

An Exploratory Study of the Adoption and Use of Securitisation in New Zealand: An Interdisciplinary Enquiry

Kirsten MacDonald
Faculty of Commerce
PO Box 84
Lincoln University
Canterbury, New Zealand 7647
Ph: +64 3 325 2811
Fax: +64 3 325 3847
Email: kirsten.macdonald@lincoln.ac.nz

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ABSTRACT

Current explanations for securitisation rely predominantly on empirical logistic regression models. Quantitative models predicting the likelihood of securitisation do not consider all of the factors that influence the securitisation decision. In combination with conflicting extant literature and a lack of industry evidence, the answer to why some firms securitise and others do not is incomplete.

This study examines how New Zealand (NZ) non-bank financial institutions (NBFIs) make the decision to adopt and use securitisation and how that compares to extant theory. The background theory of capital structure is alone unable to address the research question, therefore a multidisciplinary framework is used to determine what could contribute to an understanding of the decision to adopt and use securitisation. Four case studies are carried out in NZ NBFIs and the findings are compared to literature from Finance, Decision Research, Psychology, and their related sub-disciplines.

This research highlights the usefulness of a multidisciplinary approach to examining corporate finance decisions and the complementary nature of quantitative and qualitative models. Firm and region-specific information improves understanding of the securitisation decision at the micro level in areas previously unexplained by macro level theory. While NZ NBFIs make the decision to adopt and use securitisation in a manner consistent with aspects of securitisation and capital structure literature, this study provides insights into problems surrounding information availability, the importance of information sources and the reliance firms place on such information, decision-making methods utilised, the factors and process involved in selecting securitisation over alternative financing, and why some characteristics of securitisers in NZ differ from what is expected by quantitative securitisation models.

Key Words: **Securitisation, Capital Structure, Decision making,**
Non-Bank Financial Institutions

1. INTRODUCTION

Securitisation is believed to be “one of the most important and abiding innovations to emerge in the financial markets since the 1930s” (Kendall, in Silverman & Sparks, 1998, p. 122). The mortgage-backed securities market outgrew the United States (US) bond market by the early 1990s (Cantor & Demsetz, 1993), yet despite its size and importance in the global economy, the securitisation market remains less visible than other markets (Silverman and Sparks, 1998).

This market characteristic is echoed in Australia where firms indicate they would increase their use of securitisation if they had greater knowledge (Leung, 1995). Given that securitisation has the potential to create or destroy value for shareholders depending on its use (Johnson & Eldridge, 1995; Skarabot, 2001), the effective use of securitisation will be limited unless knowledge and understanding of the decision to adopt and use securitisation is improved.

NZ firms are said to face impediments to securitisation, nevertheless some firms participate in the market. This behaviour warrants further investigation. NZ market characteristics suggest the existence of difficulties for lenders in attracting deposits, increasing the potential for the future use of securitisation. These characteristics include significant levels of household and student debt (Harris, 2002), unsustainable levels of foreign borrowing (Claus & Scobie, 2002), an ageing population (Stephenson & Scobie, 2002), customer loyalty to banks declining (Tripe, 2002) and high competition in lending markets following deregulation, which has been exacerbated by the increase in NBFIs in the lending market (Kennedy, 1998). An Australian NBFI, Wizard, claims that its ability to offer low floating rates, even below the rates offered by other non-branch institutions, are due to flow on effects from securitising its assets (“Wizard to cast”, 2000). Although NBFIs are increasingly providing funds and financial services to borrowers in the US and Australian markets, extant securitisation research primarily focuses on banks (Demsetz, 2000; Lockwood et al., 1996; Pavel and Phillis, 1987; Stanton, 1998; Thomas, 2001) and non-financial institutions, such as industrial or automotive firms (Lockwood et al., 1996; Minton, Opler & Stanton, 1997), in the US market.

Current explanations for securitisation rely predominantly on empirical logistic regression models (Demsetz, 2000; Minton et al., 1997; Pavel & Phillis, 1987). Quantitative models predicting the likelihood of securitisation do not and are not intended to consider all of the factors that influence the securitisation decision. This lack of industry evidence means the decision to securitise remains contentious (O’Connell, Ratnatunga, & Smyrniotis, 2000), and the background theory of capital structure alone is unable to address the gap in the literature. Hence, a multidisciplinary body of literature is employed which offers additional background theories and potential explanations of the decision to adopt and use securitisation¹. However, the purpose of this paper is to provide empirical industry evidence from NZ to address the question:

How do New Zealand non-bank financial institutions make the decision to adopt and use securitisation and how does that compare to a multidisciplinary literature framework?

The following section reviews the literature. Section three justifies and describes the research methodology. Section four discusses the findings and section five presents conclusions drawn from the findings.

2. LITERATURE REVIEW

Overview

Capital structure decisions comprise two parts: a choice of the proportion of debt and equity and choices regarding the mix of securities within the debt and equity categories, including the option to securitise. According to Modigliani and Miller (1958), capital structure decisions should create no value for shareholders. Firms should therefore be indifferent between more traditional forms of financing and the use of securitisation (Minton et al., 1997; Skarabot, 2001). Yet, if practitioners continue to securitise, there must be economic benefits to be gained

¹ A full literature view is beyond the scope of the current article, but is in preparation.

because “companies do not buy sophisticated complex financial products just because they are sophisticated and complex, and, normally, correspondingly expensive” (Ward, 1993, p. 260). In the presence of market imperfections, capital structure relevance arguments identify the potential for value creation from capital structure choices generally (Jensen & Meckling, 1976; Modigliani & Miller, 1963; Myers, 1984; Myers & Majluf, 1984; Stiglitz, 1972). Capital structure relevance arguments are equally applicable to the decision to securitise (Minton et al., 1997; Skarabot, 2001; Stanton, 1998), however, the potential economic benefits alone are insufficient to explain why firms securitise (Davis, 2000; Demsetz, 2000; Fisher, Montagu & Co Ltd, 1991; Greenbaum & Thakor, 1987; Leung, 1995; Maher, 1994; Minton et al., 1997; Nicolle, 2001; Norriss, 1996; O’Connell et al., 2000; Pavel, 1986; Pavel & Phillis, 1987; Rotherham, 1999; Shaw, 1991; Sinkey, 1998; Skarabot, 2001; Tierney, Quint & Ames, 1994, Weenink, 1992).

Securitisations

Descriptive securitisation literature has primarily focussed on the US market where securitisation originated. More recently, literature has emerged on Europe, Australia and other countries as their asset-backed securities markets have expanded, but much of the literature is practitioner-focussed rather than of an academic nature. In NZ, academic securitisation literature, presented from a legal and taxation perspective, and the popular press argue that the main reasons for NZ firms shying away from securitisation are the size of the NZ market, the volume of assets available to be securitised and, in particular, the cost associated with securitising the assets (Davis, 2000; Maher, 1994; Rotherham, 1999; Weenink, 1992).

However, there are still firms securitising in NZ. Furthermore, while market size, asset volume and cost have also been previously perceived as impediments in the development of the Australian market (Leung, 1995), field evidence reveals that market participants value the strategic benefits to be gained from securitisation more highly than direct benefits, despite the costs involved (O’Connell et al., 2000).

Like descriptive evidence, quantitative and theoretical evidence centres on the US market, but it is limited further by focussing on banks (Demsetz, 2000; Lockwood et al., 1996; Pavel & Phillis, 1987; Stanton, 1998; Thomas, 2001) and non-financial institutions such as industrial or automotive firms (Lockwood et al., 1996; Minton et al., 1987). By limiting the firm type or industry, the types of asset-backed securities under examination are also limited. The choice of time period examined also impacts on the evidence provided. Wealth tests performed by Lockwood et al. (1996) and Thomas (2001) utilise two different data sets. The initial conflict in their results can be attributed to differences in time period (Thomas, 2001). Finally, all of these studies employ a methodology that limits the way in which understanding of the decision to adopt and use securitisation can be improved.

Field evidence collected to date, in the form of two Australian studies (Leung, 1995; O'Connell et al., 2000), makes significant progress to address the weaknesses of descriptive, quantitative and theoretical approaches and challenges their strong focus on the potential to achieve direct economic benefits from securitisation. Not only does field research reveal that securitising firms value the strategic benefits of securitisation more highly than firms that do not participate in the securitisation market, but it also considers non-US data and a much wider range of firm types and industries. The work of O'Connell et al. (2000) is most important to this paper because the approach used has not yet been tested in a non-Australian context and "there might be additional factors to those examined in this study that might also impact on transactions" (p. 21).

While strong support exists for quantitative models in terms of their ability to predict firms that securitise and those that do not (Demsetz, 2000; Minton et al., 1997; Pavel & Phillis, 1987), like capital structure research, these models focus on outcomes rather than process. That is, researchers must infer the reasons why firms choose to securitise from the results of regression models (Beattie, Goodacre & Thomson, 2004). The motives hypothesised are all possible, but the true explanation of a firm's decision to securitise cannot be revealed without information from within firms. However, logistic regression models are not designed to capture

all of the influencing factors involved in the decision to adopt and use securitisation (Carroll & Johnson, 1990; Radford, 1975).

Despite the different approaches of descriptive, empirical and field research, four broad categories of influencing factors emerge from the three streams of research. Direct benefits are “those that have immediate and quantifiable impacts on organisations’ financial positions” (O’Connell et al., 2000, p.8), whereas indirect benefits are “those that might lead to lower financial costs, but their impacts are difficult to quantify at the time of the transactions” (O’Connell et al., 2000, p. 78). Resource availability in terms of presence (Benston, 1992; Demsetz, 2000; Fisher, Montagu & Co Ltd, 1991; Greenbaum & Thakor, 1987; Leung, 1995; Minton et al., 1997; O’Connell et al., 2000; Pavel, 1986; Skarabot, 2001; Tierney et al., 1994; Zweig, 1989), level available (Leung, 1995; Minton et al., 1997; Norriss, 1996; O’Connell et al., 2000; Shaw, 1991; Sinkey, 1998) and accessibility (Leung, 1995; Minton et al., 1997; O’Connell et al., 2000), and the existence of favourable environmental conditions (Davis, 2000; Leung, 1995; Maher, 1994; Pavel & Phillis, 1987; Rotherham, 1999; Weenink, 1992) determine whether or not a firm is able to securitise and whether or not a benefit can be realised. Table 1 provides a comprehensive range of influencing factors sourced from the three complementary research streams and organised by the four principal categories identified.

Insert Table 1 here

Capital Structure

Capital structure theory has a predominantly quantitative and normative focus. Normative models represent what decision-makers (DMs) should do in theory, but “there is ample evidence that the art of financial management dominates its science” (McAulay, Russell & Sims, 1997, p. 34) and the capital structure decision is no exception. Recent field evidence, sourced from DMs via surveys and interviews or both, indicates that while outcomes suggest DMs seem to follow parts of one or more theories, decisions may be made as a result of implicit

understanding as opposed to explicit knowledge and application of theory (Bancel & Mittoo, 2002; Beattie et al., 2004; Graham & Harvey, 2002). The body of capital structure field work as a whole reveals some evidence in support of both the trade-off and pecking order models of capital structure, and even the more contemporary windows of opportunity hypothesis. However, the presence also of weak and conflicting evidence suggests there is still something unaccounted for in theoretical capital structure models (Allen, 1991; Allen, 2000; Bancel & Mittoo, 2002; Beattie et al., 2004; Donaldson, 1961; Fawthrop & Terry, 1975; Graham & Harvey, 2002; Norton, 1989; Pinegar & Wilbricht, 1989; Scott & Johnson, 1982; Stonehill et al., 1975), strengthening the need for industry evidence to address the gaps in the securitisation literature.

Capital structure field research seeks to address the inability of conventional methodological approaches to deal with the decision-making process and diversity of capital structure decisions (Beattie et al., 2004), including the decision-making context and managerial characteristics (Graham & Harvey, 2002). Definitive explanations of managers' behaviours are not yet available and a number of areas require further investigation (Beattie et al., 2004; Graham & Harvey, 2002). Nevertheless, this paper recognises the potential to extend the work of O'Connell et al. (2000) may lie in examining how the decision to securitise is made, encompassing not only the influencing factors involved in the decision, but also the DMs and the decision-making process and context.

Both normative and behavioural approaches examining capital structure choices address the higher-level capital structure decision regarding the choice of the proportion of debt and equity financing, but largely ignore the lower-level decision regarding the choice of the mix of securities within the debt and equity categories. Capital structure literature alone is unable to explain how a DM makes the decision to adopt and use alternative forms of financing, such as securitisation, as their availability arises in the market. Thus, a broader base of literature beyond the focus and background theories (Phillips & Pugh, 1987) of securitisation and capital structure is required to address the knowledge gaps identified in the field of securitisation.

A Multidisciplinary Approach

The decision to securitise is one of many sources of finance under the umbrella of the capital structure decision in the field of Corporate Finance. Capital structure and securitisation research revealed that DMs do not always act in accordance with normative theory or predictive models and differences exist regarding the perceptions of the costs and benefits of securitisation.

Decision making is a psychological construct and perception is a cognitive process (Carroll & Johnson, 1990). While capital structure field research has begun to address decision-making processes, context and managerial characteristics, further work is required. Finance, Decision Theory, and Psychology, along with the transition zones between each of the disciplines, Behavioural Finance, Behavioural Decision Research, Organisational Theory and Corporate Finance, are proposed to be the relevant background theories of interest which form the research lens used to explore the literature.

For example, securitisation and capital structure literature do not explain how firms make the decision to adopt and use a new or innovative form of financing such as securitisation. Financial innovation adoption decisions are influenced by many of the same factors as technology adoption in general (Akhavein, Frame & White, 2005). As an innovative form of financing, securitisation can be conceptualised as a financing “technology”. Innovation, a subset of Organisational Theory, can therefore be used to improve understanding of the decision to adopt and use securitisation.

The multidisciplinary set of literature comprised 144 publications from 1963 to 2005 inclusive. Jøcumsen’s (2000) categorisation system was used to group findings from the literature according to whether each element pertained to steps/phases, methods or the context of the decision to adopt and use securitisation. Jøcumsen’s model does not assume that all the steps or phases in the decision-making process involve the same methods and allows for the consideration of individual biases, organisational and other external contextual effects and their impact on the information chosen, the way information is used and the alternatives considered, which impact on the steps and phases themselves. The model was adapted by splitting

steps/phases into sub-categories of chronology, to indicate the order in which hypothesised steps or phases occur, and nature of the phases, to indicate the possibility that the steps or phases are sequential or iterative. The innovation under consideration was added as a dimension of the contextual factors, incorporating the attributes and perceived consequences relating to the innovation, sourced from models of innovation.

3. METHODOLOGY

Data collection and analysis

Unique to this study is a multidisciplinary focus on the securitisation decision, defined as the decision or series of decisions and influencing factors leading to the adoption and use of securitisation. With little prior securitisation field research and the application of a new approach to examining the securitisation decision, a qualitative case research approach was deemed best suited to the examination of decision-making processes (Yin, 2003). A multiple case design was used to compare the securitisation decision under varying conditions.

Purposive sampling (Sarantakos, 1998) was applied due to the nature of this study's objectives and the small population of securitisers in NZ. A number of cases must be considered to allow for analytical generalisation, the process of generalising from case study results to some broader theoretical propositions (Yin, 2003). Cavaye (2001) recommends completion of four to 12 cases, depending on information sufficiency and time constraints. Eisenhardt (1989) suggests the addition of new cases until information saturation is reached, usually between four and 10 cases, depending on information sufficiency and limits created by data overload, likely to be reached sooner as the richness and complexity of within case sampling increases (Miles & Huberman, 1984). Prior to selecting firms, annual reports, newspapers and other financial press were reviewed to identify firms meeting the case selection criteria presented in table two. Five firms were approached to participate in the study to provide a balance between the breadth and depth of information required to satisfy the study aims.

Insert Table 2

The empirical field investigation was carried out via a series of face-to-face interviews (FTFIs), a survey and the use of document analysis. The cases were intended to provide data to either confirm or disconfirm the findings from background theories, as well as to explore the possibility of additional parameters, thus multiple data collection methods increased methodological rigour via triangulation (Yin, 2003). A semi-structured interview format, using an interview guide including prompts, ensured that the pattern of questions and answers was organised and relatively uniform for each case to facilitate subsequent transcription, coding and analysis, yet adaptable according to the role of the interviewee. The interview guide began with a request for background information, followed by a series of open and closed-ended questions about the chronological process of the securitisation decision, the influencing factors and actors involved. All interviews were one to one and a half hours in length, recorded, transcribed and studied for content along with other documentation from each firm. Content was coded and analysed using NVivo version 2.0. Several rounds of coding were required to complete the data analysis as new ideas and patterns emerged, requiring further modifications to the adaptation of Jocumsen's (2000) categorisation scheme.¹⁷

One FTFI was planned with the key DM from each of the five firms. This was considered sufficient to gain insight into the processes and factors influencing the securitisation decision, given the supporting evidence provided by the survey and document analysis. While it is acknowledged that one respondent may not possess detailed information from all aspects of the decision, "if a set of questions can be reliably answered by one key informant, then the research process should focus on identifying these and validating that this person(s) is indeed one" (Voss, Tsikriktsis & Frohlich, 2002, p. 205). The CEO or CFO of each firm identified the most appropriate participant from the decision-making unit.

¹⁷ See Appendix for quotations and codebook samples.

The purpose of the 24 question survey, administered prior to the interviews, was to collect demographic and respondent information, initial information on the decision making methods of the firm and perceptions of factors that influence the decision to adopt and use securitisation. Surveys from previous adoption studies, in general, in conjunction with securitisation literature were used to ensure inclusion of the most appropriate open and closed-ended questions. Questions designed to elicit preferences used five point Likert scales to measure a factor's degree of significance to the securitisation decision or the degree to which some dimension of the decision-making process or needs were met. Quantitative measures were intended solely for use as a quality check against interview data. Annual reports, newspaper and web media were collected prior to interviews, followed by a request for access to documentation relevant to the decision to adopt and use securitisation. The number and type of documents supplied varied from firm to firm.

4. RESULTS

Descriptive Data

Four of five companies agreed to participate by returning completed surveys, with seven participants in total. Four interviews were carried out, with two individuals participating in the interview at Firm 3. Firm 1 allowed a visit to the company site prior to the interview, during which time two further individuals were consulted and approximately three hours were spent observing employees.

Demographic data presented in table three allows comparison with existing classification systems to identify consistencies or inconsistencies with extant research and thus identify areas for further research. Years of market participation are substituted for firm age to provide a more realistic indicator of experience and reputation in the market since two firms have previously operated as divisions of a parent firm. Firm size classification, important because the determinants of innovation differ by firm size (Rogers, 1995), was determined by a best fit

comparison of a number of firm variables against Clark and Associates' (2005) profiles of NZ enterprises.

Insert Table 3 here

Firm 1 is an unlisted company providing finance to the industrial sector in the form of operating leases, finance leases and credit contracts. Firm 2 is a listed company providing finance for a variety of consumer goods through merchants, in the form of hire purchase agreements, and direct to consumers, in the form of personal loans. Firms 1 and 2 have well-established reputations in the market, having previously been divisions of their respective parent companies. Firm 3 is one of a number of subsidiary firms linked to a listed parent firm providing finance to state-associated or owned entities and some long-standing businesses in the form of operating or financial leases and credit contracts. Firm 4 is an unlisted firm providing finance to individual consumers and businesses via a network of merchants in the form of operating or financial leases, credit contracts and personal loans. The firm has an established reputation in both national and international markets.

Process: Steps/Phases

Consistent with Cyert and March (1963) and the logical flow of the process model of organisational decision making, all firms provided descriptions of problems or needs driving their search for securitisation. For instance, legislation changes or a crisis within a firm, such as constrained capital, drove the search for an alternative. Each firm expected to achieve certain objectives and perceived benefits by adopting securitisation. Although the benefits named differed slightly across firms in terms of content and importance, their decisions are consistent with Harrison's (1987) definition of rational decision making, being one in which alternatives are selected to meet objectives, the objectives-oriented approach of the process model of decision making and Simon's (1957) procedural rationality. Similar to the adoption and use phases of innovation models, information gathered from all firms fell into a pattern of a before

and after focus, but it was difficult to elicit specific information regarding the decision-making processes in terms of the existence or acknowledgement of steps or phases, exactly what took place within each phase, the order of phases and the triggers for movement from one phase to another. Insufficient evidence is found to support either iterative or sequential decision-making processes.

All firms spoke of steep learning curves, particularly in the early stages of the adoption process where information availability was a problem. As predicted by Organisational Theory, which states that the degree of organisational learning is directly related to an organisation's ability to adapt and modify its task environment (Argyris & Schon, 1978; Hedburg, 1981), and studies of innovation, where information is more readily available as an innovation matures (Ford & Ryan, 1981), some firms were able to recover from these problems faster than others depending on their capabilities to modify their existing information technology and reporting systems and as time went on. A contingency planning pattern emerged across firms around areas of human resources, information technology and distribution channels, consistent with the long-term focus of the process model of organisational decision making and the underlying contingency approach of Organisational Theory and Strategic Management.

Process: Methods

Decision making across all firms was highly analytic compared to heuristic since there were low levels of manager and employee knowledge prior to the implementation of securitisation, difficulties associated with accessibility and availability of information in the market, high levels of accountability for DMs and the non-routine nature of the securitisation decision (Beach & Mitchell, 1978). Behavioural Finance, Behavioural Corporate Finance, Decision Research, Behavioural Decision Research and Innovation concur that information availability, the sources of information and reliance on those sources, the information selected by the DM and the way it is used have an impact on the decision outcome and process (Carroll & Johnson, 1990; Einhorn & Hogarth, 1982; Kanaan, 1993; Radford, 1977; Rogers, 1995;

Shefrin, 1999; Tversky & Kahneman, 1974). This is particularly important when the information comes from the external environment (Chestnut & Jacoby, 1982; Pennings & Leuthold, 2001; Shefrin, 2001; Slocum, 1982). The external network, including auditors, legal advisors, bankers, other businesses and conferences were found to be very influential on the decision to adopt and use securitisation, particularly in the early stages of adoption.

Information availability and accessibility were most problematic during the infancy of the securitisation market, increasing the length of firms' searches for alternatives. According to Organisational Theory, DMs make decisions for which they will be rewarded (Daft & Noe, 2001) and which are more likely to be aided due to environmental uncertainty (Beach & Mitchell, 1978). The adoption and use of securitisation may be influenced by the financial rewards provided by two firms as part of their innovation programmes. Two firms also relied heavily on decision aids such as computer aided modelling. In several cases the lack of information but continuance of decision making and resulting actions implied the use of heuristics and satisficing behaviour, features of the organisational and process decision-making models. Quality decision making relies to some extent on the use of intuition, judgement and creativity (Daft & Noe, 2001; Jones & George, 2003). Success is also linked to the use of intuition in risky or uncertain environments (Agor, 1989). The one firm that agreed that the use of intuition was likely has been reported in the press as being one of the most successful finance companies in NZ, but confidentiality agreements preclude such a discussion here.

A DM's experience and level of education impacts on the degree to which decision making is considered analytic (Beach & Mitchell, 1978). Two DMs had significantly less experience than the others, yet both had completed an additional year of university education. In support of Graham and Harvey's (2001) hypothesis that the level of a DM's education and theoretical awareness may have an impact on the evidence found for or against a theory, DMs with higher levels of education reported more named analytic methods, yet the remaining DM's descriptions indicated no less use of analysis despite techniques being described but not named.

Factors: Innovation Contextual Factors

As predicted by innovation models, the technical attributes associated with securitisation had an impact on both the firms' adoption and use of securitisation. Consistent with logistic securitisation models, credit ratings are a factor in the securitisation decision (Minton et al., 1997). Compatible with all streams of securitisation literature, asset suitability was considered (Benston, 1992; Minton et al., 1997; O'Connell et al., 2000; Pavel, 1986; Skarabot, 2001; Tierney et al., 1994). These factors played a role in the degree of flexibility surrounding the use of securitisation. However, other firm specific characteristics, such as borrower profile, including the length of the business relationship with the issuer and the nature of the physical asset being financed and its value, stood out as being the primary reason why Firm 3 was able to securitise far less homogenous assets than all other firms. This is the first known empirical evidence in support of descriptive literature that states the strategic importance of either the business related to the assets to be securitised or the assets themselves are factors in the decision to securitise (Fisher, Montagu & Co Ltd, 1991).

All firms acknowledged the existence of a range of potential benefits of securitisation, including access to capital, privacy of information via off-balance sheet nature, cheaper funds and improved risk management, specifically improved liquidity, and interest rate risk and balance sheet management. These results support Strategic Management, in terms of access to capital and keeping commercially sensitive information within the firms, and findings from all three streams of securitisation literature. However, previous supporting empirical evidence for the liquidity hypothesis (Finnerty, 1988; Pavel & Phillis, 1987) and diversification of risk (Greenbaum & Thakor, 1987; Pavel & Phillis, 1987) was limited primarily to banks.

Although no firm stated an intention to securitise to avoid underinvestment, the firms' comments and descriptions support the underinvestment hypothesis for securitisation (Minton et al., 1997; Stanton, 1998) given that, for example, costly external finance would have prevented them from taking on larger and more profitable clients without securitisation. Whereas Graham and Harvey (2002) found very low evidence of the importance of

underinvestment in US firms' debt issuing decisions, they found the importance placed on insufficient internal funds, particularly in small firms facing information difficulties when raising equity, supported pecking order theory. Like other field studies of capital structure (Allen, 1991; Allen, 2000; Donaldson, 1961; Pinegar & Wilbricht, 1989; Stonehill et al., 1975), there is evidence supporting the pecking order hypothesis because although two firms could have issued equity to fund their projects, they chose not to do so because of DM's beliefs about the undervaluation of equity. Although Graham and Harvey found no difference between growth and non-growth firms, the findings here are consistent with Myer's (1984) predictions for small, growth firms. NZ NBFIs are operating in an environment in which "growth rates between 50-100% are not uncommon" (Hess & Feng, 2007, p. 15).

Indirect or strategic benefits of securitisation ranked ahead of cost in three of four firms consonant with O'Connell et al.'s (2000) Australian findings. The three firms that ranked indirect benefits ahead of the direct benefits of lower costs of funds were small to medium enterprises (SMEs) that named access to capital as a benefit of securitisation and intended the funds to be used for growth. The sizes of Australian firms that ranked indirect benefits ahead of direct benefits are unknown. This finding may be isolated to market conditions where SMEs face funding constraints.

Entry into the securitisation market depended on each firm's perceived risks. Consistent with the predictions of organisational theorists such as Shoemaker and Kunreuther (1979) and Hershey and Shoemaker (1980), risk attitude varied because of differences in contextual factors. Firm 4 first securitised in 1994 during the infancy of the NZ securitisation market. Firm 1 considered securitising in the same year, but did not adopt securitisation until 2002. The lower significance of the cost of securitisation versus alternative funding sources; the higher availability of funds for the setup of securitisation; the lower importance of the off-balance sheet nature of securitisation in providing privacy; the higher availability of cost effective credit enhancements, firm size, market share, reputation, and investor demand for securities; all

allowed Firm 1 to take a higher risk by making an entry to the market at the earliest possible opportunity. Like models of innovation (Rashid & Al-Qirim, 2001; Rogers, 1995; Thong & Yap, 1995) and Leung's (1995) Australian securitisation study, knowledge was cited as a perceived risk in terms of the early stages of adoption and use. The evidence suggests the importance of this factor is related to the size of the NZ market in terms of access to skilled staff and expertise, so may not be significant in large international markets.

Two firms cited the ability to pass on a reduced cost of funds to borrowers, which they described as providing a competitive advantage, contrary to Heuson, Passmore and Spark's (2000) conclusion that mortgage rates are not lowered when mortgages are securitised by banks. The cost reduction flow on effect to borrowers may be due to firm type, banks versus NBFIs, or issue type, mortgage-backed securities versus lease and consumer finance receivables, and the associated costs and benefits.

Factors: Internal Contextual Factors

Although two firms expected time to be an important factor in the securitisation decision, time delays became important to all firms because of the link to high levels of legal and audit costs. Legal and audit costs were believed to be the primary cause of cost overruns in terms of both the setup and ongoing running costs of securitisation. Costs were also impacted by unexpected time delays in receiving cash flows during the ongoing use of securitisation. These findings are the first known empirical evidence in support of descriptive research (Norriss, 1986; Shaw, 1991). The evidence suggests time delays are more significant in the developing stages of a securitisation market.

The complexity and technical nature of securitisation was cited as being considered in the early stages of adoption in accordance with innovation adoption models (Wober & Gretzel, 2000). Yet, the ability of all firms to adopt and use securitisation without any major operational difficulties is potentially explained by the use of appropriate training and communication of information to employees which are shown to increase the feasibility of an organisation's

readiness for adoption in Organisational Theory and models of innovation (Daft & Noe, 2001; Jones & George, 2003, Thong & Yap, 1995).

Survey data, supported by descriptions from the FTFIs, shows that like the findings of Strategic Management and Innovation, managers' attitudes toward the innovation to be adopted play a role in the adoption decision (Damanpour, 1991; Fredrickson, 1983; Jocumsen, 2000; Thong & Yap, 1995). Innovation also shows the relevance of managerial characteristics including a DM's knowledge of the innovation to be adopted and their capability and tendency to innovate (Damanpour, 1991; Rashid & Al-Qirim, 2001; Thong & Yap, 1995). Despite low managerial knowledge, the decision to adopt and use securitisation went ahead, albeit as a highly aided and analytic decision. While positive evidence was collected of creativity and innovation programmes within the firms, no conclusions can be made specifically in relation to the managers' capability to innovate.

The size and structure of NZ firms using securitisation is at odds with some of the securitisation literature and practice in international markets, particularly in terms of perceived high levels of setup and ongoing costs. The size and characteristics of firms in this study are consistent with innovation research in NZ firms. While innovation is high in large companies in other small OECD countries, it is concentrated in SMEs in NZ (Bartle, 2002).² The relevance and importance of the benefits and costs of securitisation varies by organisational characteristics. The internal contextual factors differentiating firms in terms of benefits support not only descriptive and logistic models of securitisation, but also Innovation, including the literature on financial innovation, Organisational Theory and Strategic Management. The factors included access to capital (Akhavein, et al., 2005; Pavel & Phillis, 1987), organisational structure (Akhavein, et al., 2005; Rashid & Al-Qirim, 2000), reputation or market power (Demsetz, 2000; Fisher, Montagu & Co Ltd, 1991) and firm size measured in terms of market share (Frambach, 1993). The internal contextual characteristics differentiating firms in terms of costs support all three streams of securitisation literature. The factors included credit rating on

² The level of innovation is measured by research and development expenditure in private companies.

issues (Minton et al., 1997), volume of securitisable assets (O'Connell et al., 2000; Sinkey, 1998) and use of an established securitisation structure (Minton et al., 1997).

Factors: External Contextual Factors

Two firms cited the illiquid NZ debenture market and associated high costs as drivers of their search for alternative funding sources corresponding to descriptive and field research that find secondary market participation and market size are factors in the decision to securitise (Davis, 2000; Leung, 1995; Maher, 1994; Rotherham, 1999; Weenink 1992). Contrary to predictions and findings that these factors are impediments to firms securitising, these factors are found to be impediments to participation in the NZ bond market, but drivers of participation in the securitisation market. Additionally, no firms differentiated securitisation from other funding sources based on high setup or running costs, which had been important in Australian and US studies (Leung, 1995; Minton et al., 1997; O'Connell et al., 2000).

In international markets firms have more funding choices so securitisation may not be necessary to gain access to capital. If firms choose to securitise, the benefits relative to costs of securitisation may be better in NZ since NZ firms experience high capital constraints, even from the bond market, while international markets have more liquid debenture markets, more investors and therefore lower marketing and other associated costs. The form of securities issued on the back of assets provides further evidence in support of secondary market participation and market size as factors. Firm 4 issues commercial paper in the Euro market rather than NZ market because their firm is “too big for the NZ market”. This also provides support for the importance of investor demand (Leung, 1995) and reputation or experience (Demsetz, 2000) because this firm acknowledged its established reputation helps it to meet investor demand when issuing in a larger international market.

The importance of Firm 1 in using securitisation to become an issuer and establish a rating in the market supports Stock's (2005) prediction. In a survey of 30 of NZ's most prominent NBFIs, he reported that NBFIs perceive they will require, and will likely have to pay

for, credit ratings in the future. This finding is also consistent with capital structure field studies (Bancel & Mittoo, 2002; Graham & Harvey, 2002), particularly with Bancel and Mittoo (2002), in that credit ratings are important, but not a driving factor. Graham and Harvey (2002) found credit ratings were the second most important factor in US firm's decision on debt issuance. In this case, Firm 1 could have become an issuer by becoming involved in the debenture or equity markets, but they intend to remain private and securitisation allows them to achieve issuer status without disclosure of commercially sensitive information which could damage their perceived competitive advantage.

Pavel and Phillis (1987) and Leung (1995) found capital requirements set out in the Basel Accord to be an important factor for banks involved in securitisation. In a similar vein, two firms reported the legislative requirements, for NBFIs to maintain equity in the special purpose vehicles, to be an important consideration and is the first known empirical evidence in this area for NBFIs. Not only the legal, but also the accounting infrastructure, in particular, disclosure aspects of securitisation, has influenced the adoption and use of securitisation in NZ in harmony with Leung's (1995) study of the Australian market.

The rate of change in an industry leads to a focus on continuous improvements and innovation as opposed to intermittent improvements (Sibbald et al., 1994). Consistent with Strategic Management, three firms expressed the need to keep up, keep ahead and to engage in process improvement or continuous improvement to develop a competitive advantage. This was particularly important in terms of survival due to firm size relative to competitors in the market, supporting the adoption decision as a requirement of competition (Hill, 1994) or market and industry factors in general. While the choice to securitise was not primarily driven by the level of competition in the market, NBFIs heavily involved in consumer finance expressed a renewed level of competition for customers with banks. The 2004 return on assets for the top 62 NZ NBFIs was 2 percent with the return on assets for the main banks during that same time period at 1-1.5 percent (Hess & Feng, 2007). Securitisation will be most important for NBFIs supplying consumer finance, rather than those financing niche products and specifically

targeted borrowers. This result supports the role of customer loyalty to banks in the decision to securitise (Leung, 1995).

Tax benefits were not important to any firms in their choice to adopt and use securitisation. Their primary concerns were access to capital for growth and securing a cheaper source of finance. This can be contrasted with the predictions of theoretical models, such as Skarabot (2001), and provides further evidence in support of O'Connell et al. (2000) who find tax to be unimportant and field studies of capital structure that find little to moderate evidence of the importance of tax in firms' capital structure decisions, challenging trade-off models of capital structure (Bancel & Mittoo, 2002; Graham & Harvey, 2002; Norton, 1989).

Actors: Internal and External Networking

Whilst all firms engaged in external networking with providers of professional services, such as bankers, auditors, rating agencies, and other business contacts through overseas businesses and conferences, to make their securitisation decisions, no outright evidence is found in support of March and Shapira's (1982) proposition that firms copy solutions from others. The importance of reliance on external networks, or access to expert advice, is aligned with Leung's (1995) Australian evidence. The degree of reliance appears to vary between operational levels of reliance to the extent where suppliers of external information could be considered part of a firm's decision-making unit. This is explained by Organisational Theory where decisions are aided to a higher degree in the presence of resource constraints and the existence of high accountability (Beach & Mitchell, 1978) because the degree of reliance varied by firm size, reputation, market position and in-house capabilities and all firms are accountable to boards of directors who require the presentation of formal documentation in support of new ideas.

Innovation places emphasis on internal knowledge sharing for learning and to ensure that key DMs receive information relevant to decision making (Winsley, Gilbertson & Couchman, 2001). Informal management styles support flexibility in firm strategy which is linked to higher levels of innovation (Bartle, 2002). While all firms exhibited some very formal methods during

the adoption process, in terms of learning, the process of generating new ideas and information gathering prior to the implementation decision, informal methods were common to all firms. The methods described included brainstorming with external experts or internal members of staff or both, informal staff training, daily informal team interaction, and the importance of ensuring that all staff - even office staff – “understand enough of the bigger picture of securitisation to effectively carry out their own roles and responsibilities in the securitisation process”.

Actors: External Contextual Factors

The finding that borrowers, specifically their profile and relationships with the issuer, and the merchants or networks through which the assets are originated influence the securitisation process is consistent with Strategic Management (Jocumsen, 2000) and Innovation (Singletary, 2003). Furthermore, as issuers, the firms are under scrutiny from actors in the market in general. While capital structure literature discusses corporate governance issues at a broad level and demonstrates the potential for capital structure choices to impact on agency costs (Fosberg, 2004; Jensen & Meckling, 1976), securitisation literature specifically focuses on reductions in the agency costs of debt being the avoidance of underinvestment (Stanton, 1998) and asset substitution (Minton et al., 1997). No firm was specific in recognising the issue of agency costs, however, two firms acknowledged the benefit of increased governance brought to their firm by securitisation. This is the first known empirical evidence to cite governance as a benefit of securitisation that is valued by firms. Additionally, this benefit is consistent with the fact that NZ NBFIs are not regulated by any governing body. Issuing NBFIs are subject to securities legislation only and experience market discipline from investors (Hess & Feng, 2007).

5. SUMMARY AND CONCLUSIONS

Theoretical capital structure and securitisation models are relevant to practice in NZ NBFIs with the case studies highlighting evidence of 26 factors from one or both bodies of literature, yet the evidence supports a further 50 factors from other relevant background theories. No new factors were identified that were not already present in at least one of the background theories. Table four summarises the key findings with respect to the factors supported by the field research. Insufficient information was available regarding the nature of phases and the presence of agency problems. No evidence was found to support the motive of tax benefits for securitisation, consistent with the mixed evidence for tax benefits in field studies of capital structure.

Table four shows other relevant background theories provide a more comprehensive view of the securitisation decision by including further evidence of some of the factors present in the capital structure and securitisation literature, but also more behavioural aspects of the decision and contextual factors relating specifically to the innovation of securitisation itself. NZ NBFIs were driven by their problems or needs to consider securitisation in terms of both financial and strategic benefits, followed by consideration of whether they were actually able to adopt securitisation and how it was to be implemented. Thus, NZ NBFIs consider most of the factors that would be considered in any adoption decision just as if the decision related to any other non-financial innovation.

Insert Table 4 here

Via the application of a new methodology this study contributes to both theory and practice. Little is known about how the securitisation decision is made because factors included in existing empirical models are drawn from academic financial literature rather than industry evidence. While only four in-depth interviews and surveys were undertaken, limiting transferability, the nature of the project was exploratory and the findings give deeper insights

into the process, factors and actors involved in the securitisation decision. This research highlights the usefulness of a multidisciplinary approach to examining corporate finance decisions and the complementary nature of quantitative and qualitative models. Firm and region-specific information improves understanding of the securitisation decision at the micro level giving further insights into the specific localised circumstances that would be suitable for securitisation previously unexplained by macro level capital structure theory.

The primary potential for bias exists in the selection of cases by the researcher. Care was taken to gain a high level of information and knowledge of the population of interest prior to case selection in order to minimise the potential for bias. The requirement to preserve confidentiality of the firms that participated in this study has limited the way in which firms were classified, discussion of the environmental context and the ability to provide more verbatim evidence to support the results.

Opportunities for future research exist in terms of conducting a study of other market participants or a wider scale study of securitisers in other markets. Of particular use would be corroboration of the verbal evidence provided by DMs by approaching professional experts involved in the process such as lawyers, accountants and bankers. This would be important to clarify the role and degree of influence of the information provided by external parties in the decision to adopt and use securitisation. Further investigation of securitisation in NZ is also warranted. Since the completion of this study, implementation of international financial reporting standards has changed the environment in which off-balance sheet transactions are carried out.

APPENDIX

Codebook Sample: Steps/Phases				
Level	Code	Description	Inclusion/Exclusion Criteria	Examples
1	Chronology	Any reference to the name of a step/phase of the decision-making process or the order in which they took place.		"...implementation phase..." "...set up phase..." "...in the initial stages..." "Right at the outset... then..."
1	Nature of phases	Any reference to the decision-making conditions within a step/phase and the existence of one-off or repetitive processes.		"...any ideas that come up and how they're implemented would be based primarily on whether there's a need in the market..." "...we kind of tripped over [external assistance]." "...a big learning curve..."
Codebook Sample: Methods				
Level	Code	Description	Inclusion/Exclusion Criteria	Example
1	Rationality	Evidence that the decision was made according to strict definitions of rationality	Excludes any decision with the presence of information limits, cognitive constraints and time and resource constraints.	N/A
2	Procedural rationality	Evidence of a decision being made as a result of appropriate deliberations, given the limited information or constraints faced by the firm.		"...any major expenditure or funding decisions are researched and recommended to the board for sign off... [with business proposals and] case studies and ...whatever's relevant... it's all done on a cost and benefit analysis and viability". "We put together a business plan and... that goes to the board, it gets approved, and then we can move on to the next stage of actually developing that business plan ...we used experts in that particular field to sort of gauge what they thought ...analysis on what we expected our profits were going to be for the first three or four years...quite a bit of analysis done in terms of bad debts...there was quite a bit of work done on cost benefit analysis..."
Codebook Sample: Contextual Factors				
Level	Code	Description	Inclusion/Exclusion Criteria	Example
1	Attributes	The characteristics or qualities of the item of interest.		
2	Technical attributes	Technical characteristics associated with the use of securitisation.	Includes characteristics determined from a technical perspective such as contracts, laws and regulations, resource availability e.g. computer software capabilities. Limited to the characteristics relevant to the issuers or users as opposed to investors.	"Our securitisation manual outlines what we can and can't sell..."
2	Characteristics of innovation	Characteristics other than technical characteristics associated with the use of securitisation.	Limited to the characteristics relevant to the issuers or users as opposed to investors.	"...it was our cheapest source of funds..."
1	Organisational characteristics	Characteristics of the organisation being studied.		
2	Access to capital	Access to sources of capital and amount of capital available.		"The main driver for the finance company in recent years is to get external debt rather than debenture stock." "Current bank funding wasn't sufficient to cover what we needed."
2	Asset suitability	Suitability of asset types held by firm and the volume of each asset type generated.	Suitability relates to quality criteria such as asset homogeneity, cash flow predictability, delinquency rates, issue ratings, life of receivables.	"I don't think anyone approaches it unless they have at least three years minimum of generating assets of that size". "If we sign upgrades and amendments, we've got a lot of history of those customers before they do that."

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Table 1 Factors Influencing Securitisation

Influencing Factor	Author(s)
Benefits from Securitisation	
Direct Benefits	
Lower cost financing	Hill, 1996; Morrissey, 1992; O'Connell, 2000; Rosenthal & Ocampo, 1988
Tax benefits	Lumpkin, 1999; Skarabot, 2001
Increased ROE	Lockwood et al., 1996; Thomas, 2000
Reduced transaction costs	O'Connell et al., 2000; Skarabot, 2001
Indirect (Strategic) Benefits	
Regulatory arbitrage	O'Connell et al., 2000; Pavel & Phillis, 1987
Diversification of risk	Greenbaum & Thakor, 1987; O'Connell et al., 2000; Pavel & Phillis, 1987
Diversification of funding base	Demsetz, 2000; O'Connell et al., 2000
Liquidity enhancement	Finnerty, 1988; O'Connell et al., 2000; Pavel & Phillis, 1987
Economies of scale - info. acquisition and dissemination	Hill, 1996
Mitigation of information assymetry	Hill, 1996; Minton et al., 1997
Avoidance of agency costs of debt	Minton et al., 1997; Stanton, 1998
Bankruptcy remote investment vehicle	Lumpkin, 1999; Skarabot, 2001
Opportunity to exploit comparative advantage	Demsetz, 2000; Greenbaum & Thakor, 1987; Pavel & Phillis, 1987
Resources	
Knowledge of securitisation	Leung, 1995
Access to expert advice	Leung, 1995
Securitisation structure in place (previously securitised)	Minton et al., 1997
Firm reputation/experience	Demsetz, 2000; Fisher, Montagu & Co Ltd, 1991
Presence of sophisticated information systems	Greenbaum & Thakor, 1987; Leung, 1995; Nicolle, 2001; O'Connell et al., 2000; Pavel, 1986; Zweig, 1989
Possession of securitisable assets	Benston, 1992; Minton et al., 1997; O'Connell et al., 2000; Pavel, 1986; Skarabot, 2001; Tierney, Quint & Ames, 1994
Possession of sufficient volume of securitisable assets	O'Connell et al., 2000; Sinkey, 1998
Possession of strategically important business related to the assets or the assets themselves	Fisher, Montagu & Co Ltd, 1991
Financial condition/credit rating	Minton et al., 1997
Ability to cover setup costs	Leung, 1995; Minton et al., 1997; O'Connell et al., 2000
Availability of cost-effective credit enhancement	Leung, 1995
Time	Norriss, 1996; Shaw, 1991
Environmental Factors	
Secondary market existence/Investor demand	Leung, 1995
Secondary market participation/market size	Davis, 2000; Leung, 1995; Maher, 1994; Rotherham, 1999; Weenink, 1992
Market interest rates	Leung, 1995
Capital requirements	Leung, 1995; Pavel & Phillis, 1987
Legal/accounting infrastructure	Leung, 1995
Customer loyalty to banks	Leung, 1995
Increase in mortgage managers and NBFIs in market	Leung, 1995
Cultural aversion to off balance sheet financing	Leung, 1995

Table 2 Description and Justification of Case Selection Criteria

Case Selection Criteria	Description	Justification
New Zealand	Each firm must operate in NZ as either a listed or privately held company.	<p>NZ firms are said to face impediments to securitisation, yet firms continue to participate in the market.</p> <p>NZ is a similar business environment to Australia where securitisers perceive the indirect (strategic) benefits of securitisation to be greater than direct benefits. Potential exists to confirm/disconfirm those findings in another setting.</p> <p>According to the literature, small/private owned firms are less likely to securitise. NZ securitisers are primarily privately owned companies.</p>
Securitiser	Each firm must have securitised financial assets one or more times from 1999 to 2003 inclusive.	<p>Exploratory nature of the study excludes the possibility of including non-securitisers at this stage.</p> <p>FTFIs rely heavily on the memory and recall of respondents. Limiting the timeframe of the study reduces the bias from retrospective reporting.</p>
NBFI	Each firm operates primarily in either the financial services sector.	<p>Most studies to date have been carried out on banks and only a few on NBFIs.</p> <p>A number of privately owned securitisers in NZ are NBFIs that were previously finance divisions of non-financial institutions.</p>

Table 3 Firm Characteristics

Characteristic	Firm 1	Firm 2	Firm 3	Firm 4
Number of employees	6-20	100-500	20-50	20-50
Years of financial market participation	25	10	12	12
Rating on securities issued	AAA-	A1	AA-	A1+
Year first securitised	2002	1996	1999	1994
Management structure	Formal management team	Specialised Management team	Informal management team	Formal management team
Turnover	2-10M	50M+	50M+	50M+
Capital Expenditure	<2M	2-10M	<2M	2-10M
External equity	No	Yes NZX listed	Yes	No
Percent of Overseas equity	N/A	N/A	90%	N/A
Location of most significant market	National	National	National	National

Table 4 Summary of Findings

Category of factors	Number of factors supported		Key Contributing Disciplines
	Securitisation and Capital Structure	Other Background theories	
Steps/Phases			
1. Chronology	0	16	Decision Research, Financial Innovation, Innovation Theory, Organisational Theory, Strategic Management
2. Nature of phases	0	0	Financial Innovation, Innovation Theory, Strategic Management
Methods used in process			
1. Learned competencies	0	6	Behavioural Decision Research, Innovation Theory, Strategic Management
2. Inherent competencies	0	4	Behavioural Finance, Decision Research, Organisation Theory, Strategic Management
3. Internal networking	1	2	Capital Structure, Innovation Theory, Organisational Behaviour, Strategic Management
4. External networking	1	4	Financial Innovation, Innovation Theory, Securitisation, Strategic Management
Contextual Factors			
1. Innovation	3	11	Behavioural Decision Research, Innovation Theory, Financial Innovation, Securitisation
2. Internal	9	17	Capital Structure, Decision Research, Innovation Theory, Financial Innovation, Securitisation, Strategic Management
3. External	12	9	Capital Structure, Decision Research, Innovation Theory, Financial Innovation, Psychology, Securitisation, Strategic Management