

# Reverse mortgages and older people: growth factors and implications for retirement decisions

**Author:**

Bridge, Catherine; Mathews, Mark; Phibbs, Peter; Adams, Toni

**Publication details:**

AHURI Positioning Paper No. 123  
1834-9250 (ISSN)

**Publication Date:**

2009

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## **Reverse mortgages and older people: growth factors and implications for retirement decisions**

authored by

**Catherine Bridge, Mark Mathews, Peter Phibbs  
and Toni Adams**

for the

**Australian Housing and Urban Research  
Institute**

UNSW-UWS Research Centre

September 2009

AHURI Positioning Paper No. 123

ISSN: 1834-9250

ISBN: 978-1-921610-23-3

## **ACKNOWLEDGEMENTS**

This material was produced with funding from the Australian Government and the Australian States and Territories. AHURI Ltd gratefully acknowledges the financial and other support it has received from the Australian, State and Territory governments, without which this work would not have been possible.

AHURI comprises a network of fourteen universities clustered into seven Research Centres across Australia. Research Centre contributions, both financial and in-kind, have made the completion of this report possible.

Thanks also go to Yong-Jung Moon and Maree Porter, research associates who assisted with SPSS and ethics respectively. This project was a partnership with SEQUAL, consequently we would also like to acknowledge the assistance of Kieren Dell, Kevin Conlon and Pauline Negline in providing materials, access to reverse mortgage professionals and in feedback about methods.

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# CONTENTS

<b>CONTENTS .....</b>	<b>II</b>
<b>LIST OF TABLES .....</b>	<b>IV</b>
<b>LIST OF FIGURES .....</b>	<b>V</b>
<b>ACRONYMS .....</b>	<b>VI</b>
<b>EXECUTIVE SUMMARY .....</b>	<b>1</b>
<b>1 CONTEXT AND BACKGROUND .....</b>	<b>4</b>
1.1 Introduction .....	4
1.2 Understanding the Australian reverse mortgage product .....	5
1.3 Structure of the Positioning Paper .....	7
<b>2 SYSTEMATIC REVIEW .....</b>	<b>8</b>
2.1 Introduction .....	8
2.2 Search method .....	8
2.3 Search results .....	9
2.3.1 Authors' countries of origin .....	9
2.3.2 Methodologies .....	10
2.4 Retirement decisions .....	11
2.4.1 Growth implication .....	13
2.4.2 Policy implications .....	14
2.5 Summary .....	15
<b>3 REVERSE MORTGAGE PRODUCTS .....</b>	<b>16</b>
3.1 Introduction .....	16
3.2 International history of reverse mortgages .....	16
3.3 International regulation of reverse mortgages .....	17
3.4 A brief history of reverse mortgage products in Australia .....	18
3.5 Australian reverse mortgage products .....	19
3.6 Regulation of reverse mortgages in Australia .....	20
3.7 State and territory law .....	21
3.8 Understanding the market potential .....	23
3.9 Advantages and risks for consumers with reverse mortgage products .....	26
3.10 Summary .....	28
<b>4 THE METHODOLOGY – DATA COLLECTION .....</b>	<b>29</b>
4.1 Introduction .....	29
4.2 Three data gathering strategies .....	30
4.2.1 Interviews with mortgage brokers of reverse mortgages .....	31
4.2.2 Survey of reverse mortgage brokers .....	31
4.2.3 Focus groups .....	32
4.3 Analysis .....	33
4.4 Stage two of the research .....	34
<b>5 PRELIMINARY POLICY IMPLICATIONS AND NEXT STEPS .....</b>	<b>35</b>
5.1 Overview .....	35

5.2 Institutional and investor considerations .....	35
5.3 Consumer attitudes and behaviour .....	35
5.4 Preliminary appraisal of some key policy considerations.....	35
5.5 Next steps .....	37
5.6 Summary.....	37
<b>REFERENCES .....</b>	<b>38</b>
<b>APPENDICES.....</b>	<b>44</b>
Appendix 1: Systematic review search strategy .....	45
Appendix 2: Systematic review frame for reverse mortgage literature .....	47
Appendix 3: Interview schedule for lenders .....	85
Appendix 4: Focus group/interview schedule older people participants .....	86
Appendix 5: Project information statement .....	87
Appendix 6: Project consent form .....	89

## LIST OF TABLES

Table 1: Type of articles excluded from the review.....	9
Table 2: Summary of state/territory laws potentially relevant to reverse mortgage transactions .....	22
Table 3: Australian population aged 60 and over by sex .....	23
Table 4: Housing tenure expressed as percentages for those aged 60+ .....	24
Table 5: Number of occupied dwellings of older people within Australia .....	24
Table 6: Maximum possible reverse mortgage market by state and territory .....	25
Table 7: Relationship of methods to the research objectives .....	30
Table 8: Question component breakdown .....	45
Table 9: Complete list of search terms to be used.....	45

## LIST OF FIGURES

Figure 1: Overview of the suite of home equity options adapted from (AddaeDapaah & Leong, 1996).....	6
Figure 2: Review process .....	9
Figure 3: Authors country of origin.....	10
Figure 4: Methodologies evident from review .....	10
Figure 5: Factors from the literature affecting retirement decisions.....	11
Figure 6: Factors from the literature affecting growth of the reverse mortgage market .....	14

## ACRONYMS

ABS	Australian Bureau of Statistics
ACT	Australian Capital Territory
AHURI	Australian Housing and Urban Research Institute Limited
AIHW	Australian Institute of Health and Welfare
ASIC	Australian Securities and Investments Commission
EFM	Equity Finance Mortgage
CAFTA	Consumer Affairs and Fair Trading Act
CCAA	Consumer Credit Administration Act
CCC	Australian Consumer Credit Code
CPI	Consumer Price Index
CURF	Confidentialised Unit Record Files
EFM	Equity Finance Mortgage
ERRMIS	The Equity Release/Reverse Mortgage Information Service
FACS	Department of Family and Community Services
FaHCSIA	Department of Families, Housing, Community Services and Indigenous Affairs
FTA	Fair Trading Act
HECM	Home Equity Conversion Mortgage
LRV	Loan Value Ratio
NICRI	National Information Centre on Retirement Investments Inc
NSW	New South Wales
NT	Northern Territory
QHAL	Queensland Home Adapt Loan
QLD	Queensland
RECM	Reverse Equity Conversion Mortgage
RM	Reverse Mortgage
RBS	Royal Bank of Scotland
SA	South Australia
SDAC	Survey of Disability, Aged and Carers
TAS	Tasmania
UCCC	Uniform Consumer Credit Code
VIC	Victoria
WA	Western Australia



# EXECUTIVE SUMMARY

## Background

There are several key factors impacting the examination of reverse mortgage use by older people in terms of possible growth factors and the potential implications for their retirement decisions. These include understanding issues pertaining to: Australian retirement and homeownership patterns; retirement income; the types of reverse mortgage products available; and the economic drivers impacting the reverse mortgage market. Further, other researchers have suggested that consumption-based spending on the home may come at the expense of the quality and future of the housing stock, and could put the wellbeing of older homeowners at risk (Smith, Cook and Searle, 2007).

The ageing of the Australian baby boom generation and the consequent concern over adequacy of retirement planning and income has made the issue of home equity release attractive. According to the Reserve Bank Statistical Tables, Australian housing wealth represents approximately 50 percent of the Australian economy overall (Ruthven, 2007). More importantly, the policy spotlight is squarely on equity release options as older Australians are predominantly homeowners, making housing wealth, coupled with lack of adequate superannuation, a potential option for care supplementation and as a means to enable 'ageing in place'. However, the reverse mortgage market in Australia has been slow to develop (Storey, Wilson and Kendig, 1994). This is because products can be costly and older homeowners are still under-informed and conservative in their thinking as it relates to an asset with high personal and inheritance value (Apgar and Di 2005; Rowlingson and McKay 2005).

More recently, given the global recession that has impacted savings, both the financial market and older people are concerned about stalled housing prices in some areas and slashed economic growth forecasts. Australia is not immune to the effects of this financial crisis. Fiscally, the international picture is grim, with the International Monetary Fund forecasting budget deficits for all advanced economies. Specifically, a lack of liquidity has severely impacted the financial services sector internationally and locally, has resulted in a narrowing of available reverse mortgage products and providers in Australia, with some of the more popular ones being bought out by other International banking organisations who are themselves in financial crisis. SEQUAL (2009), in its most recent government submission has clearly flagged that the reverse mortgage industry is now struggling with reduced liquidity resulting from both reduced bank lending and from being excluded from the arrangements for purchase of Residential Mortgage-Backed Securities. Consequently, since the research project's inception, a number of reverse mortgage providers have left the market and/or scaled down their reverse mortgage operations.

A key element of the current government in terms of consumer credit is achieving greater national consistency (Financial Services Working Group, Treasury Department, 2008). A key strategy, which is already underway, is the National Consumer Credit Action Plan, which aims to develop a single, standard, national regulation of consumer credit for Australia (Commonwealth of Australia, 2009). The Australian Government already regulates many financial services, but credit-related financial services remain without any comprehensive national approach. This includes the systemically important area of mortgages and mortgage broking and advice, including reverse mortgages. Similarly, inconsistency in the regulatory regimes governing certain aspects of fair and transparent mortgage fees, including reverse mortgage exit fees, is of growing concern especially for those most vulnerable i.e. older consumers on low-incomes.

The National Consumer Credit Action Plan is about creating a consumer marketplace that is fair and balanced and that will better foster well-informed and confident consumers. It commenced in 2007 with the green paper and has been split into two phases. In the first phase, the Australian Government is moving towards unifying existing state and territory legislation into Australian Government law. The second phase will see the development of a National Consumer Credit Protection Bill. This bill will seek to further regulate, where necessary, to stem specific unfavourable lending practices. How it will or could relate to the emerging reverse mortgage market in Australia remains unclear.

## **Research objectives**

In Australia, as in other OECD countries like the UK, there is interest in a closer examination of reverse mortgages as a resource for long-term care, home modification, home maintenance etc. Housing wealth can be viewed both as an asset for low-income older homeowners and by government as having potential as an asset base for purchasing support services or supplementing income.

The key aims of the research are to understand and explore the following three key objectives:

- What is the nature of the reverse mortgage industry in Australia at present?
- What factors have influenced growth in the use of reverse mortgages by older persons?
- How does the use of reverse mortgages influence retirement decisions and planning?

## **Research focus**

The project seeks to determine the factors influencing the take up of reverse mortgage products and services within the context of overall demand. This research project focuses on provision of a comprehensive appraisal of reverse mortgages as they pertain to 'ageing in place' and community care decision-making.

Importantly, while there is considerable state and Australian Government interest, reverse equity product development has mainly been left to the banks and financial providers themselves, with the exception of a number of significant but smaller programs such as the Queensland Home Adapt Loan (QHAL). Thus this research is founded on a partnership with the Senior Australians Equity Release Association of Lenders (SEQUAL) so as to access this larger market knowledge. SEQUAL have agreed to facilitate access to their market research, databases and members enabling us to access reputable reverse equity providers. This partnership will be significant in answering questions concerning the range of reverse mortgage products available from SEQUAL members including their criteria for lending, value and intended purpose.

The methodology employed in this research is a mixed method one and comprises: statistical analysis; a systematic literature review of databases most likely to identify issues; a review of policy implications of particular reverse equity approaches; analysis of current products and their promotion; consultation with both lenders and their older consumers; and case studies obtained through a series of focus groups and/or individual interviews.

This Positioning Paper presents an overview of preliminary findings relating to our Systematic Literature Review, demographic analysis, and analysis and overview of the Australian regulatory landscape and National and International initiatives as they impact both growth for the market and retirement decision making. It established the

variables and assists in refinement of our methodology for the second phase of this research. In the Final Report we will present the results from our Survey, and analysis of products based on interviews with providers and older consumers.

## **Preliminary findings**

Research findings so far confirmed the large untapped potential of reverse mortgage products to assist in maintaining both housing capital and enabling 'ageing in place' by providing greater personal control and flexibility to deal with economic adversity. However, they underscore the complexity of the market and the current regulatory situation. Despite the many obstacles, reverse mortgages are an important means for low-income but 'asset-rich' older homeowners to 'age in place' with a reasonable standard of living.

Further, the Literature Review highlighted that consumer education and appropriate targeting are crucial. Reverse mortgages can work well if older consumers have carefully considered their specific circumstances and future needs, and if they are fully aware of the terms and conditions of the contract and any potential traps. Thus, financial literacy and good impartial advice is crucial, as older people often poorly understand compound interest and contract default clauses. It also appears that those older people likely to benefit most are those on the lowest incomes with an appreciating asset and who are in the last few years of their life.

## **Potential policy risks and benefits**

Ensuring a clear, simple and standard approach to regulating the reverse mortgage market is increasingly necessary. The Australian Government Financial Services and Credit Reform green paper indicated that the primary risks around the appropriate use of any cooperative state-based framework for credit makes it difficult to amend the Uniform Consumer Credit Code (UCCC), meaning that problems may remain unaddressed for some time.

Our systematic review revealed a number of significant limitations of previous research, not the least being a paucity of good quality research and numerous issues associated with comparability of findings as a result of definitional, cultural, regulatory and product differences. However, it appears that there are a number of conclusions that can be drawn from recent investigations in this area. Most importantly, it appears that longevity has become a risk to quality of life, and it may be that older people will be willing to trade off housing equity, for a level of financial security should they have a long life.

# 1 CONTEXT AND BACKGROUND

## 1.1 Introduction

Residential property represents the largest single asset class for older Australians. For many of these older Australians, the equity in their homes provides a financial opportunity to households who are asset rich but income poor. Population ageing is likely to increase demand for innovation in housing and financing products.

Currently, equity associated with homeownership can be accessed in later life by property sale or through a range of products developed by the financial sector, which offer a financial benefit in exchange for this home equity. The main product types include traditional home equity loans, which require regular payments; or an equity release product, which requires no repayment until death or voluntary relocation. The market potential has been estimated at 1.3 million households in Australia (Mitchell, Piggott, Sherris, and Yow, 2006). The most popular form of equity release product is the lifetime mortgage or reverse mortgage.

Reverse mortgages allow households to borrow cash against the value of their home. Households usually don't have to make regular repayments until they leave and move into care, sell their home or die. When the loan ends, the mortgage holder or their estate must repay what is owed, usually out of the proceeds of the sale of the home. Each year the fees and interest a mortgagee would ordinarily pay are added to the loan balance (hence the term reverse – the size of the mortgage increases rather than decreases over time). Over time, the mortgagee is charged interest on the interest (or compound interest) and that builds up the total amount that they owe. The traditional market is homeowners who are 60 years or older. Households can usually borrow between 15 percent and 40 percent of the value of their home and older people can borrow the larger percentage (ASIC, 2007).

The reverse mortgage market has gained considerable momentum in Australia. The industry peak group the Senior Australians Equity Release Association of Lenders (SEQUAL) keeps a detailed record of the activity levels of its members. As at end of June 2008, they estimated there were approximately 36,600 reverse mortgages on issue in Australia, with a total loan book size of \$2.3 billion. The size of the average loan increased from 60,000 in June 2007 to 63,000 in June 2008. The market has been expanding with a 14 percent increase in the number of loans in the last six months and 27 percent in the last twelve months. Whilst the market is Australia wide, there is a dominance of the three eastern mainland states that make up about 70 percent of the national market (SEQUAL, 2008a).

Reverse mortgages can yield cash quickly but they are complicated and can expose vulnerable homeowners to potentially serious financial risks, such as negative equity, rising interest rates, falling property values, and default conditions that could, for example, trigger immediate loan repayment and negate "no negative equity" guarantees (ASIC, 2005). Moreover, costs and benefits are unpredictable because of variations in interest rates, real estate prices and life/independence expectancies. This economic volatility makes it difficult to develop policy regarding negative equity safeguards. Moreover, individual product features can vary significantly, and the impact of product differences is poorly understood. For instance, eligibility, fees, and important contractual obligations vary even within a particular product type. Further, the proceeds from an equity release product may significantly impact older persons' entitlements and responsibilities, such as pension eligibility and tax obligations and borrowers may be required to obtain lender/buyer approval for home modifications, while undertaking home modifications could affect resale value.

On the other hand, reverse mortgages could provide widespread benefits to households and governments by providing access to resources for households who are asset rich and income poor. With limited funds available to support the ageing population and with larger numbers of older people living longer, a significant proportion of older Australians may be expected to outlive their savings. Attitudes toward inheritance and housing debt may change with increased needs and expectations from older boomers regarding their living standards and entitlements. A better understanding of the use and impact of reverse mortgages will inform policy and could ensure fiscal sustainability of older homeowners 'ageing in place', support the availability of community care, and promote residential upgrade and maintenance outcomes. Currently very little research has been undertaken about the operation of the reverse mortgage market in Australia.

The central aim of this research project is to fill the research gap by providing a comprehensive appraisal of reverse mortgages as they begin to emerge as a significant financial product for senior Australians and as a policy issue for a range of government agencies.

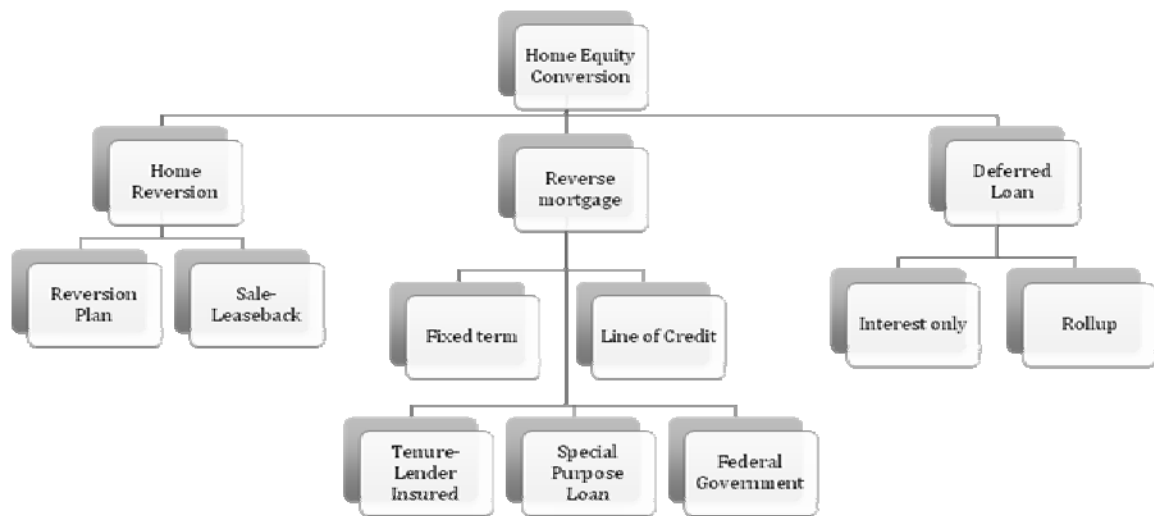
More specifically, the study aims to address three main research questions:

- A What is the nature of the reverse mortgage industry in Australia at present?
  - A1 What is the range of reverse mortgage/home reversion products available?
  - A2 What is the likely size of the market?
  - A3 What are the demographic characteristics of reverse equity consumers and do these vary among products?
- B What factors have influenced growth in the use of reverse mortgages by older persons?
  - B1 What makes the product attractive to consumers?
  - B2 What makes the product attractive to the financial services sector?
  - B3 To what extent does the current legislative and policy framework hinder or support reverse mortgage/home reversion products?
- C How does the use of reverse mortgages influence retirement decisions and planning?
  - C1 How do older people identify suitable products? What characteristics either encourage or discourage uptake by older consumers?
  - C2 What do older people use the proceeds for and why?
  - C3 Does the use of reverse mortgages influence retirement decisions and planning?
  - C4 Could reverse mortgages be used to help make housing more suitable for occupants?

## **1.2 Understanding the Australian reverse mortgage product**

In Australia, historically there have been two types of available products designed to release home equity available to older people. Reverse mortgages are by far and away the most popular, with the market of the other product being so rarely used as to be almost non-existent. Internationally the range of options is much wider and AddaeDapaah and Leong (1996), in their review of Western Home Equity Conversion finance options, identified three main types with variations within these, being; Home Reversion, Reverse Mortgages and Deferred Loans (see Figure 1).

**Figure 1: Overview of the suite of home equity options adapted from (AddaeDapaah & Leong, 1996)**



A deferred loan option for older people is currently unavailable in Australia, but is typically a loan where either principal, and or interest instalments are postponed for a specified period of time. However, only government or banks can offer these types of loan options. An example of a government program is the New Zealand 'Local Government Housing Fund' where funding is in the form of interest free deferred loans for up to half of new unit costs, and where these loans are repayable if the property is sold (Davey, de Joux, Nana and Arcus, 2004).

Also in New Zealand, a market option exists to assist older persons to enter the housing market, this home equity product "rolled-up" principal and interest. In this particular case the size of the monthly payments depends on the age of the annuitant (or the youngest of a couple) on entry into the loan scheme. This type of home equity loan, allows the loan's principal balance to increase at a later date because of any deferred interest payments. For example, if the periodic interest payment on a loan is \$500 and a \$400 payment may be made contractually, \$100 is added to the principal balance of the loan. While these mortgages can provide older borrowers with the ability to manage a low monthly payment, they carry the risk that the monthly payments must increase substantially at some point over the term of the mortgage. Because of compound interest these types of loans can be risky as the point at which no negative equity is achieved is hard to predict especially when interest rates increase steeply over time. So it is unsurprising that take-up of these schemes in New Zealand has been extremely low (Davey, de Joux, Nana and Arcus, 2004).

It is also, important to note though that although the Australian Securities and Investments Commission foreshadowed a new type of equity release product, the equity finance mortgage (EFM), this product has not yet materialised in Australia. Existing equity release products in Australia include only the following:

#### *Home reversion*

In this model the consumer sells part or their entire home to a reversion company. Generally, the home is sold for less than its market price (typically between 35% and 60%), but the consumer can remain in the property until they die or voluntarily vacate the home (ASIC, 2005, p. 4). There are at least two types of home reversion schemes – a sale and lease model and a sale and mortgage model. It is worth noting that the

Australian Securities and Investments Commission have initiated proceedings against “Money for Living” – a sale and lease model scheme; and there are no other sale and lease model schemes presently operating in Australia.

### *Reverse mortgage*

This product is specifically designed to allow an older person to borrow money against the value of their home. The older person continues to own their home and although the credit provider will have a mortgage over the home, no repayments are required whilst the named borrowers (persons named on the reverse mortgage loan document) remain in the home. However, the loan must be repaid when all borrowers have passed away, moved into long term aged care, or the property has been sold, the credit provider will usually be entitled to be repaid in full. In this type of loan, interest is charged and compounded as the loan progresses (NSW Office of Fair Trading, 2008).

Thus the focus in this research is solely on reverse mortgage products.

## **1.3 Structure of the Positioning Paper**

The Positioning Paper provides much of the background needed to understand the variables related to growth factors and retirement decision-making made by older homeowners. This report consists of five chapters, including this introduction.

Chapter 2 consists of a systematic Literature Review of the reverse mortgage market in Australia and overseas. It draws on both National and International literature.

Chapter 3 outlines the range of products in the reverse mortgage market currently and provides some details of how the market operates. It also outlines the variety of regulatory controls that operate in the market.

Chapter 4 describes the research methods that will be used to answer the research questions outlined above.

Chapter 5 concludes by discussing some preliminary policy implications from the perspective of older people, industry and government. It sets out the next steps and summarises our preliminary findings.

## **2 SYSTEMATIC REVIEW**

### **2.1 Introduction**

This systematic review chapter compiles and evaluates previously published research relating to reverse mortgages. Specifically, it seeks to better understand the research questions concerned with ‘what factors have influenced growth in the use of reverse mortgages by older persons?’ and ‘How does the use of reverse mortgages influence retirement decisions and planning?’ A number of reviews and research reports have been published in many countries and across a number of professional disciplines; however, this information has not been brought together and analysed in a coherent manner recently. By compiling the available evidence from across disciplines, this systematic review provides a summary of the available information relevant to the use of residential wealth as a means of financing older age.

A significant amount of literature exists regarding the factors influencing demand for equity release products. This requires that the question be broken into parts, synonyms and antonyms identified, relevant databases and their associated indices identified and terms matched with a consistent format. For instance, a preliminary search on the ‘ageline’ database returned over two hundred records, all of which were manually reviewed to determine if they meet the study’s exclusion/inclusion criteria.

### **2.2 Search method**

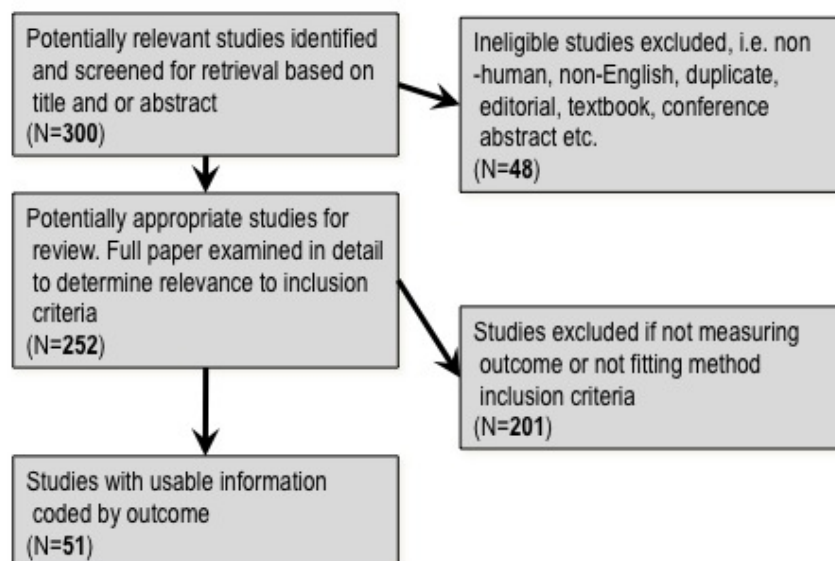
A systematic review, guided by the protocol guidelines for systematic reviews of home modification information to inform best practice (Bridge and Phibbs, 2003) was implemented in this study. For full details of the search strategy, inclusion and exclusion terms etc. see appendix 1. A matrix for aggregating findings was developed and completed (see appendix 2), as were parameters for inclusion/exclusion of materials.

The review process occurred in stages. First, the title was reviewed to determine if the article was potentially relevant. If the title was deemed potentially relevant, two reviewers screened the abstract. If both the title and abstract appeared to meet the inclusion criteria, the full text of the article was reviewed. The following information from each full-text article reviewed was entered on a spreadsheet: reference, author’s country of origin, process and issues addressed, whether housing was mentioned, cost-benefit factor(s) addressed, and methodology. The spreadsheet was then analysed qualitatively for cost estimates, methods, and formulas. Only those articles ultimately determined to meet the selection criteria were included in the final data matrix. To eliminate bias, 10 percent of the sources deemed to meet the selection criteria were read and coded by a second reviewer. Figure 2 depicts the review process and the outcome at each stage.

The initial search yielded 300 articles. After ineligible studies were excluded based on a review of the title and/or abstract, 252 full text articles were reviewed and initially coded on the spreadsheet. Following the qualitative review of the information on the spreadsheet, 51 articles were found to meet the selection criteria and were included in the review (see Appendix 2).



**Figure 2: Review process**



As shown in Table 1, a number of papers were retrieved that contained reverse mortgage information relevant to older people but were excluded, as their content was not research based or was too broad.

**Table 1: Type of articles excluded from the review**

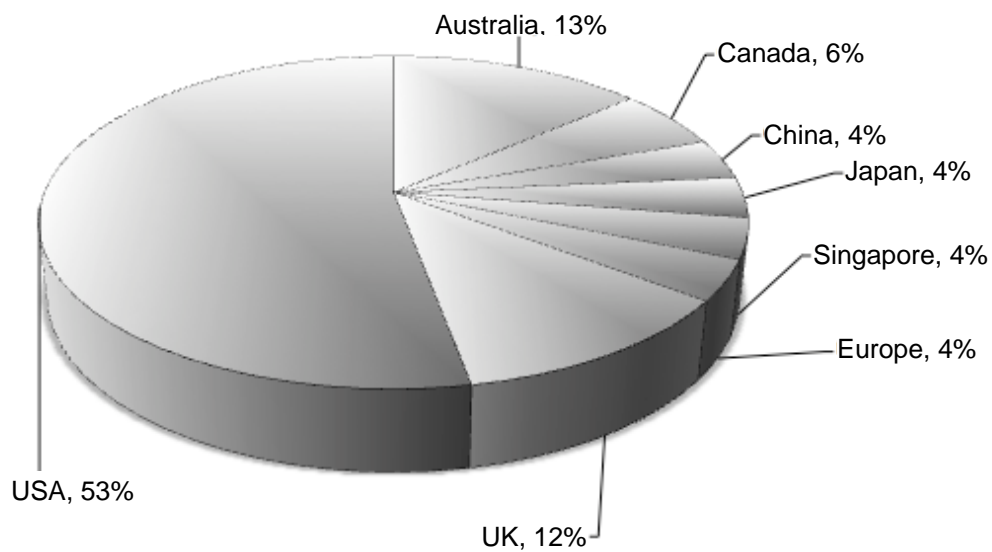
<i>Type of article</i>	<i>Number</i>
Advertorials	73
General Economic/Market/Product focus	69
General Ageing & Housing Issues	52
General Ageing & Social Issues	2
General Retirement & Income	3
Resource/Guide/Review	2
Total	201

## 2.3 Search results

### 2.3.1 Authors' countries of origin

The majority of the papers analysed in this review were from English speaking countries. This is not surprising because the inclusion criteria required sources to be written in English. Figure 3 depicts the authors' countries of origin for the articles included in the review. The large percentage of material from the United States of America may result from its larger and more rapidly ageing population and its long-standing reverse mortgage history. However, in terms of finance practices, Canada and the United Kingdom are more similar to Australia. Governmental policies and cultural practices also impact results.

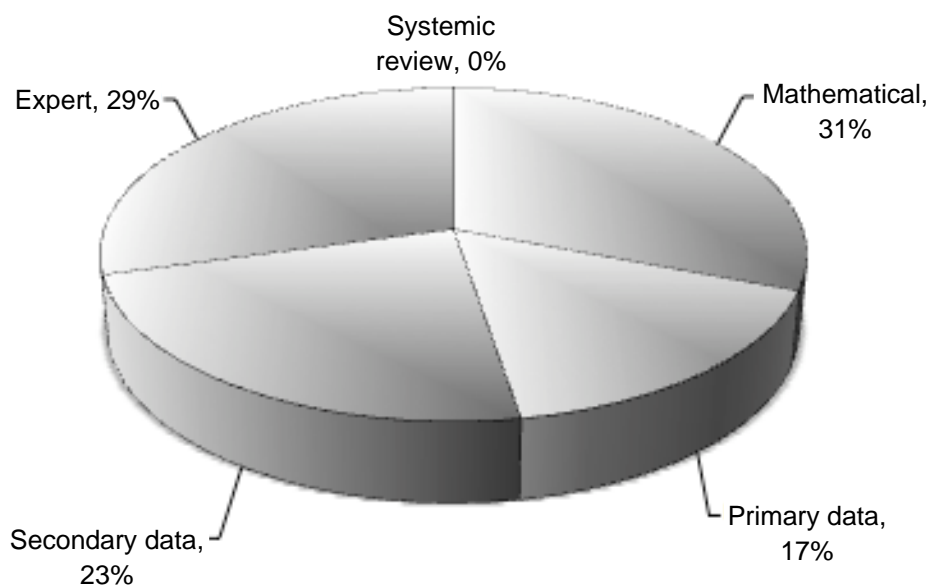
**Figure 3: Authors country of origin**



### 2.3.2 Methodologies

Figure 4 depicts the methodologies used in the 51 sources included in this review. There were no systematic reviews (0%), 41 mathematical modelling studies (31%), 22 primary data analyses (17%), 31 secondary data analyses (23%), and 39 expert opinion pieces (29%). The large percentage of quasi-experimental and mathematical studies is unsurprising as true random control studies are expensive and ethically fraught. What is more surprising is the lack of any previous rigorous meta-analysis in the form of systematic review. The large amount of secondary data analysis is also unsurprising as it is relatively effective and inexpensive methodology. It is also interesting to note the absence of any real individual case study approaches. This may be due to a general belief that variables and their interactions can be better understood in terms of large population samples.

**Figure 4: Methodologies evident from review**

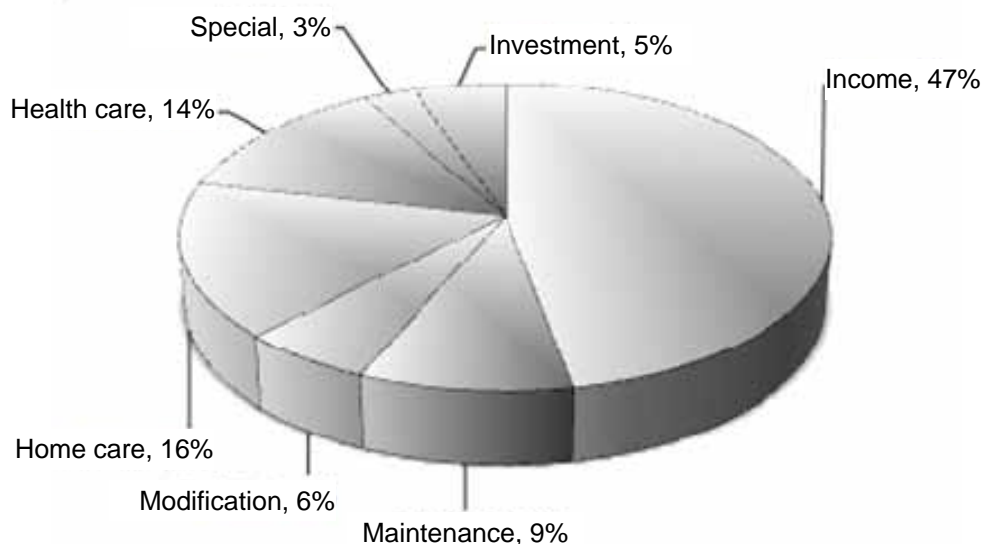


First, the mathematical modelling studies were primarily from the United States and focused on the use of either large population or specialised data sets for the purposes of simulation and/or predictive forecasting. Second, the primary data study results were primarily qualitative in nature and typically involved some sort of interview or survey either of lenders or consumers, sometimes of both. Third, the majority of the secondary data analysis findings were a statistical or regression type analysis of large census based data collected for other reasons. However, there were a small number of studies, which accessed demographic and financial pilot data from particular innovation models. Last, the expert opinion articles were primarily comprised of some form of Literature Review, and or involved an overview of reverse mortgage products or an examination of risk and benefit, typically in the context of some historical background related to homeownership and or retirement planning strategies.

## 2.4 Retirement decisions

This section looks at what previous research concerning reverse mortgages and older people has to say about the factors that make the product attractive to consumers (research objective B1) and tells us something about what older people use the proceeds for and why (research objective C1). The reverse mortgage variables mentioned by authors within the 51 sources included in this review could be thematically grouped under seven themes. It can be seen in Figure 5, that the majority of older persons taking out these products are low-income older people seeking to supplement their income (47%). However, increasing care (16%) and health care (14%) needs were also significant. Home renovations including maintenance (9%) and modifications (6%) also featured, but less significantly. Smart money (5%) or special (3%) options like holidays, care repairs or family loans were the least likely to be mentioned.

**Figure 5: Factors from the literature affecting retirement decisions**



The fact that home modifications and home maintenance were mentioned at all tells us that older people are taking out reverse mortgage products with the intent of making their housing more suitable (research objective C4). Further, access to home equity may be very important in the context of home modifications and maintenance (Rasmussen, Megolughe and Morgan, 1997) as life quality and autonomy to some extent rests on the adequacy or otherwise of housing appropriateness and quality (AddaeDapaah & Leong, 1996). This is important as they have a significant impact on functional losses associated with ageing and chronic illness and these are negatively

associated with ability to 'age in place' (Sabia, 2008). Brody, Simon and Smallwood (1987), Stucki (2007) and Stum, Bauer and Delaney (1998), all make clear that meeting long-term health and care costs are challenging for many older folk and particularly for those with chronic ill health. This widening gap between what older people can afford and what they are expected to cover in terms of long-term health and care costs is a likely growth factor into the future (Stum, Bauer and Delaney, 1998 Gibler and Rabianski, 1993). However, there are attitudinal barriers to be overcome as many older persons also resent "the prospect of selling their home to pay for care, [because of an] inalienable right to property rather than a desire to bequeath assets" and believe that "taxes should pay for residential care" (Rowlingson p. 177, 2005).

It is clear that the majority of older people want to stay in their homes not simply because they own them, frequently mortgage free, but because their homes are repositories of, and give locational access to, physical, social, and biographical meanings of place (Leith, 2006). Further, Australia has historically had a preferential treatment of home-based asset accumulation. For instance, in Australia, income from home equity conversion may be tax exempt if it pertains to the principal or family home no matter what its value even when an income support recipient is not in residence.

While, Ong (2004) stated that a reverse mortgage was non-assessable under the income test if it amounts to less than or equal to \$40,000 this figure depends on a number of factors and changes over time depending on reviews and legislative change<sup>1</sup>. For instance, the first \$40,000 withdrawn with an equity release product are exempt from the assets test for 90 days, but after this date are assessed if unspent and any amounts over this value are assets test counted from the moment they are withdrawn (Centrelink, 2008a). Amounts spent on assessable assets such as cars or furniture will mean that the income support recipient's assessable assets may have changed. However, amounts spent on repairs or renovations to the principal home, an exempt asset, means that there will be no affect on the person's payments (Gregor, 2009). Further, the Social Securities Act also clearly limits the principal home asset exemption to someone who does not have another principal home.

Further, as Harmer (2009) states, reverse mortgages product availability raises questions for the pension means test, particularly regarding whether or not the treatment is appropriate relative to other assets and the extent to which the settings may inappropriately encourage the use of these products. The Australia's Future Tax System Review is currently considering the broader issues raised by exemption of the principal home. The income test is difficult to assess but in most cases lump sum receipts (including reverse mortgages), are not counted as income as they are received, but may be assessed if these amounts are invested in other assets. For example, the amounts received from a reverse mortgage are not considered income on receipt, consistent with the treatment of any proceeds received from a loan and it is only if the loan proceeds are placed in a financial investment, such as a bank account, the income means test deeming rules apply (Gregor, 2009).

In addition, under the Social Securities Act an income support recipient can only gain access to the principal home proceeds exemption if they are making reasonable attempts to purchase, build, and repair or renovate their principal home and this can be demonstrated by contracting. Centrelink uses the Bluestone EquityTap reverse mortgage product to illustrate some of its assets and income tests relevant to reverse

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<sup>1</sup> Social Security Guide 4.6.3.80 states that exempting the rules exempting sale proceeds on the family home changed from July 2007.

mortgage products. This factsheet states, “the amounts withdrawn are ‘spent’ - that is, consumed and no longer readily accessible then the incomes test will no longer apply to the amount spent” (Centrelink, 2008b, p1). Treatment of assets and income varies depending on product purpose and income support status. For example, according to Gregor, S. (email communication 27/8/09) currently under the Commonwealth Asset and income test limits a homeowner couple can have up to \$891,500 in assets (excluding their home) and a couple can have up to \$2,642.50 in income a fortnight and still receive a part pension. It is for this reason that SEQUAL recommends its lenders advise consumers to seeking independent advice from their local Centrelink financial information services officer.

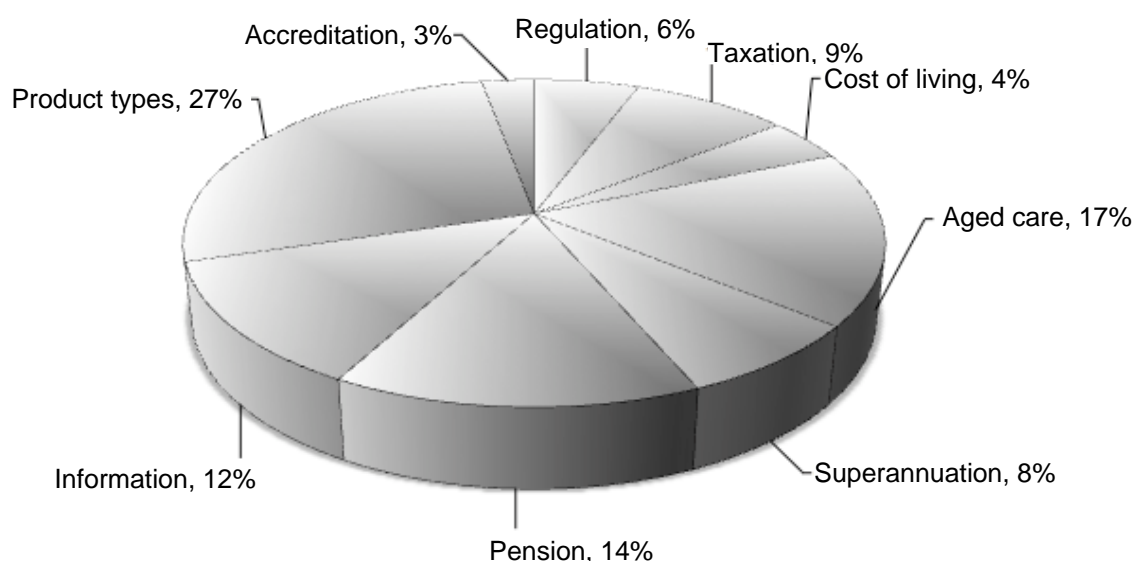
#### *2.4.1 Growth implication*

This section looks at what previous research has to say about the factors that are likely to influence growth in the use of reverse mortgages by older persons (Research question 2). The international and national literature touches on some of the factors that make reverse mortgage products attractive to consumers (Research objective B1) and also some of the factors that make it attractive to the finance services sector (Research objective B2). The reverse mortgage variables mentioned by authors within the 51 sources included in this review could be thematically grouped under nine themes. Those that clearly relate to consumers are seven of these themes including product types (27%); information (12%); pension entitlements (14%); superannuation (8%); aged care (17%) and cost of living increases (4%). For instance, on the consumer side Frantontoni (1999) found that his simulation model showed that older people are primarily concerned with the impact of unavoidable expenditure shocks on their standard of living. However, Sabia (2008) found that older peoples’ ability to age in place was affected by concerns regarding increasing utility charges and property taxes. The importance of product type choice from consumer perspectives is also critical as the interest rate risk of a reverse mortgage often is several orders of magnitude greater than the interest rate risk of other fixed-income securities (Boehm and Ehrhardt, 1994).

Terry and Gibson (2006) felt that much more individual support and guidance is required to assist with practicalities and to provide reassurance. Cutler (2007) and Tilse (2005) argued for much greater levels of financial literacy and sound professional advice given the complexities of retirement decisions. They argue that the ability of government and older people to rely on housing wealth to support quality of life and to offset pension and care restrictions depends on the knowledge and understanding springing from the older person’s level of financial literacy and capacity, in conjunction with ethical professional financial guidance (Cutler, 2007). Lusardi and Mitchell (2007) warn that concerns in terms of pension entitlements will become more significant as baby boomers demonstrate a pattern of poorer saving and retirement planning than earlier cohorts.

Those that are more relevant to the financial services sector are changes in taxation (9%), financial services legislation (6%) and requirement or incentives surrounding accreditation of lenders (3%). The fact that the financial services sector concerns are rated lower overall than the consumer growth factors should not be taken to mean that they are less important, rather it is a reflection of the fact that the majority of studies are more concerned with the consumer perspective than the financial services perspective. Those that discussed the financial services perspective like Micelli and Sirmans (1994) stated that their model demonstrated that lenders are likely to respond to risk by either limiting the amount of the loan or by charging a premium interest rate to cover the expected cost of default.

**Figure 6: Factors from the literature affecting growth of the reverse mortgage market**



#### *2.4.2 Policy implications*

The review has revealed a number of significant limitations of previous research, not the least being a paucity of good quality research and numerous issues associated with comparability of findings as a result of definitional, cultural, regulatory and product differences. However, it appears that there are a number of conclusions that can be drawn from recent investigations in this area. Firstly, it appears that our increasing longevity has become a risk to quality of life, and it may be that older people will be willing to trade off housing equity, for a level of financial security should they have a long life.

Secondly, for many individuals, housing wealth could represent a significant source of income in retirement as many older people are 'asset rich, but income poor' (Rowlingson, 2006). For instance, housing wealth increases with both income and financial wealth but there are a number of low-income older women in the oldest age group who would benefit from equity release (Hancock, 1998). Evidence suggests that demographic considerations may be more important than financial considerations to elderly homeowners' housing decisions. For instance, some previous research indicates that non-financial aspects of homeownership are significant, implying that they may be more effective policy levers i.e. separation, death of a spouse, health status, number of years in the home and dwelling unit type (VanderHart, 1993, 1995). This has implications for when older homeowners might be looking to release equity or make housing transitions. Further, factors such as attachment to the home, length of residence and dwelling type were also found to be significant.

Thirdly, equity associated with homeownership can only be accessed in later life by property sale; through traditional home equity loans, which require regular payments; or through an equity release or reverse mortgage product, which requires no repayment until death or voluntary relocation. Some researchers like Lusardi and Mitchell (2007) and Beal (2001b) have noted a greater reliance by baby boomers on home equity as a result of poor saving and planning, with 28 percent of their study sample indicating little or no retirement planning. This is supported by Housing and Urban Development data that indicates that the average age of reverse mortgage borrowers is dropping (Stucki, 2007). Increasingly, governments of countries where homeownership is high are looking to housing assets to fund long-term care (Costa-Font, Masecarilla-Miro and Elvira, 2006).

Lastly, there is clear international evidence that “fixed term reverse mortgages” are popular with older frail people wanting in-home long-term care services (Brody, Simon and Smallwood, 1987). Indeed, there is some research that indicates that maintaining long-term care quality is challenging and just over 11 percent of the older people sampled were struggling financially to meet rising care costs. Those most at risk and thus most likely to benefit from reverse mortgage products, appear to be single, older homeowners with a chronic disability requiring quite large amounts of home-care (Stum, Bauer and Delaney, 1998).

## **2.5 Summary**

Historically, home equity conversion schemes and reverse mortgage schemes have not taken off in Australia. Attitudes are impacted by generational change although the current baby boomer cohort can see the advantages, as can government. While in general, qualitative research demonstrates that elderly homeowners have a balanced and pragmatic attitude to their housing assets, it appears that a growing number might be willing to trade their housing asset off to supplement low-income. However, many older homeowners are wary of equity release because of concern re risk, this is unsurprising as the interest rate risk of a reverse mortgage often is several orders of magnitude greater than the interest rate risk of other fixed-income securities. So it would appear that the success or otherwise of reverse mortgage products will rest on how future policy treats home equity in terms of its status as an asset or not, and in terms of its treatment of eligibility for long-term care subsidies.

## **3 REVERSE MORTGAGE PRODUCTS**

### **3.1 Introduction**

This chapter informs the aims of this research by exploring: the nature of the current reverse mortgage industry in Australia (research question one), and the international and historical factors that influence growth in the use of reverse mortgages by older persons (research question two). This chapter is divided into five parts. The first part offers a summary on the international history of reverse mortgages followed by the international regulatory frameworks governing reverse mortgage markets. Second, a brief history of reverse mortgages in Australia is provided. Third, the Australian historical context is followed by a summary of the regulatory and legislative systems in place at national and state and territory level. Fourth, census figures are used to draw some boundaries around current market share and potential market opportunities as a means of starting to answer the question posed by trying to estimate the likely size of the reverse market into the future (it does this by providing an international context, a historical overview and a review of the legislation and regulation before moving on to the likely size of the market (research objective A2). Finally, a summary of the advantages and risks associated with reverse mortgage products is presented.

### **3.2 International history of reverse mortgages**

Home equity release programs are not new; indeed, a form of equity release has been available in France for two centuries (Ward, 2004). Under the French viager system, the property owner sells the property below market value, but retains the right to live in the home for as long as he/she lives and to receive a life-time annuity from the buyer (Ward, 2004). Usually accomplished through a notary, the viager allows the parties to avoid costly intermediaries and banks (Ward, 2004; Fleming, 1992).

In contrast to the viager system, many modern equity release schemes are reverse mortgages and do not involve a sale of the home. Reverse mortgages were first available in the UK (Huan and Mahoney, 2002). They have been available in the US since the 1960s (Law Reform Commission of Saskatchewan, 2006) and were introduced in New Zealand and Canada in the 1980s (Ward, 2004; Law Reform Commission of Saskatchewan, 2006). With a reverse mortgage the homeowner receives a loan in a lump sum (reverse mortgage) or in periodic payments (typically called a reverse annuity mortgage). The loan is secured by a mortgage on the home, accrues interest until it is repaid, and is not payable until the borrower dies or moves out of the home.

Lenders in Canada and New Zealand, for example, offer both types of reverse mortgages (Ward, 2004; Law Reform Commission of Saskatchewan, 2006). In the US, there are Reverse Equity Conversion Mortgages' (RECM) and Home Equity Conversion Mortgages' (HECM). The RECM has been available on a limited basis since 1988, this loan type is relatively flexible, but older people have been reluctant to participate because of high interest rates, poor financial literacy and variance between products (Stone, 1995). Unlike the RECM, in a HECM loan the proceeds are available only as a line of credit or as a "tenure plan", which amounts to an annuity (Law Reform Commission of Saskatchewan, 2006). Chuo Mitsui in Japan also offers fixed annual instalments and a plan that allows disbursements, within an established limit, on an as-needed basis (Chuo Mitsui Services for Individuals and Corporations, 2008).

Internationally, a variety of equity release schemes are available to older adults. In New Zealand, for example, a reverse annuity mortgage is available only to borrowers aged 60 or older, and lump sum loans are available to borrowers 60+ or 65+



depending on the lender (Ward, 2004). In Canada and the US, borrowers aged 62 years or older are eligible for reverse mortgages (Law Reform Commission of Saskatchewan, 2006). In Spain, homeowners aged 65 and older are eligible for a reverse mortgage but these are few in number (Bover, 2006).

The percentage of the home equity that may be mortgaged usually varies with the borrowers' age and gender, and some lenders cap available equity at a certain percentage. For example, one New Zealand company will lend up to 10 percent of the current value of unencumbered property and will only extend a loan if the property is valued at or above \$250,000 (Ward, 2004). Other New Zealand companies will extend loans of up to 45 percent of the current property value. The primary Canadian provider will loan up to the lesser of 40 percent of the equity or \$500,000, and US HECM loans may be for up to 60 percent of the home equity with a maximum of \$220,000 (Law Reform Commission of Saskatchewan, 2006), whereas in Japan, the city of Murashino will lend up to 80 percent of fair market value (Hayashida and Saski, 1986).

Many programs cap maximum indebtedness at the market value of the house at the time the loan becomes due. (e.g. Law Reform Commission of Saskatchewan, 2006). Most (90%) of all reverse mortgages in the US are through a government-sponsored program (the Home Equity Conversion Mortgage Program or HECM) that specifies the loan terms, guarantees any shortfalls for lenders, and guarantees payments to borrowers should the lenders fail to pay (Law Reform Commission of Saskatchewan, 2006).

Some reverse mortgage schemes permit borrowers to use the funds for any purpose (e.g. Law Reform Commission of Saskatchewan, 2006). While the two US schemes are flexible regarding the use of loan proceeds, one program offers a single purpose loan (Ong, 2004). Proceeds from a Chuo Mitsui reverse mortgage in Japan may be used for any purpose, except business (Chuo Mitsui Services for Individuals and Corporations, 2008). Japan has also recently introduced some programs that make funds available only for specific purposes, such as financing support services or home renovations (Goda, 2007).

While most reverse mortgage plans do not require borrowers to make any payments until they die or vacate the home, some require periodic interest-only payments. The Japanese program to fund home renovations, for example requires interest-only payments until the borrower dies or sells the home, at which time the balance becomes due (Goda, 2007). Two plans available in the UK also require interest only payments (Huan and Mahoney, 2002).

Other forms of equity release include a program in Russia in which the homeowner grants the home to a caregiver in the form of a bequest in exchange for care during the owner's lifetime (Buckley, et al, 2003). The Japanese government will guarantee continuous and timely rental payments if an older couple agree to rent their home to a young family that needs additional space (Goda, 2007).

With a home reversion in the UK, the homeowner sells the home but retains the right to live in the house for life in exchange for modest rent (Huan and Mahoney, 2002). A shared appreciation mortgage in Scotland provides low- or no-interest loans in exchange for an agreed share of any increase in property value plus repayment of the loan (Huan and Mahoney, 2002).

### **3.3 International regulation of reverse mortgages**

The type and degree of regulation varies among countries that offer equity release products. The most stringent regulation of equity release products in the US applies to

the government insured HECMs. The insurance guarantees that the consumer's debt will never exceed the property value and that consumers will receive any regular payments from the loan even if the property loses value or the lender becomes insolvent. These requirements do not apply to reverse mortgages that are not federally insured (Australian Securities and Investments Commission, 2005). The Federal Truth in Lending Law applies to all reverse mortgages and requires disclosure of the total annual loan cost (Australian Securities and Investments Commission, 2005). The type and degree of state regulation varies from state to state, and some private lenders have relevant internal policies (Australian Securities and Investments Commission, 2005).

In the UK, equity release products are governed by the Financial Services Act or the Consumer Credit Act; providers also self regulate under the Mortgage Code or Safe Home Income Plan (Huan and Mahoney, 2002). The UK's Financial Services Authority regulates entities that "provide, administer, advise on or arrange mortgages" (although solicitors, conveyancers, and financial counsellors are excluded in some circumstances) and requires specific disclosures throughout the life of the mortgage (Australian Securities and Investments Commission, 2005). In Ireland, the Consumer Credit Act includes disclosure and contract requirements (Loughlin and Murphy, 2008). The proposed section 19 of the Markets in Financial Instruments and Miscellaneous Provisions Act will require authorization of equity release product providers and set minimum probity and competence standards (Loughlin and Murphy, 2008).

In New Zealand, the government has already developed a code of practice for the reverse mortgage industry. The New Zealand code covers issues such as "disclosure of terms and conditions, risk management practices and recoveries" (Australian Securities and Investments Commission, 2005). Also in New Zealand to promote 'ageing in place' a number of local councils let low-income older people defer rates. In this case interest accrues on the outstanding amount and there are also often set-up or establishment fees, and the debt immediately becomes payable when the home is sold (New Zealand Retirement Commission, 2008).

### **3.4 A brief history of reverse mortgage products in Australia**

The Australian reverse mortgage market began tentatively in the early 1980s with three providers (Selstay Pty Ltd in 1986, Advance Bank/St George) all of whom had minimal success with their products (Beal, 2001a, 58). Until the publication of a report on Home Equity Conversion Mortgage (HECM) by the Australian Housing Research Council in 1994, very little was known about reverse mortgage products in terms of their viability and usage in Australia (Storey, Wilson and Kendig, 1994). Research conducted for the report was collected between January 1990 and July 1992 and focused on providing an explanation of the products, consumer viewpoints and consumer protection goals and mechanisms, and provided a discussion of policy issues for governments including challenges associated with the financial effects of these products under various means tests (Beal, 2001a, 59). The report identified three groups of home equity conversion products available on the Australian market at the time; loan contracts lump sum advance (used for one-off expenses); loan contract periodic payment (used to supplement income) and sale plans where the property is sold upon creation of the contract with payment available immediately, in instalments or part 'up front' payment, with the remainder deferred until permanent vacation or death (Storey, Wilson and Kendig, 1994, pp.13-14).

The continued growth of the Australian reverse mortgage market can be largely attributed to the increasing commercial viability of products (Storey, Wilson and

Kendig, 1994) and a generational change in attitudes towards inheritance and the desire (and in some cases a need) to supplement income and fund a more comfortable retirement (Mackay, 1997; Beal 2001a; Storey, Wilson and Kendig, 1994). Liquidating home equity in retirement is becoming increasingly popular for the ageing Australian population. A study by the Australian Reserve Bank found a significant life-cycle influence on housing equity flows during 2004, particularly among property transactors, with the bulk of equity withdrawal undertaken by older households (Schwartz et al 2006, 34) with the trend likely to continue.

### **3.5 Australian reverse mortgage products**

A number of reverse mortgage products are currently available throughout Australia. They typically allow the borrower to receive payment as a lump sum, a line of credit, a regular income, or a combination of these. The Senior Australians Equity Release Association of Lenders (SEQUAL) is a self-regulatory membership organization of reverse mortgage lenders and accredited reverse mortgage consultants. Members agree to comply with the Privacy Act, Trade Practices Act any other relevant Code or Regulation at law.

SEQUAL has previously commissioned the actuarial and advisory firm Trowbridge Deloitte, to survey the reverse mortgage sector (SEQUAL, 2007). This study revealed that the reverse mortgage market was increasing rapidly not just in terms of loans but also in terms of the numbers of new products and providers entering the market. The increasing numbers of mortgage brokers and financial planners lead SEQUAL to develop accreditation standards and a code of conduct (SEQUAL, 2008b) that sets minimum standards for its members. While self-regulation codes of conduct inform a 'no negative equity' policy for SEQUAL members, only the Uniform Consumer Credit Code regulates loan providers and product variability and complexity may make enforcement of neutral or positive equity outcomes difficult even for SEQUAL members (COTA National Seniors Partnership, 2005).

At the commissioning of this project in late 2007, the SEQUAL web site ([www.sequal.com.au](http://www.sequal.com.au)) identified 12 reverse mortgage providers. Lenders included traditional banks (e.g., BankWest, Commonwealth Bank, and St George Bank), credit unions and building societies (e.g., Police and Nurses Credit Society and Newcastle Permanent), fund management and financial services companies (ABN AMRO, Bluestone, Over Fifty Group, and Suncorp), and specifically targeted lenders (Australian Seniors Finance, Vision Equity Living). Eight of the 12 lenders had their own product; the remainder used the ABN AMRO product. Four lenders withdrew their product from the market following the economic downturn in June 2008 they were; Bluestone, Vision, Over Fifty Group and Mariner. Their exit from the reverse mortgage market was reportedly due to the sub-prime crisis.

Most lenders typically have some form of equity release calculator on their websites that can compute the maximum loan available based on the age of the youngest borrower, property and location (postcode), and the percentage of equity to be protected. Most include the option of a fixed interest rate for lump sum payments and variable rates for lump sum, monthly income, and flexible drawdown payment plans. The calculator can project the amount of equity that would remain at closure, based on the amount and type of loan, the borrower's estimates of annual growth in the price of housing, interest rate forecast, and expected term of the loan. Minimum age of the youngest borrower varies from 60 to 65 years of age. Lenders typically charge an establishment fee (ranging from \$700 to \$1,000) and some charge a monthly or annual fee (up to \$12 per month). Following the recent economic downturn, BankWest

temporarily suspended new applications for their reverse mortgage product and other lenders are likely to modify their loan requirements.

In addition to the industry providers, there are some other small schemes, which are either national or state run. The sole national scheme is the Commonwealth's Pension Loans Scheme. Under this program, "People of pension age (or their partners) who cannot get a pension because of their income or assets (but not both), or those who only receive a part pension, can access capital tied up in their assets" (Centrelink, 2008a). This scheme is more limited than a reverse mortgage in that the money can only be taken as an income stream. The Pension Loans Scheme uses an older person's home equity to enable those who would otherwise be ineligible for the aged pension to receive the equivalent of the full aged pension fortnightly. Additionally, some very specific equity release programs also exist such as the Queensland Home Adapt Loan (QHAL) that was introduced by the Queensland Department of Housing on a trial basis in North Brisbane in 2004 and, despite extensive promotion by the Department and service providers, has had a low take-up rate (Environmental Resources Management Australia, 2007).

### **3.6 Regulation of reverse mortgages in Australia**

There is no comprehensive regulatory scheme to protect Australian consumers who obtain a reverse mortgage. One Commonwealth law permits action against credit providers who engage in misleading conduct in the advertising or sale of credit products. Two proposed Commonwealth laws, if enacted, will provide considerably more protection. The Uniform Consumer Credit Code is the primary regulatory tool at the state/territory level, but it may not apply to all reverse mortgages. Other consumer protection law varies from state to state.

Commonwealth law: The Australian Securities and Investments Commission Act (2001) permits state and federal governments to take action against providers who engage in misleading, deceptive or unconscionable conduct in advertising or sale of credit products (Australian Securities Investments Commission, 2005). Two proposed Commonwealth laws will affect the reverse equity mortgage industry and at least some of its consumers. One is the Finance Broking Bill, which was released for comment in November 2007; the other is the National Consumer Credit Code.

The Finance Broking Bill includes requirements for broker licensing and conduct as well as remedies for aggrieved consumers (NSW Office of Fair Trading, 2007). The proposed National Consumer Credit Code will incorporate, in some form, the Uniform Consumer Credit Code (UCCC) provisions already in force in all states and territories. The UCCC requires credit contracts to disclose specific information and permits courts to reopen unjust contracts. The Code in force at the state level does not apply if the loan proceeds are used for investment or business purposes

There are limitations to the UCCC's ability to protect consumers in reverse mortgage transactions. Although the UCCC requires creditors to provide some information to debtors, there is no specific duty to disclose risks resulting from new complex products and no duty to disclose anything about costs that are unknown at time of contract (e.g., foregone equity). Reverse mortgages, by their nature, have uncertain costs to borrowers, and the national economic situation and lenders' solvency will affect the costs and benefits. Ongoing fees and property evaluation charges can also affect the total cost of the loan. The Commonwealth appears to recognize some of the risks unique to reverse mortgages and these risks were discussed in the Green Paper on the two proposed statutes (Financial Services Working Group, 2008).

Enactment of the UCCC as Commonwealth law is part of a plan (Treasury Department, 2008). Phase one of the plan includes additional protections:

- Licensing for all consumer credit providers and credit-related brokering services.
- Extending the powers of ASIC to be the sole regulator of the consumer credit industry.
- Code of conduct for licensees.
- Required membership in an external dispute resolution body for all providers of consumer credit and credit-related brokering services.
- Extending the UCCC to cover consumer mortgages over residential investment properties.

Phase 2 includes additional reforms to address such issues as unfavourable lending practices, comparison rates and default notices, and enhancements of the regulation of reverse mortgages.

### **3.7 State and territory law**

Table 2, following summarises state and territory law that potentially applies to reverse mortgages. State and territory regulation of consumer credit transaction occurs primarily through the Uniform Consumer Credit Code, which is in effect in each state and territory. Other regulation is not consistent in the states. Some states and territories have enacted fair trade and credit administration legislation that affords additional protections for consumers in credit transactions. The scope of that protection, however, varies from state to state. ACT, NSW, VIC and WA specifically regulate finance brokers in some fashion; the remaining states and territories do not have any broker-specific laws (NSW Office of Fair Trading, Finance Broking Working Group, 2007).

**Table 2: Summary of state/territory laws potentially relevant to reverse mortgage transactions**

	<i>ACT</i>	<i>NSW</i>	<i>NT</i>	<i>QLD</i>	<i>SA</i>	<i>TAS</i>	<i>VIC</i>	<i>WA</i>
<b><i>Contract Requirements</i></b>								
Credit contract requirements specified	CCC	CCC	CCC	CCC	CCC	CCC	CCC	CCC
Requirements re termination of credit contracts	CCC	CCC	CCC	CCC	CCC	CCC	CCC	CCC
States may be sent maximum credit contract APR by regulation	CCA	CCA	CCA	CCA	CCA	CCA	CCA	CCA
Mortgage must be in writing and copy provided to mortgagor	CCC	CCC	CCC	CCC	CCC	CCC	CCC	CCC
Finance broking contract requirements specified		CCAA						
<b><i>Credit Providers</i></b>								
Licensing and/or registration required	CCAA						CCA	CAA
Protections against misrepresentation, dishonesty, unfairness, etc by credit providers	CCAA/FTA	CCAA	CAFTA	FTA	CAA		FTA	FTA
Regulations may specify prohibited fees or charges by credit providers	CCC	CCC	CCC	CCC	CCC	CCC	CCC	CCC
<b><i>Finance Brokers</i></b>								
License and/or registration required	CCAA							
Protections against misrepresentation, dishonesty, unfairness, etc by finance brokers	CCAA	CCAA						FBR
Statutory duties re conflict of interest, confidentiality, reasonable care, competence, disclosures								FBR
Finance brokerage fees limited	CCAA						CCA	
<b><i>Consumers' Remedies</i></b>								
Court may reopen unjust transactions	CCC	CCC	CCC	CCC	CCC	CCC	CCC	CCC
Court may order compensation to debtor if credit provider violates Code requirement	CCC	CCC	CCC	CCC	CCC	CCC	CCC	CCC
Court may order payment of damages or other remedies orders for violation of FTA				FTA				
Court may modify, void, or enforce the contract	FTA		CAFTA	FTA			FTA	FTA
Court may restrain unjust conduct				CCA				CAA

### 3.8 Understanding the market potential

To try and unpack the research objective concerned with the likely size of the market (research objective A2) the data will be analysed for each state and territory within Australia using the 2003 Survey of Disability, Ageing and Carers conducted by the Australian Bureau of Statistics and the new 2006 census. This data will be:

- Disaggregated by variables relevant to reverse equity relevance and uptake.
- Reported separately for three cohorts of older persons (e.g. 55-64; 65-74; and 75+ years); and interrogated to examine the likely nature of demand on the basis of assumptions regarding the relationship between homeownership, financial vulnerability and age given current ABS estimates of older persons.

SEQUAL surveys estimate that there are currently more than 30,000 reverse mortgages in Australia, with an average value of around \$60,000 for each mortgage (Hickey and Ling 2008). The considerable wealth currently tied up in housing can be accessed if the policy parameters and products are supportive of greater growth potential, particularly given the fact that the proportion of people aged 65+ in the population will increase from 13 percent in 2007 to 23-24 percent in 2056 (ABS, 2009). Table 3 indicates the numbers of older Australians based on analysis from the Census of Population and Housing, a quick review makes clear that already the population over 75 is quite substantial.

**Table 3: Australian population aged 60 and over by sex**

<i>Age</i>	<i>Male</i>	<i>Female</i>	<i>Total</i>	<i>Percentage</i>
60-64 years	480,572	477,509	958,081	27%
65-69 years	373,601	383,784	757,385	21%
70-74 years	294,849	321,202	616,051	17%
75-79 years	247,501	296,103	543,604	15%
80-84 years	164,957	239,523	404,480	11%
85-89 years	75,531	138,782	214,313	6%
90-94 years	24,254	61,476	85,730	2%
95-99 years	4,453	15,196	19,649	1%
100+ years	799	2,355	3,154	0%
Total	1,666,517	1,935,930	3,602,447	100%

Data Source: Australian Bureau of Statistics (2006)

It is also important to think about the population for whom reverse mortgages are an option i.e. only older homeowners; as those older people excluded from homeownership cannot access a reverse mortgage. Among the total population of the 3,602,447 persons within Australia who are currently aged 60 years and over, 2,925,187 people or (81.2% see Table 4) of older persons are homeowners and thus this is the upper limit or maximum potential capacity for the reverse mortgage market. In reality, it is somewhat less as a number of homeowners are older couples who are joint homeowners and 12.2 percent already have a home mortgage and so are carrying housing debt into retirement. Further, unless an older person can find a reverse mortgage product that can payout the existing mortgage their existing housing debt might make them ineligible for a top up reverse mortgage product.

**Table 4: Housing tenure expressed as percentages for those aged 60+**

<i>Tenure type</i>	<i>Frequency</i>	<i>Percent</i>	<i>Cumulative percent</i>
Owner without a mortgage	3,965	69.1	69.1
Owner with a mortgage	700	12.2	81.2
Life tenure scheme or participant of rent/buy (or shared equity) scheme	51	.9	82.1
Renter - State/Territory Housing Authority	320	5.6	87.7
Renter - private	415	7.2	94.9
Renter - boarder	58	1.0	95.9
Living rent-free	225	3.9	99.9
Other	8	.1	100.0
<b>Total</b>	<b>5,742</b>	<b>100.0</b>	

Data source: Australian Bureau of Statistics, Census of Population and Housing (2006)

The proportion of older homeowners varies substantially across Australia with the highest levels of homeownership being in the ACT, while the lowest are in SA. This may reflect variance in state/territory governance and taxation policies, homeownership incentives, housing affordability and/or socio-economic status. A limitation of statistics relating to homeownership is that a number of older people may own more than one home for investment or holiday purposes, so another means of thinking about the potential growth of the reverse mortgage market is to think about it from the perspective of occupied dwellings which may better capture the principal place of residence. Table 5 shows that there are cohort differences and as expected there are less older people aged 75+ in all states and territories than those under 74. Further, while there appears to be some consistency in numbers based on state/territory, this varies when based on population sizes. For example, NSW has the largest numbers of older people in all categories, but WA has less 75+ persons than SA' but more in the 65-74 year cohort, indicating a change over time.

**Table 5: Number of occupied dwellings of older people within Australia**

<i>States/Territories</i>	<i>65-74</i>	<i>75+</i>	<i>Total (65+)</i>	<i>Percentage</i>
NSW	172,137	152,054	324,191	33.4
VIC	138,126	120,045	258,171	26.6
QLD	97,667	78,198	175,865	18.1
SA	45,434	40,884	86,318	9.0
WA	47,110	35,256	82,366	8.5
TAS	15,808	13,402	29,210	3.0
NT	1,405	557	1,962	0.2
ACT	6,840	4,938	11,778	1.2
<b>Total</b>	<b>524,527</b>	<b>445,334</b>	<b>969,861</b>	<b>100</b>

Data source: Australian Bureau of Statistics, Census of Population and Housing (2006)

If we are to reflect on the total potential market, it is also helpful to examine not just percentages but numbers. Table 6 takes percentage data about homeownership from the SDAC and combines this with census data to create an estimate of the maximum numbers of older homeowners whose occupied dwelling asset value might be tapped via a reverse mortgage if required. One of the reasons that this can only be



considered an estimate is the fact that the age band categories are not perfectly aligned. This is a limitation and is a result of having to combine two sets of unrelated secondary census data. Indeed, the definition of old age is somewhat arbitrary (Thane, 1978). More importantly, the World Health Organisation (2009) states that while most developed world countries have accepted the chronological age of 65 years as a definition of 'elderly' or older person, the United Nations agreed cut-off is 60+ years. So while the mixed sampling results represent an approximation rather than an absolute, both age bands are acceptable for analysis purposes.

Although there are commonly used definitions of old age, there is no general agreement on the age at which a person becomes old.

**Table 6: Maximum possible reverse mortgage market by state and territory**

<i>Region</i>	<i>Percentage of 60+ homeowners</i>	<i>Number of occupied dwellings of those 65+</i>	<i>Eligible numbers</i>
NSW	82	324,191	265,837
VIC	84	258,171	216,864
QLD	79	175,865	138,933
SA	76	86,318	65,602
WA	80	82,366	65,893
TAS	82	29,210	23,952
NT	79	1,962	1,550
ACT	88	11,778	10,365
<b>Totals</b>		<b>969,861</b>	<b>788,996</b>

Data Sources: Australian Bureau of Statistics, Survey of Disabled, Aged and Carers (SDAC) CURF & Census of Population and Housing (2003<sup>2</sup> ; 2006)

While the most recent data from the Deloitte SEQUAL reverse mortgage study (2008a) indicates that while the market was growing at 14-27 percent prior to the economic downturn in June 2008, the current market share at approximately 36,600 loans is still well below what is potentially possible at under one twentieth of the maximum market potential. Further, 31 percent of Centrelink clients are aged 65 years and over (Australian Institute of Health and Welfare, 2007). This means that there are substantial numbers of older homeowners who depend on the aged pension for income. However, not all aged pensioners will rely totally on their aged pension entitlement as some may hold other assets such as bank deposits, shares, property and managed funds and though these will all be taken into account under both the assets and income tests, these additional assets can be liquidated if required in preference to their principal home. Moreover, retirement income stream investments are assessed concessionally, so more leniently. Thus, it would be incorrect to assume that all aged pensioners are cash poor or necessarily asset rich.

<sup>2</sup> The Survey of Disabled, Aged and Carers (SDAC) is a sample survey that has been weighted to infer results for the total population. To do this, a 'weight' is allocated to each sample unit. The weight is a value that indicates how many population units are represented by the sample unit. While the survey was benchmarked to the estimated population living in non-sparsely settled areas at 30 June 2003 based on results from the 2001 Census of Population and Housing the results are subject to both sampling and non-sampling error. For instance, the survey covered people in both urban and rural areas in all states and territories, except for those living in remote and sparsely settled parts of Australia meaning that some areas such as the Northern Territory and Tasmania will be more prone to sampling error.

Nevertheless, knowing the number of older people eligible for the pension gives an approximation of number who may be experiencing more liquidity problems, especially when financial emergencies crop up unexpectedly like health costs, and/or the need to replace or repair large assets like hot-water systems, fridges, cars etc. Given that, previous research has indicated that more than three-quarters of all single low-income homeowners in the oldest age cohort are likely to benefit from reverse mortgage products (Mayer and Simons, 1994), there may well be a mismatch between those wanting a reverse mortgage and the population that bankers are happiest selling this type of product to, as they are the group perceived by mortgage practitioners to produce less interest but pose a higher risk in terms of their sub-prime nature. For instance, Gibler and Rabianski (1993) and Terry and Gibson (2006) both point out that the elderly homeowners most interested in reverse mortgages had homes with relatively low asset values. However, the Austrian survey reported by SEQUAL (2008a) disputes that those in the lowest income brackets are the most likely to apply for reverse mortgage products, instead they found that middle and higher income bands are interested in reverse mortgages in order to maintain their current standard of living.

It is also important to be clear that while there is a considerable gap between the current number of reverse mortgage loans and the maximum growth potential of the market, the population demographics cannot tell the full story. Many mitigating factors must be considered when estimating reverse mortgage product market potential including:

- The number of homeowners in homes with low market value because of the location or the nature of the house (e.g. in rural areas).
- The numbers of older homeowners on sufficient income who would not be interested in these products.
- Homeowners down-sizing instead of taking up this option.
- Other constraints to supply and demand including the resistance to the product from both bankers and homeowners because of risk and complexity.

Unfortunately, these qualitative factors cannot be reliably estimated on the basis of our existing population level data pertaining to older people and homeownership. While it is clear that more detailed market modelling would be desirable it is beyond the scope of the currently funded research being undertaken.

### **3.9 Advantages and risks for consumers with reverse mortgage products**

There are both advantages and risks attached to reverse mortgages for older consumers. First the advantages for older consumers will be dealt with. Reverse mortgages permit borrowers to diversify their wealth rather than keeping it all in a single, and thus risky, asset. For instance, older people with self-managed superannuation funds are gravitating to reverse mortgages as a way to manage their assets - a consequence of the stock market fall and interest rates on reverse mortgage being at an all time low (Fraser, 2009). They also increase consumption by older adults without a house sale, thus avoiding the financial and emotional costs associated with moving while receiving loan proceeds in the form of a lifetime annuity, which guarantees an income for life.

Reverse mortgages also have social benefits. Making it possible for the elderly to remain at home could ease pressures on government safety-net programs, which could ultimately ease tax burdens on workers. If borrowers use reverse mortgages to

maintain and improve their homes accessibility, this yields social as well as private benefits (Mitchell and Piggot, 2004).

Second, consumer risks are also evident. As a general concern, reverse mortgages are complex and may be difficult for elderly homeowners and their potential heirs to understand (Mitchell and Piggot, 2004). Many homeowners may not understand that they are reducing the value of their home equity when they obtain a reverse mortgage and that the balance due increases over time (Phillips and Gwin, 1993). Indeed, the value of the loan at the time it is due may exceed the value of the home. The significance of this risk depends upon the terms of the contract. If the contract includes a no negative equity guarantee, it caps the maximum indebtedness at the market value of the home at the time of sale. Such guarantees, however, may be voided if borrowers do not comply with all contract terms. Without a 'no negative equity' guarantee, the borrower or the borrower's estate could owe money on the loan in addition to sale proceeds. Indeed, according to Terry and Gibson (2006) the homeowner's share of the housing asset diminishes:

- Progressively, the longer the homeowner lives.
- More rapidly, when the anticipated rate of growth in house prices is less than the lenders estimate of the total amount owed (i.e. the principal loan sum plus the fees and interest being charged that are being compounded with the principal).

Additionally, upfront costs can make a reverse mortgage costly if it is only in place for a short period of time. Further, borrowers who chose periodic payments over a lump sum payment run the risk that the lender will become insolvent before all payments have been made (Phillips and Gwin, 1993). As with negative equity, the degree of such a risk depends on the terms of the contract and lenders' insurance. There also is the potential that payments from a reverse mortgage could affect eligibility for government benefits (Phillips and Gwin, 1993). Finally, the value of the homeowner's estate is reduced by the amount of the loan. If, however, the heirs would have subsidized their parents' care and housing had there been no reverse mortgage, the loss may not be as great as it initially seems (Mitchell and Piggot, 2004). Lenders' risks fall into five categories: longevity, interest rates, general house and property appreciation, specific house appreciation, and expense (Phillips and Gwin, 1993). The risk of longevity is the risk that the value of the loan will exceed the value of the property if the borrower remains in the home for a long time (Phillips and Gwin, 1993; see also Pinnegar, Milligan, Quintal, Randolph, Williams, and Yates, 2008).

The nature of the interest rate risk depends on whether the rate is fixed or variable. If fixed, the lender cannot control its asset fluctuation if the market rate changes. If variable, the lender cannot predict the future value of its assets. In addition, because interest is added to the loan balance and not paid as it accrues, the debt can increase rapidly if interest rates rise, increasing the chance that the balance due will exceed the property value when payment is due (Phillips and Gwin, 1993). The house appreciation risk arises because lenders cannot predict the future value of a home. Even if housing prices in general rise, there is the possibility that the value of a particular type of home, or a home in a particular location, may not rise (Phillips and Gwin, 1993). The expense risks include the cost of marketing, legislative compliance, administration, and sale (Phillips and Gwin, 1993).

The converse of these risks is the primary benefit for lenders: the higher interest rates charged for reverse mortgages could generate significant income for lenders, provided the terminal value of the loan does not exceed the value of the home at the time of sale.

### **3.10 Summary**

This chapter provided the legislative, regulatory and demographic context needed to understand the nature of the current reverse mortgage industry in Australia (research question one), and the international and historical factors that influence growth in the use of reverse mortgages by older persons (research question two). The summary on the international history of reverse mortgages found a number of novel product types as yet unavailable in Australia. For instance, the reverse annuity mortgage and the French viager system are both means of releasing equity in the home but have a track record of reducing costly intermediaries and bank interest charges.

The review of international and national regulatory frameworks governing reverse mortgage markets demonstrated their complexity and the large amount of regulation that shapes both consumer and banker behaviours. For example, what is taxable and what is not directly affect demand by older consumers and supply in the form of product availability. The historical overview of reverse mortgages in Australia has indicated that the reverse mortgage market has been slow to develop and has been impacted dramatically by the recent Global Financial Crisis that has affected consumers and lenders alike.

The analysis of market share versus the potential for market growth clearly indicates that greater numbers of older people could potentially benefit from reverse mortgage products if the market incentives were right and appropriate consumer education and other safeguards were in place. Lastly, the summary of the advantages and risks associated with reverse mortgage products demonstrates the importance of finding an appropriate balance, one that protects vulnerable consumers from financial abuse. This is especially so for those in the old-old category which according to Smith, Goard, & Hardy (2004) is those older persons who are older than 75 years because of a greater likelihood of frailty and the potential presence of cognitive decline combined with a dwindling social support base.

## 4 THE METHODOLOGY – DATA COLLECTION

### 4.1 Introduction

There is very little available empirical data about the nature of the reverse housing mortgage market in Australia, especially in relation to the motivation of consumers, the use of the mortgage funds and the way older people research and sign up for reverse mortgages. The project intends to undertake a comprehensive data collection exercise to investigate the research aims listed in Chapter 1. The research design incorporates a triangulation approach, utilising qualitative and quantitative methodologies and research strategies. Triangulation is essential for obtaining corroborating evidence and providing a more robust set of data, through employing a variety of techniques and methods of data collection such as structured surveys, semi-structured individual and focus group interviews (Scandura and Williams 2000). Applying purposive sampling to the recruitment process the research group entered into a partnership with SEQUAL to facilitate recruitment of participants for the study.

The research partnership with SEQUAL is framed by the fact that:

- Survey-based methods without accredited industry support would be limited by a lack of common understanding regarding terminology and product variability both within the industry and amongst consumers.
- Some critical data has been collected by loan providers about spread and demographic characteristics of older people who both inquire about and take out reverse equity products. However the unpublished and restricted nature of such data limits synthesis and means that representativeness and power calculations required for our sampling frames cannot be made reliably a priori.
- Engaging with reputable product providers to tap their knowledge and thinking is likely to yield the most policy-relevant data.

The research design is a multi-method one involving four overlapping phases. During each stage, a user group (including policy makers, methodologists, content specialists and AHURI representatives) will review, validate and comment on the research approach and the model being developed. The first phase, the Systematic Literature Review is complete and is outlined in Chapter 2 and in Appendices one and two. The second phase, the Legislative Review is also complete and this was reported on in chapter three. Also complete and reported on in chapter three is the third phase the data analysis. This employed the 2003 Survey of Disability, Ageing and Carers conducted by the Australian Bureau of Statistics and the new 2006 census to identify relevant demographic groups and the nature of likely needs related to reverse mortgage products.

The fourth and final phase of the research remains. Our focus groups and interviews will generally focus on:

- Understanding older persons perceived need for reverse equity products.
- Issues and barriers associated with taking out a loan product, such as eligibility caps, access to information etc.
- Determining the level of knowledge of reverse equity products.
- Exploring how the reverse equity products are rated by providers and older persons and what gaps exist in the current range of products.

Table 7 makes clear the relationship between the research questions and data sources used and the mixed methods proposed.

**Table 7: Relationship of methods to the research objectives**

<i><b>Research question</b></i>	<i><b>Data sources</b></i>	<i><b>Methodology</b></i>
What is the nature of the reverse mortgage industry in Australia at present?	SEQUAL member survey Interview and focus group transcripts	Consumer focus groups; Individual interviews with SEQUAL accredited banking development officers Individual interviews with older persons Survey of mortgage practitioners (i.e. bankers and brokers)
What factors have influenced growth in the use of reverse mortgages by older persons?	ABS Census data: 2006; Survey of Disability, Ageing and Carers 2003; University library databases; online searches and Key national, state and territory reverse equity Acts, regulations, guidelines policies and plans	Secondary data analysis Legislative Review Systematic literature review
How does the use of reverse mortgages influence retirement decisions and planning?	SEQUAL member survey Interview and focus group transcripts	Consumer focus groups; Individual interviews with SEQUAL accredited banking development officers Individual interviews with older persons Survey of mortgage practitioners (i.e. bankers and brokers)

Three main strategies will be used to collect the remaining data:

- Interviews with SEQUAL accredited banks and other financial institutions who are the funders or providers of the reverse mortgages.
- An online survey of banking development officers and SEQUAL accredited financial intermediaries. This survey will provide some indications of the nature of the market, its future potential, and its attractiveness to the financial services sector. The survey will also seek the views of mortgage brokers on the nature of the current legislative and policy framework. It will also be used to identify the reasons why households take out a reverse mortgage.
- A series of focus groups with holders of reverse mortgages.

Each of these strategies will now be examined in more detail.

## **4.2 Three data gathering strategies**

It is anticipated that 8 focus groups of 8-10 members will be conducted supplemented by individual interviews. Focus groups would be held in four capital cities and at least one of the territories. In addition, three focus groups would be held in regional and rural areas. Individual interviews via phone or on-site would be conducted with interested persons who were unable to attend a focus group, or with people who

attended the focus groups with an interesting case that needs to be further documented, as well as with reverse mortgage providers.

#### *4.2.1 Interviews with mortgage brokers of reverse mortgages.*

The first strategy in the data-gathering phase of the project is the collection of qualitative data through individual interviews with mortgage brokers of reverse mortgage products. Qualitative methods such as individual interviewing are important as they can provide 'a deeper understanding of social phenomena than would be obtained from exploring purely quantitative data' (Silverman 2005, p. 10). Methods of individual semi-structured interviews were chosen for this project as the tools for data collection (see Appendix 3 for the Interview Schedule) can be shaped around board topics and issues central to the research aims (Minichiello et al 1995); and applied using a conversational style allowing for greater flexibility in exploring and documenting a broad range of issues relating to the reverse mortgages market.

Through this phase we aim to:

- Understand older persons' perceived need for reverse equity products, and their reservations.
- Identify issues and barriers associated with using reverse equity products, such as eligibility criteria, access to information.
- Determine older persons' level of knowledge of the products.

The decision was made that interviews would be conducted with SEQUAL accredited lenders only, as there is no database or list of non-accredited lenders. In addition, it was recognised that compliance with the SEQUAL code of conduct would be a minimum requirement for ethical practice in this market.

SEQUAL published an information flyer on the project in their Newsletter inviting members and their clients of reverse mortgage products, to voluntarily participate in the project. At that time, SEQUAL had 11 active lender institutions listed as members. By the time interviews were scheduled in September and October 2008, four of these ceased to be active lenders and three members did not market their own product but a white label version of another member's product. This meant that there were seven active SEQUAL accredited lenders remaining with six products amongst them by 30th September 2008.

Follow-up telephone contact was made with the financial institution members to discuss the project, and those expressing interest were given the opportunity to book a time to participate in an individual face-to-face interview with one of the research team. Interviews were conducted at the offices of the reverse mortgage lender, or by telephone where distance did not permit a face-to-face interview. All participants were given a Project Information Sheet and Consent Form to read and sign. Where written consent was provided, the interview was audio taped. In addition, field notes of all interviews were taken. The interviews took approximately one hour and a semi-structured interview schedule was used.

#### *4.2.2 Survey of reverse mortgage brokers*

Employment of an online 'reverse mortgage practitioners' industry survey in this phase of the research will address the following research question; *what is the nature of the reverse mortgage industry in Australia at present?*

The aim of the surveys is to understand the motivation of reverse mortgage practitioners, their views on particular reverse mortgage products, their views on the

legislative and policy framework and the future of the market. In addition, they will be asked to comment on the reasons why older people take out reverse mortgages.

A modification to the original methodology was required to elicit the views of mortgage brokers of reverse mortgage products. The assistance of SEQUAL was sought to access the mortgage brokers who are registered with their organisation. The decision was made that the surveys would be sent to mortgage brokers registered with SEQUAL, as there is no database or list of mortgage brokers of reverse mortgages who are not registered with SEQUAL.

A web-based survey was developed using the online software package Key Survey. Utilising survey authoring software and online survey services makes data collection easier, faster and enables access to participants in distant locations (Wright 2005). Key Survey allows for the survey to be easily distributed to participants via email or the World-Wide-Web, and stores completed survey data for export to spreadsheets such as SPSS.

Two SEQUAL accredited target groups involved in the brokering of reverse mortgage products were identified; banking development managers and financial intermediaries. The first stage of data collection will employ a pilot survey distributed to the banking development managers. The online pilot survey 'reverse mortgages business development managers' survey will be distributed by industry partner SEQUAL who will email an invitation and link to the survey to their list of banking development managers throughout Australia. Survey participants will be invited to login to the survey, and asked to complete and submit their survey online. This indirect process is necessary as SEQUAL's agreement with its registered mortgage brokers precludes the use of that mailing list by third parties to maintain confidentiality of all participants. Upon completion of the pilot survey data collection stage, the report function of the Key Survey software will be used to generate trends and preliminary analysis.

After completion of the pilot survey stage, an online survey for 'reverse mortgage professionals' including market practitioners as "intermediaries", will be distributed by industry partner SEQUAL who will email an invitation and link to the survey to their database of 1,500 financial intermediaries throughout Australia. Survey participants will be invited to login to the survey, and asked to complete and submit their survey online. Upon completion of this stage, the final data set will be exported to SPSS for statistical analysis.

The online survey will be distributed to their network of reverse mortgage professionals by SEQUAL in 2009.

#### *4.2.3 Focus groups*

The main data collection tool in the project will be a series of focus groups with the holders of reverse mortgages. Adding to the qualitative component of data collection, focus group interviewing offers a method of documenting and understanding how participants think or feel about an issue, service or product; such as a reverse mortgage (Krueger and Casey, 2000).

The focus groups will aim to:

- Understand older persons' perceived need for reverse equity products, and their reservations.
- Identify issues and barriers associated with using reverse equity products, such as eligibility criteria, access to information.
- Determine older persons' level of knowledge of the products.



Focus groups will be conducted with clients of SEQUAL accredited reverse mortgage lenders, where the lenders agree to forward the invitation to their clients (see Appendix 4 for the Focus Group Questions). At this stage, four lenders have agreed to forward the invitations to their clients. Two lenders are seeking permission from higher levels of management to forward the invitations, and two lenders are yet to be interviewed.

A letter will accompany the letter of invitation to the clients from their reverse mortgage lender about why they are being invited to participate in the focus groups, a project information statement and a project consent form (see Appendix 5 for project information statement and Appendix 6 for informed consent forms). The letter of invitation invites clients with reverse mortgages to ring an 1800 telephone number if they are interested in participating in a focus group and/or wish to know more about the research project. Those who are unable to participate in a focus group but wish to contribute will be given the opportunity to participate in a telephone interview, based on the focus groups questions.

The number, location and size of focus groups will be based on the number and location of the proposed participants. As mentioned earlier, it is anticipated that eight focus groups of 8-10 members each would be conducted. However, the actual location of the focus groups will depend on the more specific information obtained from interviews from SEQUAL members and will depend on their members' willingness to assist with consumer recruitment. The already established partnership and support from SEQUAL's members should facilitate this, but this is a known limitation of this methodology. The proposed location of each of the focus groups is listed below:

1. Sydney
2. Melbourne
3. Adelaide
4. Brisbane
5. Newcastle
6. Port Macquarie
7. Hervey Bay
8. Canberra

The focus groups will be held in May 2009. Participants will be recruited via a letter forwarded to them through the financial institution that holds their reverse mortgage. They will be asked to call an 1800 number to register their interest to participate in a focus group in their particular area.

Older people that are unable to attend a focus group and wish to contribute to the research project will be given the opportunity to undertake a short telephone interview covering some of the same questions addressed in the focus groups.

### **4.3 Analysis**

All digitally recorded interviews will be transcribed word-for-word and coded using a coding framework developed from the research aims. The purpose of coding is to aggregate the data under topics or themes so that each category can be studied individually (Tesch 1990). For the purpose of reliability and to minimise researcher bias, three members of the research team will crosscheck coding on the first three interviews and focus group transcripts. After the transcripts are coded, they will be

analysed using thematic analysis. Thematic analysis was chosen as it 'captures important sections from the data relative to the research questions and aims, and represents levels of patterned response or meaning' within the data set (Braun and Clarke 2006, p. 82). This method of analysis will assist in facilitating a deeper understanding of the issues and experiences of older people, the nature of the reverse mortgage market in Australia, and the views of financial intermediaries of reverse mortgage products.

For the focus groups, a protocol for arrangement and analysis will ensure that each group is run consistently. As the Focus group is a social event and is generally one that participants enjoy it also provides valuable information on how people talk about a topic and how they respond in a situation where they are exposed to the views and experiences of others (Catterall and Maclaran, 1997). This has implications for interpretation in that the analysis needs to capture not just key themes but some sense of the quality of the group dynamics and needs to be representative of not just individual experiences but also of collective ones. In this case we will be examining our notes and audio-recordings in terms, not just of understanding the text, but also in terms of documenting of processes, taking into account both temporal sequencing and group interactions.

#### **4.4 Stage two of the research**

The data gathering strategy will enable the research questions identified in Questions one and three to be addressed. Triangulation is a particular feature of the research design that will elicit a broad range of data on the reverse mortgage market. Some research questions are addressed by each of the data gathering strategies and will enable the wide variety of perspectives, viewpoints and data to be catalogued, compared and validated. A project user group will be established and their advice will be sought re appropriate supplementary strategies if focus group recruitment becomes problematic.

## **5 PRELIMINARY POLICY IMPLICATIONS AND NEXT STEPS**

### **5.1 Overview**

As Smith, Cooke and Searle (2007) make clear, the way mortgages are viewed is changing as part of the culture of consumption, and the move from a welfare state towards a shared responsibility approach where the user of services is expected to pay or contribute to those services. For instance, previous research that surveyed two Australian electoral divisions, found that approximately half of the respondents were not averse to accessing their housing wealth to supplement their retirement income (Beal, 2001). This is particularly so in terms of home and community care services, where, for instance Community Aged Care Package guidelines state that a minimum of 17.5 percent of the pension is contributed and services are waitlisted or rationed on a priority need basis.

Mortgages traditionally were the means to an end i.e. achieving security of tenure and enabled stored housing wealth to be inherited. However, the dramatic increase in life expectancy has resulted in more Australians having to manage a greater number of years after retiring from the workforce. Reverse mortgages, unlike traditional mortgages, accumulate debt. In recent years, a combination of financial deregulation and product innovation means that, within certain limits, homeowners can draw down from their loan as readily as they can pay it off.

### **5.2 Institutional and investor considerations**

Financial institutions understand risk management, but applying this knowledge to retirement-orientated products is particularly difficult (Hunt, Ramji, and Walker, 2005) as it cuts across the traditional silos of life insurance; assets evaluation; income testing; taxation and health benefits. The largest banks and building societies have been slow to enter the market while its size remains very small (in their terms), and there is concern that reputations could be damaged by adverse publicity about equity release deals done by others. Matters are further complicated by the involvement of government in both offering and/or regulating products. For instance, Myers (1995) describes significant product variance in terms of payment: term (fixed monthly payments for a specified period); tenure (fixed monthly payments based on tenure irrespective of time); and a line-of-credit that you can access for emergencies.

### **5.3 Consumer attitudes and behaviour**

As Terry and Gibson (2006) note in their appraisal of the United Kingdom situation, there is still widespread mistrust of equity release products and providers, and belief that the products on offer are not good value for money. In Australia, reverse mortgage options are now readily available for older homeowners on either fixed or flexible terms, but self-regulation by industry groups such as SEQUAL and the move to clear ethical codes and accreditation standards regulation, while definitely to the benefit of consumers, does not appear to have been followed by vastly increased demand, especially in the current economic downturn situation. Further, for older homeowners, guidance on housing and care options can be difficult to find. When equity release is the chosen funding option, it can involve a daunting process with professionals with whom they are unfamiliar.

### **5.4 Preliminary appraisal of some key policy considerations**

The ageing of the population makes a full consideration of a range of complex interactions across a range of policy portfolios critical. For instance, innovation in

housing finances for an older population requires a whole of government approach and good consideration of the interactions and consequences of changes in retirement patterns; superannuation; age-pension; age-care; and community care. Further, policy-makers will need to work collaboratively with non-government agencies, industry and the community to achieve the desired changes.

Traditionally the home has been viewed as a 'non-financial' asset, providing shelter and other non-shelter outcomes like health, access to services etc. However, in order to supplement their retirement income an older homeowner has either to sell down or borrow against their homes market value. If seeking to make reverse mortgages a more mainstream option for low-income older homeowners and in a similar vein to the recommendations made by Terry and Gibson (2006), government and reverse mortgage providers need to cooperatively examine how:

- The private and public sectors might look at risk sharing or insurance options for those properties, lenders will not currently accept i.e. in areas of housing asset depreciation and/or where negative equity is likely to be reached too early, or lack of residual equity would impede choice of aged care facility.
- The private and public sectors sharing some of the costs of setting up deals where only small sums are required as a means to reduce fees i.e. similar to the idea of a last homeowner's grant.
- Producing more 'plain English' standard documents and procedures as part of industry regulation or accreditation procedures.

If reverse mortgage products are to be accessed to enable 'ageing in place' by supplementing the housing and care needs of older homeowners, greater guidance and support is required for the most frail and vulnerable. For instance, it may be helpful to look at both peer support and/or advocacy and support for the frailest and most vulnerable. It has been noted that greater support for older people and their informal asset managers requires improved monitoring especially where substitute decision-makers are involved (Tilse, 2005). Those with some experience in the field could:

- Examine the feasibility, costs and benefits of providing individual guidance on ways of resolving housing and care needs of older homeowners, and providing personal support for those homeowners and/or their asset managers in pursuing optimal solutions.
- Review good practice on providing information and advice on care services, particularly as they relate to the condition and safety of the home, to enable people to remain in their own home longer, and disseminate this to community care providers, local authorities, consumer organisations and other interested parties.

Ease the consequences for means-tested income and the impact on assets of taking out more than \$40,000 amounts in any transaction with a reverse mortgage product. Central government could:

- Provide a practical way in which older homeowners can draw on the equity in their homes to purchase care, without adverse effects on their entitlement to benefits.
- Facilitate the use of moderate amounts of equity from assets being released without affecting entitlement to benefits, and make a corresponding change in the income assessment requirements for community care services.

The level of support for developing a private sector solution for state/territory based equity release deals should also be examined. For instance, government could expand more innovative options like the nationally existing Pension Loans Scheme.

## **5.5 Next steps**

There have been a number of significant changes in relation to reverse equity products and to financial governance as a result of the economic downturn both globally and nationally, making this a particularly challenging time to be conducting this type of research.

In our Final Report and overall conclusions we will be seeking to:

- Describe the various features of the available products so as to identify the policy and targeting implications.
- Determine the perceptions of reverse mortgage practitioners in terms of market potential.
- Determine older homeowners' perspectives on reverse mortgage products and the risks and benefits that make these products accessible and appealing.
- We will be focusing on understanding older persons' and mortgage providers' perceptions in regard to the policy implications and potential of reverse equity products for older homeowners.

We will specifically draw out:

- Issues and barriers associated with taking out a loan product, such as eligibility caps, access to information etc.
- The level of knowledge of reverse equity products within both industry and older people.
- An understanding of how the reverse equity products are rated by providers and older persons and what gaps and opportunities exist within the current range of products.

## **5.6 Summary**

The rapid increase in older Australians should lead to a significant increase in the demand for reverse mortgage products over the next twenty-five years, especially if industry and government can work together to ensure a sustainable industry with a range of innovations and policy and industry safeguards in place.

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## **APPENDICES**

## Appendix 1: Systematic review search strategy

### *Terms used*

Specific terms were used to search for relevant materials in a variety of sources. Table 8 outlines the root search terms regarding problem, intervention, comparison, outcome, and target population.

**Table 8: Question component breakdown**

<i><b>Problem</b></i>	<i><b>Intervention</b></i>	<i><b>Outcome</b></i>	<i><b>Target population</b></i>
Retirement planning	Reverse mortgage	'Ageing in place'	Aged 60+

Table 9 contains the full list of search terms, which was generated using a standard online (from the Google search engine) thesaurus and knowledge gained from the Literature Review.

**Table 9: Complete list of search terms to be used**

<i><b>Problem</b></i>	<i><b>Intervention</b></i>	<i><b>Outcome</b></i>	<i><b>Target population</b></i>
Retirement decisions	Home equity conversion mortgage	Retirement housing	Retirees
Long-term care	Home equity loan	Retirement income	Senior
Home care	Home equity conversion loans	Poverty alleviation	Elderly
Health care	RM loans	Retirement resource	Baby boomers
Income support	Housing equity	Influence	Older
Poverty	Equity release	Resolution	Aged
Living arrangements	Lifetime mortgage	Incentive	
Housing finance	Equity conversion	Choice	
Retirement funding	Home reversion scheme		
	Housing wealth		

Typical search strings were as follows:

- Reverse Mortgage\* or RM loans or Home equity conversion mortgage or Home equity loan or Housing equity or Equity release or Lifetime mortgage or Equity conversion or Home reversion scheme or housing wealth.
- Retirement decisions or Long-term care or Home care or Health care or Income support or Poverty or Living arrangements or Retirement planning or Housing.
- Retirement housing or Retirement income or Poverty alleviation or Retirement resource.
- Influence or Resolution or Incentive or Choice or 'Ag(e)ing in place'.
- Retirees or Seniors or Senior Citizens or Elderly or Baby Boomers or Older Adults.

### *Inclusion and exclusion criteria*

Articles were eligible for inclusion if they were published between 1980 and 2008, available through University Library networks or the World Wide Web, written in English and if they matched the search terms and had an abstract. Articles that did not meet the inclusion criteria, such as duplicates, videodiscs, conference abstracts, unpublished conference papers, and whole of subject texts were excluded.

A list of exclusion terms was also used to refine the search. Lastly, a number of articles retrieved via the search process were excluded because their content was primarily of an advertorial or product review nature. Articles where reverse mortgages were a glancing focus such as generalised reviews of: mortgage practices, equity release; retirement and economics etc. were also excluded.

### *Search strategy*

Using the search terms listed in Table 9, articles were identified from ten databases, the World Wide Web via the Google search engine, and grey literature. Several articles were also identified from a review of the reference lists of review articles. The ten databases that were searched included the following:

1. ABI-inform
2. Ageline
3. APAIS
4. Business Source Premier
5. Econolit
6. Health & Society
7. Social services abstracts
8. Sociological abstracts
9. Scopus
10. Web of Science

The search strategy combined terms relating to retirement decisions, equity release, and 'aged', based on the keywords and synonyms listed in Table 9.

## Appendix 2: Systematic review frame for reverse mortgage literature

	Reference	Nationality	Main findings	Process & issues	Retirement decisions								Growth factors								Methodology				
																					0	1	2	3	4
					Income	Maintenance	Modification	Home care	Health care	Special	Investment	Regulation	Taxation	Cost of living	Aged care	Superannuation	Pension	Information	Product types	Accreditation	Systematic	Mathematical	Primary data	Secondary data	Expert
1.	(Franttoni, 1999)	USA	The simulation model shows that older people are primarily concerned with the impact of unavoidable expenditure shocks on their standard of living. More likely to be better off with a line-of-credit plan rather than adding on a fixed additional income component. Need to structure product to meet market needs.	Multinomial logit regression based on HECM's five differing payment options. Factors in explanatory variables included no of rooms; Appraisal value; Age of the home; Age of the youngest borrower & household income.	X	X			X	X										X			X		
2.	(Buckley, Cartwright, Struyk, & Szymanoski, 2003; Buckley, Cartwright, Struyk, & Szymanoski, 2002)	Russia	Russian elderly are amongst following economic transition, in the absence of a developed RM system, a substantial share of pensioner households have incomes that hover just above the poverty line. Just under one-quarter of all elderly households and over one-third of single (mainly female-headed) elderly households are near poor.	Secondary data from income and housing data from the Moscow Longitudinal Household Survey (MLHS) with Russian life tables are combined and examined using an actuarial model devised by the US Department of Housing and Urban Development	X	X								X					X			X		X	X

	Reference	Nationality	Main findings	Process & issues	Retirement decisions								Growth factors								Methodology				
																					0	1	2	3	4
					Income	Maintenance	Modification	Home care	Health care	Special	Investment	Regulation	Taxation	Cost of living	Aged care	Superannuation	Pension	Information	Product types	Accreditation	Systematic	Mathematical	Primary data	Secondary data	Expert
3.	(Isaac, Sa-Aadu, & James 1987)	USA	Elderly households liquidate or accumulate housing wealth either for altruistic reasons or out of concern for the wellbeing of their children. Trading up or trading down is related to race and socioeconomics not sex.	Descriptive analysis based on PSID (longitudinal representative sample 1968-1988) which concerns a cohort of married elderly homeowners and their children.	X						X											X		X	X
4.	(Terry & Gibson, 2006)	UK	This report sets out to identifying the obstacles to equity release for low-income homeowners. Much more individual guidance and support are needed to assist with the practicalities and provide reassurance. This role could be likened to that of a knowledgeable trusted friend. The bulk of the cost is likely to have to be found by the public sector. Elders living in some kinds of property are still excluded because their home is not expected to grow sufficiently in value. Local authorities could	This is a literature and policy review pertaining to the UK, no methodologies are mentioned; Areas covered include: key attributes of the financial help required in terms of both commercial and non-commercial markets as relevant to people on means-tested benefits.	X	X		X										X	X						X



	Reference	Nationality	Main findings	Process & issues	Retirement decisions								Growth factors								Methodology				
																					0	1	2	3	4
					Income	Maintenance	Modification	Home care	Health care	Special	Investment	Regulation	Taxation	Cost of living	Aged care	Superannuation	Pension	Information	Product types	Accreditation	Systematic	Mathematical	Primary data	Secondary data	Expert
			share the risk on such properties with a commercial provider.																						
5.	(Miceli & Sirmans, 1994)	USA	A theoretical model of the problem of maintenance risk in reverse mortgages (RM) and home equity conversion instruments generally. The results of the model show that lenders will respond to this problem either by limiting the amount of RM loans to guarantee that maintenance risk is not a threat, or by charging an interest rate premium to cover the expected cost of default.	Homeowners reduce maintenance expenditures as their equity in the house falls during the term of the RM. The underlying reason for this tendency is the limited liability feature of RMs, given that a borrower's obligation to the lender at maturity is limited to the value of the house. No data to test the importance of maintenance risk as a possible limitation on the extent of the RM market.		X										X	X			X					

	Reference	Nationality	Main findings	Process & issues	Retirement decisions								Growth factors								Methodology						
																					0	1	2	3	4		
					Income	Maintenance	Modification	Home care	Health care	Special	Investment	Regulation	Taxation	Cost of living	Aged care	Superannuation	Pension	Information	Product types	Accreditation	Systematic	Mathematical	Primary data	Secondary data	Expert		
6.	(Hayashida & Saski, 1986)	Japan	This reports on one of only two government based equity conversion programs. There is preparedness to support a user pays system but insufficient resources for informal care. The plan allows residents aged 65+ to borrow money from the city. The Welfare corporation provides and co-ordinates individualized welfare services which can be funded via housing equity release for up to 80% of fair market value.	Program growing but not self-sufficient and the plan has attracted older people to resettle or transfer to the area increasing the burden on the system. Potentially subsidises retirees who may not be income poor.	X			X						X		X		X						X			
7.	(Venti & Wise, 2000)	USA	This reports on home equity and the fact that this is typically not used to support non-housing related consumption in retirement. Most elderly unlikely to move barring changes in household structure and that even those that move do not seek to reduce housing equity. The authors concluded that families'	Survey of Incomes and program participation and the Asset and Health Dynamics among the Oldest Old.	X						X				X	X								X			

	Reference	Nationality	Main findings	Process & issues	Retirement decisions								Growth factors								Methodology				
																					0	1	2	3	4
					Income	Maintenance	Modification	Home care	Health care	Special	Investment	Regulation	Taxation	Cost of living	Aged care	Superannuation	Pension	Information	Product types	Accreditation	Systematic	Mathematical	Primary data	Secondary data	Expert
			purchase homes in which to live not to fund retirement.																						
8.	(Mayer & Simons, 1994)	USA	Examines the whole distribution of elderly households and debt. It finds relatively high levels of housing equity mean a larger potential for RMs than previous studies. It states that more than three-quarters of all single homeowners aged 82+ would potentially benefit from a RM.	Simulations based on 1990 survey of Income and program participation and census population estimates.	X							X			X	X		X			X			X	
9.	(Cutler, 2007)	USA	Retirement decisions are increasingly complex with the need to self-fund health care being increasingly linked to personal income. Thus a greater emphasis on personal autonomy requires higher levels of financial literacy and sound professional	Online survey of boomers attitudes in regard to housing and retirement choices. Unclear if heterogeneity of views is the result of cohort differences, given evidence of financial differences between generations.					X							X				X	X				

	Reference	Nationality	Main findings	Process & issues	Retirement decisions								Growth factors								Methodology				
																					0	1	2	3	4
					Income	Maintenance	Modification	Home care	Health care	Special	Investment	Regulation	Taxation	Cost of living	Aged care	Superannuation	Pension	Information	Product types	Accreditation	Systematic	Mathematical	Primary data	Secondary data	Expert
			advice. Financial concerns are important in housing transitions but four sets of values are balanced in decision-making, these include personal; social; environmental and financial values.																						
10.	(VanderHart, 1993)	USA	The study sought to understand which factors were most important in home-equity decision-making for older homeowners. Factors correlating to attachment to the home were the most significant implying that the non-financial aspects of homeownership may be more effective policy levers i.e. separation, death of a spouse, health status number of years in the home and dwelling unit type.	A binomial probit multivariate regression was applied to cross-sectional data from the Panel Study of Income Dynamics. (PSID) 1968-1987. There is a small known sample error within the database in regard living arrangements in regard to co-habitation with family and nursing home transitions.	X	X	X							X			X					X		X	

	Reference	Nationality	Main findings	Process & issues	Retirement decisions								Growth factors								Methodology				
																					0	1	2	3	4
					Income	Maintenance	Modification	Home care	Health care	Special	Investment	Regulation	Taxation	Cost of living	Aged care	Superannuation	Pension	Information	Product types	Accreditation	Systematic	Mathematical	Primary data	Secondary data	Expert
11.	(Gibler & Rabianski, 1993)	USA	This study examines whether attitudes about housing, independence, and finances affect a homeowner's interest in home equity conversion. Few elderly homeowners liquidate their home equity to fund consumption. The elderly homeowners most interested in home equity conversion own houses with relatively low asset values, are concerned about maintaining independence and funding future medical expenses. Thus, societal norms for maintaining single-family homeownership and medical assistance programs that exempt home equity from requirements that participants spend all their assets to be eligible may be inhibiting the growth of home equity conversion programs.	A nationwide survey of 321 elderly homeowners (65+) were analysed by logistic regression to ascertain the relationship between interest in home equity conversion and economic, demographic, and attitudinal characteristics.				X	X				X				X					X	X		

	Reference	Nationality	Main findings	Process & issues	Retirement decisions								Growth factors								Methodology				
																					0	1	2	3	4
					Income	Maintenance	Modification	Home care	Health care	Special	Investment	Regulation	Taxation	Cost of living	Aged care	Superannuation	Pension	Information	Product types	Accreditation	Systematic	Mathematical	Primary data	Secondary data	Expert
12.	(Lusardi & Mitchell, 2007)	USA	This study found that although total patterns of total net wealth have changes little over time, there was a greater reliance by boomers on home equity as a result of poor saving and planning with 28% indicating little or no retirement planning. Further, those with financial literacy and good financial planning were significantly wealthier at retirement.	Two cohort comparison study 1992 and 2004 of the Health and Retirement study.	X													X				X	X		
13.	(VanderHart, 1995)	USA	Cross-tabulations on marital, employment, children, and disability factors yield strong, intuitively consistent results as to their effect on housing changes. Financial variables, on the other hand, have less consistent results. Home equity and housing costs do not have consistently strong relationships across housing transitions. Where they do have relationships,	Three sets of data were considered: The Annual Housing Survey (AHS); The Retirement History Survey (RHS) and the Panel Study of Income Dynamics. (PSID) but all cross-tabulations analysis used the PSID.	X			X	X								X					X		X	

	Reference	Nationality	Main findings	Process & issues	Retirement decisions								Growth factors								Methodology				
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					Income	Maintenance	Modification	Home care	Health care	Special	Investment	Regulation	Taxation	Cost of living	Aged care	Superannuation	Pension	Information	Product types	Accreditation	Systematic	Mathematical	Primary data	Secondary data	Expert
			they are often different from what is indicated by intuition. The results for income and financial assets are somewhat better, but are not particularly strong. Overall results suggest that demographic factors are much more important than financial factors in elderly homeowners' housing decisions.																						
14.	(Stum, Bauer, & Delaney, 1998)	USA	Examines home equity as a means to meet home care costs for chronically disabled elders. Maintaining long-term care quality is challenging and just over 11% are of elders sampled were struggling financially to meet rising care costs. Those most at risk were single older and had a chronic disability.	A subsample (N=568) from the 1989 Long-term Care Survey (NLTCs) was examined. Chi squared or two tailed pooled t-tests were used to examine significance.				X	X								X							X	X

	Reference	Nationality	Main findings	Process & issues	Retirement decisions								Growth factors								Methodology					
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					Income	Maintenance	Modification	Home care	Health care	Special	Investment	Regulation	Taxation	Cost of living	Aged care	Superannuation	Pension	Information	Product types	Accreditation	Systematic	Mathematical	Primary data	Secondary data	Expert	
15.	(Brody, Simon, & SmallWood, 1987)	USA	Long-term care can quickly impoverish most elderly resulting in Medicaid dependency. Reverse options are currently the only equity release available for lifetime funding of long-term care. Innovative-shared finance models are advocated and attention to cost shifting and monitoring are viewed as critical.	Primarily a literature review with some simple care and income projects for California based on Medicaid expenditure patterns.				X	X					X												X
16.	(Rowlingson, 2006)	UK	Homeowners have a balanced and pragmatic attitude to their housing assets, it appears that attitudes may have changes with may wanting to maintain their home intact but a growing number who are willing to trade it off to supplement low-income. However many were wary of equity release because of concern re risk, trustworthiness and value for money.	Secondary data qualitative data analysis of the Joseph Rowntree Foundation Studies: 'Wealth in Britain' and the Future 'Orientation and Forward Planning' study. In addition four focus-groups of owner occupiers were used to explore attitudes in greater detail.	X								X			X		X					X			



	Reference	Nationality	Main findings	Process & issues	Retirement decisions								Growth factors								Methodology				
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					Income	Maintenance	Modification	Home care	Health care	Special	Investment	Regulation	Taxation	Cost of living	Aged care	Superannuation	Pension	Information	Product types	Accreditation	Systematic	Mathematical	Primary data	Secondary data	Expert
17.	(Stucki, 2007)	USA	Managing financial long-term care risk by liquidating housing wealth through reverse mortgages could improve long-term care quality and choice enabling 'ageing in place'.	Analysis is based on the 200 Health and Retirement Study. And data from housing and mortgage industries.				X	X						X		X		X						X
18.	(Costa-Font, Maserailla-Miro, & Elvira, 2006)	Spain	LTC in Spain has been rationed based on income and assets and has been devolved to the States. The vast majority of older person want to age in place. The Government is increasingly expecting housing-assets to pay for LTC but regional differences present obstacles. The oldest old however are the most resistant and this is most common amongst the less skilled and widowed.	Survey administered to 729 people over 55 years.				X							X								X		X

	Reference	Nationality	Main findings	Process & issues	Retirement decisions								Growth factors								Methodology				
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					Income	Maintenance	Modification	Home care	Health care	Special	Investment	Regulation	Taxation	Cost of living	Aged care	Superannuation	Pension	Information	Product types	Accreditation	Systematic	Mathematical	Primary data	Secondary data	Expert
19.	(Hancock, 2000)	UK	Household surveys have recently started to collect data on the original purchase price of owner-occupiers' homes. This provides a basis for investigating the joint distribution of housing wealth, income and other personal characteristics. However, a number of difficulties arise which make form conclusions difficult.	The method is based on data from the British Household Panel Survey, and subsequently applied to the UK Family Expenditure Survey to explore the housing wealth of older people.	X						X					X								X	
20.	(Hancock, 1998)	UK	Explores housing wealth in relation to income and financial wealth. Housing wealth increases with both income and financial wealth there are a number of low-income people (predominantly women in the oldest age group), who could supplement their income by accessing their housing wealth; however this would be insufficient additional income to pay for LTC.	Combined data from 1992-1994 of the Family Expenditure Survey (FES). Most wealth analysis previously done at household level but this study used individual as unit of analysis.	X			X	X							X								X	

	Reference	Nationality	Main findings	Process & issues	Retirement decisions								Growth factors								Methodology				
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					Income	Maintenance	Modification	Home care	Health care	Special	Investment	Regulation	Taxation	Cost of living	Aged care	Superannuation	Pension	Information	Product types	Accreditation	Systematic	Mathematical	Primary data	Secondary data	Expert
21.	(AddaeDapaah & Leong, 1996)	Singapore	Singapore has not grappled yet with the problem of housing for the elderly, especially in terms of finance, despite its changing demographics and socio-economic trends. This paper evaluates the applicability of some of the housing-finance schemes that are tailored for the elderly in the West, especially the Home Equity Conversion Scheme (HECS), to Singapore. It concludes that of all the variants of HECS, the Sale-Leaseback (SL) has the greatest potential for resolving the housing finance problem of the elderly in Singapore.	This paper is a literature overview of various product types in the context of Singaporean government housing policy, culture and finance options.				X						X											X
22.	(Rasmussen, Megbolugbe, & Morgan, 1997)	USA	Three market segments for reverse mortgages are discussed: elderly persons living alone, other elderly households, and non-elderly households. Potential uses include turning	This paper is a literature overview of US programs and initiatives' it claims that an almost exclusive focus on low-income single, elderly persons has failed to capitalize on Markey gaps.	X			X	X				X			X									X

	Reference	Nationality	Main findings	Process & issues	Retirement decisions								Growth factors								Methodology				
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					Income	Maintenance	Modification	Home care	Health care	Special	Investment	Regulation	Taxation	Cost of living	Aged care	Superannuation	Pension	Information	Product types	Accreditation	Systematic	Mathematical	Primary data	Secondary data	Expert
			housing equity into personal human capital investment accounts, enabling children to provide care for their disabled parents, funding elderly households' long-term care insurance, and sustaining consumption. Recent progress in product development and availability and political pressures to find private financing for health and long-term care suggest that the reverse mortgage market has considerable growth potential.																						
23.	(Chinloy & Megbolugbe, 1994)	USA	An explicit pricing model of the reverse mortgage permits the evaluation of this default crossover option. Alternative methods involving life insurance contracts and securitization are compared as secondary market channels.	A pricing model based on HUD assumptions and Securities and Exchange Commission house price growth rates is developed for a reverse mortgage contract where the borrower perceives payments either as a lump sum or in an annuity while the loan balance accumulates as	X													X			X				

	Reference	Nationality	Main findings	Process & issues	Retirement decisions								Growth factors								Methodology				
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					Income	Maintenance	Modification	Home care	Health care	Special	Investment	Regulation	Taxation	Cost of living	Aged care	Superannuation	Pension	Information	Product types	Accreditation	Systematic	Mathematical	Primary data	Secondary data	Expert
				a claim against the house. No underwriting criteria on income are applied. One risk of default is that the borrower will remain in the house after the negatively amortizing loan balance exceeds the value of the house.																					
24.	(Shiller & Weiss, 1998)	USA	Home equity conversion as presently constituted or proposed usually does not deal well with the potential problem of moral hazard. Once homeowners know that the risk of poor market performance of their homes is borne by investors, they have an incentive to neglect to take steps to maintain the homes' values. They may thus create serious future losses for the investors. A calibrated model for assessing this moral hazard risk is presented that is suitable for a number of home equity conversion forms:	A mathematical risk model is developed and explored with a number of scenarios.		X	X													X			X		

	Reference	Nationality	Main findings	Process & issues	Retirement decisions								Growth factors								Methodology				
																					0	1	2	3	4
					Income	Maintenance	Modification	Home care	Health care	Special	Investment	Regulation	Taxation	Cost of living	Aged care	Superannuation	Pension	Information	Product types	Accreditation	Systematic	Mathematical	Primary data	Secondary data	Expert
			1) reverse mortgages, 2) home equity insurance, 3) shared appreciation mortgages, 4) housing partnerships, 5) shared equity mortgages and 6) sale of remainder interest. Modifications of these forms involving real estate price indices are proposed that might deal better with the problem of moral hazard																						
25.	(Boehm & Ehrhardt, 1994)	USA	The results show that the interest rate risk of a reverse mortgage is greater than that of either a typical coupon bond or a regular mortgage. Somewhat surprisingly, it is found that this difference in interest rate risk is extremely large. In fact, the interest rate risk of a reverse mortgage often is several orders of magnitude greater than the interest rate risk of other fixed-income securities.	A mathematical analysis is developed and applied to produce a valuation model that quantifies the interest rate risk inherent in fixed-rate reverse mortgages. This assumes that the mortality rate is high and that mean age of entry is approximately 75 years.	X															X		X			

	Reference	Nationality	Main findings	Process & issues	Retirement decisions								Growth factors								Methodology				
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26.	(Morgan, Megbolugbe, & Rasmussen, 1996)	USA	A large (1.8 million) number of single low-income women with low home equity assets (\$40,000 and above) could see a significant increase in income via a RM program.	Data from the 1990 Census of Population and Housing and Public Use Microdata Samples (PUMS) are used to estimate the potential demand for reverse mortgages among elderly women householders. A reverse mortgage product is simulated using parameters based on the Home Equity Conversion Mortgage insurance demonstration, and its effect on poverty and income distribution among this group is calculated.	X										X		X				X		X		
27.	(Tilse, 2005)	Australia	There are competing claims on older people's assets and asset interventions like RM's require attitudinal change, improved financial literacy and greater support for older people and informal asset managers with improved monitoring and support for substitute	A national survey (n=3466) regarding the prevalence of asset management combined with a qualitative exploration of 81 asset managers and 34 older people who had their assets managed.	X								X				X				X				

	Reference	Nationality	Main findings	Process & issues	Retirement decisions								Growth factors								Methodology				
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					Income	Maintenance	Modification	Home care	Health care	Special	Investment	Regulation	Taxation	Cost of living	Aged care	Superannuation	Pension	Information	Product types	Accreditation	Systematic	Mathematical	Primary data	Secondary data	Expert
			decision-makers.																						
28.	(Beal, 2001b)	Australia	About half of the survey participants were willing to access their housing wealth to fund their retirement. Community and government attitudes are changing but slowly.	Random sample survey (457 respondents) method using electoral rolls across two electorates in one in NSW and one in Qld.	X										X								X		X
29.	(Kuitly, 1998)	USA	This paper investigates the scope for alleviating poverty among elderly home-owners in the US by means of reverse mortgages, We estimate that 621 820 elderly home-owners in poverty could be raised above the poverty line if they obtained a reverse mortgage under the HECM tenure plan, These households constitute 29 per cent of all poor elderly home-	Mathematical simulation of monthly payments using data from the National File of the American Housing Survey of 1991.	X											X				X		X			



	Reference	Nationality	Main findings	Process & issues	Retirement decisions								Growth factors								Methodology				
																					0	1	2	3	4
					Income	Maintenance	Modification	Home care	Health care	Special	Investment	Regulation	Taxation	Cost of living	Aged care	Superannuation	Pension	Information	Product types	Accreditation	Systematic	Mathematical	Primary data	Secondary data	Expert
			owners, There appears to be considerable scope for alleviating poverty among elderly home-owners through reverse mortgages.																						
30.	(Kutty, 1999)	USA	Coping with activity limitations that occur in old age is an important issue in the context of increasing life expectancy and the, still, inevitable onset of chronic conditions in old age. Elderly households can be viewed as coping with activity limitations by producing functionality with the use of direct inputs that include home modifications. The main findings of the empirical analysis are that the demand for home modifications is fairly income-inelastic, home modifications and personal care are substitutes to some degree, the demand for	A model of the household production of functionality is developed within the general framework of household production function models of health. Hypotheses generated from this model are tested using a logit model for data from the Survey of Asset and Health Dynamics Among the Oldest Old (AHEAD).	X		X								X				X			X			

	Reference	Nationality	Main findings	Process & issues	Retirement decisions								Growth factors								Methodology				
																					0	1	2	3	4
					Income	Maintenance	Modification	Home care	Health care	Special	Investment	Regulation	Taxation	Cost of living	Aged care	Superannuation	Pension	Information	Product types	Accreditation	Systematic	Mathematical	Primary data	Secondary data	Expert
			home modifications increases with years of schooling, and that particular health conditions and the use of other assistive devices are important determinants of the demand for modifications.																						
31.	(Sabia, 2008)	USA	Elderly housing surveys consistently report that older Americans prefer to remain living in their homes for as long as they are physically able. The empirical results show that increases in property taxes and utility costs, changes in family composition, and diminished physical wellbeing are negatively associated with aging in place. Increased home equity, greater financial resources, and stronger ties to the community are positively associated with aging in place. Taken together, these findings suggest that policies	This study uses hazard models to estimate the effects of family composition changes, health conditions, housing characteristics, and local policies and amenities on aging-in-place decisions by older homeowners in the 1972-1992 Panel Study of Income Dynamics.	X	X	X						X						X			X			

	Reference	Nationality	Main findings	Process & issues	Retirement decisions								Growth factors								Methodology				
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					Income	Maintenance	Modification	Home care	Health care	Special	Investment	Regulation	Taxation	Cost of living	Aged care	Superannuation	Pension	Information	Product types	Accreditation	Systematic	Mathematical	Primary data	Secondary data	Expert
			designed to reduce the user costs of homeownership or to enhance the functionality of elderly homeowners may facilitate aging in place.																						
32.	(Mitchell & Piggott, 2004)	Japan	Releasing equity in housing may be a natural mechanism to boost consumption, reduce public pension liability, and mitigate the demand for long-term care facilities in Japan. In the Japanese case, declining residential housing values as well as low interest rates and long life expectancies will dampen demand for RMs. Nevertheless, we conclude that RMs can be a good way to finance elderly consumption in Japan, particularly against the backdrop of governmental financial stringencies.	This economic risk simulation analysis evaluates what might be needed to implement RMs i.e. manipulation of capital gains tax and transactions tax, along with mechanisms to make annuity income flows non-taxable, along with interest rate accruals for RMs.	X								X				X					X			X

	Reference	Nationality	Main findings	Process & issues	Retirement decisions								Growth factors								Methodology				
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					Income	Maintenance	Modification	Home care	Health care	Special	Investment	Regulation	Taxation	Cost of living	Aged care	Superannuation	Pension	Information	Product types	Accreditation	Systematic	Mathematical	Primary data	Secondary data	Expert
33.	(Chou, Chow, & Chi, 2006)	China	The reverse mortgage plan has been proposed as a viable solution to improve or maintain the economic status of older adults who are "house-rich but cash-poor". Hong Kong middle-aged adults, 663 of them owned their self-occupied flats. Approximately, 11% + 2.4% ( $p < 0.05$ ) of these homeowners would consider applying for a RM. The amount of financial asset (excluding their self-occupied properties) was negatively associated with that willingness. Results suggest a RM may be another option to secure the retirement income of older adults in the future.	Logistic regression analyses, of a random sample of those who participated in the General Household Survey (n=1867) in 2000.	X						X			X				X	X					X	

	Reference	Nationality	Main findings	Process & issues	Retirement decisions								Growth factors								Methodology				
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					Income	Maintenance	Modification	Home care	Health care	Special	Investment	Regulation	Taxation	Cost of living	Aged care	Superannuation	Pension	Information	Product types	Accreditation	Systematic	Mathematical	Primary data	Secondary data	Expert
34.	(Ong, 2008)	Australia	The scope for RM's in Australia is considerable. Elderly homeowners most likely to benefit are the very elderly, single, female and have significant housing assets. However in areas with low housing appreciation rates homeowners who take out RMs risk having little or no equity to draw on or to bequeath.	A RM model is simulated based largely on the features of the US HECM.	X											X			X			X			
35.	(Venti & Wise, 2000)	USA	Housing wealth is typically not used to support non-housing consumption during retirement. Families that continue to own typically do not reduce home equity. However, precipitating shocks, like the death of a spouse or entry to a nursing home, sometimes lead to liquidation of home equity. Home equity is typically not liquidated to support consumption	Based on data from the Survey of Income and Program Participation, and the Asset and Health Dynamics Among the Oldest Old, change in home equity as families age are considered. The results are based in large part on families aged 70 and older.	X								X							X					

	Reference	Nationality	Main findings	Process & issues	Retirement decisions								Growth factors								Methodology				
																					0	1	2	3	4
					Income	Maintenance	Modification	Home care	Health care	Special	Investment	Regulation	Taxation	Cost of living	Aged care	Superannuation	Pension	Information	Product types	Accreditation	Systematic	Mathematical	Primary data	Secondary data	Expert
36.	(Venti & Wise, 1991)	USA	The potential for reverse annuity mortgages is impacted by the fact that most low-income elderly have littler housing equity. Results indicate that only the very old would benefit and that lump-sum payment rather than an annuity would be most beneficial	Analysis is based on the 1984 Survey of Income and Program Participation (SIPP).	X					X							X		X					X	
37.	(Lusardi & Mitchell, 2007)	USA	Boomers rely more on home equity than non-boomers and financial planners with higher levels of financial literacy n both cohorts accumulate more wealth.	Analysis is based on the Health and Retirement Study, 2004 and 1992.	X						X							X						X	
38.	(Australian Securities and Investment Commission, 2007)	Australia	RM's are new and complex and several factors can inhibit good decision-making including lack of familiarity with the product, difficulties in estimating equity remaining and a reluctance to consider health and functional changes over time.	Documents experiences of 29 RM borrowers	X					X			X				X	X					X		

	Reference	Nationality	Main findings	Process & issues	Retirement decisions								Growth factors								Methodology				
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					Income	Maintenance	Modification	Home care	Health care	Special	Investment	Regulation	Taxation	Cost of living	Aged care	Superannuation	Pension	Information	Product types	Accreditation	Systematic	Mathematical	Primary data	Secondary data	Expert
39.	(Redfoot, Scholen, & Brown, 2007)	USA	History of unattractive options for older people to divest home equity. RMs became widely available in 1990's but growth is slow and only 1% of older households have one, of which HECM type loans accounts for 90%.	National telephone survey (n=1509) RM counselling recipients; Four focus groups of RM borrowers and a national telephone survey (n=1003) on consumer attitudes of persons aged 45+.	X	X	X	X	X			X			X			X	X			X			X
40.	(Williams, 2008)	UK	Market is regarded as under-performing in relation to underlying demand. However equity release is widespread but not in the formal product sense. The report concludes that a stronger government approach is required in association with a more integrated, coherent and sustained stance from industry. Role for more guidance and advice in relation to risks	International Literature survey.	X							X					X	X	X						X

	Reference	Nationality	Main findings	Process & issues	Retirement decisions								Growth factors							Methodology						
																				0	1	2	3	4		
					Income	Maintenance	Modification	Home care	Health care	Special	Investment	Regulation	Taxation	Cost of living	Aged care	Superannuation	Pension	Information	Product types	Accreditation	Systematic	Mathematical	Primary data	Secondary data	Expert	
41.	(Beal, 2001a)	Australia	This reviews sale and lease equity release plans as they might work in Australia. The author argues that neither HEC nor SLB plans are appropriate for the elderly homeowner, but may be a means for low-income ones. Unfortunately legislation falls across several sectors of the law making for complications. The article concludes that a properly regulated insurance market is required to protect lenders and consumers.	This paper is a literature overview of two different product types in the context of Australian government housing policy.	X										X		X									X
42.	(The Canadian Centre for Elder Law Studies & The British Columbia Law Institute. 2006; Timmermann. 2006)	Canada	Report discusses RMs and common complaints about them, how British Columbia regulates them, and what options for reform of the law are most promising. It concludes by recommending two significant changes: first, the cooling-off period should be extended to	Legal and literature review.	X							X					X	X								X



	Reference	Nationality	Main findings	Process & issues	Retirement decisions								Growth factors								Methodology				
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					Income	Maintenance	Modification	Home care	Health care	Special	Investment	Regulation	Taxation	Cost of living	Aged care	Superannuation	Pension	Information	Product types	Accreditation	Systematic	Mathematical	Primary data	Secondary data	Expert
			ten clear days; and second, there is need for an oversight authority similar to Manitoba's Consumers' Bureau.																						
43.	(Sabia, 2008)		The empirical results show that increases in property taxes and utility costs, changes in family composition, and diminished physical wellbeing are negatively associated with aging in place. Increased home equity, greater financial resources, and stronger ties to the community are positively associated with aging in place. Taken together, these findings suggest that policies designed to reduce the user costs of homeownership or to enhance the functionality of elderly homeowners may facilitate aging in place.	This study uses hazard models to estimate the effects of family composition changes, health conditions, housing characteristics, and local policies and amenities on aging-in-place decisions by older homeowners in the 1972-1992 Panel Study of Income Dynamics.	X				X				X		X							X			

	Reference	Nationality	Main findings	Process & issues	Retirement decisions								Growth factors								Methodology					
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					Income	Maintenance	Modification	Home care	Health care	Special	Investment	Regulation	Taxation	Cost of living	Aged care	Superannuation	Pension	Information	Product types	Accreditation	Systematic	Mathematical	Primary data	Secondary data	Expert	
44.	(Smith, Cook, & Searle, 2007)	UK	Little guidance on, and no active regulation of, the pattern of spend from housing wealth. This is despite the relevance of home equity as a resource for home maintenance and as an asset base for welfare. Participants in the 'Banking on housing' study are generally resistant to government intervention either in the process of wealth accumulation through housing, or in patterns of spend from it. They emphasis the risks they have taken, and the hard work they have engaged in, in order to build up an individual store of housing wealth. They position this wealth in the intensively private sphere of home; and they do not trust governments to manage it wisely.	Drawing from 150 qualitative interviews with a spread of UK mortgage holders, this paper offers a consumers-eye view of the case for and against a more active governance of housing wealth.	X	X		X					X		X			X	X				X			

	Reference	Nationality	Main findings	Process & issues	Retirement decisions								Growth factors							Methodology						
																				0	1	2	3	4		
					Income	Maintenance	Modification	Home care	Health care	Special	Investment	Regulation	Taxation	Cost of living	Aged care	Superannuation	Pension	Information	Product types	Accreditation	Systematic	Mathematical	Primary data	Secondary data	Expert	
45.	(SEQUAL, 2008)	Australia	The survey shows that respondents in the lower income brackets were more likely to state that they would not use a reverse mortgage. In total, 58% of respondents with less than \$20,000 in annual household income stated that they would not use a reverse mortgage, and this proportion dropped to 44% for those with \$80,001-\$100,000 and 41% for those with over \$100,000 in annual income. This finding further dispels the view that reverse mortgages are a product of 'last resort' for lower income earners looking for additional funds for their retirement – instead, it appears that many middle to high income earners find the option of being able to release equity through a reverse mortgage attractive.	A survey of 1,000 Australians aged 60 and over. It explores the financial status and arrangements of individuals who are either currently living in retirement or planning to retire in the near future.	X										X	X	X	X					X			

	Reference	Nationality	Main findings	Process & issues	Retirement decisions								Growth factors								Methodology				
																					0	1	2	3	4
					Income	Maintenance	Modification	Home care	Health care	Special	Investment	Regulation	Taxation	Cost of living	Aged care	Superannuation	Pension	Information	Product types	Accreditation	Systematic	Mathematical	Primary data	Secondary data	Expert
46.	(Stucki, 2005)	USA	Despite the promise of this financing option, the funds that could be tapped to pay for in-home services and supports through home equity are limited. Government can help leverage limited housing assets by creating the right mix of incentives as part of a public-private approach to funding services for “aging in place.” RMs also could have greater success if policymakers can reduce homeowners’ fears of impoverishment if they use housing wealth to pay for long-term care. Some type of “insurance” mechanism will be important to protect borrowers against catastrophic long-term care costs. This can be achieved through private products that link to reverse mortgages or in partnership with	Mixed methods including: Analysis of national datasets to determine the size of different market segments and the total funds available to individuals and the nation from reverse mortgages; Telephone interviews with senior homeowners and adult children of older homeowners to evaluate generational differences in attitudes toward the use of reverse mortgages for in-home services and supports; and Microsimulation modelling to estimate the potential savings to Medicaid from increased use of reverse mortgages for long-term care.	X			X	X			X				X			X			X	X	X	

	Reference	Nationality	Main findings	Process & issues	Retirement decisions								Growth factors								Methodology				
																					0	1	2	3	4
					Income	Maintenance	Modification	Home care	Health care	Special	Investment	Regulation	Taxation	Cost of living	Aged care	Superannuation	Pension	Information	Product types	Accreditation	Systematic	Mathematical	Primary data	Secondary data	Expert
			Medicaid. It will also be important to substantially lower upfront costs for reverse mortgages in order to make this financing option more cost effective for impaired seniors.																						
47.	(Davidoff & Welke, 2004)	Canada	The RM market remains smaller than might be expected given the large number of cash-poor, house-rich elderly. This fact is in part attributable to high fees, rationalized by fears of adverse selection and moral hazard. Empirically, high housing wealth and low non-housing wealth drive both reverse mortgage demand and mobility. Limited evidence supports a theoretical prediction that moral hazard worsens with weaker price appreciation.	Mathematical simulation based theoretical modelling.	X											X	X			X					

	Reference	Nationality	Main findings	Process & issues	Retirement decisions								Growth factors								Methodology				
																					0	1	2	3	4
					Income	Maintenance	Modification	Home care	Health care	Special	Investment	Regulation	Taxation	Cost of living	Aged care	Superannuation	Pension	Information	Product types	Accreditation	Systematic	Mathematical	Primary data	Secondary data	Expert
48.	(Chan, 2002)	China	This study aimed to: review international trend and current development in RM in five selected overseas countries; on this basis it recommends that the HK government should encourage the participation of the financial community in originating, servicing and investing in RMs by providing insurance that would protect these firms from the risks of substantial losses.	Literature and policy review.	X								X				X					X			
49.	(Bartel & Daly, 1980)	Canada	How older homeowners dispose of their wealth, is difficult because the uncertainty with regard to life expectancy and the future course of inflation tends to deter them from selling. The house provides inflation-proof 'rent-free' non-taxable <sup>1</sup> services as long as they retain ownership and continue to live there whereas, if the house is sold, the capital realised and income generated	Literature and policy review.	X								X	X		X		X				X			

	Reference	Nationality	Main findings	Process & issues	Retirement decisions								Growth factors								Methodology				
																					0	1	2	3	4
					Income	Maintenance	Modification	Home care	Health care	Special	Investment	Regulation	Taxation	Cost of living	Aged care	Superannuation	Pension	Information	Product types	Accreditation	Systematic	Mathematical	Primary data	Secondary data	Expert
			there from could run out before they die. The increasing financial 'burden' on the work force to support 'poor' elderly homeowners through various government tax-transfer programs could perhaps be relieved insofar as reverse mortgages become more readily available.																						
50.	(Australian Securities and Investment Commission)	Australia	Australia has seen the rapid development of a range of 'equity release' products, where consumers can obtain current financial benefit by trading equity in their homes. An increase from three to at least 15 RM products—currently the most popular equity release products in Australia. There are also complex issues surrounding equity release products that consumers should consider. ASIC has commenced proceedings	Product and market review	X							X	X		X			X	X					X	

	Reference	Nationality	Main findings	Process & issues	Retirement decisions								Growth factors								Methodology				
																					0	1	2	3	4
					Income	Maintenance	Modification	Home care	Health care	Special	Investment	Regulation	Taxation	Cost of living	Aged care	Superannuation	Pension	Information	Product types	Accreditation	Systematic	Mathematical	Primary data	Secondary data	Expert
			in relation to Money for Living—a sale and lease home reversion scheme																						
51.	(Quercia, 1997)	USA	Four factors are key to the long-term viability of reverse mortgage programs: expected interest rates, borrower longevity, dropout rates, and house value appreciation. The Home Equity Conversion Mortgage (HECM) demonstration program of the Federal Housing Administration (FHA). Older homeowners (age 62 or older) - those who would qualify to participate in the FHA program - experienced appreciation in line with program assumptions. In contrast, housing-rich, income-poor homeowners age 71 or older - those who most resemble actual HECM borrowers - experienced appreciation lower than assumed. FHA's expected dropout rate is	Data from the 1968-1989 Panel Study of Income Dynamics are used to estimate house value appreciation and dropout rates and thus assess the accuracy of the assumptions in a major reverse mortgage program,	X											X				X				X	



	Reference	Nationality	Main findings	Process & issues	Retirement decisions								Growth factors								Methodology				
																					0	1	2	3	4
					Income	Maintenance	Modification	Home care	Health care	Special	Investment	Regulation	Taxation	Cost of living	Aged care	Superannuation	Pension	Information	Product types	Accreditation	Systematic	Mathematical	Primary data	Secondary data	Expert
			significantly lower than those estimated.																						

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## Appendix 3: Interview schedule for lenders

# AGEING AND HOUSING – REVERSE MORTGAGES AND THEIR INFLUENCE ON RETIREMENT DECISIONS AND PLANNING

Approval No: 85033



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### REVERSE MORTGAGES INTERVIEW SCHEDULE FOR LENDERS

**Question 1.** What is the nature of the reverse mortgage industry in Australia at present?

**Question 2.** What is the range of reverse mortgage/home reversion products available?

**Question 3.** What is the likely size of the market?

**Question 4.** What are the demographic characteristics of reverse equity consumers and do these vary among products?

**Question 5.** What factors have influenced growth in the use of reverse mortgages by older persons?

**Question 6.** What makes the product attractive to consumers?

**Question 7.** What makes the product attractive to the financial services sector?

**Question 8.** To what extent does the current legislative and policy framework hinder or support reverse mortgage/home reversion products?

**Question 9.** How do you identify suitable products? And what characteristics either encourage or discourage uptake by older consumers?

**Question 10.** What do older people use the proceeds for and why?

## **Appendix 4: Focus group/interview schedule older people participants**

# **AGEING AND HOUSING – REVERSE MORTGAGES AND THEIR INFLUENCE ON RETIREMENT DECISIONS AND PLANNING**



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### **FOCUS GROUP/INTERVIEW SCHEDULE OLDER PEOPLE PARTICIPANTS**

#### **DEMOGRAPHIC QUESTIONS:**

**Question 1.** How old are you?

**Question 2.** What is your gender?

**Question 3.** Do you live in a city, regional area, or rural area?

**Question 4.** What kind of home do you own (unit, house, town house)?

#### **REVERSE MORTGAGE QUESTIONS:**

**Question 1.** What kind of reverse mortgage products have you enquired about?

**Question 2.** Did you request information from SEQUAL about a reverse mortgage by telephone or online?

**Question 3.** How much prior knowledge did you have about reverse mortgages?

**Question 4.** Who is the reverse mortgage for, and what will it be used for?

**Question 5.** How would you rate the information you received on reverse mortgage products?

**Question 6.** What information would you like to be given regarding reverse mortgages?

## Appendix 5: Project information statement

**Project title:** *Ageing and Housing – Reverse mortgages and their influence on retirement decisions and planning*



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### Participant selection and purpose of study

You are invited to participate in a study of the reverse mortgage market, its popularity and potential impact on retirement decisions and planning in Australia. You were selected as a possible participant in this study because you are either a current, past or potential reverse mortgages client or mortgage broker.

### Description of study

If you decide to participate in a focus group and or individual interview, we will interview you for the purpose of providing a comprehensive appraisal of reverse mortgages and home reversion schemes as they begin to emerge as a significant financial product for senior Australians and as a policy issue for a range of government agencies. If you agree to participate, all individual and focus group interviews will be audio recorded.

### Confidentiality and disclosure of information

Any information that is obtained in connection with this study that can be identified with you will remain confidential and will be disclosed only with your permission, or except as required by law. All individual interviews and focus group transcript data will be de-identified and pseudonyms used. If you give us your permission, the de-identified research data will be published in a report for the Australian Housing and Urban Research Institute (AHURI).

### Recompense to participants

There will be no financial recompense for your time, and we cannot and do not guarantee or promise that you will receive any direct benefits from this study.

### Your consent

Your decision whether or not to participate will not prejudice your future relations with The University of New South Wales or other participating organisations. If you decide to participate, you are free to withdraw your consent and to discontinue participation at any time without prejudice by completing the statement below and returning this entire form to Dr Catherine Bridge, Faculty of the Built Environment, UNSW, Sydney NSW 2052.

If you have any questions, please feel free to ask the Research Officer, Toni Adams by email at [ToniA@fbe.unsw.edu.au](mailto:ToniA@fbe.unsw.edu.au) or call 1800 305 486. If you have any additional questions later, please contact Dr Catherine Bridge via telephone on 02 9385 5619 or via email at [C.Bridge@unsw.edu.au](mailto:C.Bridge@unsw.edu.au) and she will be happy to answer them.

A handwritten signature in black ink, appearing to read 'C Bridge'.

Dr Catherine Bridge  
Assoc/Prof Centre for Health Assets Australasia (CHAA)  
The University of NSW  
UNSW Sydney NSW 2052 AUSTRALIA

## REVOCATION OF CONSENT

Project Title: **Reverse mortgages and their influence on retirement decisions and planning**

Dr Catherine Bridge  
Assoc/Prof Centre for Health Assets Australasia (CHAA)  
The University of NSW  
UNSW Sydney NSW 2052 AUSTRALIA

(If you chose to withdraw from the study, please send this entire form to the above address.)

I hereby wish to withdraw my consent to participate in this research project. I understand that such withdrawal will not jeopardise my relationship with The University of New South Wales, other participating organisations or other professionals.

.....

Signature

Please PRINT name

Date



## Appendix 6: Project consent form

**Project Title:** *Ageing and Housing: Reverse mortgages and their influence on retirement decisions and planning*



Approval No: 85033

THE UNIVERSITY OF  
NEW SOUTH WALES



You are making a decision whether or not to participate in a research project.

This PROJECT CONSENT FORM enables you to indicate your preparedness to participate in the project. By signing this form, your signature indicates that you have decided to participate.

You will be given a PROJECT INFORMATION STATEMENT that explains the project in detail, and that statement includes a revocation clause for you to use if you decide to withdraw your consent at some later stage. The PROJECT INFORMATION STATEMENT is your record of participation in the project.

This PROJECT CONSENT FORM will be retained by the researcher as evidence of your agreement to participate in this project.

Please complete the information below:

---

Please indicate which of the following options you agree to by ticking one of the following options:

☐ I consent to being quoted and identified

☐ I do not want to be quoted or identified but am prepared to participate anonymously

.....  
Signature of Research Participant

.....  
Please PRINT name

.....  
Date

---

Name of researcher: Dr Catherine Bridge

## **AHURI Research Centres**

Queensland Research Centre

RMIT Research Centre

Southern Research Centre

Swinburne-Monash Research Centre

Sydney Research Centre

UNSW-UWS Research Centre

Western Australia Research Centre



Australian Housing and Urban Research Institute

Level 1, 114 Flinders Street, Melbourne Victoria 3000

Phone +61 3 9660 2300 Fax +61 3 9663 5488

Email [information@ahuri.edu.au](mailto:information@ahuri.edu.au) Web [www.ahuri.edu.au](http://www.ahuri.edu.au)