the process in order to turn information into electronic formats that can be quickly dispersed to other parties and to quicken funding decisions has taken precedence.

The securitisation industry is becoming increasingly complex and fragmented. This complexity and fragmentation is fuelling opportunities as well as challenges for its members and participants and is discussed further in the Literature Review chapter.

CHAPTER TWO – LITERATURE REVIEW

2.1 Introduction

The aim of this chapter is to present a review of the existing literature on securitisation and Corporate Trustees and to identify any gaps in the literature. While a comprehensive outline of securitisation is discussed the focus is on the specifics of the changing dynamics of the Australian securitisation Market and the drivers for change and the impact these have on Corporate Trustees. This is done so as to tie back to the objectives of the study and the title of this thesis.

Participants in the Australian securitisation market are undergoing changes to their business models. These changes have occurred as a result of shifting market dynamics and will impact the range of services that Corporate Trustee's offer. Providing an outsourced service to clients is a challenge, but in the Australian securitisation market outsource service providers have the extra hurdle of providing a service that does not have a negative impact on a securitisation program rating. Corporate Trustees have been meeting this challenge for a number of years with a limited range of services that are centred on investor protection through the maintenance of trust legal structures.

The chapter has a number of sections in it with the approach to the literature search is outlined initially before moving onto describe what securitisation is. A history of securitisation is then presented while focusing mainly on the Australian context it shows how the structure of securitisation programs has changed over time. This history sets up section debating the definition of securitisation given the changes the industry has gone through and moves into a

servicing section covering administration outsourcing with an emphasis on quality. The last section covers a Corporate Trustee literature gap.

The motivation behind this research thesis is to present an overview of securitisation and to specifically focus on Corporate Trustees given the researchers interest and background in this area. This interest is used to try and fill a gap in the literature on Corporate Trustees. The author work in Corporate Trustees in the outsource service area is also tied into the literature. These entities provide a valuable service to the securitisation market in Australia and potential to offer more services.

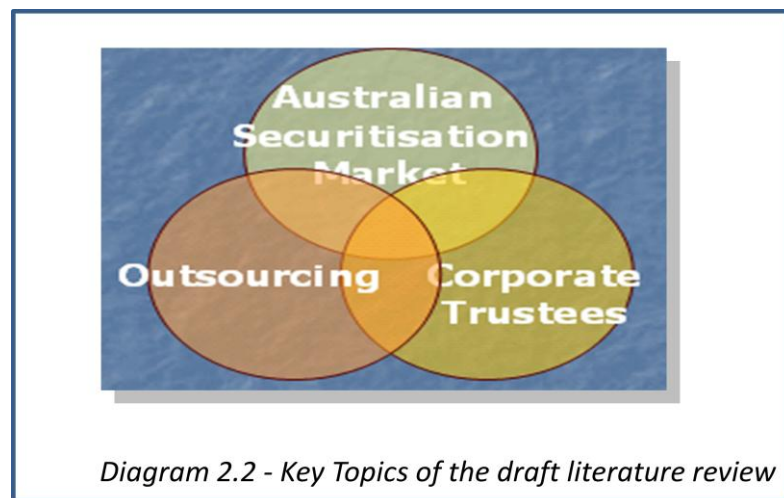
2.2 Literature Search Plan – Focus on Outcomes

In order to provide structure and to tie in the researcher's interest in the topic a structured approach to the literature was undertaken. There are a number of topics to search through in doing the literature review and the following diagram shows the flow of the main topics and the resulting focus on the core research objectives.



Taking Rudestam and Newton's (1992) long, medium and short shots view, the literature search focuses on the Australian securitisation market in the long shot view, the role of outsourcing as the medium view and Corporate Trustees as the short view. Taking these different views the literature research specifically looks at the following links:

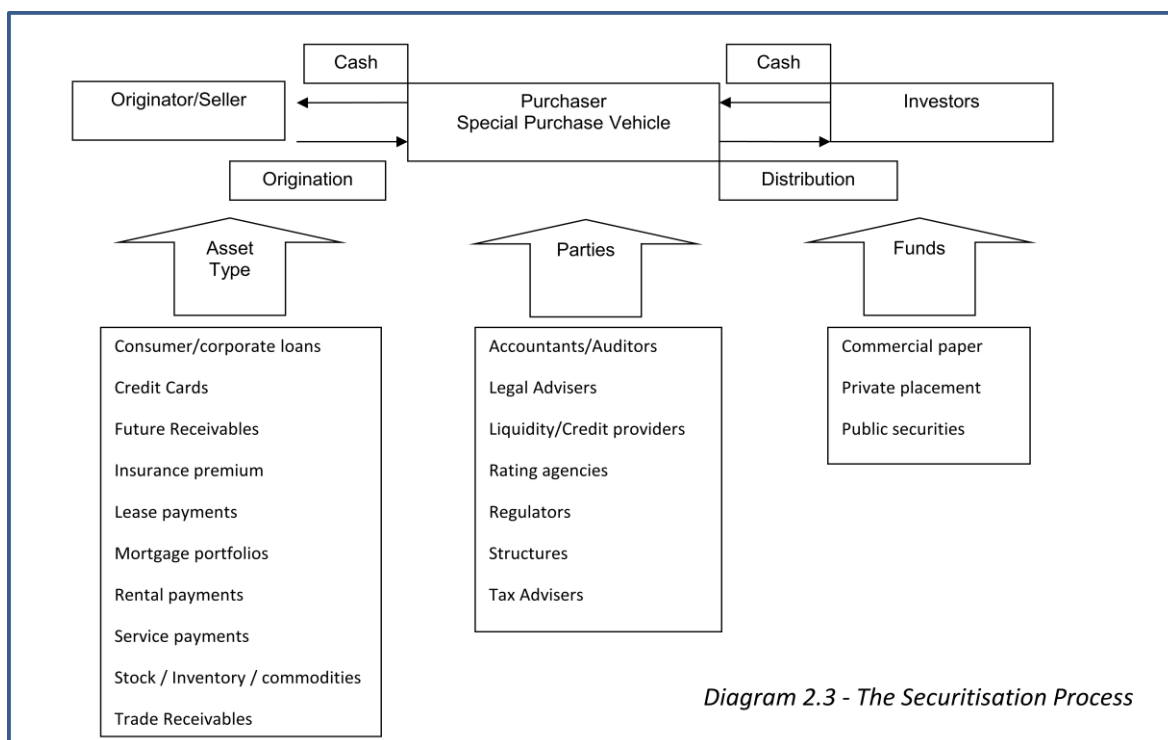
- The link between the securitisation market and outsourcing exploring trends on the value chain due to the changing nature of securitisation;
- The link between the securitisation market and Corporate Trustees as service providers to that market; and
- The links between Corporate Trustees as outsource service providers explored by reviewing the changes in the securitisation market and the impact on service providers.



In addition, the chapter will highlight the diverse advantages of securitisation and how it sets it apart from other forms of finance. A definition of what securitisation is as well as a brief history of its development in both the USA and Australia. Understanding the history of the subject and its definition is important as securitisation has continuously evolved and grown over time.

2.3 What is Securitisation?

As stated previously securitisation is a funding source using bonds or notes secured by cash generating loans and assets. This section sets out to provide a broader definition of securitisation by covering off a detailed review of a typical securitisation program and its diverse parts.

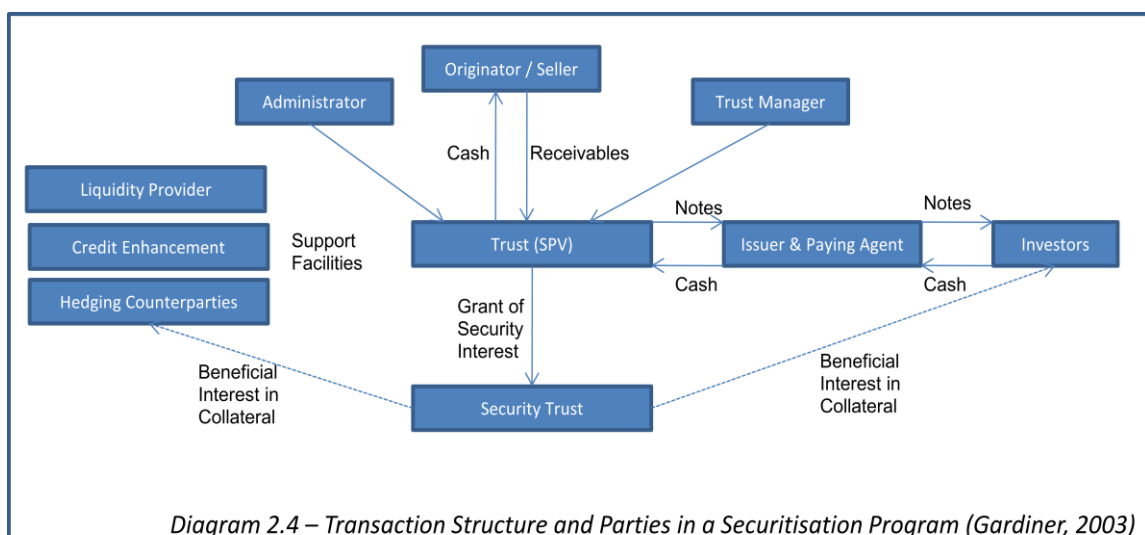


In its simplest form a securitisation program can operate as follows. The manager of the program arranges for the creation of a special purpose vehicle (SPV), which in Australia is usually a trust. The manager then arranges for the SPV to buy a specific pool of relatively homogenous assets from a financial enterprise or arranges for the creation of assets through loan approval processes by originators.. For example, good-quality fixed-term fixed-rate mortgages are typical assets that could be sold into a securitisation program trust. The intended assets are those that typically deliver a steady income stream and are therefore attractive for securitisation given that they should be able to support the on-going interest payments of the trust.

The SPV finances the initial purchase of assets by using a line of credit that can come from a parent or associated company. The SPV then issues debt securities or bonds, which can be short or long term in nature. Money raised from the issue is used to repay any line of credit and to purchase more assets to securitise. The investors receive the income and repayment of principal from the assets (via the SPV) over the lifetime of the securities. To ensure maximum marketability for the issue, managers usually arrange enhancement facilities in the form of guaranteed credit lines, asset insurance, and have the issue rated by at least one of the major rating agencies; being either Standard and Poor's, Moody's or Fitch.

In Australia, a securitisation program must have as a minimum:

- A specially created SPV (usually a trust), which is resident in Australia
- Specifically selected assets backing its liabilities in the form of debt securities



The Corporate Trustee has a general fiduciary duty to act in the best interest of trust beneficiaries, to effectively monitor a company such that is a debt issuer or a fund manager, and to be able to act independently in accordance with the relevant trust deed. When a Trustee

takes on a role in securitisation programs the degree of care and diligence should be no less than that for debt issues, notwithstanding that the degree of regulatory control will vary depending on the nature of the program (Kelsch, 2003).

2.4 Problems with the Securitisation Definition

Compared to other forms of corporate funding and loans, securitisation is more complicated and involves a lot more parties. The securitisation market is relatively short in historical terms and it is a funding technique that is continuously evolving and becoming more complicated.

One of the key problems with the securitisation process is the lack of uniform definitions regarding what securitisation actually is. Part of this problem stems from the benefits it provides and how these benefits get tied into the description. Securitisation can be defined as a means of transferring risk, it could be seen as an asset re-packaging technique, it can be defined as a source of funding and it can also be interpreted as a balance sheet adjustment technique. All of these interpretations are correct and at the same time flawed due to an over simplification. As Jean De La Fontaine once said (1671) “it’s a little bit like an elephant – difficult to describe but you know one when you see one.” Securitisation means different things to different organisations and finding a uniform definition is hard.

2.5 History of Securitisation

Securitisation history can be traced to the United States of America during the early 1970s when the first mortgage-backed securities were issued. Prior to this investors had bought and sold whole loans, or unsecuritised mortgages. At this time the Government National Mortgage Association (GNMA), also called Ginnie Mae, guaranteed the first mortgage securities. These

securities had a feature called pass-through that allowed the principal and interest payments on mortgages to pass through to investors and this was seen as a dramatic innovation for the market. Ginnie Mae was soon followed by Fannie Mae, a private corporation chartered by federal government, along with Freddie Mac, to promote homeownership by fostering a secondary market in home mortgages. (Barnett, 1997)

The whole-loan market, the buying and selling of mortgages, was relatively illiquid and this presented a risk to mortgage lenders who could find themselves unable to find buyers if they wanted to sell their loan portfolios both quickly and at an acceptable price. Holding the loans also meant exposure to the risk that rising interest rates could drive a lender's interest cost higher than its interest income. Traditionally the trading whole loans also meant a raft of details and paperwork that made the business relatively costly while Mortgage Backed Securities (MBS) changed that. By combining similar loans into pools, the government agencies were able to pass the mortgage payments through to the certificate holders or investors. This change made the secondary mortgage market more attractive to investors and lenders alike. Investors now had a liquid instrument and lenders had the option to move any interest rate risk associated with mortgages off their balance sheet. (Barnett, 1997)

Growth in the new Securitisation market inevitably led to more innovations especially as originators sought a broader MBS investor base. In response, Fannie Mae issued the first collateralised mortgage obligations (CMO) in 1983. A more complicated twist on pass-throughs securities, the CMOs redirected the cash flows of trusts to create securities with several different payment features. The central goal with CMOs was to address prepayment risk – the main obstacle to expanding the demand for securitisation bonds. Prepayment risk for MBS investors is the unexpected return of principal stemming from consumers who refinance the mortgages that back the securities. Homeowners were more likely to refinance

mortgages when interest rates were falling and this translated into the prepayment of MBS principal. Thus investors were often forced to reinvest the returned principal at a lower return. CMOs were an attempt to accommodate the preference of investors to lower repayment risk with classes of securities that offer principal repayment at varying speeds. The different bond classes are also called tranches to distinguish the different slices of the securities now being offered. Further innovations in the market saw some tranches, CMOs can include 50 or more, become subordinate to other tranches thus broadening the appeal of the securities to different investors. However it also meant that in the event that loans in the underlying securitisation pool default, investors in the subordinate tranche would have to first absorb any loss.

As part of the Tax Reform Act of 1986, the United State's Congress created the Real Estate Mortgage Investment Conduit (REMIC) to facilitate the issuance of CMOs. Today almost all CMOs are issued in the form of REMICs. In addition to varying maturities, REMICs can be issued with different risk characteristics. REMIC investors – in exchange for a higher coupon payment – can choose to take on greater credit risk. Along with a simplified tax treatment, these changes made the REMIC structure an indispensable feature of the MBS market. Fannie Mae and Freddie Mac are the largest issuers of this security.

The first asset-backed securities (ABS) originated in 1985 when the Sperry Lease Finance Corporation created securities backed by its computer equipment leases. Leases, similar to loans, involve predictable cash flows. In the case of Sperry, the cash flow comes from payments made by the lessee. Sperry sold its rights to the lease payments to an SPV. Interests in the SPV were, in turn, sold to investors through an underwriter.

Over time the securitisation market has grown and evolved to include the securitisation of a variety of asset types, including auto loans, credit card receivables, home equity loans,

manufactured housing loans, student loans and even future entertainment royalties. These types of securitisation programs are commonly classed as Asset Backed Securities (ABS). Credit card receivables and auto and home-equity loans make up about 60% of all these ABS programs. Manufactured housing loans, student loans and equipment leases comprise most of the other ABS. The industry continues to look for new assets to securitise such as auto leases, small-business loans and stranded cost recovery which refers to bonds backed by fees some newly deregulated utilities have won authority to include in future billings as an offset of previous investment.

2.6 History of Securitisation in Australia

Following on from the American experience, securitisation came to Australia as a funding technique used predominantly by banks. The Australian origins of securitisation, and early experiences, were modest. However, asset securitisation has evolved rapidly from the mid-1990s to mid 2000's. During this period, the outstanding assets and liabilities have increased from around \$10 billion in March 1995 to \$160 billion in June 2004. In addition, the range of assets that has been securitised has broadened (Bailey and Davies, 2004).

Australian entities have issued asset-backed securities into both the domestic and offshore markets. Current outstanding asset backed securities comprise \$63 billion of domestic bonds and \$59 billion of offshore bonds. In addition, there is \$22 billion of asset-backed commercial paper outstanding. Since 2000, more than half of the bonds issued domestically by Australian entities have been asset-backed bonds, while over a quarter of offshore bond issuance has been for asset-backed bonds. (Bailey and Davies, 2004)

The rapid growth in the asset-backed securities market in the past decade has been driven by the securitisation of residential mortgages. Securitised residential mortgages have increased from \$55 billion to \$116 billion and currently account for 70% of the assets of Australian securitisation vehicles. (RBA Statistics, 2009)

While issues of securities backed by other types of assets, such as commercial mortgages, trade receivables, other loans and asset-backed bonds, have also increased in recent years, they have done so at a slower pace. Accordingly, this thesis focuses on residential mortgage-backed securities (RMBS). (Bailey and Davies, 2004)

The rapid growth in housing finance in Australia in recent years cannot fully explain the growth in residential mortgage securitisation. Over the past decade, the stock of securitised mortgages has grown much more quickly than overall housing finance. As a result, securitised mortgages now account for one fifth of outstanding housing finance, compared with less than 5% in 1995. (Bailey and Davies, 2004)

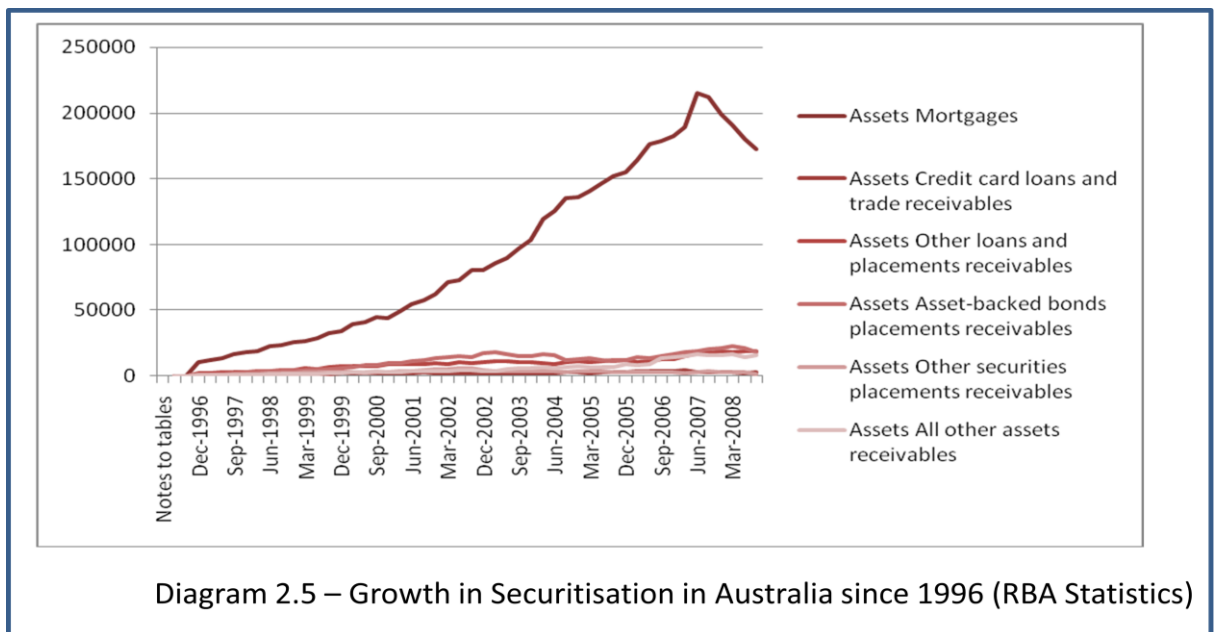
The growth partly reflects the changing composition of the mortgage market. Specialist mortgage originators – who securitise all of the loans – have more than doubled their share of housing lending since 1995. Since 2000, mortgage originators have issued \$85 billion of RMBS and account for half of RMBS outstanding. (Bailey and Davies, 2004)

Securitisation has also become a more attractive financing option for traditional mortgage lenders as the deal costs associated with securitisation has fallen. Since the start of 2000, regional banks, and, credit unions and building societies (CUBs), have securitised about one quarter of their gross housing lending, issuing a total of \$47 billion of RMBS. The four major banks have funded a smaller proportion (less than 10%) of their new housing loans through

RMBS as they have cheaper ways of funding loans on their balance sheets. Despite having a share of more than half of the mortgage market, the major banks have accounted for only around 15% (\$23 billion) of RMBS issuance since 2000. (Bailey and Davies, 2004)

Banks and other deposit-taking financial institutions use securitisation for various reasons. The process of selling the loans to a third party, rather than retaining them on their balance sheets, enables them to: manage their credit risk while continuing to maintain a relationship with the borrower; free-up regulatory capital so that it can be used more productively; and diversify their funding sources thereby enabling them to raise funds to finance new lending.

There are some differences in the composition of RMBS issuers between the domestic and offshore markets. The major Australian banks are far more active offshore than they are domestically, whereas the opposite is true for credit unions and building societies. Mortgage originators and regional banks are active both in Australia and offshore. Neither market appears to have a systematic cost advantage. Spreads above bank bill rates on RMBS issued offshore have tended to be slightly lower than those on domestic RMBS, but the cost of hedging the bonds into Australian dollars has offset most of this advantage. For large issues, however, offshore issuance may enjoy a cost advantage. It certainly appears to be possible to issue in much larger volumes offshore than in the domestic market. This may help explain the major banks' preference to do such issues offshore rather than in the domestic market. On the other hand, the domestic market appears to enjoy an advantage when it comes to issuing subordinated tranches; currently, most subordinated tranches – even for RMBS where the senior tranches are issued offshore – are sold domestically.



The growth statistics shown in table 2.5 highlight a number of key trends. Specifically, it can be seen that growth rates have been significant in the industry and that growth has been primarily driven by mortgages. There is, however, a downward trend in the mortgages graph from September 2007 onwards. This is linked to the financial crisis that commenced at this time and has continued since when financial markets liquidity levels greatly reduced. Mortgages are the dominant asset class for the industry accounting for over 70% of all assets as at September 2008 (RBA Statistics, January 2009).

2.7 Global Financial Crisis

The Global Financial Crisis, or GFC as it has become known, began in the last quarter of 2007 and its impact is ongoing. Given that the GFC is still current, it is difficult to paint a full historical picture of the events, but the low point of the crisis is generally accepted as being the collapse of the investment bank, Lehman Brothers. That collapse sent Global stock markets into free-fall and prompted many Western governments to commence intervention in

their respective financial systems in order to stop further collapses of banks and financial institutions.

According to Professor Kevin Davis (Davis, 2009) the GFC can be attributed to four major factors. The first of these was the rapid growth of financial products that involved high leverage. These higher leverage levels could only be sustained by investor confidence and continued increases in the assets values that supported the loans. The second reason was the growth of liquidity creation techniques which left lenders believing that their risk exposures were not significant. Thirdly, the growth of the so-called shadow banking systems including hedge funds, conduits, supported the construction of complex financial instruments that quickly spread risk throughout the global financial sector. A fourth reason is the absence of public information about the levels of risk in the financial system – this forced many institutions to suspend credit when the crisis commenced due to the inability to assess the risk positions of potential counterparties, thus compounding the crisis through the lack of liquidity in the market.

Government responses to the GFC in the short term have resulted in a number of measures being taken including deposit insurances, bank guarantees, and injections of liquidity by central banks. In Australia, commitments to support infrastructure spending projects were also made. While this has helped to ease the effects of the GFC on the Australian economy, the securitisation market has been hit hard during the crisis with fewer avenues for bond issuance. Small lenders have been forced out of the industry due to an inability to access the capital markets in order to fund their business. This has helped the main high street banks to claw back the market positions they had been losing throughout the 1990's and early part of the 2000's as fewer market participants have the ability to lend for mortgages and other forms of retail credit.

In 2009, confidence appeared to be returning to the securitisation market with bonds being issued for high quality lenders. While it is still too early to fully assess the post GFC securitisation era the fundamentals of a securitisation transaction remain attractive and access to funding in the capital markets through securitisation programs should once again allow for greater competition in the Australian market and a return to some of the trends that had been seen in the 1990's and early 2000's.

2.8 How Securitisation Works in Australia

This section describes some of the technical aspects of securitisation that are common in the Australian market covering aspects of the various transactions that typify the approaches to securitisation. Reviews of securitisation transactions documents demonstrate these characteristics and a list of reviewed transaction documents are contained in Appendix One. In the majority of securitisation transactions, it is critical that the transfer of assets from the originator to the SPV is legally viewed as a sale, or "true sale." The proceeds of the securities are remitted to the originator as the purchase price for the assets. If the asset transfer is not a "true sale," investors are vulnerable to claims against the originator of the assets. The cash flows backing the securities or the assets themselves could be ruled a part of the originator's estate and used to satisfy creditor's claims if a true sale did not occur. Legally separating the asset also protects the originator. Investors can turn only to the SPV for payments due on the ABS and MBS, not to the general revenues of the originator.

The SPV can either be a trust, corporation, or form of partnership set up specifically to purchase the originator's assets and act as a conduit for the payment flows. Payments advanced by the originators are forwarded to investors according to the terms of the specific securities. In some securitisations, the SPV serves only to collect the assets, which are then

transferred to another entity – usually a trust – and repackaged, into securities. Individuals are appointed to oversee the issuing SPV or trust and protect the investor's interests. The originator, however, is still considered the sponsor of the pool.

There are two main types of SPV that is used in the Australian market, individual trusts, which are established to securitise a specific pool of loans and are wound up once the loans are fully repaid. The other are called conduits, which are used to securitise a revolving pool of loans. The majority of individual trusts' assets are residential mortgages, and they fund themselves by issuing bonds secured against those loans either in Australia or offshore. Conduits are generally sponsored by banks and are used to securitise assets from either a bank's own balance sheet or from those of its corporate clients. They hold a much broader range of assets (including individual loans and both asset-backed and non-asset-backed bonds) than individual trusts, and they fund themselves by issuing asset-backed commercial paper.

A number of features set RMBS apart from their non-asset backed counterparts in the Australian market. Firstly, the credit quality of the assets are not directly related to the credit worthiness of the originator. The sale of the assets from the originator to the SPV is structured so that, in the event of a default by an asset originator, the assets should be protected from any claims from creditors to that originator. Likewise, if the SPV defaults on its obligations, the RMBS investor would not have recourse to the originator.

Second, almost all RMBS benefit from some form of credit enhancement, which is used to raise the credit rating of some or all of the securities above that of the underlying loans. The most common form of enhancement comes from splitting the asset-backed security into senior

and subordinated tranches. The subordinated securities provide protection for the senior tranche by absorbing the first round of defaults in the pool of assets. So long as the value of losses does not exceed the combined amount of the subordinated tranche and any external credit enhancement, the senior securities will be repaid in full. Although tranching generally allows the senior securities to be assigned an AAA-rating, the subordinated tranches will have lower credit ratings than they otherwise would. Another common tool is lenders' mortgage insurance, while a recent innovation has been the provision by the monoline insurers of additional protection for the senior tranches over and above that provided by mortgage insurance. These external guarantees usually lift the rating on the securities to a least that of the insurer.

Third, the principal of the RMBS is amortised over the life of the security rather than being repaid as a bullet payment when the security matures. This reflects the payment profile of the underlying mortgages which are usually over a 30 year term with commitments to repay principal and interest at regular intervals, e.g. weekly or monthly) during this term. If early repayments of principal are received, these are generally paid through to investors during the term of the transaction, known as pass-through, rather than being held with the SPV. The amortising principal and the ability to repay the loan early means that the average life of an RMBS is substantially shorter than its final legal maturity, which is usually set to occur after the longest dated loan in the underlying portfolio is due to be repaid in full.

ABS and MBS represent an interest in the underlying pools of loans or other financial assets securitised by issuers who often also originate the assets. The fundamental goal of all securitisation transactions is to isolate the financial assets supporting payments on the ABS and MBS. Isolation ensures payments associated with the securities are derived solely from the segregated pool of assets and not from the originator of the assets. By contrast, interest

and principal payments on unsecuritised debt are often backed by the ability of the issuing company to generate sufficient cash to make the payments.

The assets used in securitisation are created, or originated, in a number of ways. When a lender extends a loan or acquires another revenue-producing asset such as a lease, they are creating assets that can be securitised. Other assets, such as the balances due on credit card accounts or a corporation's accounts receivable can also be securitised. Because they initiate the securitisation chain, the lenders, credit card companies and others are also called originators. Originators often retain a connection to their assets that can be securitised. Servicers are paid a fee for their work. Some originators contract with other organizations to perform the servicing function, or sell the servicing rights.

Another party involved in securitisation transactions are underwriters. These are usually investment banks that serve as intermediaries between the issuer (the SPV or the trust) and investors. Typically, the underwriter will consult on how to structure the ABS and MBS based on the perception of investor demand. The underwriter may, for example, advise the SPV to issue different tranches each with specific characteristics attractive to different segments of the market. Underwriters also help determine whether to use their sales network to offer the securities to the public or to place them privately. Perhaps most importantly, underwriters assume the risk associated with buying an issue of bonds in its entirety and reselling it to investors.

Just as in other bond markets, dealers play an important role once an issue is initially distributed. For most bond investors, liquidity – the ability to easily buy or sell a security – is an important characteristic. By offering prices at which they will buy or sell bonds to the

investment community, dealers provide this service. Bonds typically trade more actively closer to their date of issue. Because bond investors – usually institutional investors such as pension funds and insurance companies – hold most bonds to maturity, trading in bonds declines as they draw nearer to their stated maturity date. The issuance volume of a certain bond, a bond's credit rating, and whether it was issued publicly or privately, can also affect liquidity. All ABS and MBS are traded on a dealer-based, over-the-counter market so liquidity depends in part on the ability and willingness of dealers to maintain an inventory, or to make a market, in a certain bond.

Various liquidity and hedging facilities are put in place to ensure that the SPV can fulfil its debt-servicing obligations. The loan originator or another bank may provide these services. Currency and interest-rate swaps will be used to match the timing, interest rate and currency of the cash flows from the underlying assets with those of the bonds. And a liquidity facility ensures that the SPV will be able to make timely repayments on its obligations if there is a temporary shortfall in the cash flow on the underlying assets.

Credit enhancement techniques are also common in securitisation transactions. Depending on the nature of the transaction and type of assets, the securitisation pool may need such support to attract investors. Enhancement of support can come from the assets themselves or from an external source. Examples of internal enhancements include subordinating one or more tranche, or portion, of the securities issued. This practice places the claims of investors on subordinate tranche before the tranche is affected. This occurs when the amount of assets placed in a securitisation pool exceeds the principal amount of bonds issued.

External credit enhancements can include a surety bond or a letter of credit from a financial institution. Both options serve as guarantees that investors will receive the payments

associated with the securities. For example Government Sponsored Enterprises enhance the credit of the MBS they issue by guaranteeing the timely repayment of principal and interest.

Another important feature of Securitisation transactions in Australia is the fact that virtually all ABS and MBS bonds that are issued are rated by independent rating agencies. The ratings are closely monitored as a guide to the credit quality of the securities. In almost all cases, rating agencies monitor the performance of the securities on an ongoing basis. (Baron, 2001)

2.9 Benefits of Securitisation

The benefits of securitisation are evident in a number of ways. Chief among these is the contribution of securitisation to lower borrowing costs both for individuals and corporations. The existence of a liquid secondary market for home mortgages increases the availability of capital to make new home loans. Financial institutions that realise the full value of their loans immediately can turn around and re-deploy that capital in the form of a new loan. This is often the most efficient way to raise new funds in the capital markets and the savings are passed on to the borrower.

Consumers other than homebuyers also benefit from lower borrowing costs. Securitisation can lower a firm's financing costs as well. MBS and ABS are often designed to carry a higher credit rating than the originating firm would otherwise realise for other types of bonds. Higher credit ratings mean the security is less risky. This translates into a lower interest rate for the originator, as investors do not demand the same risk premium. The originator passes the savings on to the consumer in the form of lower lending rates.

Securitisation also aids in the geographic dispersion of capital to areas that may otherwise be deprived of credit options. Traditionally, depository institutions have provided credit in the areas where they accepted deposits.

By subjecting the lending decisions of financial institutions to valuation by the capital markets, securitisation also encourages an efficient allocation of capital. Financial institutions and others who securitise assets depend on investors. Investors seek an appropriate return based on a level of risk. If the asset pools are not of a sufficient quality, for example, investors will demand a higher interest rate as compensation. At its most basic level, securitisation is the process of isolating risk and repackaging it for investors. This increases efficiency in the capital market by removing intermediary steps between investors and the risk they are assuming. A money manager, for example, may be interested in a mortgage-backed bond that pays interest and principle on a monthly basis, but not in the debt securities issued by the originator of the securitised assets.

Securitisation reallocates risk at many levels. By shifting the credit risk of the securitised assets (for a price) to investors, financial institutions can reduce their own risk. As the risk of an individual institution declines, so does systemic risk, or the risk faced by the financial system overall.

Commingling of assets is generally avoided in securitisation as investors benefit from the protection that is created by the legal segregation of the securitised assets. The segregation protects the payment stream on the MBS and ABS from a bankruptcy or insolvency. Higher-rated securitised instruments generally offer higher yields than similar sovereign government issues. Pension funds – which comprise much of the market for MBS and ABS – pay close attention to this premium as they seek a wide variety of safe fixed income products with

attractive yields. Insurance companies, money managers and other institutional investors with needs for fixed income securities with specific features are also large ABS/MBS investors.

The ability of issuers to vary the terms of securities backed by the same asset pool through different securitisation techniques also makes MBS and ABS attractive to investors. Issuers can tailor the coupon, maturity and seniority of a security according to particular investor's needs. This flexibility not only boosts investor interest in ABS and MBS, but also contributes to more efficient capital markets by ensuring investors and money managers have access to the most appropriate securities.

Securitisation also benefits the financial institution or corporation that originates the securitised asset. Without securitisation, a bank making a home loan usually would hold that loan on its books, recognizing revenues as payments are made over time. They realise the value of the loan immediately, the bank can sell the whole loan to another institution, though this is generally not economical unless the loan is very large. The more efficient option is to pool similar loans together, as discussed above, and enters into a securitisation transaction.

The process makes even more sense for originators with assets considered illiquid, such as equipment leases or the balance due on a credit card. The latter comprises an asset class called credit card receivables that account for approximately 20 percent of outstanding ABS. Similar to banks securitising home loans, credit card companies are able to use the securitisation process to provide more credit and manage their balance sheets.

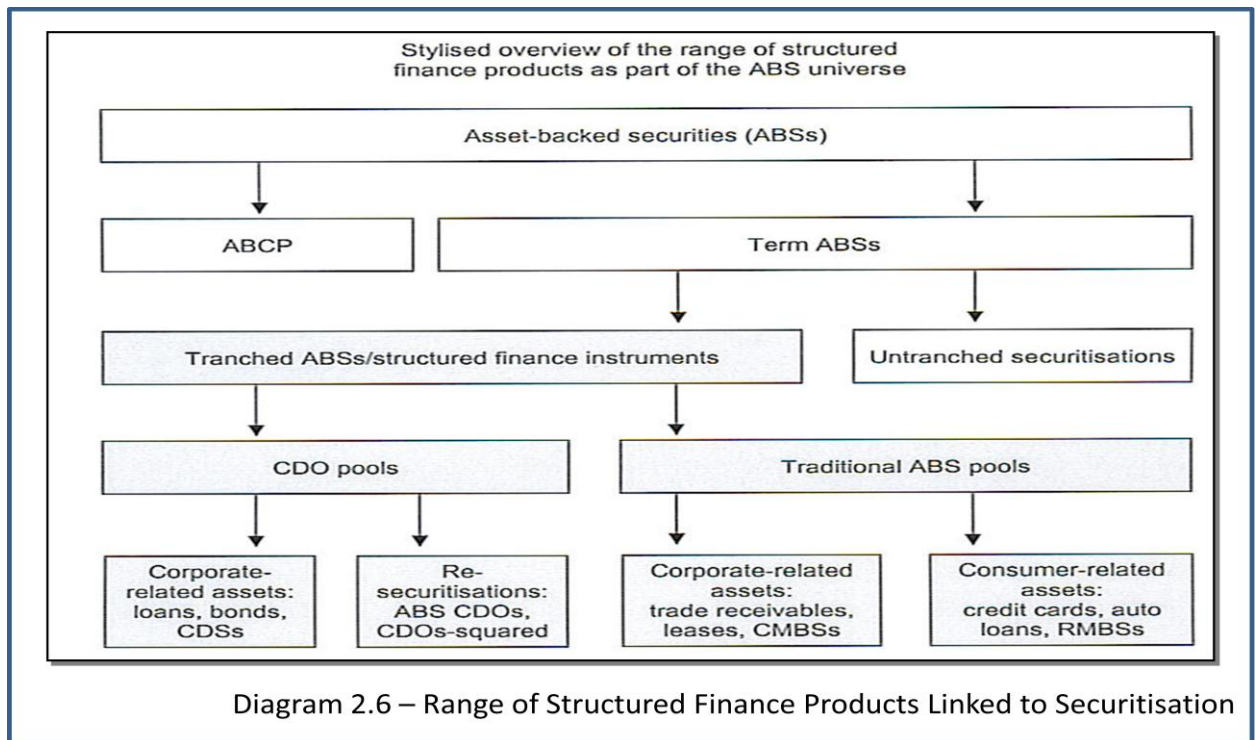
2.10 From Vanilla Issuance to Structured Finance

Securitisation has evolved from being a simple repackaging of assets and issuance of notes to a complicated financial technique that is heavily structured and tailored to particular asset types, investor needs, legal requirements, and structural enhancements. This section goes through these changes as securitisation evolves into a Structured Finance technique.

Structured Finance can be defined as a form of financial intermediation, based upon securitisation technology. It involves the pooling of assets and the subsequent sale to investors of claims on the cash flows backed by these pools. Typically, several classes or tranches of securities are issued, each with distinct risk-return profiles. In addition, the underlying collateral asset pool is usually legally separated from the balance sheet of the transaction's originator. Assets in the collateral pool can range from cash instruments (for example residential mortgages, credit card receivables, loans and bonds) to synthetic exposures, such as credit default swaps (CDSs). Depending on the nature of these assets, pools may contain large numbers of relatively homogenous individual holdings (for example several tranches of thousands of consumer loans) or may be made up of rather heterogeneous exposures to a limited number of obligors (some 50-150 in the case of CDOs).

A key goal of the tranching process is to create at least one class of securities whose rating is higher than the average rating of the underlying collateral pool or to create rated securities from a pool of unrated assets. This is accomplished through the use of credit support (enhancements), such as prioritisation of payments to the different tranches. The equity/first-loss tranche absorbs initial losses, followed by a mezzanine tranche, which absorbs some additional losses, again followed by more senior tranches. Thus, the most senior claims are

insulated from default risk of the underlying asset pool to the extent that the more junior tranches absorb credit losses.



Following this description, structured finance can be identified as possessing three key characteristics:

- Pooling of assets (either cash-based or synthetically created) – this involves bringing similar assets together into a legal structure for the purpose of combining them to form a new transaction;
- Tranching of liabilities that are backed by these collateral assets (this sets structured finance apart from traditional “pass-through” securitisation) - this involves issuing bonds backed by assets into sub-structures that can be bought and sold in financial markets; and
- Segregating the assets into their own structure that have to stand alone in terms of credit worthiness. This involves de-linking of the credit risk of the collateral pool from the credit risk of the originator, usually through use of a standalone financing vehicle (commonly referred to as a special purpose vehicle or SPV).

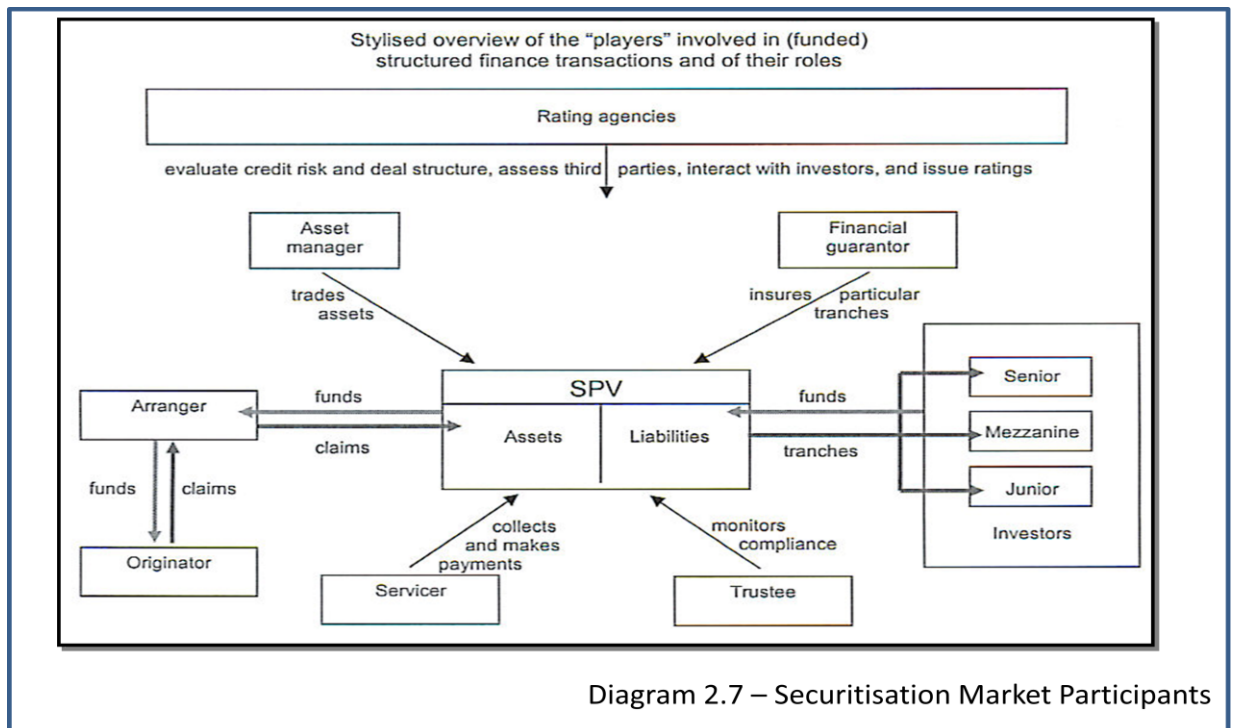
A key attribute of tranching is the ability to distribute cash flows received from the underlying asset pool to different investor groupings (according to factors such as riskiness, timing of payments, and fixed versus floating). As a result, tranching transforms the risk characteristics of the collateral pool into classes of securities with distinct, transaction-specific risk features.

2.11 Market participants and their roles

A number of different participants are involved in structured finance markets. These include: the arranger who sets up the structure, tranches the liabilities and markets the tranches; one or more originators who either originate the underlying assets in the course of their regular business activities or source them in the open market; the servicer who collects payments and may track pool performance; the asset manager who – in managed transactions – may assemble the initial pool and subsequently trades in and out of the collateral assets; the Trustee who oversees cash distributions to investors and monitors compliance with deal documentation; and, in certain deals, financial guarantors (for example the so-called monolines), who provides guarantees on principal and interest payments to, or sell credit default swaps on, particular tranches as part of their business model of underwriting high-grade credit risk.

In addition, given their tranching nature, structured finance transactions will also involve one or more investors, who buy different tranches issued against the asset pool. Also, as most of these tranches will be rated, one or more rating agencies tends to be involved. As is noted below, the provision of a structured finance rating by a rating agency can help to mitigate asymmetric information problems arising in the creation of a structured finance instrument, for example in assessing the rules governing the prioritisation of cash flows to the tranches.

The rating agencies also collect and assess information on the performance of the servicer and of other third parties involved in the transaction.



When structured finance instruments are made up of non-traded loans or similar claims, the originators tend to be banks or finance companies. When the collateral pool is made up of traded assets, the arranger is typically also the originator and is often an investment bank or the asset management arm of a financial conglomerate. The servicer, whose role is particularly important for instruments based on large traditional ABS pools, is often the originating bank or a specialised institution. Asset managers are typically dedicated units within banks and other financial institutions or standalone asset management firms with prior experience managing fixed income assets. The role of Trustee is usually assumed either by specialist legal firms or units within major financial institutions.

2.12 Continued Evolution for Securitisation

On the basis of broad driving forces, such as growth in the industry in both range and breadth of assets being securitised, investor and issuer involvement in securitisation's transformation into a structured finance technique with added complexity have been strong. Originally securitisation was a cash market with assets being homogeneous and low credit risk. Building on mortgage pass-through securities that had first appeared in the early 1970s, tranching deals collateralised with pools of residential mortgages, in the form of so-called Collateralised Mortgage Obligations (CMOs) began to be issued in 1983. This was followed by similar products in other ABS sectors, which were regarded as cost-efficient means to diversify funding sources and to obtain funds via collateralised lending. Later, tranching securitisations began taking the form of collateralised loan and bond portfolios (CDOs), driven by a general desire by banks to transfer credit risk and release economic and regulatory capital. (Barnett, 1997)

Securitisation's evolution into structured finance technique and added complexity is driven by a number of factors that are present within the finance market. These factors have shaped the current trends in securitisation and changed the nature and transaction structures. The distinguishing features transforming basic securitisation into structured finance are tranching, de-linking, pooling and market imperfections.

Tranching is the feature that more distinguishes structured finance products from traditional securitisations (pass-through instruments). Tranching is crucially important for understanding the economics of structured transactions. Because tranching allows the risk characteristics of the collateral pool to be transformed, it contributes to transaction complexity, while also determining the risk properties of structured instruments. Tranching creates a layer of

analytical complexity beyond that of estimating the loss distribution of the collateral pool. It requires detailed, deal-specific documentation covering the definition of the transaction's structure to ensure that the intended characteristics, such as the seniority ordering of the various tranches, are actually delivered under all plausible scenarios.

Depending on their position in the capital structure, tranches of structured finance instruments can be more leveraged than the portfolio of underlying assets. Subordinated tranches, while being unaffected by defaults within the asset pool up to some (tranche-specific) level, will be significantly more affected than the underlying asset pool (that is reflected in higher percentage losses) once the critical level of defaults is reached. That is, as the level of subordination below a certain tranche decreases, the possibility that the holder of that tranche will lose a large portion of its investment increases.

The process of de-linking generates at least two benefits for originators as well as investors. One is the use of collateral (that is the underlying asset pool), which turns structured finance into a form of secured borrowing. However, despite the provision of collateral, structured finance differs from traditional forms of secured borrowing in that payments to the secured creditors (or tranche holders) are affected by the performance of the de-linked asset pool and not by the performance of the originating firm (Bank for International Settlements, 2005). The benefits of de-linking, taken together, allow for the issuance of claims secured by portfolios of assets with well-defined characteristics and with returns that may be more predictable than the total returns of the originator. Part of the predictability may be due to the particular characteristics of the securitised assets such as cash flows with stable distributions characteristics.

An SPV issuing tranching claims against a pool of assets can be compared to a firm issuing debt and equity backed by the firm's assets, which include physical and human capital. Likewise, the intuition of the Modigliani-Miller theorem can be applied to SPVs: in a world of perfect financial markets, with no information asymmetries and with all assets readily tradable, tranching would not add value relative to a share in the pool, since the structure of liabilities would be irrelevant. Market imperfections are thus needed for structured finance to add value. Two such imperfections, which may play a role individually or in combination, are asymmetric information and market segmentation (Bank for International Settlements, 2005).

An originator may have private information about the quality of certain assets and/or a comparative advantage in valuing these assets relative to other market participants. If the originator wishes to sell some of its assets, an adverse selection problem will arise; because investors do not know the true quality of the assets, they will demand a premium in order to purchase them or a market will fail to arise in the first place. Originators, or arrangers, can overcome this problem by creating structured finance instruments. Pooling creates diversification benefits, whereas tranching allows risk adverse investors and those with less information about asset values to purchase senior tranches and be protected from default.

Finance theory suggests that, when asymmetric information exists, under certain conditions less informed investors will be more likely to purchase the senior tranches more informed investors the subordinated tranches of a structured transaction (Bank for International Settlements, 2005). Yet, whereas asymmetric information can give rise to tranching, it is also potentially at the heart of a basic trade-off in designing structured finance instruments. To the extent that the holder of the most subordinated tranche is indeed better informed about the value of the collateral assets than are senior investors, it might seem natural to designate the subordinated note holder as the party in charge of workouts or portfolio restructuring should

defaults occur among the obligors. This, however, leads to a conflict of interest between the subordinated note holder, who is often also the originator, and the more senior investors.

Different risk preferences among investors or publicly and privately imposed investment constraints can influence transaction costs and create markets that are segmented between investor groups. This leads to arbitrage opportunities that can be exploited through the creation of structured finance instruments. For example, when an arranger possesses private information concerning particular investor's preferences that is not easily attainable by other intermediaries, the arranger can profit from pooling and tranching by creating securities with characteristics that are tailored to the investor's specific demands. Investors who benefit from the additional diversification of their own portfolios achieved by the tailored product will then be willing to pay a premium for it.

A second form of arbitrage opportunity may appear when market segmentation leads to pricing differentials across certain classes of assets that can be included in the underlying pools of structured finance instruments. One example is given by arbitrage CDOs, where the underlying asset pools are comprised of bonds of credit default swaps (CDSs). Originators of these instruments seek to take advantage of the fact that the market spreads of certain rating categories of bonds tend to be higher than what would be expected solely on the basis of the default risk, and that this difference has been greater for certain rating categories than for others.

2.13 Is Securitisation a Derivative?

Jane Borrows (2002) argues that securitisation is a credit derivative and lays down the challenge to the definition of securitisation when she says - "What is a securitisation other

than a credit derivative?” (Borrows, 2002, p. 21) Her definition is based on the way that securitisation has evolved from a means to finance cash generating assets into a form of structured finance which allows a project’s cash flow needs to be aligned with the profiles of potential investors. Thus the securitisation process/transacting moves from referencing and packaging an asset’s cash flows based on an established pattern to looking at future assets ability to generate cash and then aligning this to future investors needs.

Borrows’ argument is based on the fact that an integral part of a credit derivative is matching a credit risk and return with an investor’s appetite, while an integral part of a securitisation transaction is the ability to manipulate and enhance the cash flows to produce income and principal payments on the bonds that will suit investor appetite for certain rates of interest and maturities or an acceptable rating. Using these definitions they don’t sound like very different instruments as the terms of reference for each become blurred and indeed interchangeable. However, as noted earlier, the problem with defining securitisation in narrow terms means that it can be seen as a different technique to different groups of people. A look at the use of derivatives in the securitisation market may help to uncover more answers.

Throughout the history of securitisation, derivatives in the form of interest rate swaps and foreign exchange instruments are readily used. Lenders used the bank market for funds to start up their operations and refinanced through the capital markets. The array of mortgage products being offered expanded and when securitised this array of cash flows necessitated the use of interest rate swaps to direct the cash flows into steady income and principal payments on the bonds being sold to investors. All of the mortgage-backed securitisations in the mid to late eighties included interest rate swaps, many incorporating caps (maximum amount) and floors (minimum amount). It is an important point that in almost all of the early securitisations, derivatives were used to hedge against market risk only: the risk of falling or

rising interest rates or simply foreign exchange risks. The counterparties to the swaps were the investment banks involved in structuring and selling the securitisation together with the centralised lenders (or if their credit was not acceptable, a relationship bank with which the centralised lender had hedged its portfolio of mortgages prior to securitising) (Borrows, 2002).

None of the early securitisations used derivative instruments to enhance, sell down or diversify credit risk and for the most part credit risk was parcelled up in the form of A and B tranches, supplemented by liquidity facilities usually provided by either the originator or, at a cost, a relationship bank. A notable step forward in 1988 was the issue by HMC 101 of a two-tier structure (Borrows, 2002), using a combination of interest rate swaps and a put and call mechanisms to issue a fixed rate five-year bond to the market. More recently the derivative market has expanded its product range and options, (such as credit default swaps, total return swaps and credit linked notes) and the securitisation market has evolved to include these new products. The use of these new instruments, together with the more vanilla derivative products and traditional credit enhancement techniques can transform an asset or pool of assets into an appealing investment, both for the traditional asset backed investor looking for AAA rated paper and the institutional investor looking for a certain return that is proportionate to the risk that the investor is taking.

In charting the use of derivatives in securitisation as it moves forward from these early days, it is necessary to look at the great leaps and bounds made in derivatives products since the debut of interest rate swaps and asset swap. The derivative market was initially a market that parcelled up market risk and matched investor demands to enable both counterparties to the swap to hedge their liabilities. It was not until the early to mid 1990's that the powerful derivative houses started to look at instruments that parcelled up credit risk and the credit derivative

market was born using two types of products – credit swaps and credit options. (Borrows, 2002)

The first types of credit derivative were called credit swaps. This is a contract that enables counterparties to exchange disparate cash flows, with at least one side of that cash flow being linked to the credit of an underlying asset or portfolio of assets. The second leg of the swap can be either a fixed rate linked to LIBOR or, in the more sophisticated instruments, an exchange of the return on another credit. The total return swap is the most common type of credit swap. (Borrows, 2002)

The other types of product to be used were called Credit Options. These gave the purchaser of the option the right to buy or sell a specified security or spread at a specified level. The contract is tailored to meet the investment needs of the two counterparties. A credit call option sells the rights to buy an underlying asset or credit spread at a stipulated fixed price. A put option gives the purchaser the right (but not the obligation) to sell at a specified price or spread. The most common type of credit option is the Credit Default Option.

Investment banks have set-up structured programs that combined credit derivatives with rated note issues in arbitrage vehicles that could offer securities to investors that suited all risk appetites. Based on these developments in the securitisation and Derivative markets, Jane Borrow's (2002) argument that the synergy between the total return swap/credit default option/credit linked note/structured note and securitisation is obvious.

There is a degree of caution that must be exercised here as classifying all securitisation finance as derivatives is not entirely accurate and given that the use of derivatives in securitisation continues to evolve it is too early to make such as bold statement. There is no

doubt that certain parts of the securitisation market have produced structures and transactions that display the characteristic of a derivative transaction but other parts of the market do not use securitisation as a structured finance technique can take on many characteristics and will range from vanilla offering of a pass-through mortgage structure to a more complicated tranching structure based on assigning equitable rights in different asset types to the transaction. The problem is that the particular transactions may indeed have their own unique definition based on their own unique characteristics and thus avoid fitting neatly into a set definition of securitisation.

There are also a number of issues for derivatives in securitisation, which also highlight that it is too early in the evolutionary cycle to make bold new definitions. Jane Borrows acknowledges this as well, “with the advent of the synthetic CDO and the increased use of credit derivatives both in the securitisation market and generally, it is true that we are still learning the pitfalls in their application.” (Borrows, 2002, page 45) As the market for synthetic collateralised debt obligations (CDOs) and the credit default swap market have grown there are concerns regarding the potential magnitude and probability of what are referred to as soft credit events. Increasingly included in credit derivative contracts are credit events that fall just short of insolvency or default. There are potential weaknesses for the market where there is already a warning of a potential default occurring.

2.14 Role of Rating Agency and Quality of Rated Securitisation Programs

In Australia there are three main commercial rating agencies that assess the credit quality of a securitisation program - Standard and Poor's, Moody's Investor Services and Fitch Ratings. These agencies analyse a securitisation program and based on their analysis will apply a credit rating to the debt issue (Liaw, Alvin and Guy 2000). For illustrative purposes a bond-rating

table is given below showing examples of the most common rating grades for long-term securities. In using the table a potential bond investor can assess the likelihood that there will be a repayment default.

Moody's Investor Services	Standard & Poor's	Grade Explanation
AAA	AAA	Highest
AA	AA	High Grade
A	A	Upper Medium Grade
Baa	BBB	Medium Grade
Baa	BB	Lower Medium Grade
B	B	Speculative

Table 2.1 – Bond-Rating Guide (Nesbitt, 1997)

According to Standard and Poor's, 88% of securities issued by the Australian securitisation market have been assigned the highest possible rating while less than 1 per cent of securities are rated BBB or worse (Liaw, Alvin and Guy 2000). The fact that most securities are highly rated attracts investors and lower costs of funds. The average issue of securitisation bond margins over bank bills have fallen from around 80-90 basis points in the mid 1990s to just over 30 basis points in more recent years (Liaw, Alvin and Guy 2000).

Most securitisation bond issuers will want to get the bond highest rating thus providing lower cost of funds for their operations. This sets a high quality benchmark to be maintained in order for rating agencies to provide a good assessment of operations, management, procedures and processing capabilities of a potential bond issuer.

In his report *The Role of Rating Agencies in the Securitisation Process*, Neill Baron (1996) makes the case that the role of rating agencies is to assist investors in making investment

decisions. The role is confined to credit assessments, as opposed to interest rate or other types of risk, and the agencies use research analysis to protect investors from unknowingly taking credit risk. The service of a rating agency is paid for by the issuer of the securities and information used in the rating process is often provided by the issuer. Baron denies that this creates a conflict of interest citing that investors demand to see rating agency reporting for debt issues as the reason for this lack of conflict. However, the research carried out by the Bank for International Settlements in 2005 shows that investors do not appear to be overly reliant on ratings in making structured finance investment decisions. In fact, the research indicates that the level of reliance on rating agencies is dependent on the level of sophistication of investors – more sophisticated investors will be less reliant as their analytical tools are well developed. Indeed the role of rating agencies is to provide a tool of risk management, which is often combined to other tools to allow investors to form a more rounded opinion of the security. As investors become more sophisticated in the assessment of securitisation programs the role of rating agencies may come under threat as the reliance on their analysis and opinion diminishes.

It is evident that securitisation continues to evolve and change its characteristics and in the space of less than 40 years has grown from a relatively simple funding technique to a complicated range of structured finance transaction options. For writers in this field it presents a problem as to how to offer a definition readers and also how to present a feasible study on a technique that continues to evolve. Rosenthal and Ocampo's (1988) decision to refer to securitisation as a technology is insightful as like other forms of technology it is one that requires continuous upgrades, redevelopment and bug fixes.

2.15 Drivers for Change in the Market and the Value chain

As mortgages make-up the largest portion of all bonds issued in the Australian securitisation market, the mortgage industry has a very biggest influence on the market. Competition in the mortgage industry has stepped up in recent years as barriers to entry and exit have reduced. Arguably the most explicit example of these developments in Australia has been the rapid success of the non-bank mortgage managers. These organisations obtain wholesale mortgage funding from the securitisers, and were able to lend at much cheaper interest rates than the banks and attract significant market share (Walker, 2002).

The increasing importance of phone and internet distribution coupled with the growing availability of outsource options have lowered barriers to entry, Going forward, technological developments will continue to support this trend even further in the mortgage industry. Additionally, a traditional financial services brand is no longer a prerequisite to offering financial services. A number of supermarkets and other retailers have launched financial services offerings, extending their established brands and exploiting their existing customer relationships (Walker, 2002).

There are a wide variety of factors and influences driving change in the mortgage industry, although their impact on structural changes does vary.

Political regulation threatens to have a profound impact across the mortgage value chain. This is especially so given the Global Financial Crisis as governments around the world grapple with the fact that poor financial regulation has had such a profound impact on world economies. In Australia, regulation of the financial markets has been seen as a key reason for

limiting the impact of the crisis and thus it can be concluded that the Australian Federal Government would be unlikely to loosen regulation in the foreseeable future.

Economically, Australia has enjoyed a sustained period of robust, and relatively stable, economic growth since the early 1990's, providing a favourable background for mortgage lenders in terms of robust asset growth and low levels of arrears. However, the increasingly competitive mortgage market, rising interests, slowing growth in the property market will increase the demand for greater economies of scale in the mortgage servicing costs. The Global Financial Crisis appears to have bucked this trend. However, as the crisis eases the economic stability appears to be returning.

Social change is constantly fuelled by new technology trends and greater levels of awareness of broader access to information. Levels of customer sophistication have increased, with demand for more flexible products and improved service levels. The commoditisation of mortgage products has increased the downward pressure on mortgage prices as consumers see price as a key differentiation between different types of loan. The commoditisation trend has been countered by product manufacturers providing more flexible products with different features which has been partly achieved by outsourcing different aspects of the manufacturing chain to third parties.

Technology plays a big part in most industries and the securitisation market is no different. The traditional operational systems of many lenders are under pressure. The evolution of new technologies has facilitated the growth in phone, and internet distribution. However, product bundling and the desire to "own" the customer pose both practical and even esoteric constraints to outsourcing as providing assurances over customer interaction and control can be a barrier for outsource service providers.

These drivers of change are having a profound effect on business models in the Australian securitisation market. Value chain analysis is a technique that “dis-aggregates a firm into its strategically relevant activities in order to understand the behaviour of costs and the existing and potential sources of differentiation.” (Shank, 1998). Understanding the value chain and its components are important to help better understand the position of a company and according to Shank “gaining and sustaining a competitive advantage requires that a company understand the entire value delivery system, not just the portion of the value chain in which it operates.” (Shank, 1998, p.5). The mortgage value chain concept refers to the main ‘blocks’ of activity associated with offering mortgages (such as distribution, new business processing, funding and administration). For example, lenders are now faced with an increased number of options in how they organise funding and distribute their services. The chart below demonstrates a number of possible business models, set against the backdrop of the generic mortgage value chain.

Internationally, the US mortgage value chain is significantly unbundled with different organisations specialising in different parts of the value chain. This means that a number of options on providing different services are available and a number of different service providers are available. There has been a gradual move in this direction in the UK market in recent years and also in Australia. The growth of specialist services has produced different service providers that did not exist previously and different options to obtain existing and new services for the mortgage market. This trend is also occurring in Australia. This unbundling of the value chain allows for organizations to change their business models and to outsource parts of their activities (Walker, 2002).

2.16 Outsourcing

Outsourcing is simply the use of someone else's capacity, whether it is for hardware, software, personnel or expertise, to perform a task (Hershlowitz, 1991). There are essentially two types of outsourcers – strategic and operational. The difference between the two centres on the motives behind their decision to outsource. Strategic outsourcers are focused on concentrating on core business or are looking for longer-term relationships, which help business growth. Operational outsourcers are focused on more tactical reasons for outsourcing such as cost reduction or quality assurance. The best way for an organization to start to identify their outsourcing options are to list the reasons for the decision. The following is a list of the likely motivating factors for outsourcing:

- Cost reduction
- Improved cost predictability
- Need to update existing, outdated technology
- Lack of current system reliability/up-time
- Lack of internal expertise
- Need for significantly improved system functionality
- Need for increased information system productivity
- History of missed deadlines
- Need to consolidate acquired operations with existing ones
- High staff turnover rate
- Reduction of data processing investments in training, standards and development and reporting tools
- Recognition of outsourcing as a trend that deserves an assessment

(Sprinkle, Stephen, Kemp and Terrell, 1992)

By understanding the motivation, organisations can better make a “first cut” assessment of the likelihood that outsourcing will meet their needs. Furthermore, by recognising the issues associated with each type of outsourcing arrangement, organisations can structure an evaluation process that focuses on their particular situation. One of the key failures in some literature on outsourcing is the fact that it mainly focuses on cost reduction (operational) as the overriding motivation to proceed with an outsourced arrangement.

Generally speaking there are three types of outsourcing options – Service Bureau, Facilities Management and Resource Management.

The Service Bureau is a way of describing the provision of remote services using standard software and procedures. The service bureau option typically provides the greatest savings, because the vendor offers a single system environment, with associated technical support, under a long-term contract, to multiple financial institutions. The high cost of staff turnover can be eliminated with a service bureau option. Typically, core liaison staff are maintained at the financial institution to work directly with the vendor on their systems needs. In addition, the investments in programming tools, methodology, standards, software aids, technology training and so forth, are also eliminated, since the cost of these types of investments become the outsourcing vendor’s responsibility.

Facilities Management is the provision of services using the proprietary systems or licensed software of the client. Typically, a facilities management firm either hires the institution’s information systems staff or provides staff to support information systems at the institution’s data centre. Although generally more expensive than a service bureau, it does provide clients with the feeling of more control over their data processing environment because the vendor is managing system development and production operations at the client’s location. This on-site

control, for some institutions, can translate into a competitive advantage through personalised service and customised product offerings.

A third outsourcing alternative is a combination of service bureau and facilities management called Resource management. This allows an institution's current environment to be processed at the vendor's location. Typically, what motivates a client to decide in favour of a resource management arrangement is not software-driven, but rather people-driven (and perhaps driven by a desire to reduce costs as well). For example, a scenario is where an institution that has been unsuccessful in managing its in-house technical resources and is unable to deliver quality service and satisfy expectations. Although the users and management are happy with current software functionality, the financial institution may no longer be able to justify the costs of a separate facility, hardware and support staff for the institution's ongoing development and production operations.

2.17 Outsourcing Trends in the Securitisation Market

Servicers have begun to outsource functions that have traditionally remained in-house and, in some cases, they have transitioned those functions to offshore vendors. New loan set-up, customer service, early stage collections, and, in certain instances, default management, are some of the processes that traditionally have been performed in-house and are now being transitioned to specialist outsourcers and even offshore providers.

Until recently, mortgage servicers generally contracted with offshore providers for data entry and other back-office, non-critical servicing functions (Searson, 2003). Further advances in global telecommunications and technology have enabled servicers to leverage offshore opportunities to increase efficiencies and improve profitability (Searson, 2003).

In the United States, servicers are now outsourcing to overseas vendors several functions that involve customer contact, such as early stage collections, welcome calls, and customer inquiry research. This trend has also been seen in Australia but most companies (66%) would prefer to keep their services located locally (Wire, 2004).

2.18 Need for Quality of the Outsourced Activity

For securitisation programs, high standards are expected of outsource service providers as securitised bonds are generally highly rated and outsource service providers must not impact that rating (Kelsch, 2003). Ratings agencies will look for the following from outsource service providers:

- Management oversight procedures;
- Documented training programs;
- Performance metrics; and
- Disaster recovery programs to be fully documented and tested at least annually.

Fitch (Fitch, 2004) has identified several concerns with offshore outsourcing. The stability of national and local governments and the effect on vendor viability should be considered when contracting with service providers outside of the US. Technical communication issues, such as network connectivity and power outages, need to be addressed as part of the servicer's disaster recovery and business resumption plan. Additionally, recent information regarding staffing availability overseas indicates that the supply of highly skilled and educated workers may not continue to meet demand, particularly in India. Finally, differences in culture must be accounted for when developing training programs and procedures (Kelsch, 2003).

Another threat outsource service providers must handle is the trend towards re-internalisation. While outsourcing is still popular, in Australia there is evidence that organisations are reversing some of the earlier trends towards outsourcing and are starting to bring some of their operations back in-house (Dunford, 1998). Called re-internalisation, it is seen as a rational response where one or more of the following apply:

Market Failure – the market has proven to be unable to provide the activity at a competitive price or of a necessary quality or at the appropriate time. This is the dominant factor for re-internalising with quality issues being the highest of the market failure reasons.

Transaction Costs - An unacceptable level of transaction costs such that the transaction costs associated with searching, contracting (specifying and negotiating), controlling (monitoring and enforcing) and re-contracting, have proven to be greater than those associated with carrying out the activity in-house, with no associated competitive advantage to justify the additional costs.

Core Competence - Realisation that the outsourcing activity is, or should be developed, as a core competence. That is, the outsourcing organization may realise that the outsourced activity was, is, or will be, a key means whereby competitive advantage is maintained. In such a situation it is likely to be advantageous for the organization to maintain and develop that activity internally.

<i>Reason for Re-Internalisation</i>	<i>Examples</i>
<i>Market Failure</i>	<i>Quality</i>
	<i>Cost</i>
	<i>Time/Speed</i>
	<i>Innovation</i>
<i>Transaction Costs</i>	<i>Cost control</i>
	<i>Monitoring & enforcing</i>
<i>Core Competence</i>	<i>Important resource to have in-house</i>
	<i>Recognition as core competence</i>
<i>Other</i>	<i>Developed capability</i>
	<i>Demand decline</i>
	<i>Information technology</i>
	<i>Effect of growth</i>
	<i>Supplier went out of business</i>
	<i>Staff wanted to do the task</i>

Table 3.1 - Reasons for Re-internalisation (Dunford/Sutcliffe, 1998)

The current environment provides interesting information on the practice of outsourcing and the associated phenomenon of re-internalisation. It shows clearly that the dominant reason provided for re-internalisation is market failure. The frequency with which quality and cost factors appear emphasised the dependence of successful outsourcing on the existence of an effective and efficient market in the provision of the outsourced activity. This would suggest that the failure rate surrounding outsourcing could be considerably reduced if more attention was given to the quality, cost and speed of potential contractors. The results show that transaction cost issues rarely feature in the re-internalisation decision.

2.19 Corporate Trustees as Outsource service providers

A Trustee, including a corporate Trustee, has a general fiduciary duty to act in the best interest of trust beneficiaries, to effectively monitor a company such as a debt issuer or a fund manager, and to be able to act independently, in accordance with the relevant trust deed. When a Trustee takes on a role in securitisation programs, the degree of care and diligence should be no less than that for debt issues, notwithstanding that the degree of regulatory control will vary depending on the nature of the program.

The responsibilities of the corporate Trustee in securitisation programs are set out in legal contracts called a note trust deed and/or the security trust deed. The note Trustee deed generally requires the note Trustee to purchase assets with the proceeds of note issues at the direction of the trust manager, and to perform associated functions, such as making payments to note holders, maintaining program bank accounts and note clearing accounts, and taking custody of security documents relating to the assets.

The security trust deed generally requires the security Trustee to hold a charge over all of the assets of the securitisation program, for the benefit of the note holders and other secured creditors. In an event of default, the security Trustee may, at its discretion, or at the direction of an extraordinary resolution of secured creditors, enforce the charge. The security Trustee could either appoint a receiver, or realise the assets to repay the note holders and other secured creditors. The security Trustee may have the discretion to waive an event of default if it believes this is in the best interest of the note holders and other secured creditors.

The trust legal structure is more popular than using a special purpose company in Australia. This is because the trust can be managed by a professional Trustee company without the need to appoint a separate board of directors. Also, the financial/regulatory reporting requirements are less onerous for trusts. Professional Trustee companies are popular because their specialist skills and independence allows them to act in the interests of investors (O'Sullivan, 2001).

Building on these core outsource service provider competences, Corporate Trustee's have built on their Trustee experience and have started to market a range of other services to financial intermediaries. These services include back office processing, document custody, registry services, paying agent services and data analytics. The addition of these services

allows corporate Trustees to diversify their revenue streams and attract new business while still maintaining their core investor protector role (O'Sullivan, 2001).

At the heart of maintaining a securitisation program the Trustee has to keep the assets of a trust separate from those of other trusts or its own assets. A further technical issue for Trustees in securitisation is the ability to balance the interests of the various parties (O'Sullivan, 2001). Whereas in most trusts a Trustee is required to act in the best interest of the beneficiaries, in a securitisation trust the interests of secured creditors are paramount, and the interest of the residual beneficiaries (the equity holders) is subordinated. In some securitisation programs, the note trust deed may require the Trustee to step in as trust manager or asset servicer for a short period of time, until a replacement trust manager or asset servicer is found, if a trust manager or asset servicer resigns or is removed. In other securitisation programs, the Trustee may agree to perform certain functions of the trust manager and the asset servicer throughout the life of the program.

Rating Agencies in Australia carry out due diligence checks on Corporate Trustees to ensure that they can carry out their fiduciary obligations thus maintaining the overall quality of the securitisation program (O'Sullivan, 2001). The technical and back-up duties of a Corporate Trustee require it to maintain a high level of competency and the means to meet the quality benchmarks that are set in the industry. These competences and resourcing skills provide the Corporate Trustee with a robust framework for expanding its suite of services and market segments.

2.20 Research Gap – Opportunities for Corporate Trustees

An analysis and search of various information sources reveals a gap in the current literature on Corporate Trustees. Most of the current research discusses the role of Corporate Trustees in the superannuation industry. The literature that does exist, on Corporate Trustees operating in other industries, tends to be from a legal perspective (Salter, 2003) or from an ethical and Corporate Governance perspective (Monks, 2001). Education courses tend to focus on the role of Corporate Trustees from a convenience perspective or legal structure perspective (Australian Securitisation Forum, 2002).

Treating Corporate Trustees as commercial enterprises, with the normal commercial pressures to attract/retain profitable client business and to generate investment returns for shareholders, is not evident from the current literature. It is this gap that this research intends to target, by presenting Corporate Trustees as commercial enterprises facing numerous challenges and requiring competitive strategy analysis.

The literature on outsourcing tends to discuss the cost motive in depth but very little about other the motives for example the lack of internal expertise, adding extra capacity to a business etc. This focus on cost could conflict with the quality requirements of a securitisation program and could lead to re-internalisation (Dunford and Sutcliffe, 1998).

Given the changes occurring in the Australian securitisation Market and the continued unbundling of the value chain within that market, the role of Corporate Trustees comes more into the spotlight. securitisation programs regulatory and operational requirements require high quality levels of service, which must stand-up to third party scrutiny from investors and rating agencies. Given the traditional role of Corporate Trustees and continued advances in

technology, could Corporate Trustee companies expand their services to provide more outsourced services to the Australian securitisation market? This is a question that will be discussed further in chapter six on the Corporate Trustee strategic review.

2.21 Conclusion

This chapter has provided a literature review on the securitisation market, its history and the process around securitisation as a funding mechanism. The history and development of securitisation highlights a strong growth of the finance technique that has evolved and become more complex to the point where the definition of securitisation overlaps with structured finance and can mean different things to different audiences. The growth of securitisation will continue and it will likely be an ambiguous area that overlaps with aspects of structured finance as different types of financing structure as used in the market.

Outsourcing has become more common place in the securitisation as the changes in the market take hold and the process of asset financing changes. The different motives for outsourcing are sometimes orientated to cost savings but can also be for other reasons. The opportunity for Corporate Trustees is that they already provide a type of outsourced service already and this could be extended to provide other outsourced services. However, a gap in the literature on Corporate Trustees means that this is difficult to work out from existing material and requires further research to examine this.

Securitisation programs have credit ratings assigned to them in order for investors to understand the risk exposure they have. Rating agencies play a big part of this credit assessment and this creates a demand for credit quality in the securitisation process. Any role

for outsourced parties therefore carries with it the need to have a quality service as the securitisation market continues to expand out.

CHAPTER THREE – DATA COLLECTION AND RESEARCH METHODOLOGY

3.1 Introduction

While reviewing the literature for a research topic on Corporate Trustees, the researcher found that the existing research on the topic was sparse. Thus, the initial aim of this research was to provide material to help bridge this gap. In order to compile the research on the specific topic the broader context of the market that Corporate Trustees operate in had to be presented and thus the objectives of the research were broadened to provide the readers with more industry background from an historical perspective and also to provide more insight into the commercial context for Corporate Trustees.

To meet the research objectives the researcher embarked on a field based study of a Corporate Trustee operating in the Australian securitisation market. This chapter presents the methods used for data collection, the research activities and methodologies.

3.2 Focus and Research Questions

Given the researchers interest and work in this areas of the study the research is designed as a top down analysis of Corporate Trustees operating in the Australian securitisation market thus drawing on the research conducted but also the motivations behind the research. To build the background information and focus the topic I started the research process by asking three main questions:

1. What is the composition of the securitisation Value Chain?
2. What are the changes in the securitisation Value Chain?

3. What are the implications for Corporate Trustees?

To contextualise the research and also to draw upon the researcher's own interest in the area and working experience of being involved in the securitisation industry, the literature review focused on information on securitisation looking at the industry from a past, present and future perspective and discovered that as the industry changed over time the definition of the securitisation itself also changed. This discovery changed the focus of the research to focus on four main streams of work:

1. Description of the securitisation Value Chain
2. Changes/Trends in the securitisation Value Chain
3. Changes: Implications for Technology
4. Corporate Trustees: Current role and Future Opportunities

Drawing upon the researcher's work experience in the area this was designed as a field based research project analysing, through a single unit case study, one Corporate Trustee currently offering services to the Australian Capital Market. Given the nature of the research methodology the initial grounds for research were very open as the researcher intended to approach the phenomenon in an extensive manner without pre-defined research questions and hypothesis. However, given that when the research commenced the researcher held a role in case study nominee as a project manager, responsible for operational, strategic and production development projects, the research began to focus on the following key areas:

- Analysis of competitive strategic choices available to Corporate Trustees for servicing the Australian Capital markets
- Product development for Corporate Trustees

- Evolution of Corporate Trustees role and market position
- Change management

This research will be able to expand on the current literature by providing real insight into the securitisation market and how Corporate Trustees were responding to their changing environments.

3.3 Data Collection and Research Methodology

The research is designed around a case study of the Australian securitisation market and the role of Corporate Trustees within that market. The following sections describe the way the research project was planned for and carried out. Using a field based (Cavaye, 1996) research methodology the case study approach was developed to present new evidence and focus on the key problems and issues as they emerged. During the data collection phase the researcher was an active participant in the Australian securitisation market working as a project manager for a leading Corporate Trustee and was able to access data from a variety of industry sources.

Originally, the researcher's approach to this project was to carry out a pure case research method for gathering, analysing and presenting the data. Case research is a term, which describes a way to systemise observation and the key elements of the case method are:

- It does not explicitly control or manipulate the variables
- It studies a phenomenon in its natural context
- It studies the phenomenon at one of a few sites
- It makes use of qualitative tools and techniques for data collection and analysis

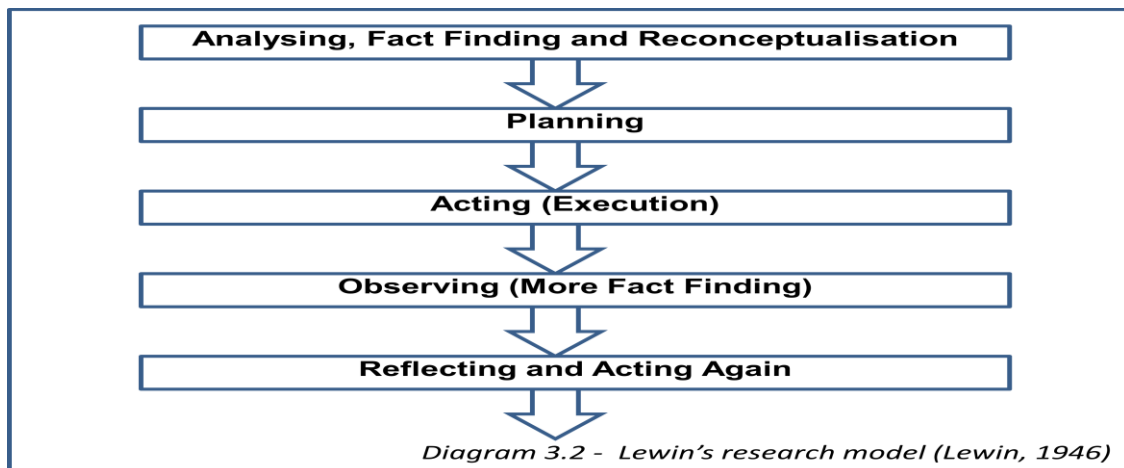
(Weick, 1984).

	Case research	Field studies	Action research	Application description	Ethnography
Use of case method	✓	✓	✓	✓	✓
Aims for understanding of context	✓		✓	✓	✓
Does not defines a priori constructs	✓		✓	✓	✓
Topic defined by researcher	✓	✓		✓	✓
No intent of interference in phenomenon	✓	✓		✓	✓
Attempts to contribute to know ledge	✓	✓	✓		✓
Relates findings to generizable theory	✓	✓	✓		
Interpretation from researcher's view point	✓	✓	✓	✓	

Table 3.1 – Comparing characteristics of case research with those of related strategies (Cavaye, 1996)

However, after reviewing Cavaye's (1996) table above and comparing it to the research approach it became apparent that the researcher would actually be undertaking research based on field studies. The two areas that focused the researcher to consider this was the fact that the subject area, Corporate Trustees, was relatively well defined and the research topics relating to this subject – being strategy, product management, and change management – would be defined by the researcher. The other factors that lead the researcher to propose to undertake field studies based research was that the intention of the researcher was not to interfere in the phenomenon.

Field based research combines observation and participation (Coughlan and Brannick, 2001). As a field researcher, the investigator did not have to understand the research context beforehand. In this way the researcher intended to allow the problem(s) to be defined by the case study. Given the researcher's previous role in the Australian securitisation Market he was able to enter the field with the intention of observing and recording without interfering, but also able to view the data with direct topics in mind (Cavaye, 1996).

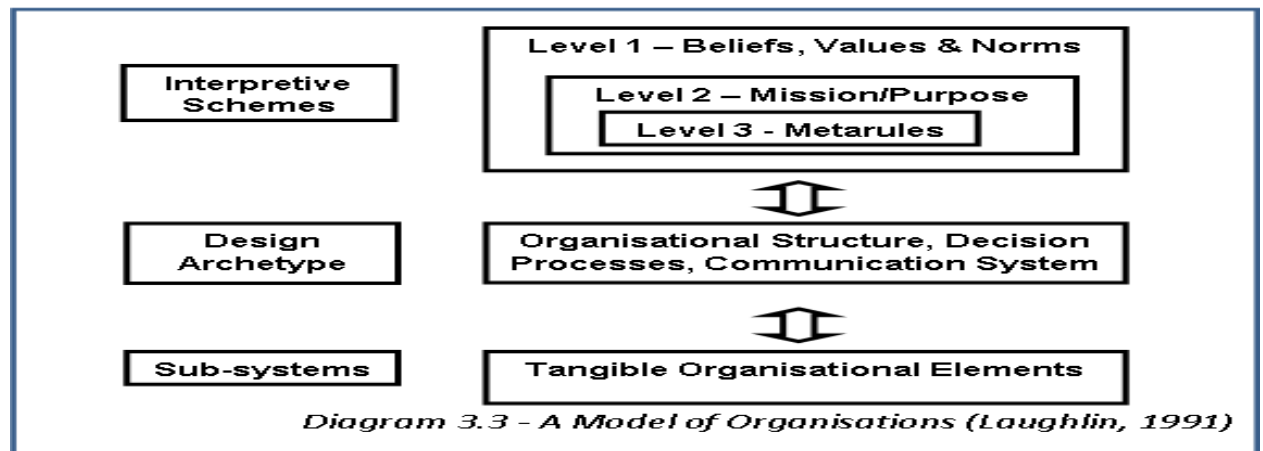


In order to project manage the research, the researcher has chosen to use Lewin's (1946) research model to build a structure around the case study. The reason for choosing this approach was that it is a process that not only gives the project a framework but it also provides a systematic cycle to cross reference themes and data collection results. As the data is gathered and sorted it should become apparent to identify problems for further investigation. The researcher found this useful given the top-down nature of the topics and breadth of areas that needed to be covered. This process of setting an agenda for the research to be identified and worked through has been well articulated by Beckhard and Harris (1987). Beckhard advocated a framework with four phases:

1. Determining the need for change and the degree of choice
2. Defining the future state, after the change have taken place
3. Assessing the present in terms of the future to determine the work to be done
4. Managing the transition state

The initial observation and data gathering involving the Corporate Trustee case study concentrated on era analysis, highlighting the historical journey to the current scenario, and a process and systems audit to evaluate the structure of the services provided by Corporate Trustees and how these in turn touch upon other aspects of the securitisation market. To

provide focus to this part of the research, the researcher chose to use Laughlin's (1991) model of organisations to build the initial analysis for the case study.



The researcher chose this approach to review the field study as he wanted to understand the entity at different levels and Laughlin's model lends this approach to it. Given the internal position of the researcher to the organisation a basis of study that is structured around a number of areas provides a level of objectivity. By applying this Habermasian lens to the study, the interpretive schemes will present the culture within the organisation, the design archetype gives the research project a clear view of the organisation's structure and the sub-systems will provide the tangible organisational elements. While this analysis will be set out at the start it will be revisited a number of times during the research project to test for changes and the effects of these changes.

3.4 Focusing on the Specific Setting, Population, and Phenomenon

In Australia Corporate Trustees services are offered by a number of large financial institutions including Perpetual, ABN Amro, Bank One, JP Morgan, and Trust Company of Australia.

The researcher had worked in a previous role as a project manager with Perpetual and a large amount of the data used in this research was gathered through the work at this organisation.

Corporate Trustee's have built on their Trustee experience and have started to market a range of other services to financial intermediaries. These services include back office processing, document custody, registry services, paying agent services and data analytics (Salter, 2001). The addition of these services allows corporate Trustees to diversify their revenue streams and attract new business while still maintaining their core investor protector role.

The base from which I will conduct my research is from a Perpetual Corporate Trust (PCT) project known simply as "Project Growth". This was a project formed with the aim of expanding the current product range and offering new services to existing and new customers. The Project Growth committee was made of two parts – a steering committee consisting of senior managers and two project members – a project manager and an external consultant on contract. The researcher was the project manager within the group and actively participated in the project and most of the related meetings.

3.5 Sampling People, Behaviours, Events, and Processes

Using the platform of Project Growth the researcher commenced the research into the case study of PCT. The issues for Project Growth were fairly complex and were driven by both external and internal factors. The main external factor was the involvement of a company that wished to form a joint venture with PCT and they are very keen to pursue the development of new services. Culturally they were very different to PCT as they are keen to move at a faster pace, less bureaucratic, privately owned, smaller, and offered a different range of products to the market; being more technology focused. PCT was trying to move at a slower pace and

have a trial venture with one client before formalising the joint venture. This formed a good opportunity to conduct research on the back of this as the opportunity in its own right required analysis, evaluation of markets and trends, as well as capability assessments.

Within PCT a number of sub-projects were also commencing which had more aggressive timeframes. This provided a good research opportunity as the behaviours of various parts of the organisation could be analysed as they dealt with market and internal change. The project group was made up of relatively senior members and three of these had been pursuing the project over a number of months prior to the formal recognition of the project and the other two (including the researcher) joined the project shortly after it had commenced.

The emerging themes were numerous including the potential for future problems coming from the diverse pressures, the different cultures of potential joint venture problems and the different opinions of the members of the steering committee. While there were also some positive influences such as strong client demand and a strong platform to develop the business, there was a lot of groundwork for the project and it provided a valuable source of information. While there are a lot of behavioural issues coming through from the group due to the amount of work to cover there was a sense of unity, as the purpose of the project appeared to be clear.

3.6 Issues of Entry, Reciprocity, Personal Biography, and Ethics

The researcher worked in the Corporate Trustee market for over 5-years as a Project Manager for operational and specialist projects such as strategy, e-commerce and new product development. Prior to this the researcher had accumulated financial services market experience through working in the Australian, American and European markets. At the time

of compiling and presenting the thesis the researcher continues to work in the Administration Services part of the Financial Services market for a major Australian based Investment Bank. In a research capacity, the researcher has prepared a number of internal research papers for current and previous employers and has submitted two minor thesis for previous academic qualifications.

Entry into PCT was quickly granted for this research given the mutual benefits of having a project manager carry out additional research to the immediate day to day work required of the organisation. A large part of the researcher's role in PCT was to gather material and to carry out analysis of issues related to it. PCT was happy for the researcher to carry out the research as part of a Doctorate in Business Administration given that it was envisaged that PCT would benefit from this research through the production of minor papers on areas such as product management, competitive strategy, and market analysis.

The ethical challenges in undertaking this research could have been very political in nature. As Coughlan (2001) notes, the role of the field researcher is very political and undertaking this type of research project on one's own organisation may even be considered subversive. As a field research manager the researcher attempted to generate valid and useful information from the outset, however as the research progressed it was always likely that the researcher would encounter role conflict and encounter conflicts between loyalty tugs, behavioural claims and identification dilemmas. To mitigate this risk the researcher has sought to use neutral third parties, through my supervisor or non-project related senior managers, to control these conflicts and act as soundboards for this and conflicts.

3.7 Data Collection Methods

Field research is designed to start in a very open manner to gather information before focusing on specific problems identified through the data gathering process. Given this fact the researcher has used a variety of methods for collecting data and the following sections describe the main data collection methods the researcher used.

3.8 Participant in the Setting

As stated previously the researcher was a member of the group being studied during the earlier part of the research. The researcher's role in the study as a project manager was very broad and involved managing technology and non-technology projects. For Project Growth the researcher's role was to plan, develop and implement a new set of products as the PCT business expanded into new markets. This role allows the researcher to liaise with stakeholders at a number of levels including members of the executive, clients, employees and third-party vendors. This unique role, the researcher believes, gave a good insight into the role of PCT, its changing market, the evolution of the business and its commercial success in undertaking new business adventures.

3.9 Direct Observation

The researcher used direct observation as a method at meetings attended, during interviews, and by observing day-to-day interactions taking place in the work environment of PCT. Observation can take place in a laboratory setting or in a natural setting. A natural setting is a research environment that would have existed had researchers never studied it (Vogt, 1993). There are two ways in which observation can be conducted: non-participant and participant

observation. Non-participant observation will not be used in this study. Participant observation is a method of collecting data where the researcher is fully involved with the participants and the phenomena being researched. The aim is to provide the means of obtaining a detailed understanding of values, motives and practices of those observed.

There are a number of problems associated with observation techniques. One problem is that the researcher cannot control the variables in a natural setting, but by observing the behaviour in two different settings can instead draw comparisons. Other problems are concerned with ethics and objectivity (Creswell, 1998). To mitigate these problems the researcher asked other participants to read the notes taken during observations sessions and confirm their accuracy and validity.

3.10 In-Depth Interviewing

Throughout the research project interviews were a primary source of data collection. While acknowledging that interviews are not always the best tool to gather data this research project required access to senior industry practitioners and structured interviews were the best means to achieve this. Interviews make it easier to compare answers and may be face-to-face, voice-to-voice or screen-to-screen; conducted with individuals or a group of individuals (Creswell, 1998). The notes gathered from interviews were used to compare and contrast the data emerging from direct observation and from the documentation analysis.

During the interviews the researcher used the critical incident technique to generate qualitative data. Developed by Flanagan (1954), the critical incident technique is a procedure for gathering certain important facts concerning behaviour in defined situations. Although it is a flexible set of principles, it will help to focus the interviews and provide objectivity to data

collection. This approach has also allowed the researcher to tie back material gathered in interviews to other material obtained through other methods.

3.11 Document Review

The researcher has had access to a large number of documents, which were used to gather data. This material includes meeting minutes, strategy analysis documentation, detailed financial information, rating agency reports, client communication and legal contracts. This information was used to provide a cross-reference to the information gathered in through direct observations and interviews. The information was also used to provide historical context data and material that traces the development of patterns.

3.12 Research Time Line

The researcher commenced the research process in 2003 and has followed a part-time study mode due to full-time work commitments. The majority of the raw material including literature review would have been gathered between 2003 and 2007 with the following 2 and half years used to write, compile and update the thesis for the purposes of presenting a final submission for the DBA program.

3.13 Level of Data Collection

The primary data collected was gathered from structured interviews, direct observation and documentation review. The general nature of the material and difficulty of isolating key topics within the broader subject area meant that the researcher needed a structured approach to

setting out the information. This also allowed the primary data collection to become more meaningful and succinct.

In order for the case study unit of analysis to have greater meaning the researcher conducted a secondary data collection which aimed to present the external context. Gathering industry based information from forums, working industry groups, industry conferences, information and papers from senior personnel from key companies operating in the financial services markets provided more data focused on key areas at three levels as described in diagram 3.4.

Level of Analysis Issue	High Level Analysis <i>Macro Issues Affecting all Parties</i>	Mid Level Analysis <i>Specific issues affecting market segments</i>	Micro Level Analysis <i>Influences on servicing roles Servicing</i>
Market Drivers & Future Trends	Rating Agencies Investment Banks Asset originators Transaction Managers	Rating Agencies Investment Banks Asset originators Transaction Managers	Rating Agencies Asset originators Transaction Managers
Regulatory & Governance Issues	Lawfirms Rating Agencies	Lawfirms Rating Agencies	Rating Agencies
Operational (Technological) & Administration	Rating Agencies Investment Banks Asset originators	Rating Agency Asset originators	Rating Agencies Investment Banks

Diagram 3.4 – Secondary data sources

The diagram above shows examples of the type of parties involved in each category. At least three sources were used at each level in order to obtain sufficient primary data to analyse.

The researcher has carried out four forms of data analysis and interpretation on the data during the research project. Using Stake's (1995) approach the following analysis has been undertaken:

Categorical aggregation - seeks a collection of instances from the data, hoping that issue-relevant meanings will emerge

Direct interpretation - looks at a single instance and draws meaning from it without looking for multiple instances

Tabulation - establishes patterns and looks for a correspondence presented in the form of a table showing the relationship between two categories

Generalisations - develops naturalistic generalizations from analysing the data

Using these four methods, the researcher intended to provide a robust means of analysing and interpreting the data gathered.

3.14 Personnel and Resources Needed

The primary researcher was the key resource for this research project. The primary research will bore all expenses incurred during the various project phases. Contributors of data and information gave freely of their time and were accessible for the duration of the required research phases.

3.15 Conclusion – The Value and Logic of Qualitative Research – Criteria of Soundness

The existing literature on Corporate Trustees was sparse and in order to help fill this gap in the material, the researcher believed that a qualitative research project was the best option to undertake. Quantitative research has a number of benefits but a purely quantitative driven research would not shown the fabric and nuances that make-up the world of Corporate Trust and the changing environment that they are exposed to. By undertaking a field based research,

the researcher hoped to conduct the project in a natural setting and using qualitative techniques allowed for a broad picture to be built while focussing specifically on an understanding of Corporate Trustees. As a field based researcher it would be very difficult to capture all of the data through purely quantitative means as some of the data in the form of behaviours and interactions, could have been missed.

Throughout the research the researcher has sought to enhance the accuracy of the data by presenting for review to internal and external parties. It was hoped that this open feedback loop for the research project would sharpen the validity of the results.

CHAPTER FOUR – THE ROLE OF CORPORATE TRUSTEES IN SERVICING THE AUSTRALIAN SECURITISATION MARKET

4.1 Introduction

This chapter looks at the role of the Corporate Trustee in the securitisation market. It aims to add to the literature on securitisation by specifically dealing with the role of the Corporate Trustee, its place in securitisation transactions and the multiple demands placed on it by the different stakeholders that have a say over the Corporate Trustee's operations. Corporate Trustees can be in-house bodies within an organisation but generally will be independent parties in their own right in the Australian market offering services to the broader financial services market. The key services offered by Corporate Trustees are the ability to act as either Trustee or Security Trustee in a securitisation or Structured Finance Transaction.

The chapter take a top down approach to describe the role of the Corporate Trustee by looking at the macro issues initially before delving into the specifics of the operational aspects of the role. Firstly the role is discussed in the context of the broader securitisation market. An outline of the legal obligations of the Corporate Trustee is compared to the expectations of the role in the market. Details of the operational demands on the Corporate Trustee are covered through the description of the cash flow management process before discussing the options for Corporate Trustees. The concluding section of the chapter covers Stakeholder expectations for Corporate Trustees.

4.2 The Role of the Corporate Trustee in a Securitisation Program

The trust legal structure is more popular than using a special purpose company in Australia. This is because the trust can be managed by a professional Trustee company without the need to appoint a separate board of directors while financial and regulatory reporting requirements are also less onerous for trusts. Professional Trustee companies are also popular because of their specialist skills and independence that allows them to act in the interests of securitisation investors (O'Sullivan 2001).

Building on core outsource service provider competencies developed over the course of the expansion of the securitisation market, Corporate Trustee's have built on their Trustee experience and have started to market a range of other services to financial intermediaries. These services include back office processing, document custody, registry services, paying agent services and data analytics. The addition of these services allows corporate Trustees to diversify their revenue streams and attract new business while still maintaining their core investor protector role (O'Sullivan, 2001).

At the heart of maintaining a securitisation program the Trustee has to keep the assets of a trust separate from those of other trusts and also of its own assets. A further technical issue for Trustees in securitisation transactions is the ability to demonstrate objective and transparent handling of the various interests of the different stakeholders that it interacts with. (O'Sullivan 2001) Whereas in most other type of trust structures a Trustee is required to act in the best interest of the beneficiaries, in a securitisation trust the interests of secured creditors are paramount, and the interest of the residual beneficiaries (the equity holders) will be subordinated. In some securitisation programs, the trust transaction deeds may require the Trustee to step in as trust manager or asset servicer for a short period of time, until a

replacement trust manager or asset servicer is found, if a trust manager or asset servicer resigns or is removed. In other securitisation programs, the Trustee may agree to perform certain functions of the trust manager and the asset servicer throughout the life of the program.

Rating Agencies in Australia carry out due diligence checks on Corporate Trustees to ensure that they can carry out their fiduciary obligations thus maintaining the overall quality of the securitisation program (O'Sullivan, 2001). The technical and back-up duties of a Corporate Trustee require it to maintain a high level of competence and the means to meet the quality benchmarks in the industry. These competences and resourcing skills are a key strength of its business model and can provide the Corporate Trustee with a robust framework for expanding its suite of services and market segments.

4.3 Research Gap

As outlined in the Chapter Two an analysis and search of various information sources reveals a gap in the current literature on Corporate Trustees. Treating Corporate Trustees as commercial enterprises, with the normal commercial pressures to attract/retain profitable client business and to generate investment returns for shareholders, is not evident from the current literature. It is this gap that this research intends to target, by presenting Corporate Trustees as commercial enterprises facing numerous challenges and requiring competitive strategy analysis.

Given the changes occurring in the Australian securitisation market and the continued unbundling of the value chain within that market, the role of Corporate Trustees comes more into the spotlight. Securitisation programs regulatory and operational requirements require

high quality levels of service, which must stand-up to third party scrutiny from investors and rating agencies. Given, the traditional role of Corporate Trustees and continued advances in technology, could Corporate Trustee companies expand their services to provide more outsourced services to the Australian securitisation market? This is a question that this research can start to answer.

4.4 Corporate Trustee's legal obligations

A review of various transaction documents (listed in Appendix One) has been undertaken to assess the legal obligations imposed upon the Trustee regarding the cash flows, fees calculations and payments from bank accounts. A selection of programs covering both equitable and legal title and RMBS and ABS were chosen. These programs are Crusade; Harvey; Berri; REDS; PUMA; Medallion and Heritage and detailed extracts from the transaction documents relating to calculations and cash payments are reported in Appendix Two.

Corporate Trustees are involved in a wide variety of securitisation programs, with varying structures, intentions, obligations and therefore any conclusion can only be generalised and must always be tempered with reference back to documents of each particular securitisation program. However, across the documentation reviewed it is clear that the Trust Manager takes responsibility for all calculations and for notifying the Trustee of all payments and distributions that are to be made.

Securitisation programs will have various bank accounts set-up in order to manage and track the various payments required in the terms of the transactions. In order to support the cash flow management of the securitisation program, the Trustee is obliged to only make payments

where there are sufficient total available funds therefore the Trustee must be aware of the balance at all times to ensure the account is not overdrawn. However, there is no obligation upon the Trustee to check any of the calculations and they can be relied upon in the absence of manifest error. This can be seen from a review of various legal documents in securitisation. An outline of those reviewed is contained in Appendix One.

From a diligence perspective, the Trustee does not need to undertake any investigation into the Manager unless they are under actual notice of problems or possible breaches. The basic premise of the transaction negotiations is to limit the Trustee's liability to fraud, negligence and wilful default but most Trustees are also bound by a duty to exercise all due diligence and vigilance in carrying out its functions and duties and in protecting the rights and interests of the Investors in the Trust. The sentences in quotes are standard phrases in most securitisation transaction documents.

Based on this analysis of the legal documentation the Corporate Trustee should review the level of work they currently carry out in view of their limited legal obligations and responsibilities placed upon it. Trustee's need to consider if the current levels of checking payment calculations and cash flows provided by the Trust Manager could be replaced by more limited checks to simply ensure bank accounts are not overdrawn. Corporate Trustee's should aim to balance the legal obligations imposed against them with what the client's perceptions of their role actually is.

4.5 Securitisation Market Expectations of the Corporate Trustee

According to the rating agency Moody's, in most transactions the Trustee's role has a number of parts to it. The role involves holding cash flows in segregated accounts specific to the

securitisation transaction. In addition it also covers notifying investors and rating agencies of covenant breaches and/or events of default. The other aspect of the role involves managing servicing transfers if a particular servicer is no longer able to function in that capacity. The Moody's report (February 2003) makes the point that the role of the Trustee is mostly a function of the credit strength of the seller of the assets or the ongoing servicer role. As long as the seller and/or the servicer are financially strong, the role of the Trustee is not as critical a component of Moody's analysis. Although the Moody's analysis covers most of the duties of a Trustee this section of the paper is mainly concerned with the conditions regarding the Trustee's role in cash flow and/or fee recalculations.

The Trustee's role in the management of segregated securitisation trust accounts consists of distributing the cash in the segregated accounts to the proper parties. While this role varies occasionally and can cover either monthly and/or quarterly payments, it typically, allocates cash flows relating to principal and interest payments. Some of these monies may be held in one or more reserve accounts, and some of it may be paid out to the servicer in the form of servicing fees. Depending on the transaction rules excess spread, otherwise known as the cash left over after making all required distributions, can also be paid to the servicer. The servicer's role outlines the payments to be made at each interval and this certificate is provided to the Trustee listed out the payments that are to be made for any period for the relevant securitisation transaction.

According to Moody's (Moody's 2003), the key issue regarding the management of segregated trust accounts is the extent to which the Trustee may rely on the instructions of the servicer for the distribution of funds. Moody's acknowledge that it is true that transaction documents may not in each case specifically call for the Trustee to recalculate the distributions. However, Moody's believes that the Trustee is responsible for exercising some

oversight with respect to these distributions. To this extent they believe that the purpose of the Trustee recalculating the distributions is to make sure that the amounts are correct and that the ratios used to determine whether a performance trigger has been breached are also calculated correctly. However, Moody's also acknowledges that the Trustee is not in a position to verify with certainty the calculations reported by the servicer and/or the trust manager. This then conflicts against the rating agencies belief in what the role should constitute and in reality problems highlights that the main concern for groups such as Moody's is more related to the security and availability of underlying cash. If a servicer has unrestricted access to the segregated trust accounts, investors will gain little benefit from the segregation of asset collections. Moody's argues that if the servicer can direct the use of cash in the accounts with few constraints, investors are left vulnerable to misdirection of cash by the servicer. So while reviews of the calculations of servicers are important for trustees to conduct where possible the primary role is to provide a level of fiduciary responsibility over the security of the cash assets of the securitisation transaction. In its review of transactions involving unrated and below investment grade-rated seller/servicers, Moody's will evaluate the level of oversight, if any, that is exercised over the distribution of transaction cash flows.

In summary, regarding cash flow maintenance, Moody's view of the role of the Trustee is that it: "Acts on instruction in the distribution of cash flows and distributes the cash in segregated accounts to the proper parties. Exercises some oversight with respect to the recalculation of cash flows to make sure that the distribution amounts are correct and whether a performance ratio has been breached." (Moody's, 2003, p. 93).

The American Bankers Association's Corporate Trust (CT) Committee responded to the Moody's report in March 2003. According to this report, in most asset-backed securities

transactions, the roles and basic duties of the Trustee are specifically detailed in the transaction documents and consist of:

As securitisation asset's custodians and analytics providers are responsible for the receipt, holding and substitution of the assets and the performance of certain specified analysis the role of the Trustee is therefore constrained. The analysis referred to by the Corporate Trust Committee is that the determination that the aggregate value of the assets bears a prescribed ratio to the amount of the debt outstanding is the role of either the service of the Trust Manger and for the Trustee to perform other analytics on the assets not described in the transaction documents sets it outside of its normal duties and obligations (American Bankers Association, 2003).

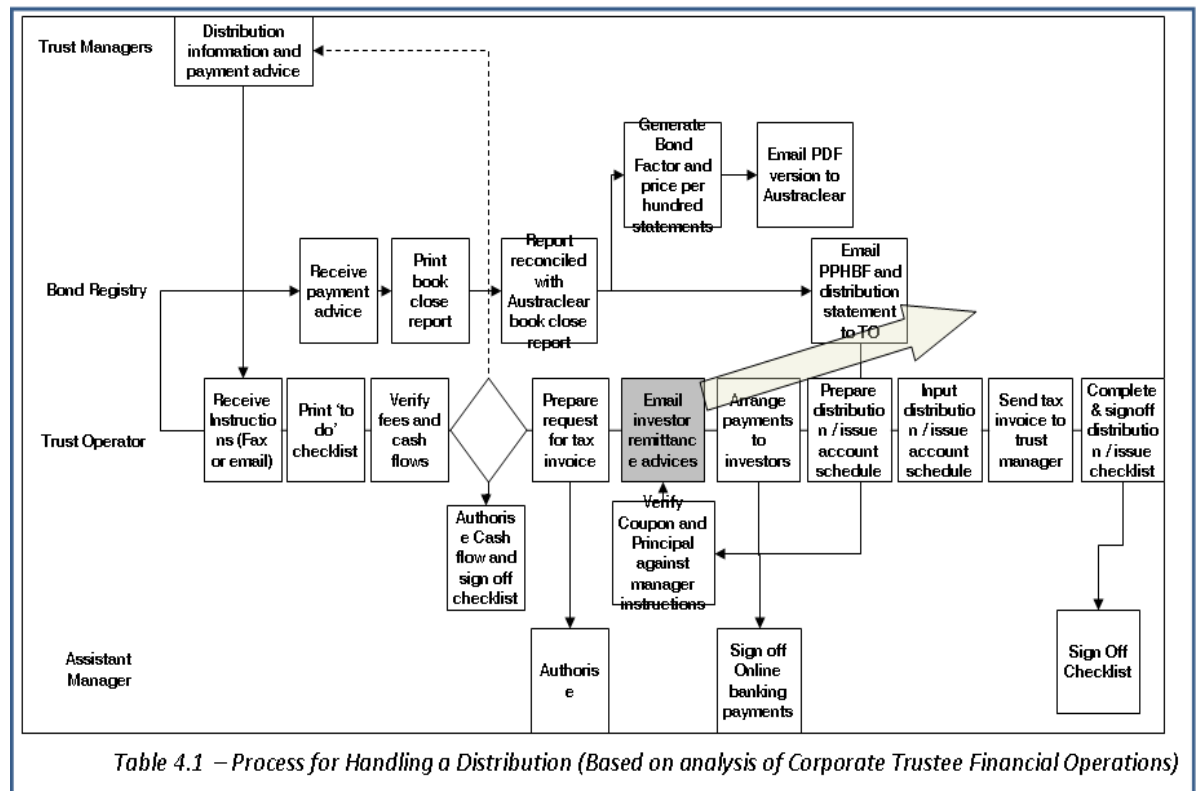
According to the American Bankers Association's Corporate Trust (CT) Committee the account custodian, receipt, maintenance and segregation of funds derived from the assets is the role of the Trustee. The paying and calculation agent is responsible for the release of funds as payments to bond holders and for other purposes as set out in the transaction documentation. The calculation agent role refers to the role that the Trustee can play if formally appointed to calculate the amount of distributions made to note holders, but is a separate role in terms of the transaction structure.

As Trustee, the holding of a lien on the assets for the benefit of the holders, the distribution of certain information to holders and the replacement of the servicer is an obligation that the Corporate Trustee is generally expected to undertake. Based on the Moody's and American Bankers Association reports the Corporate Trustee in its operations should verify instructions from the servicer/trust manager by making sure that the instructions are from the correct authorised person(s) and are in accordance with the trust deed. The Corporate Trustee should

check that the trust account has adequate funds before making any payments and maintain segregated accounts and track payments in those accounts. However both Moody's and the American Bankers Association differ on whether verifying the calculation of distributions to note holders and checking of ratio's linked to financial covenants (if there are any) is a role for the Trustee to perform. However, as a compromise, an additional optional verification could be for the Trustee to check calculation of the servicer and/or Trust Manager's own fees to add another layer of comfort that the rating agency is seeking.

4.6 Current Operational Process for Securitisation Distributions

The role of the Trustee is not a stagnant one and it has to ensure that it has the back office operations to support the smooth operation of securitisation programs. As part of a securitisation program a monthly (or sometimes quarterly) distribution of funds is made to the relevant bondholders and expenses and fees are also paid to the various parties to the transaction. In essence, the process involves calculations of the amounts to be paid by a securitisation program as well as the physical movements of the associated monies. This section sets out to describe the main activities in the Corporate Trustee's operations area relating to a typical bond distribution and in particular to look at the process of rechecking the Trust Manager's activities.



The diagram in 4.1 shows the typical process for handling a securitisation program's regular distribution of payments. The steps involve the Trust Manager sending a distribution and cash flow advice to the Trustee by facsimile. A Trustee's staff member, in its operations area, will provides a copy of the fax to the Bond Registry team and then proceeds to obtain a distribution checklist for that particular transaction. The Trustee's operations team will verify the calculation of fees and recalculate the payments waterfall usually by using a purpose built spreadsheet. The purpose of this task is to act as a check on the Trust Manager's calculations. A manager within the operations team will also recheck the spreadsheet's workbook. It is worth noting that the spreadsheet workbooks are different for each securitisation client and there are sometimes inconsistent practices regarding the level of checking (see Appendix two).

This same spreadsheet is used to generate tax invoices and is also used to recheck the bond distribution calculations for Global trusts prepared by the Corporate Trustee Bond Registry

team. These same bond calculations have already been prepared by the Trust Manager and also by the Corporate Trustee Bond registry team. The Trust Operator will also check the various bond reports with the Trust Manager's report. This is also conducted by the Bond Registry Team that is also updating the various records it has in relation to the various bond holdings.

The payments notification, checking and re-checking are obviously relatively complex given the large and often structured transactions in place for securitisation. In addition the Trustees operation's team find the process to be very time consuming involving a high number of checks, re-checks and in some instances duplicates checks by the Corporate Trustee.

The current process for the spreadsheets is to act as a risk management tool for rechecking all of the fee calculations provided by the Trust Manager to the Corporate Trustee. The second part of the process involves preparing a cash flow waterfall, based on the Trust documentation, and then calculating all of the various distributions to compare to the Trust Manager's calculations. There are a number of flaws with this process which are outlined in the following paragraph.

Bond distributions are already calculated in the Bond Registry system and the recalculation in the spreadsheets represents a duplication of effort. The philosophy behind the cash flow calculations is based on taking a total distribution amount and the recalculating all of the amounts that will flow out of this total amount. An end zero balance implies that the calculations are correct and therefore the Trust Managers calculations must be correct. However, the reality is that most of the figures entered into the spreadsheet are based on set amounts provided by the Trust Manager and are not recalculated. Generally for most distributions, the only recalculated amounts are the fees for the various parties linked to the

Trust. While spreadsheets have a lot of flexibility as a tool for doing calculations and for estimating or keeping track of cash flow, it does not contain an audit trail of activity for risk management purposes and its reliability is based on the skills of the person that put the spreadsheet together.

The reality is that the cash flow model probably plays little part in acting as a recheck on the Trust Managers calculations and is more of a data capture tool (for payments and billing) which currently sits in isolation to the other processes that sit around the activities for bond distributions.

Based on the analysis of the current process, Corporate Trustees should consider the fact that there are a number of manual steps which could be automated using technology. A redesign of the current process for bond distributions could remove the amount of duplication and rechecking of information. In addition, reducing the dependency on spreadsheets and replacing with a system that allows for automation, creation of efficient validations, and produce a reliable set of audit trails.

4.7 Options for the Corporate Trustee

The role of the Corporate Trustee in the distribution process of a securitisation program highlights a number of key issues. The role is ambiguous and not clearly defined either in legal terms, operational practices or market expectations. Fiduciary obligations on the Corporate Trustee place it as a central part of the distribution process and a high degree of trust is placed in the market for the role. A high skill level is required to execute the securitisation transactions and there is perceived value in having a professional company perform this role on behalf of the market.

This thesis provides an insight into the operational practices of the Trustee and the perceived role it plays. From a commercial perspective the business model is unique as the Corporate Trustee's market is created by a securitisation financial structure and the role is one that other parties to the transaction are keen to keep at arm's length. The commercial questions raised for the Corporate Trustee are whether the role could be expanded upon, improved or is it best to leave it as is. There are three options for the Corporate Trustee in moving forward and each are discussed separately.

The first option is to do nothing and leave the status quo in place. As the current process is well known to the market and the Corporate Trustee is building a revenue stream through playing a role that benefits from increased inflows of funds into securitisation programs. Changing a process that works and adding on new business areas introduces operational risks may affect client service levels. However, the do nothing option will continue to have an expensive manual process that does not have the potential to create scale. Additionally as the securitisation market matures and new deal flows start to decline then pressure could be brought on the Corporate Trustee to reduce fee levels as margins erode for all parties and suppliers are seen as a source of cost reduction.

The second option is to redesign the current operational process. This could involve redesigning the process to remove the current spreadsheet based calculations and introduce a level of rechecking focused on bond distribution calculations, checking of financial covenant ratios and limited fee recalculations. Integrating the bond distribution process with the current Bond Registry operations could also produce synergies and help to redesign the process to be more effective. This is based on the facts that the bond registry system already has the ability to calculate bond distributions, the ability to calculate fees, issue investor reports, contains an audit trail and is used to notify financial market clearing services such as Austraclear.

Automating the capture of data and transfer of financial information between the various systems used in the operations area would also produce efficiencies and could reduce costs.

The third option would be to build on the current role. As the current role for the Corporate Trustee allows for a very central position in the on-going running of securitisation programs it could be seen as a way of expanding into other services that the complex market requires. Opportunities could be created by leveraging the unique role and add on more services to offer the market. This presents a number of strategic opportunities as well as difficulties.

The Superannuation market has roles for professional trustees particularly for self managed superannuation funds. This market is very particular to Australia given the Superannuation regime in place that encourages greater savings for retirement through mandatory, e.g. employer contributions, and encouraged, e.g. tax benefits, means for investing. However, for Corporate Trustees in securitisation this might not be a suitable area for expansion as the legislation and regulatory regime for this area is different and it is structured differently to securitisation transactions given its retail focus and restrictions on levels of debt.

Another option would be for Australian Corporate Trustees to expand internationally. Given the level of securitisation bond issuance that occurs overseas this seems like something that would make commercial sense. However, while Corporate Trustees businesses exist in locations such as the US, UK and New Zealand with similar services the compliance legislation, tax rules and regulations of these countries differs from Australia and has impacts on the way the Corporate Trust services operate thus making these business different from Australia due to their regional vagaries.

4.8 Stakeholder Expectations

The Corporate Trustee has many expectations placed on it by different parties and balancing competing demands could place a number of challenges for them. The internal stakeholders include managers and staff as well as shareholders of the Corporate Trustee business. From an external stakeholder perspective the role of the Corporate Trustee evolves around a Trustee structure which has been created by other parties in order to support a securitisation financial structure that aims to efficiently sell assets and then issue notes to bondholders. Bond holders expect the Trustee to act on their behalf in the complex world of securitisation and fiduciary duties on the Trustee are explicit in the transaction documentation.

From a shareholder perspective the expectation of a return on investment would set an expectation of an efficient input/output model where operations processes are made to be as efficient as possible in order to keep costs reduced, avoid risk and build the ability to absorb the demands of the market while charging a consistent fee level for the services offered. This demand could put the needs of employees of the organisation under threat as roles are automated and removed and in other cases potentially de-skilled.

The fiduciary obligations can be broad for the Corporate Trustee services and there are some ambiguities around the extent of the role as demonstrated by the debate between the rating agency Moody's and the American Bankers Association. Trustees play a very central role in the securitisation process acting on behalf of bond holders while at the same time acting under instruction of the Trust Manager and/or servicer while retaining potential back-up roles to set-up into the place of these parties should the need arise. Risk management in securitisation is an obligation on all parties but one of the few parties that has to be there at the start and end of a securitisation transaction is the Trustee.

The position of a Trustee in a Securitisation program means that it would be difficult for it to just uphold the needs of its own shareholders given the expectation of the wider range of stakeholders that the Trustee has. In fact, there could be an argument that the better the Corporate Trustee is able to meet its fiduciary obligations then the better positioned it is to meet market demand and thus provide a good base for a commercial model that in turn meets the need of its shareholders. Balancing the multiple demands of the various stakeholders on Trustees is a key part of being a Corporate Trustee and one that will not dissipate.

4.9 Conclusion

This chapter has tried to bridge the research gap in the securitisation literature by outlining the role of Corporate Trustees in the Australian securitisation industry and discussing the ambiguous nature of that role. Corporate Trustees need to balance the needs of investors while supporting a funding structure and the role is well established in the industry with Credit Rating agencies carrying out reviews of the Corporate Trustees as part of a securitisation program. The high competencies required to act as a Trustee provide Corporate Trustees with a high level of skills and robust framework to meet the challenges of operating in continuously demanding industry.

While the role of the Trustee in securitisation programs is documented in the transaction's legal documents, there are still a number of ambiguities with the role particularly around the calculation of cash flows for payment distributions and verification of these details. Operationally, for Corporate Trustees this ambiguity is also evident and it is a difficult balancing act between legal obligations and managing service expectations. While different industry parties have different views on parts of the role it is likely that this ambiguity will continue for certain parts until it is fully tested in practice.

From a commercial perspective the Corporate Trustee business model is unique as the market demand for the role is created by a preferred financial structure and the role is one that other parties to the transaction are keen to keep at arm's length. Commercially, Corporate Trustee's have to ask the question as to whether this role could be expanded upon and improved or is it best to leave it as is.

The role of the Corporate Trustee is very important for the securitisation industry in Australia as it sits at the heart of the distribution process. Given this central position it is then surprising that the market perception for what the Corporate Trustee should do differs from the legal obligations. This ambiguity is translated into the operations of the Corporate Trustees creating a complex and manual process of checking and cross checking information. For Corporate Trustees the challenge is to balance the legal and service obligations while creating an efficient operational process.

CHAPTER FIVE – SYSTEM TECHNOLOGY CHALLENGES FOR CORPORATE TRUSTEES

5.1 Introduction

An analysis and search of various information sources reveals a gap in the current literature on system technology in the securitisation Industry. Most of the current research discusses securitisation generally or specific parts such as the various aspects of financing or funding. However, system technology is seen as a key part of the industry and it can impact on the ability of the Corporate Trustees to offer both current and new services.

Treating system technology as a key part of the securitisation industry is becoming more important as it is the various systems and processes that link the industry together. For example, the ability to trace a securitised asset from inception through to dissolution while mapping/maintaining its changes during its lifespan is increasingly dependent on the use of system technology. For some industry participants' use of technology is an enabler for product innovation and operational efficiency while for others it is a necessary part of remaining competitive.

Given the changes occurring in the Australian securitisation market, the role of technology becomes more important for Corporate Trustees. Securitisation program's regulatory and operational requirements demand high quality levels of service supported by systems which will have need to stand-up to scrutiny from investors and rating agencies. Given the continued advances in the securitisation industry technology is likely to increase in importance.

5.2 The challenges for Technology in the Australian Securitisation Market

The securitisation market has driven changes in the use and deployment of technology by its various participants. Historically, securitisation had been a consideration after a loan had been originated and technology developments in securitisation tended to be focused on the servicing of the loan only. The main banks drove technology considerations initially in the securitisation market and the main focus were on the loan application stage and post settlement servicing. As all aspects of the loan servicing were conducted on a single party the technology was developed to service this need with large in-house systems being used. Loan servicing was very simple as the characteristics of the accounts were of a relatively simple nature.

The stand-alone systems developed for loan servicing meant that there was a lack of integration for internal system purposes and also with securitisation industry participants. This was not a problem when an organisation controlled all parts of the process, but increasingly, as the securitisation required additional parties to be involved, the stand-alone nature of the system meant that exchange of information was difficult and time consuming.

Over the years, the growing complexity of the loan account and competitive nature of the Loan market mean that greater flexibility on finance options and more features on the service have created greater complexity for technology to meet these requirements

The Australian securitisation market's use of the Trust structure requires more information around the financials of the Trust, its ability to hold and transfer assets and improved Trust accounting. These information requirements create greater demands on technology to track

the flow of securitised assets, provide improved and reliable monitoring/accounting and greater flexibility with the use of data.

5.3 Lending Industry and Technology – Historical Development

To understand the position of technology in the industry it is important to look at the historical development of the lending industry over the last decade and the changes in the value chain. Technology plays a key part in the chain as it often has to mimic the manual stages and in addition different points of the chain have different technology expectations.

Ten years ago, the lending industry was based mainly on centralised relationships with lending institution. High street branches of the various institutions controlled the distribution of loans and all aspects of the loan processing service sat with that particular institution. The process was paper based with loan applications passing from the start of the chain to the final stage for all parts to be completed. This was a costly and time consuming exercise. In what was an advance of its time, facsimile exchange of the information was the only efficiency added to the paper pushing process that existed at that time.

Generally there was a lack of service level agreements between the service providers which added to the cost of the process and meant that each loan application could be treated differently. Where service level agreements did exist they were inconsistent so that the industry did not follow any service levels norms.

Competition was not strong so the costs of the loan process were borne by the borrower. This situation did not offer much incentive for the industry to become efficient given that it could simply pass the costs to the customer. Not surprisingly this did not encourage a desire to

change the processing model and technology was focused on keeping the centralised model in place. In addition, regulation for the industry was generally low and governance overheads were manageable for the industry participants.

Technology was developed in a number of ways and tried to match the practices of the industry process. Technology was built for purpose and centralised for each industry participant. The exchange of data with third parties was limited. The points of the chain were sometimes separated from each other in terms of the technology used which meant that each system would be have separately updated, usually manually, with the data it required. Funding was not tied into the systems that were responsible for loan decision making and loan tracking as it was seen as a separate activity to these. The pressure for change was limited to that particular industry player and its own technology choices so the practices were not viewed from an industry perspective.

Although relationships were still centralised there was a desire for the industry to start changing with pressure to speed-up processing. This meant that the industry started to see a mixture of paper and electronic data being used which started to change the use and design of technology.

Technology started to be changed from centralised systems to systems that could cater for data interchange. Industry groups organised data exchange standards such as LIXI based exchange of data with some providers using this XML (extensible mark-up language) data standards to send each other data messages. This led to the creation of some standard service levels agreements between some of the various service parties.

Competition in the industry means that costs are being shared between the borrower and lender as price became a differentiator. The complex funding models used to service the lending assets increased the desire to minimise costs and time. More emphasis was again placed on technology to do this as technology became the enable of quicker processing times and the greater use of electronic information allowed for decentralisation of processing and reduction in costs.

As the industry expanded legislation and governance issues put extra pressure to modernise and technology was again being used to track compliance through the creation of standard processed and audit trails for each part of the lending chain.

5.4 Current Technology Practices in the Lending Industry

The use of electronic application forms through on-line, offline and near-line websites and data exchange processing gateways emerging are starting to increase the use of technology in the industry

Electronic transactions are overtaking the use of paper. Although application forms are still used to capture data, they are normally transformed into the electronic format quickly so that data can be exchanged with other parties and also efficiency achieved throughout the lending chain. The use of gateways encourages the use of electronic information and transaction flow.

As time has become a critical factor in the approval phase, greater reliance on electronic transactions is placed so that data can be sent quickly and cheaply.

A strong emphasis on quality and cost also feature heavily in the transformation. Technology is seen as the enabler to capture more and better standards of information and then process this at reduced cost levels. The upfront capture of electronic information also helps the rest of the lending chain as it is passed efficiently down the chain. Other parties further along the value chain can benefit from this quality through improved maintenance of records and more reliable sources of data.

The demand for speed and efficiency has seen a shift of critical third party services as far forward as possible in the lending chain. Services such as valuations, credit references, lending criteria, mortgage insurance, building inspections, and title insurance are all processed concurrently once the loan application has been presented. The improved data capture upfront allows this and almost simultaneous ordering of these services electronically allows for more speed to be achieved as well as allowing different parties to have less dependence on other parts of the chain given that their services are treated separately at the outset.

As time dependencies for loan approvals have become critical for the industry, technology has been required to meet the need to quicken the processing of loan approvals. To meet this need technology has been designed to capture more information up-front than what had been captured historically in order to be able to process more parts of the value chain without the need to go back to the borrower multiple times.

Through the use of electronic gateways, the essential up-front ordering of key services can be met as the data is transmitted through the various services. The services can carry out their work simultaneously to speed the processing and quicken the workload of setting up the loan asset. Use of data exchange standards, usually based on XML, allow for messaging to occur quickly and for prompts to be received back through the gateway.

Control over unnecessary costs is more critical for the up-front process so the use of gateways are designed and set-up to capture, process and feed essential services only. By using standard XML messages with data exchange agreements with service providers the use of the gateways can control costs by focusing on only the task at hand. Business rules can be automated through this process as well thus reducing the need for manual intervention and allowing for scale to be created.

The main drawback to the use of the gateway is that by pushing a lot of the services in the lending chain up to the front of the chain all of the associated expenses for these services are incurred earlier than the credit process. This in practice could mean that the loan application must be almost guaranteed to have approval to justify higher up-front expenditure. If the application is declined then all of the costs of the services that have been initiated simultaneously will not be covered.

In order to achieve an almost guaranteed approval the process relies heavily on having accurate data, known business and product rules as well as more automated decision processes. It is only when all parts of the lending chain are working in tandem that the gateway can achieve the benefits of faster processing and cost recovery.

The primary benefit of gateways is early lock-in of the client/borrower and less dependence on lender resources and systems which are typically legacy based and difficult and expensive to change. These types of gateways can operate independently of other core systems as they are designed as business process technology enablers rather than as a part of the core system infrastructure.

5.5 Future Pressures on Technology in Securitisation

The colloquial that change is a constant is true of the technology that operates in the securitisation market because as the industry changes the technology must keep pace with this. These changes involve having not only tracking the underlying assets and information but also contribute to the roles that industry players will take. For example, a product manufacturer without the ability to have technology to cater for the product rules will find it could lose a competitive advantage. This section explores some of the main areas for change that will impact technology in the industry.

The ability for technology to cater for multiple types of accounts is becoming more important as lenders provide different types of loan accounts which can be linked to different features. Technology systems have to be able to cater for different relationship structures given the wide range of account types and multiple features that each type may have. As different loan features get utilised the technology must also reflect this fact and modify the underlying information immediately without compromising data quality. In addition, the extended range of services often involve links to external services for example BPAY, direct debiting, salary crediting, redraw facilities and the loan account then starts to function as a multiple type of account – loan, clearing account, saving account, and line of credit. Catering for this rich list of demands from consumers is very important for technology development. In addition each part of the service is showing that product demands are increasing.

Loan accounts are no longer just a case of collating information on an outstanding debt and matching to a pre-determined repayment profile. Instead they are now being set up to be more dynamic services that allow for different repayment options with the ability to change/modify at different points in time. Financing these loan accounts could involve a securitisation

funding program so linking the accounts, and information they hold, either directly or indirectly to corresponding Trust accounting is very important. Creating these linkages means that the loan accounts are no longer standalone in one system but must be tied to the financing activities. As loans move through their own lifecycle the financing lifecycle may change as well so loans that are a part of one securitisation structure could move to another, either through a sale or transfer, and the systems needs to be able to reflect this fact so that the security of a Trust can be traced and the underlying asset performance can be linked. The information could be all tied together directly through one system that caters for all relationships and is built for the purposes of handling all aspects of the loan. The alternative is to indirect linkages between systems so that the lifecycle and funding activities are modular and the linked through data exchange mechanisms. This indirect approach also allows for exchange of data with different parties and also for outsourcing of activities to occur. Regardless of whether a direct or indirect tracking occurs as the funding options for loans changes, the technology has to cater for the changes and alter accordingly.

The financing aspects of loans mean that the accounts are not part of a single unit but must be linked to the funding of the organisation that originates the loan and then the market that provides the actual finance. Being able to link loans like this, especially where multiple parties are involved, is not easy and therefore integrated technology becomes more important. The ability to provide and receive information with others is more important in the securitisation arena given the need to track the loan from origination through to settlement, financing and then funding through the sale of a bond. The on-going servicing of the bond also means that the loan must continue to provide information to different parties over its lifecycle. Putting securitisation and funding decisions at the forefront of decision-making has major implications for technology use and design as the systems must be linked to these types of decisions and not merely be instruments of just tracking individual asset types. The

financing aspects require complex analysis and re-analysis. Technology must be able to provide the functionality to meet this analysis and also be able to use the underlying data in the systems. Decisions on whether to build all functionality for the securitisation and funding needs into one system or build a separate system to cater for these specific needs and use the loan account tracking system to furnish it with the data required are important ones.

The changes in the securitisation and lending markets will drive further technology changes and this will put more pressure on systems and technology developments to cater for this. Increasingly there are demands for technology to be delivered in a more flexible way so that it can be quickly adapted into the business. Speed and quality of delivery are becoming more important for technology and to cater for this technology is increasingly being delivered in modules. The system has to be designed to be split into modules to allow for this type of development. What this means in practice is that rather than rebuilding the entire system when changes are required the specific components affected of the system are rebuilt while leaving the others untouched. The value of doing this is that speed of development and delivery is increased and the interruption to the business is reduced as only those modules that have been changed need to be tested and analysed.

The costs and complexity of catering for change can lead to decisions to outsource technology change to others either through purchase of vendor system or outsource relationships through service of bureau contracts. Opportunities for outsource service providers are evident in the technology space and being able to cater for the changes through technology development provides these parties with a competitive advantage.

5.6 Technology and Corporate Trustee Strategy Evaluation

Catering for future changes is difficult, especially when the extent of the changes may not be fully known. This section looks at the strategic decision making process for Corporate Trustees taking technology as an enabler and how to view decisions on its technology design decisions.

The technology options for industry participants will fall into three main categories, Innovative, Fast Follower, or Passive Adapter. Choosing between the options depends on a number of factors and is tied to the company involved and its circumstances. A fourth option which is a hybrid of either two or three of these is also available.

The Innovate option involves being first to market by spending more on technology to get ahead of the competition and by using the newest breed of technology to have as a competitive advantage. The Fast Follower option involves watching the market trends and moving quickly after events have unfolded. This option involves a lot of analysis and use of technology is determined by making choices based on this analysis with cost benefit considerations applied. The Passive Adapter uses technology out of necessity but having the newest and latest innovations is not important as the option uses other items for competitive advantage.

<u>Innovative</u>	<u>Fast Follower</u>	<u>Passive Adapter</u>
<ul style="list-style-type: none"> -Above industry spend - Build and Develop - New technologies - Source of Competitive advantage -Staff are Thought Leaders 	<ul style="list-style-type: none"> - Industry benchmark spend - Buy and adapt - Proven technologies - Business enabler - Business savvy staff 	<ul style="list-style-type: none"> - Below industry spend - Off the shelf - Old technologies - “lights on” support - Process orientated staff

Table 5.1 – Examples of Technology possible choices for organisations

Table 5.1 provides an outline of some of the possible choices that organisations have when positioning their technology strategy. These options are not exhaustive but instead provide an illustration of the options that could be available. Similarly the choices do not have to be exclusive as a combination of options is also possible as organisations decide how to build, buy and/or outsource their technology requirements.

While the structure of the Industry and how the various parties in it interact with each other changes, technology has also evolved to be built with greater flexibility in mind as well as the ability to interact with systems at other organisations. Industry participants have had to become more aware of the technology available and its abilities to support innovation, efficiency and improved integration. The extent of this system interaction has gone so far as to see competitors agree to exchange data with each other in agreed format as well as provide access to systems that would ordinarily be restricted. Technology change is not only keeping up with industry changes it is also starting to determine the next set of changes as technology advancements allow for more options to be considered.

One of the more innovative ways the industry has tried to adapt to try and agree data exchange standards using XML language. The body started in 2001 and is made up of lending industry participants that use LIXI to agree standards for data exchange. Its mandate is that it

is an independent body established to develop e-Commerce standards and remove barriers to electronic data exchange within the Australian lending industry.

5.7 Corporate Trustee Stakeholders and Technology

Technology can increase the demands of the various stakeholders on the Corporate Trustee as it provides both opportunities and threats to it. The ability to achieve efficiencies for shareholders is presented by technology while the external parties in the market will expect the Corporate Trustees to keep pace with progress in terms of its role in securitisation transactions as well as how it interfaces to the other parties in the industry.

The position of a Trustee in a securitisation program means that it would be difficult for it to avoid technology advancement as it would be expected as a minimum to at least keep up with technology advancements across the industry. However, the other aspect of technology for Corporate Trustees is that it could bring opportunities outside those that it currently has. These opportunities, in conjunction with the changes in the industry, could allow the Corporate Trustee to offer services that it currently does not.

Changing technology in the securitisation industry has multiple impacts on stakeholders for Corporate Trustees as it changes the nature of relationships and also develops new stakeholders that need to be considered.

5.8 Conclusion

This chapter has looked at the role of Technology on the industry and has tried to shed light on an area that does not have much in the way of academic research to date. Technology has

evolved as the securitisation industry has moved from standalone systems that were designed with single organisations in mind to be more modular in design to meet the changing needs of an industry that requires more innovation, more processing speed and greater flexibility.

There are a number of choices for industry participants for technology and it ultimately ties back to their role in the industry and what they want to achieve within it. Being innovative could mean significant investment in technology for competitive advantage, a fast follower maintains a consistent and safe approach to technology in order to continue reap the benefits while a passive adopter approach keeps up to date as required. There are no wrong or right answers as the success of each approach is determined by the party themselves and how it ties back to the industry.

The influence of the industry on technology use within it has been closely linked to the changes in the lending industry value chain and the changes to funding in that industry. Consumer demand for more choice and options, increased competition, and demand for speed of service have all played big parts in the shaping of the technology in the industry. These indicators will not change in the future and will have a determining influence on technology development as a whole while the immediate technology decisions for participants are tied to their industry role and participation.

CHAPTER SIX – CORPORATE TRUSTEE STRATEGY REVIEW

6.1 Introduction

This chapter aims to present a strategic analysis for Corporate Trustees in the securitisation industry. It also covers the changes to the securitisation value chain that are occurring and the opportunities this presents for commercial entities such as Corporate Trustees. The complexity of the market and need to issue bonds for funding requires an understanding of quality in the interaction with the funding part of the value chain and the securitisation transactions that support the funding in the industry.

For Corporate Trustees to be responsible to all their stakeholders an understanding of their position in the market is relevant and more important the options this position potentially provide them with. Changing market conditions can bring threats as well as opportunities and understanding the Corporate Trustee in terms of its strengths and weaknesses helps with this.

The chapter commences with a review of quality in securitisation programs which leads into an outline of the changes in the market that are creating a new arena for market participants. Strategic opportunities and choices for Corporate Trustees is discussed in the next sections before moving into describing some of the specific services the Corporate Trustees may be able to offer. The strategic opportunities are further covered in the concluding section with recommendations for Corporate Trustees provided.

6.2 The importance of Quality in Securitisation Programs

As discussed in section 2.14 the quality of the ratings it is clear for industry participants is that the quality of securitisation programs is very important to bond holders and an expectation for a high rating for the notes issued is very likely. For Corporate Trustees this means that their fiduciary role will be assessed critically by third parties such as rating agencies and the expectation upon them as they will be able to deal with securitisation programs that are highly rated. This implied level of quality in their role sets out a unique position for Corporate Trustees that means it is continuously under scrutiny.

The current role of the Corporate Trustee positions the business as a central point in the securitisation structure as it passes funds through the funding structure and then supports the maintenance of the program over its lifecycle. This unique position gives the Corporate Trustee a seat at the table of an expanding market and establishes it as a key outsource service provider in that market. Commercial businesses looking to expand normally try to do so by offering new services to existing clients or by taking an existing business model to new markets. For Corporate Trustee the latter option limits new market choices to those that use a similar transaction structures in its securitisation market so the former option would seem to be the most likely one to allow for expansion.

6.3 Changing Market Creates New Arena

There are a number of changes occurring in the securitisation market and these are leading to increased competition, the emergence of different business models, and market participant transition. The Global Financial Crisis is the largest and most recent change to occur and probably the most profound given that it has impacted the source of funds available to the

market thus interrupting deal flows and in turn levels of competition and the standing of the parties in the market.

Securitisation has grown in size and complexity over time and there has been increased activity across a wide range of parties and asset types. On the basis of broad driving forces, investor and issuer involvement in securitisation's transformation into a structured finance technique with added complexity have been strong. Originally, securitisation was a cash market with assets being homogeneous and low credit risk. Building on simpler structured mortgage securities that had first appeared in the early 1970s, , in the form of so-called Collateralised Mortgage Obligations (CMOs) began to be issued in 1983. These continued with the pass through structure of original deals but also included different tranches of collateralised pools of residential mortgages. These were followed by similar products in other Asset Backed Securities as aimed at cost-efficient means to diversify funding sources. Later, collateralised loan and bond portfolios (CDOs), driven by a general desire by banks to transfer credit risk and release economic and regulatory capital added to the different types of securitisation available.

Securitisation's evolution into structured finance technique and added complexity is driven by a number of factors that are present within the finance market. These factors have shaped the current trends in securitisation and changed the nature and transaction structures. The distinguishing features transforming basic securitisation into structured finance are tranching, de-linking, pooling and market imperfections.

The lending chain has been dissected into a number of different parts. Historically lenders (especially banks) tried to cover all parts of the chain and had functions for all aspects. This is no longer the case as parties can pick and choose the areas they wish to operate in. Non-bank

Financial Institutions (NBFI) emergence in the lending market has brought through a number of changes for the Industry. NBFI's desire for funding meant that securitisation became the means to provide up-front financing that could be used by these parties to compete with the main banks. Bank's control of access to Securitised funds, with conditions on using the Bank's own mortgage administration services, meant that NBFI's would have to move out of the manufacturing part of the value chain and into funding area to gain additional revenue.

Traditionally, balance sheet backed lenders with branch networks provided mortgages. However, the growth of the broker industry has seen the emergence of a range of players across the value chain, including lenders, originators, aggregators, brokers and referrers. Significant change is also occurring as regional banks and non-bank mortgage providers are gaining manufacturing share.

Model	Example	Funding	Manufacturing & Packaging		Fiduciary & Administration	Distribution	
			Product	Brand		Own Loans	Others' Loans
Banks	CBA, BOQ	✓	✓	✓	✓	✓	✓
NBFI (product)	Liberty, Bluestone	✓	✓	✓	✓	✓	✓
NBFI (franchise)	RAMS	✓	✓	✓	x	✓	✓
NBFI (Wholesale)	PUMA, Mobius, Interstar	✓	✓	x	✓	x	x
NBFI (Hybrid)	Aussie	x	x	✓	x	✓	✓
Mortgage Managers	Mortgage House	x	x	✓	x	✓	x
Aggregator / Brokers	AFG	x	x	✓	x	✓	✓
Brokers	Mortgage House	x	x	x	x	x	✓

Table 6.1 – The Mortgage Value Chain in Australia

Table 6.1 shows an overview of the mortgage value chain. The Funding section refers to the parties that offer the initial funds for the assets. Manufacturing refers to the development of mortgage products and marketing for these products. Parties that provide outsourced services

such as loan settlement, arrears management, loan servicing, Trustee administration and custodian services occupy the Fiduciary and administration part of the chain. The distribution section of the chain refers to the channels by which the assets are sold / offered to customers.

The various changes in the Mortgage Value Chain are creating different business models in the Australian market. These business models can be grouped together into categories, traditional, securitised, outsourced, warehoused and wholesaling. It would be misleading to label all companies with each of these labels or specifically adhering to one particular model. In practice, most lenders adopt different elements of the various models across the value chain and in respect of separate mortgage portfolios. However, the categories are useful to use to describe different approaches to the market.

Parties are looking to move along the lending chain to leverage their current position and add new revenue streams. Increased competition and the desire to increase revenue streams has meant that NBFIs are now beginning to move back along the value chain to leverage their strong manufacturing position and to provide their own securitised funding vehicles. This is reducing margins in the funding arena and also re-directing funding margins to manufacturers. The implication for this is that established funders such as Macquarie Bank's PUMA program are facing increased competition in this part of the value chain. In addition the administration services, traditionally tied to the funding participants, are being unbundled and are now an area that other specialists can offer services in.

Major Banks have reported increased lending margin compression, explained by a range of factors including back-book repricing, increasing use of third-party broker origination, changing product selection and a less favourable funding environment. Margin decline is likely to continue due to ongoing back-book repricing and greater competition from regional

players and new entrants with aspirations of increased market share. These include General Electric, BankWest, BOQ, ADB and BEN, as well as Citibank, which have flagged an interest in increasing its branch presence in Australia. The movements in the mortgage value chain and unbundling of administration services will likely lead parties to drive greater efficiencies as a result of back office process re-engineering, increased use of electronic application and submission, and reduced re-work. (Johnson and Wiles, 2005)

The addition of new services, increased product range and options, funding alternatives and structures, and increase used of technology it is not surprising that the level of complexity has increased in the market as a whole. Managing this complexity and understanding its implications brings with it increased costs and risk for the parties in the industry.

The Global Financial Crisis is also having a knock-on effect to the smaller institutions in the market in particular as competition for funding increases and the access to funds seen in previous periods becomes harder thus squeezing margins and forcing greater emphasis on risk management oversight to cover the increased financial risk. (Davis, 2008)

6.4 Strategic Opportunities for Corporate Trustees

Corporate Trusts already have a full range of capabilities including securitisation market experience, asset type experience, infrastructure investment, and rating agency credibility. This type of experience offers new market entrants (in particular) reduction in the number of suppliers to mitigate complexity, the ability to avoid start-up costs in loan servicing system and capabilities, speed to market and operational risk management.

There are a number of different factors that are providing opportunities for Corporate Trustees to expand their offerings to the securitisation market. The biggest change occurring in the market and the one that could provide further opportunities for Corporate Trustee organisations is the unbundling of the value chain. Parts of the lending chain are starting to be treated as unique offerings and as distinct services that can be maintained as stand alone offerings. These outsourced parts of the process do not have to be offered to one party but can be provided by a number of different parties cemented together with technology interfaces and service level agreements.

New entrants to the market are keen to control costs and where possible have the costs occur as variable rather than fixed thus matching the cash flows of the loans (assets) to the costs of the business (liabilities). The residual cash from the liabilities taken from the assets is then treated as profit (or loss). One of the more common options for these new lenders entering the market is to pick parts of the lending chain to operate in-house and outsource all other aspects of the process. This allows for focus on core activities and centres the operation around revenue generating activities while allowing others to provide the other services required. Corporate Trustee's investment in infrastructure and capability provides the ability to offer clients a cost structure tailored to its business needs. Charging models in the industry generally are expressed as percentage charges on Funds under Administration (FUA). Legal fees for establishing trusts are one barrier to entry for new securitisers. Corporate Trustees usually incur the legal fees to establish a standard set of documents and this allows new participants the ability to leverage this investment.

Corporate Trustee's knowledge of funding structures in the securitisation market provides a strong base for new entrants as it provides expertise to clients that are new to the area. Corporate Trustees provide an expertise for securitisation market participants as their working

knowledge of the industry and requirement to understand a wide range of complex financial transactions for different assets types has built a wide range of experience for new market entrants to tap into. Coordinating the various stakeholders in the securitisation programs is a role that Corporate Trustee's are in a unique position to arrange, thus mitigating the operational risk for market participants.

6.5 Strategic Choices – The Corporate Trustee Capability Analysis

The securitisation Market has a number of different roles and opportunities that Corporate Trustee could avail of in the future. The Securitised Lending Chain diagram shows the number of areas that could be covered in the market and for Corporate Trustees to move into. While all areas have attractions as well as limitations, Corporate Trustees choices are limited to mainly the administration areas servicing parties in both the funding and manufacturing parts of the value chain.

Table 6.2 presents an analysis of the main administration areas that could be options for Corporate Trustees and each area is discussed in turn in terms of their strengths and weaknesses.

	Fiduciary Services		Loan Servicing		Loan Origination
	Document Custody	Post-Settlement Servicing	Variations & Discharges	Settlement	Credit Assessment
CT Mortgage Services Participation	Offer custody of physical documents relating to Securitisation program assets	Service loans including calculation of interest, statement provision, arrears management	Administer changes to loans including variations & discharge of loan	Offer Settlement of Loans service to third parties	Offer Credit Assessment of loans to third parties
Strenghts	Legal title programs list Corporat Trustee as lender of record	Connection to the industry	Connection to Document Custody Service		
	Securitisation Specialist	Brand	Pricing		CT's experience is that dients prefer to keep this service in-house
	Responsible for monitoring of assets	Service ethic	Service delivery		(competitive advantage / proximity to the customer)
	Usually acts as Security Trustee as well	Independence from banking entity	Technology solution (via mortgage processing specialist)		
Weaknesses	Need additional capacity to take on major bank	Lack of SSP 'servicer' rating	Relationships with influential mortgage managers	Lack of capabilities	
		Inability to offer banking products			

Table 6.2 – Service choices and strengths/weaknesses choices

From a commercial perspective, Corporate Trustees offering a broader range of services is not only a good source of additional revenue it is also a good mechanism to protect itself during market downturns. The Global Financial Crisis highlighted this as having a single source of income could be jeopardised as a deal flows decreased in the securitisation market, the Corporate Trustees that provided a wider range of service could provide greater protection through diversification.

6.6 Corporate Trustees Fiduciary Services Expansion into Document Custody

Securitised lending programs create a large documentation trail and require safe custody of the physical loan documents. Comprising the loan application, loan security information and asset titles the packet of information is a very valuable part of the securitisation program. A Corporate Trustee is ideally suited to carry out this role given its responsibility to secure the assets of the Trust and to administer the securitisation program. Typically the investment required to become a custodian is large as it involves having a secure premises to hold the documents and the ability to track and administer them. However, the Corporate Trustee investments in this infrastructure would provide it with the ability to add a new service to base and create a new revenue stream from securitisation clients.

6.7 Post-Settlement Servicing and Loan Servicing

The lenders interest in the loan wanes post-settlement as the costs and focus of administering the loan can be unattractive. Post settlement servicing is only attractive to lenders if they can cross-sell other services or use the servicing element to attract refinancing and increases to lending limits. There are opportunities to provide a loan servicing service-outsourced service to the securitisation market. Possible options range from offering a service bureau service

providing full loan servicing including customer relationship management or instead providing simpler services involving data reporting and related support services. Underlying the service options is the ability to hold the date, process interest calculations across a variety of lending products and collect repayments. Additional services such as arrears management can also be provided but this is not necessary as there are other parties in this market space that can offer this service.

Corporate Trustees are in a good position to offer this type of service given their securitisation specialism, their ability to collect monies for lending programs and the ability to perform financial calculations. Investment in loan servicing infrastructure involves specialist software and trained staff. However, the level of investment is dependent on what type of loan servicer the Corporate Trustee wishes to be – a full end-to-end service bureau, or a more limited offering. This choice will likely come from the target market characteristics. New entrants to the securitisation lending program will typically seek a provider of full-outsourced capabilities and with variable costs. Established lenders, such as banks, would consider outsourcing from a cost perspective and finding a party that can achieve a lower cost base through economies of scale. The Corporate Trustee choice may also be an evolving one offering a limited service initially and then expanding the capability to accommodate demand.

Whatever the choice, there are good strategic opportunities for Corporate Trustees to offer a post settlement loan servicing offering to the securitisation market.

6.8 Loan Variations and Discharges

The ability to offer a service to lenders that are discharging loans or making some kind of variation can be attractive as the process is not straight forward and requires administration

co-ordination of the physical custodian, the loan servicing and legal parties. For many parties this is not a core part of their business and the Corporate Trustee's capabilities in securitisation provide it with a good base to tap this market.

6.9 Loan Credit Assessment and Loan Settlement

Linked closely to lending decision making process, the credit assessment process for loans is normally a core part of what the lender does and is therefore unlikely to be an area for the Corporate Trustee to build capability. Similarly the settlement process is the defining part of the up-front work in lending as the application and decision-making process bear fruit to settle a loan and introduce a new asset to a securitisation program. The lender's ability to successfully complete a loan can be defined in the settlement part of the contract and is therefore an area that would be outsourced.

The Corporate Trustee could leverage capability in these areas and build a service but without an appetite in the market it is unlikely to flourish.

6.10 Strategic Opportunities and Recommendations

There is a good opportunity for Corporate Trustees to be premier providers of fiduciary and administrative services to clients in the Australian securitisation market. A Corporate Trustee's strategic priorities are driven by the strengths and weaknesses in these activities. Building on the trust service the opportunity to leverage new opportunities is strong given the changing characteristics of the securitisation Value Chain and the unbundling of the services within it.

For the Corporate Trustees the strategic priorities would be:

- Defend and grow the core business – Facilitate the entry of new securitisers and target competitor clients
- Broaden and strengthen mortgage services capabilities – Enhance offering or launch additional services

The development of an expansive strategy can be seen in table 6.3 where the Corporate Trustee can plot its commercial course over a series of horizons. The horizons approach is used to show a business in its current status and then plotted out over a series of next steps or horizons. A list of key areas is highlighted that are important to the business.

	Horizon 1	Horizon 2	Horizon 3
Market Characteristics	<ul style="list-style-type: none"> Securitisation aimed at funding mortgage market New competitors for Banks and traditional lenders Fragmented market Specialist roles evident but administration roles closely tied to funding structure 	<ul style="list-style-type: none"> Value Chain Changes Market Participant Changes Commoditisation of value chain Expansion of Securitisation market Increased Complexity of Securitisation Market 	<ul style="list-style-type: none"> Continued expansion and complexity of industry Increased requirement to provide data exchange capabilities using common interface protocols Product changes and demand for increased product flexibility Unbundling of the value chain
Regulation	<ul style="list-style-type: none"> ASIC (Corporations Law) Corporate Trustee Legal Documentation Australian Consumer Credit Code Regulations 	Mortgage Brokers began to increase scrutiny	Increased regulation of broker distribution Rating agency rating criteria adherence/maintenance
Technology	<ul style="list-style-type: none"> Trust Account Maintenance Technology Custodian Tracking Systems Transaction input/output processing systems 	<ul style="list-style-type: none"> Expanded administration capabilities Desire to introduce straight through processing for Trust administration New technology aimed at expanding capabilities and providing specialist services 	<ul style="list-style-type: none"> Modular technology capability to cater for various outsource service provision Data interface capabilities using industry language standards Flexible ability to customise technology offerings to cater for different client requirements
Resources	<ul style="list-style-type: none"> Legal Trust Administration Transaction negotiators 	Technology specialists	Combined business and technology capability Virtual teams that can work on customised client solutions
Competitive Advantage	<ul style="list-style-type: none"> Ability to understand complex transactions Balance commercial with fiduciary duties Independence 	<ul style="list-style-type: none"> Ability to bundle services and reduce administrative burden on institutions by providing range of specialist services Limited but specialised outsource services Specialist Administration services provider 	<ul style="list-style-type: none"> Economies of scale Ability bundle specialist activities to provide customised service and range of outsource options Administration services provider
Market Position	Trustee Administration services		
Ability to Expand	<ul style="list-style-type: none"> Limited by costs and ability to maintain independent administration role 	<ul style="list-style-type: none"> Limited by costs and ability to handle specialist workload Willingness to expand product range 	Limited by logistics and profit margins in target areas
Requirements	<ul style="list-style-type: none"> Technology capabilities Administration staff with specialist skills Mandate Transaction profile (e.g. Rating agency rating) 	<ul style="list-style-type: none"> Expanded technology capabilities especially improved interfaces to external parties Expanded reporting capabilities Date warehouse capabilities for data exchange/interfaces 	<ul style="list-style-type: none"> Customised technology driven by ability to deliver efficiently and a high quality service Expansion of ability to combine and harness technology capabilities

Table 6.3– Strategy Horizons for Corporate Trustees

In the first horizon the Corporate Trustee is shown at its most simple role in a securitisation transaction that is as Trustee. The role requires a degree of independence as well as the ability to balance commercial requirements with its fiduciary duties within a complex financial structure.

Horizon 2 shows the Corporate Trustee expanding its new areas but closely tied to those that exist in the first Horizon. The examples here could be as document custodian, which is a role closely tied to the securitisation structure and which the Corporate Trustee could offer without significant expansion of specialised knowledge or capabilities. This added service could then be offered as part of a suite of services to the securitisation market, which provide further opportunity to charge fees and create revenue-generating opportunities.

The third horizon is a further expansion such as into the more complex areas of loan servicing. While some capabilities such as legal knowledge, transaction expertise, are already established the Corporate Trustee will need to acquire additional technological capabilities to purchase/enhance systems capable of servicing the loans and combine these systems with the ability to exchange data internally and externally. This skill set requires the Corporate Trustee to ensure that business and technology knowledge is shared.

The horizons approach is one means to display an expansion strategy for a Corporate Trustee and there are other means to analysis and assess this area. The opportunity of adding revenue generating services to the product capabilities of a Corporate Trustee will be dependent on the individual commercial circumstances of each and their position in the securitisation Market.

6.11 Conclusion

This chapter has looked at Corporate Trustee's role in the securitisation in the light of the changes facing the industry and what that means for their strategic decisions. The dissection of the industry into a number of different parts means that there are a number of roles that could be filled by different parties in the industry. The creation of different business models in the industry that can be grouped into categories of traditional, securitised, outsourced, warehoused and wholesaling provide different groups of clients for Corporate Trustees to work with and each will have different needs to match the business models.

Corporate Trustee's central position within the securitisation structure provides a potential base to expand into a number of different new services along the value chain in order to improve their market offering. The strengths and capabilities of Corporate Trustees give them the ability to move along the value chain and increase their services to include areas such as

other Fiduciary Services in Document Custody or Post-Settlement Servicing, loan servicing and servicing for Loan Originations. A number of parts of the value chain are being treated as separate parts providing the opportunity to develop capabilities in these areas and offer them as discrete services.

The unbundling of the value chain and in particular the commoditisation of the administration part of the securitisation market is creating opportunities for Corporate Trustees to expand outside of their traditional roles. The expansion of services and increased capability should allow the Corporate Trustees to create economies of scale which can be in turn linked to the funding and delivery of a range of services to new and existing funders and product manufacturers in the securitisation market.

CHAPTER SEVEN – CONCLUSION AND FOLLOW-UP

7.1 Introduction

The aim of this research was to provide a top down analysis of Corporate Trustees operating in the Australian securitisation market. Specifically the study has focused on analysing the changes in the securitisation industry and the impacts and opportunities these could have for Corporate Trustees. The securitisation industry has grown to \$180 billion over the last 10 years and home loan mortgages still account for the majority of this at circa 70%. Growth in securitisation funding has also been coupled with the industry changing considerably since it first came to prominence in Australia in the mid-1990s with more sophisticated forms of structured finance, increased competitiveness and changes to the structure and make-up of the value chain which have all further driven the changes. (Bailey and Davies, 2004)

To build the background information and focus the topic I started the research process asking three main questions:

1. What was the composition of the securitisation value chain?
2. What were the changes in the securitisation value chain?
3. What were the implications for Corporate Trustees?

To contextualise the research, the empirical research focused on information about securitisation looking at specifically at the industry from a past, present and future perspective and discovering that as it changed over time the definition of securitisation itself also started to change. This discovery changed the focus of the research to re-focus on four main streams of work at a deeper level:

1. Description of the securitisation Value Chain
2. Changes/Trends in the securitisation Value Chain
3. Changes: Implications for Technology on the Industry and on Corporate Trustees
4. Corporate Trustees: Current role and Future Opportunities

This was a field based research project analysing, through a single unit case study, one Corporate Trustee currently offering services to the Australian Capital Market. The thesis has covered key areas in relation to the role of the Corporate Trustee providing an analysis of competitive strategic choices available to Corporate Trustees for servicing the Australian Capital markets. It has also explored the evolution of Corporate Trustees role and market position, product development for Corporate Trustees and the associated change management.

This research identified a literature gap and sought to fill this void by providing insight into the securitisation market and how Corporate Trustees are responding to the changes in the industry.

7.2 Main Findings

The historical journey of the securitisation market has seen it evolve from a simple transaction that packaged financial cash flows to encompassing a sophisticated range of structured finance techniques. The rapid growth of the securitisation market and increasingly complex structured solutions being used are in turn increasing the levels of complexity and change within the industry. As the largest sector of the securitisation Industry, changes in the mortgage value chain have fuelled increasing changes on the process of securitisation as well as putting it at the foremost part of the lending process. This move of securitisation as a means to fund business growth rather than merely addressing existing balance sheet lenders

has created opportunities for mortgage manufacturers to tap into the funding part of the value chain and to increase their margins share in mortgages.

Increasingly sophisticated customer requirements, the desire to contain costs and add efficiency has put through a large amount of change in the mortgage process. Increasingly the need to push more of the mortgage process to the front of the process in order to turn information into electronic formats that can be quickly dispersed to other parties and to quicken funding decisions has taken precedence. The securitisation Industry is becoming increasingly complex and fragmented. This complexity and fragmentation is fuelling opportunities as well as challenges for its members and participants.

While the role of the Corporate Trustee in a securitisation program is documented in the transaction's legal documents, there are still a number of ambiguities with it. From a commercial perspective, the Corporate Trustee business model is unique as the market demand for the role is created by a preferred financial structure and the role is one that other parties to the transaction are keen to keep at arm's length. The role of the Corporate Trustee is very important for the securitisation industry in Australia as it sits at the heart of the distribution process. However, despite the central part of the Trustee and the legal documentation that surrounds it, it is still an ambiguous role with differences of opinion on what the role should be doing. This ambiguity is translated into the operations of the Corporate Trustees creating a complex and manual process of checking and cross checking information. For Corporate Trustees the challenge is to balance the legal and service obligations while creating an efficient operational process.

Technology has evolved as the securitisation industry has evolved moving from standalone systems that were designed with single organisations in mind to be more modular in design to

meet the changing needs of an industry that requires more innovation, more processing speed and greater flexibility. There are a number of different technology strategies available and ultimately these choice ties back to the role in the industry and the demands of that role. Being innovative could mean significant investment in technology for competitive advantage, a fast follower maintains a consistent and safe approach to technology in order to continue reap the benefits while a passive adopter approach keeps up to date as required. There are no wrong or right answers as the success of each approach is determined by the party themselves and how it ties back to the industry. The influence of the industry on technology use within it has been closely linked to the changes in the lending industry value chain and the changes to funding in that industry.

Corporate Trustee's role within securitisation transactions provides a potential base to expand their market offering. The strengths and capabilities of Corporate Trustees give them the ability to move along the value chain and increase their services to include areas such as other Fiduciary Services in Document Custody or Post-Settlement Servicing, loan servicing and servicing for Loan Originations. The unbundling of the value chain and in particular the commoditisation of the administration part of the securitisation market is creating opportunities for Corporate Trustees to evolve to start to move outside their traditional roles in the securitisation market and take on new roles as commercial opportunities and demand for expansion have taken hold. The expansion of services and increased capability should allow the Corporate Trustees to create economies of scale which can be in turn linked to the funding and delivery of a range of services to new and existing funders and product manufacturers in the securitisation market.

7.3 How the Findings Relate to Stakeholder Theory

Corporate Trustees have a pivotal role in a securitisation transaction and they have to balance their own commercial obligations with the fiduciary duties as being a Trustee. There are a number of stakeholders involved in a securitisation transaction and the Corporate Trustee will liaise with every one of them at some point. All of them will have different expectations of the Trustee role and will have to be managed in different ways by the Corporate Trustee as part of its overall securitisation duties. There is ambiguity in terms of what the legal obligations and operational realities of the Corporate Trustee role are that can confuse the role thus making stakeholder management more challenging.

The Corporate Trustee has shareholders that expect it to earn a return on its capital investment and produce income from the services it provides. However, the legal obligations placed on the Trustee require it to act in the best interests of the beneficiaries of a securitisation trust acting impartially throughout the process. These competing interests have the potential to produce conflict as one hand the interests of the Corporate Trustee is to produce a profit while on the other hand they have to act impartially and in the best interests of another party. The securitisation program allows for this conflict though as the Corporate Trustee's commercial rights are protected so that it can act impartially in the event of a problem in the securitisation transaction. This keeps the potentially competing interests at arms length while not neutralising the effectiveness of either the commercial or fiduciary objectives.

A further counterbalance in the securitisation process is the desire for quality in the transaction. Rating agencies review the transaction documentation as well as examining the role of various parties. This review role helps to reveal and mitigate potential conflicts of

interest as well as assessing the overall quality of the securitisation transaction. This review can then be used by investors to determine the risks of the transaction.

The role of the Corporate Trustee helps to prove Stakeholder Theory as it highlights the fact that a commercially demanding role can also meet ethical objectives through its support of fiduciary obligations. Corporate Trustees cover a number of different areas that form Stakeholder Theory. Going beyond the obvious fiduciary duties Corporate Trustees have a definite risk mitigation role that has been given the powers to act on behalf of the various stakeholders, it integrates the obligations into the various contracts of the securitisation transaction that also covers property rights and stakeholder obligations.

Critical Distortions and Friendly Misinterpretations	Corporate Trustee and Securitisation Experience
Stakeholder theory is an excuse for managerial opportunism	Securitisation is a tangible market that provides benefits to its participants. The role of the Corporate Trustee is very commercial
Stakeholder theory cannot provide a sufficiently specific objective function for the corporation	Corporate Trustee's role is tangible and governed by the relevant securitisation transaction documentation
Stakeholder theory is primarily concerned with distribution of financial outputs	Securitisation has a very tangible financial purpose that provides benefits to a number of stakeholders
All stakeholders must be treated equally	The various securitisation transactions allow for different levels or tiers among the different stakeholders
Stakeholder theory requires change to current law	Securitisation transactions and the role of Corporate Trustees has not required a change of law in order to exist
Stakeholder theory is socialism and refers to the entire economy	Securitisation covers a particular aspect of the finance industry and not the whole economy
Stakeholder theory is a competitive moral doctrine	The role of the Corporate Trustee has fiduciary duties
Stakeholder theory applies only to corporations	Not directly covered by Corporate Trustees role or Securitisation generally

Table 7.1 – What Stakeholder Theory Is Not & Corporate Trustees

Table 7.1 is used to demonstrate that the nature of securitisation transactions and the role of the Corporate Trustee also help to counter what stakeholder theory is not. The Corporate

Trustee role, despite its ambiguities, does provide a definite proof of stakeholder theory in action.

7.4 Limitations of the Study

The study of Securitisation and its components is very broad and this research project did not intend to become the complete guide to all things related to Corporate Trustees and so has a number of limitations to it. In writing this research thesis, the author has tried to address the limitations by identifying them and by also presenting the information in a way that future research can be undertaken. The following sections outline some of the main limitations of this research.

The research only focuses on Corporate Trustees operating in the Australian market. This limitation to the scope of the research could cap the usefulness of the research to overseas parties or Australian parties wishing to evaluate international opportunities. The Australian market has a strong preference for using the Trustee structure in Securitisation transactions and thus the role of the Corporate Trustee is important in this context but overseas markets that use Special Purpose Vehicles and a Company structure will require further study.

Initially in the data collection phases of the research, the researcher has had to balance the conflict between being part of the research and being the researcher. This role conflict may limit some aspects of the research given the closeness to the material. However, as the study has progressed the researcher has moved away from working directly in the areas being studied to other fields of work in financial studies thus mitigating any conflicts that may have arisen.

Currently, there are limited studies of Corporate Trustees operating in the Securitisation market and this limits the benchmarks for study that could be available. The positive side to this limitation is that researcher has the opportunity to fill in gaps in the academic research in this area of the Securitisation market thus providing a valuable source of information. The gap in current research and material is an area of study the researcher has set out to address.

7.5 Conclusion

The rapid growth and expansion of the securitisation Industry has also coincided with increased complexity and fragmentation of the industry. Difficulties with defining securitisation are met with increasing difficulties of understanding the roles of the participants as they move into new roles along the Mortgage Value Chain and change their business models to suit the new circumstances in which they face. Product distributors are more focused on being able to sell products while the lending process is required to balance the quality of delivery with cost effectiveness.

Technology in the securitisation industry is being driven by the extensive changes that face the industry. Increased competition, value chain fragmentation, demand for improved and increased services, increasingly complex financing structures, and more regulated lending practices are all contributing to the changes in technology use. Use of integrated technology that is delivered in modules is becoming more important given the need to meet demand quickly and link to a range of third parties and industry participants are increasingly have to make choices to their technology strategy and decide whether they will be innovative, run with the crowd or stay behind.

Stakeholder theory is proven in the role of the Corporate Trustee as it highlights the ability to balance ethical requirements with commercial objectives. In fact the ethical role of the Corporate Trustee supports its commercial position and the fiduciary duties are held in high regard by the securitisation industry. Corporate Trustee's role also helps to counter some of the misinterpretations of Stakeholder Theory.

Corporate Trustees role as Trustee for securitisation Transactions in Australia has created an opportunity for them to expand their range of services and provide more commercial opportunities in the industry. The unbundling of the securitisation Value Chain and in particular the opening up of the administration services part of the market is creating opportunities for parties to provide specialist services. The Corporate Trustee has a unique opportunity to leverage its position in securitisation while balancing its fiduciary obligations with commercial demands.

CHAPTER EIGHT – FUTURE OUTLOOK AND IMPLICATIONS

8.1 Introduction

This thesis does not purport to be an exhaustive study of all matters pertaining to the Australian securitisation market and its related topics and there are a large number of other information areas of research potential within this industry. To support the growth of further study in this field the author would like to recommend some areas of interest for further study. These areas are related to the topics within this study.

This research is a contribution to a body of knowledge relating to securitisation and specifically relating to Corporate Trustees. The purpose of this chapter is to set out some recommendations for further research as well as potential implications for these areas in the future.

8.2 Recommendations for Further Study

The recommendations for further study are based on some topics that this thesis has touched upon and discussed in the context of the research objectives but has not delved into the detail that these areas merit as specific research topics in their own right.

The Global Financial Crisis (GFC) that climaxed during 2008 and its impact on securitisation is an area of further research that requires study and analysis. This financial crisis caused disruptions to financing from the securitisation market and the associated impacts of this have been felt throughout the whole industry. The immediate impact of the GFC on the securitisation was that access to funding for mortgages assets quickly disappeared as investors

fled the market. Mortgage originators were required to seek access to other funding sources which were limited and the mortgage industry has become dominated by large financial institutions with access to funds from cash deposits. NBFIs that had increased competition in the market during the 1990's were forced to wind back operations and in some cases close their businesses in response to the lack funding. The most visible output of this is that the four major banks in Australia – Australia and New Zealand banking group, Commonwealth Bank of Australia, Westpac Banking Corporation and National Australia Bank – were originating up to 90% of the mortgages in Australia during the GFC compared to just over 50% only two years before that. (Charpentier, 2008)

A study in this area could review financial markets disruptions and its impact on the securitisation value chain as well as general or specific studies on the impacts to industry participants. When these markets are liquid the funds available can generate a number of different securitisation programs and differing transaction types. However, commencing in 2007 the credit markets have begun to go through a number of changes that have been headlined in the media. The effective decline (and closure in a number of cases) is having a big effect on the securitisation industry and its participants. Given that securitisation supports financing and particularly off sheet funding for the banking industry then changes in funding arrangements are likely to also have impacts on the type of transactions that securitisation supports going forward. A likely consequence of the Global Financial Crisis is that transactions types will be judged more on risk management guidelines as the appetite for riskier transactions evaporates. For smaller operations in the financial markets securitisation as an avenue for funding may close thus forcing changes onto these participants including exiting of markets.

While it may be too early to discuss the full implications of these changes they will certainly be an interesting area to study in the context of funding sources for securitisation vehicles, costs of finance and downstream impacts on industry participants and assets.

Given the global context of securitisation and links to the Global Financial Crisis discussed above, an international comparative study would be a good area to study. Global credit markets play a big part of the securitisation Market in Australia with high issues of bonds going overseas. At the height of securitisation issuance in 2006 to 2007 over 50% of funding for securitisation markets was coming from outside of Australia from investors in Europe and North America. The markets these securities are sold in often have their own domestic issuers selling their own securitisation transactions. A comparison between the different countries that support securitisation transactions would be interesting as it would allow for a broader understanding of the global financial market for these types of study comparing the issuance of securitisation bonds in Australia versus overseas based on a number of criteria such as pricing, risk management, costs of the transaction and access to investors. A study across a number of these types of areas would be of use to those working in the securitisation market from a pricing and issuance perspective. This further research could be tied into this paper through comparisons of the value chain compositions and changes in markets to further understand the unique changes that take place in the market.

The global access to funds for securitisation tied to a post GFC environment is also of further research from an international comparison perspective as the trends in the various jurisdictions may have knock on impacts for Australia. The high level of issuance of Australian securitisation bonds pre-GFC may be impacted over time as markets in other jurisdictions take different times to emerge from the crisis.

This thesis has discussed the quality of securitisation programs in relation to rating agencies and the demands placed on industry administrators in terms of the scrutiny they receive for their role in a transaction. The rating agencies themselves play a very big role in the market as the ratings they assign impacts pricing of bonds, the structure of the securitisation transaction and rules by which the transaction must follow in order to maintain a credit rating. However, the rating agencies themselves are open to criticism as their role can appear to lack of objectivity as it is the asset originator and not the investor that pays for the credit rating. This could be perceived as creating a bias on the rating outcome as it is in the interest of the asset originator to get as high a rating as possible in order to keep costs of funding down. A study on whether this perception holds true, especially in light of the ratings during the GFC, would be a worthwhile undertaking to assess the objectivity and value of rating agencies.

Another aspect of the role of the rating agencies is the perceived value created from the rating assigned. Securitisation bonds with the highest credit rating are priced by investors above similar rated sovereign and corporate bonds. This is due mainly to the perceived complexity of understanding a securitisation investment compared to a sovereign or corporate investment. However, the role of the rating agency could be to provide comparisons between the various investment types by relying more on the rating outcome and agency report. A study in this area might be of use to investors to help investment decisions for bond issuance and improve their perception on pricing levels for securitisation transactions.

Risk Management in pricing securitisation transactions could also be a topic to research and study. While risk based pricing is not a new area of study, the complex areas of securitisation transactions make risk management assessments a broad area of research given the financial, operational and asset risks involved in the funding arrangements. Against the context of a complex and changing market the management of operational risks that could impact the

overall securitisation transaction is important to understand for asset originators and service providers in the industry. Pricing these risks into the transaction flows across the value chain and ultimately for the financial mechanics of the transactions to work is both complex and compelling. In times of volatility, markets mis-pricing of risk and institutions ability to manage exposures can make or break securitisation transactions. This is evident in the extreme of the GFC where investors unable or unwilling to price acceptable levels of risks chose to exit the market rather than engage in seemingly complex transactions. Risk modelling can be flawed if it is based on historical correlations that no longer hold true for the market and continuously being able to price the risks is a an on-going pursuit. Rising debt costs, debt availability and credit rationing has an aggressive impact on pricing. There are a number of different research questions that this area could produce for further exploration.

8.3 Conclusion

The Australian securitisation market is an important part of the global financial markets and thus is interlinked with the broader transaction and funding flows that resonate across Capital markets. The four areas of recommended further study of the impacts of the GFC on the securitisation market, an international comparative study, the role of rating agencies and risk management in securitisation are all worthy of further research. These recommendations are not an exhaustive list of areas for further study and the broad and evolving area of securitisation provides a broad base of further research.

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APPENDIX ONE – EXTRACTS FROM TRANSACTION DOCUMENTS

Extracts from securitisation program Transaction Documents used to assess and understand the expectations on the role of the Trustee/Corporate Trustee.

Crusade Global 2 of 2003

Supplementary Terms Notice

5.22 Notice of calculations

The calculations outlined in this clause 5, or required to be made by the Manager under any Condition, must be made by the Manager and notified to the Trustee on each Determination Date. The Manager must also notify the Trustee of all details of payments which are to be made by or on behalf of the Trustee on each Payment Date. The Manager must also notify the Currency Swap Provider of all payments which are to be made by or on behalf of the Trustee on each Quarterly Payment Date under clauses 5.1(c)(v), 5.1(c)(vii), 5.2(a)(ii)(A), 5.5(a)(ii) and 5.6(a)(ii) on each relevant Quarterly Determination Date. In the absence of **manifest error**, each of the Trustee and the Currency Swap Provider is entitled to rely conclusively on (and will rely on) the Manager's calculations and notifications and is not required to (and it will not) investigate the accuracy of them.

(a)The Trustee shall only make a payment under any of sub-paragraphs (c)(i) to (c)(xii) inclusive if it is directed in writing to do so by the Manager and only to the extent that any Total Available Funds remain from which to make the payment after amounts with priority to that payment have been distributed.

Harvey Trust 2004-1 (Domestic RMBS)

Series Supplement

27.8 Trustee May Rely

(a) (Entitled to rely): The Trustee is entitled to conclusively rely on (unless actually aware to the contrary) and is not required to investigate the accuracy of:

(i) (Contents of Letter of Offer): the contents of any Letter of Offer in the form of Schedule 1 given to it by the Seller or any Letter of Offer in the form of a Transfer Proposal given to it by the Manager, and, in either case, any representation as to whether a Housing Loan specified therein meets the Eligibility Criteria;

(ii) (Settlement Statement): the contents of a Settlement Statement;

(iii) (Calculations): any calculations made by the Seller, the Servicer or the Manager under this Deed including without limitation, the calculation of amounts to be paid to, or charged against, any Investor or the Seller on specified dates;

(iv) (Collections): the amount of, or allocation of, Collections; or

(v) (Certificates): the contents of the letter and certificates provided to the Trustee under clauses 6.1(f), 6.1(g), 6.1(h) and 10.25(g) and any certificates given by the Manager or the Servicer pursuant to the Settlement Statement or otherwise pursuant to subsequent amendments to this Deed or the Master Trust Deed.

Clause 17 Determination and Application of Total Principal collections

.....The obligations of the Trustee to make any payment under each of the above paragraphs is limited in each case to the balance of the Total Principal Collections (if any) available after application in accordance with the previous paragraph or paragraph

Berri (Aurora)

Supplemental Deed

14 Determinations by Trust Manager

14.1 Determinations to be made

On or before the Settlement Date immediately following each Determination Date, the Trust Manager will, in respect of the Collection Period ending on the Determination Date, determine or otherwise ascertain each determination or calculation which is relevant for the purposes of making payments or allocations on the next Settlement Date in accordance with the Cashflow Allocation Methodology (including without limitation, calculations necessary to determine any fees payable by or to the Trustee).

14.2 Notification and instruction

The Trust Manager must:

- (a) notify the Trustee and the Note Holder of each of the amounts calculated by it in clause 14.1 (“Determinations to be made”) and each payment to be made or amount to be applied in accordance with the Cashflow Allocation Methodology on each Settlement Date; and
- (b) instruct the Trustee as to the payments to be made by the Trustee on the relevant Settlement Date in accordance with the Cashflow Allocation Methodology.

REDS

Master Trust Deed

16.9 Trustee is not liable for

(c)(**Failure to check information**): for any loss, costs, liabilities or expenses caused by the Trustee's failure to check any calculation, information, document, form or list supplied or purported to be supplied to it by the Manager, any Nominated Seller or

Nominated Servicer under this Deed or a Series Supplement or by any other person pursuant to a Transaction Document except to the extent that any of the foregoing is caused by the Trustee's or the delegate's own fraud, negligence or wilful default;

Series Supplement REDS 2003-1

27.8 Trustee May Rely

(a) (**Entitled to rely**): The Trustee is entitled to conclusively rely on (unless actually aware to the contrary) and is not required to investigate the accuracy of:

(i) (**Contents of Letter of Offer and Transfer Proposal**): the contents of any Letter of Offer in the form of Schedule 1 given to it by the Seller and any Transfer Proposal given to it by the Manager and, in either case, any representation as to whether a Housing Loan specified therein meets the Eligibility Criteria;

(ii) (**Settlement Statement**): the contents of a Settlement Statement;

(iii) (**Calculations**): any calculations made by the Seller, the Servicer or the Manager under this Deed including without limitation, the calculation of amounts to be paid to, or charged against, any Investor or the Seller on specified dates;

17.1 Application of Total Principal Collections

On each Determination Date, based on information provided by the Servicer, the Manager must determine the payments or allocations to be made by the Trustee on the following Distribution Date from the Total Principal Collections for the Monthly Period just ended and will direct the Trustee to apply, and the Trustee must apply, the Total Principal Collections in making the following payments and allocations on that Distribution Date on account of principal in the following order of priority:

PUMA

Master Trust Deed

20.3 Trustee's Reliance on Manager

Whenever any certificate, notice, proposal, direction, instruction or other communication is to be given by the Manager to the Trustee, the Trustee may accept as sufficient evidence as to the form and content thereof a document reasonably believed to be signed on behalf of the Manager by any 2 Authorised Signatories of the Manager. The Trustee shall not be responsible for any loss arising from any act, neglect, mistake or discrepancy of the Manager or any officer, employee, agent or delegate of the Manager in preparing any such document or in compiling, verifying or calculating any matter or information contained in

Nothing in this clause 20.14 alone (but without limiting the operation of any other clause of this Deed) shall imply a duty upon the Trustee to supervise the Manager in the performance of the Manager's functions and duties, and the exercise by the Manager of its discretions, hereunder. any such document, provided that the Trustee is not actually aware that such document is not genuine and correct, whether or not an error in any such information, document, form or list is reproduced by the Trustee in any step taken by it.

Sub Fund Notice

5. Cashflows

5.1 Order of payments on each Monthly Payment Date

At least three Business Days prior to each Monthly Payment Date the Manager must determine the payments or allocations to be made by the Issuer Trustee on that Monthly Payment Date from Collections in relation to that Monthly Payment Date and must direct the Issuer Trustee to apply, in accordance with clause 5.2 and subject to clause 5.4(e) (in relation

to Collections comprising the Principal Cash Balance), and the Issuer Trustee must apply, those Collections in making the following payments and allocations on that Monthly Payment Date in the following order of priority:

The obligations of the Issuer Trustee to make any payment or allocation under each of the above paragraphs is limited in each case to the balance of the Collections (which may be applied in accordance with clause 5.2) after payment in accordance with the preceding paragraph or paragraphs (if any). Any Collections not paid towards a liability of the PUMA Trust on a Monthly Payment Date, or otherwise allocated to the Income Reserve or the Principal Cash Balance, are to be held by the Issuer Trustee as Collections and invested in Authorised Investments in accordance with clause 10.4(a) of the Trust Deed. The determination by the Manager of the payments and allocations to be made by the Issuer Trustee pursuant to this clause 5.1 are to be made based upon the Manager's reasonable expectation of amounts to be received by the Issuer Trustee after the date of determination and which will be included in Collections on the relevant Monthly Payment Date. The Manager may by notice to the Issuer Trustee revise any direction given pursuant to this clause 5.1 in relation to a Monthly Payment Date at any time before a payment is made by the Issuer Trustee pursuant to that direction.

Medallion

Series Supplement 2004-1G

8.1 Application and Payments on Distribution Dates

‘...the manager must make all necessary determinations to enable the Trustee to make the payments or allocations to be made by the Trustee on that distribution date....’

10.3 Payments ‘...the Trustee must in accordance with the directions given by the Manager...pay the amount available for distribution... ++’

28.1 (a) the Trustee is entitled to rely upon (unless actually aware to the contrary) and is not required to investigate the accuracy of:

(iii)...any calculation made by a seller, the servicer or the manager under this Deed including without limitation, the calculation of the amounts to be paid to, or charged against, any security holder or seller on a specified date.

(iv)...The amount of, or allocation of, collections.

Heritage

Series Notice

5.1(b) Cash Flow Methodology

‘The Trustee shall only make a payment under any of the sub paras(i) to (xvi) inclusive only if it is directed in writing to do so by the Manager on the Determination date immediately preceding the relevant Payment Date and only to the extent that any Total Available income remains from which to make the payments after amounts with priority to that payment have been distributed,’

Master Trust Deed

14.16 Make calculations, co-ordinate and provide reports

The Manager shall, in respect of a Trust:

(a) calculate all payments due on any relevant Payment Date;

(b) co-ordinate the issue of relevant Notes and the raising of funds from those issues, or from any Support Facility;

- (c) supervise the preparation of all relevant Accounts, financial reporting and preparation of Tax returns for a Trust;
- (d) prepare and deliver (by facsimile or such other method as the Manager may consider appropriate), all statements and reports as and when required by any Series Notice or other Transaction Document prepare and distribute the Manager's Report for each Trust to the Trustee and, for each Rated Trust, each Designated Rating Agency; and
- (e) provide all directions to the Trustee, as may be required for the Trustee to comply with its obligations under the Transaction Documents.

37.2 Trustee's reliance on Manager, Approved Seller or Servicer

- (a) (Authorised signatories are sufficient evidence) Whenever any certificate, notice, proposal, direction, instruction, document or other communication is to be given to the Trustee, the Trustee may assume:
 - (i) the authenticity and validity of any signature in any such document and that such document has been duly authorised; and
 - (ii) the accuracy or any information contained in any such documents, in either case unless the officers of the Trustee responsible for the administration of the relevant Trust are actually aware to the contrary.

37.18 Trustee not obliged to investigate the Manager etc

The Trustee shall be responsible only for so much of the Authorised Investments, and the income and proceeds emanating from the Authorised Investments as may be actually transferred or paid to it and the Trustee is expressly excused from:

- (a) taking any action or actions to investigate the accounts, management, control or activities of the Manager or any other person; or

(b) inquiring into or in any manner questioning or bringing any action, suit or proceeding or in any other manner seeking to interfere with the management, control or activities (including the exercise or nonexercise of powers and discretions) of such persons or seeking to remove from office such persons, taking any steps or bringing any action, suit or proceedings or in any other manner seeking to vary, amend, delete from or add to this Deed or other instrument establishing the Trusts, or wind up any of such persons or vest the Trusts.

37.22 Reliance by Trustee

Notwithstanding any other provision of this Deed, in the absence of actual knowledge to the contrary, the Trustee is entitled conclusively to rely on and is not required to investigate the accuracy of:

- (a) the contents of a Sale Notice given to it by an Approved Seller;
- (b) the contents of any Manager's Report;
- (c) any calculations made by an Approved Seller, a Servicer, the Manager or a Calculation Agent under any Transaction Document including the calculation of amounts to be paid to, or charged against, Noteholders, the Beneficiary or the Seller on specified dates; or
- (d) the amount of, or allocation of, Collections.

APPENDIX TWO – EXAMPLES OF CURRENT FEE AND CASHFLOW VERIFICATIONS

The following are examples of Current Fee and Cashflow verifications used to assess and review the role of the corporate Trustee in securitisation program transactions.

Puma	REDS
Trustee Fee	Manager's Fee
Cashflow - Funds In/Out	Servicer's Fee
Interstar	Trustee Fee
Trustee Fee	Custodian Fee
Manager's Fee	Liquidity Facility Fees and Interest
Servicer's Fee	Redraw Facility Fees and Interest
Cashflow - Funds In/Out	Basis Rate Swap
Members Equity	Fixed Rate Swap
Trustee Fee	Schedule of Bank and ACLR Fees
Cashflow - Funds In/Out	Cashflow - Waterfall
Resimac	AIMS
Trustee Fee	Trustee Fee
Security Trustee Fee	Servicer's Fee
Servicer's Fee	Managers Fee
Managers Fee	Cashflow - Waterfall
Liquidity Facility Commitment Fee	
Cashflow - Waterfall	

Torrens	HBS
Trustee Fee	Trustee Fee

Custodian Fee	Servicer's Fee
Manager's Fee	Cash Advance Facility Fee
Servicer's Fee	Manager's Fee
Redraw Facility Fee	Custodian Fee
Liquidity Facility Commitment Fee	Liquidity Facility Commitment Fee
Basis Rate Swap	Redraw Facility Commitment Fee
Fixed Rate Swap	Backstop Liquidity Facility Fee
Cashflow - Waterfall	Fixed Rate Swap
Crusade (Euros and Globals)	Cashflow - Waterfall
Trustee Fee	Medallion (Globals)
Servicing Fee	Trustee Fee
Manager's Fee	Manager's Fee
Custodian Fee	Servicer's Fee
Redraw Facility Availability Fee	Liquidity Facility Commitment Fee
Floating/ IR Swap	Liquidity Interest Charge
Basis Swap	Redraw Commitment Fee
Coupon in both Currencies	Redraw Interest Charge
Currency Conversion of Principal	Coupon in both Currencies
Cashflow - Waterfall	Currency Conversion of Principal
	Cashflow - Waterfall