The Potential Role of Housing Equity in a Looming Baby Boomer Retirement Cashflow Crisis

Dianne Johnson, Andrew Worthington and Mark Brimble

Dianne Johnson (Corresponding author)

Griffith Business School

Griffith University

PO Box 242, BULIMBA QLD 4171 Australia

Tel: +61 (0)7 3890 3524

Email: dianne.johnson@griffithuni.edu.au

Andrew Worthington

Griffith Business School

Griffith University

170 Kessels Road, NATHAN QLD 4111 Australia

Tel: +61 (0)7 3735 4273

Email: a.worthington@griffith.edu.au

Mark Brimble

Griffith Business School

Griffith University

University Drive, Meadowbrook QLD 4131, Australia

Tel: +61 (0)7 3382 1355

Email: m.brimble@griffith.edu.au

Abstract

With Australia's 5.5 million 'baby boomer' generation and tens of millions of others around the world now transitioning into retirement, government and community resources for the developed world's rapidly ageing populations are increasingly stretched. A key emerging problem is that some retirees do not have sufficient asset liquidity to finance post-retirement consumption needs. This is seemingly despite households holding substantial assets in the form of housing equity in many countries. The family home has the potential to change from a direct investor private financial asset to a more flexible, securitized, financial instrument. The purpose of this paper is to examine the role of housing equity in supporting retirement consumption and income needs and easing financial stress in later retirement. The paper also examines the potential for new financial instruments tailored for retirees seeking to decumulate housing equity at low cost. Incorporating panel data from the Household, Income, and Labour Dynamics in Australia (HILDA) Survey, we illustrate the role of housing in Australian household portfolio composition in particular and the experience of homeownership for different Australian households, with the primary objective being to identify issues that affect home equity decumulation.

Key Words: Homeownership; household finance; retirement, financial stress, housing equity.

Introduction

Population ageing is one of the most important systemic shifts and policy challenges for public policymakers and private industry in countries experiencing the post-World War II baby boom. This paper focuses on an Australian perspective, given it is significantly under-researched (Bradbury 2010a; Productive Ageing Centre 2012a). However, the fiscal challenges facing policymakers responding to Australia's ageing population mirrors the challenges faced in other advanced economies with similarly ageing demographics, such as Japan, Canada, Britain and the US (Fox et al. 2013; Sierminska and Takhtamanova 2012; OECD 2011; Toussaint and Elsinga 2009; Greenspan and Kennedy 2007).

Population projections show that from 2007 to 2051, the proportion of the Australian population aged 65 years and over is expected to increase from 13 per cent (2.8 million) to between 23 per cent and 25 per cent (7.8 million and 10.4 million). In addition, the population aged 85 years and

over will more than quadruple from 0.3 million in 2007 to 1.73 million in 2056 (ABS 2006). These developments will place significant pressure on Australia's social security, health, aged care, and retirement investment systems.

Several studies, including Freebairn and Warren (2010), Bradbury (2010a, 2010b), and Wood and Ong (2012), have argued that Australia's ageing population brings with it concerns about whether in the future there will be enough workers to support the growing proportion of the population who have retired. Internationally, an increasing emphasis is being placed on personal responsibility as the starting point for meeting the costs of one's own care in old age, which can be paid from income, savings, housing assets, or financial products that allow housing equity use (Dilnot et al. 2011; Coile and Levine 2011; Haffner 2008).

This implies a rethinking of the sources of income for ageing households to accommodate longer periods of retirement, complex health issues, and 'ageing in place', that is staying in the family home for as long as possible, with services coming to the home rather than moving the person to the services (Judd et al. 2012). With regards to the provisions for aged care, in April 2012, the Australian government released an aged care reform package, "Living Longer. Living Better." (Commonwealth of Australia 2012a), that suggested that 'the family home' is growing in prominence in relation to provision of aged care, and briefly mentioned utilising home equity to support changes in aged care provision, including through reverse mortgages. A reverse mortgage is a form of equity release (or lifetime mortgage), a loan available to home owners of retirement age, enabling them to access a portion of their home's equity. The home owners can draw the mortgage principal in a lump sum, by receiving monthly payments over a specified term or over their (joint) lifetimes, as a revolving line of credit, or some combination thereof (SEQUAL 2013). Unfortunately, there has been very little research on how prepared older Australians are to utilize home equity to pay for aged care services, and whether additional policy and regulations are needed to support such changes (Bradbury 2010a, 2010b; Productive Ageing Centre 2012b). Similarly, considering the pressing imperative of ageing populations internationally, the options for income provision are similarly under-researched (Reinold 2011; Ong et al. 2013a)

In this paper, we employ data from the Household, Income, and Labour Dynamics in Australia (HILDA) Survey as Australia's primary source of high quality longitudinal information on individual and household economic and social dynamics (Melbourne Institute of Applied Economic and Social Research 2012). The remainder of this paper will explore the financial wellbeing of current retirees and the potential and capacity of home equity to fund later stages

of the financial lifecycle both in Australia and from an international perspective. This research has important implications for social policies and financial products designed to increase the lifestyle and cashflow options for retirees, as well as providing a better understanding of the experience of homeownership for different groups of Australians. Such evidence can better inform the targeting of financial products, services, and assistance in earlier and later stages of the financial lifecycle. The contribution of this paper is relevant to policy makers, financial institutions, financial planners as well as individuals.

The remainder of this paper is structured with background literature, an outline of methodology, some descriptive data, inferential data and discussion on implications for stakeholders of the study's results.

Background Studies Regarding the Wealth Profile of Ageing Populations

This section provides a review of the literature relating to homeownership in Australia and internationally, the fiscal wealth profile of retirees in Australia, and financial options and wellbeing in retirement. In setting the context for homeownership in Australia, some studies, such as Stimson (2011), give a cautionary note that a one-size-fits-all approach will not work in a country as vast and diverse as Australia. They claim there is no 'typical' city, town, or region, with areas performing both specialized and diverse roles, and with some growing and others in decline. Even with this caveat, Australia has long been a society of homeowners, with more than half of all households becoming homeowners by the late 1880s, a rate not attained by most other developed societies until after World War II (Beer 1993).

Since the 1950s, a range of housing and non-housing policies has encouraged homeownership for a broad range of Australian households (Berry 1999). These have included exemptions from capital gains tax, discounted/controlled interest rates for home mortgages, cash grants for first-home buyers, and the provision of low-interest home loans directly by governments and via intermediary organisations such as state banks. They also include the sale of public housing to sitting tenants, mortgage tax deductibility (for a short time only), development of 'affordable' homeownership lots by state land developers, and planning policies which promoted detached housing, the house type most desired by purchasers (Bradbury 2010a).

Of particular interest to this study is that older retirees in Australia have a relatively high level of homeownership among comparable economies. This translates into a relatively high level of average housing wealth in older age groups (Bradbury 2010a). In most countries, homeownership rates and housing wealth fall significantly after retirement age. Chiuri and

Jappelli (2010), for instance, argue that much of this decline is due to a cohort effect, and that in future years countries such as the United Kingdom (UK) and Italy will probably also have relatively high homeownership rates among their older retirees.

Of further particular concern is the general finding that across many countries, household incomes fall sharply with retirement. However, Bradbury (2010a) contends that this fall is particularly steep in Australia because of the lack of earnings-related pensions in Australia and the immaturity of the superannuation system for current retirees. Further compounding this income dilemma is that the actions of many Australians are at odds with behavioural lifecycle theory which predicts that in the later years of life, individuals should decumulate assets (including housing equity) to support retirement consumption needs.

The Welfare Role of Housing in Retirement

Numerous studies have made links between high levels of homeownership and the role of housing equity in facilitating welfare smoothing (Kemeny (1980), (1981); Castles (1998); Castles and Ferrera (1996); Ritakallio (2003); Doling and Ronald (2010)). This approach relies on relatively less housing costs, compared to private renting, levelling out the after-housing income shortfall.

Pressure on welfare systems is likely to exacerbate income poverty among older Australians. Poverty, a relative concept, is used to describe the circumstances of people in a society that cannot afford the essentials that others take for granted. People therefore living in poverty not only have low levels of income, they also miss out on opportunities and resources that most take for granted, such as adequate health and dental care, housing, education, employment opportunities, food and recreation (ACOSS 2012). A 2008 study by the Australian Council of Social Service (ACOSS) found that the group most experiencing income poverty is single people aged 65 years and older, 47 per cent of whom were living under the poverty line in 2006. A more recent study shows that persons aged 65 and over in Australia have a 35 per cent risk of living in poverty (ACOSS 2012). Lastly, in a comparison with the experience in five other countries (Canada, UK, USA, Italy and Finland), Yates and Bradbury (2010) find that while Australia has the highest before-housing poverty rate among those aged 65 years or over, it has one of the lowest after-housing poverty rates in this same age group.

The Role of Housing in Retirement Income Provision

Housing wealth has traditionally been an important pillar supporting Australian retirement policy (Baxter and McDonald, 2005), but not necessarily as a source of retirement *income*. For the most

part, discussion of retirement income has generally focussed on Australia's three-pillar approach to retirement income:

- 1. a safety net consisting of a means-tested Government age pension system
- 2. private savings generated through compulsory contributions to superannuation, (since the introduction of the compulsory superannuation guarantee in 1992)
- 3. voluntary savings through superannuation and other investments (Commonwealth of Australia 2012b).

Within this three-pillar approach, the place of home equity could be included under 'other investments' or as a fourth pillar of retirement income (Yates and Bradbury 2010). That is not to say that home equity is less important. Work by Bradbury (2010b) and Bradbury and Gubhaji (2010) argues that throughout the past half century, homeownership has been considered a central pillar of Australian retirement planning, reinforced by tax and benefit subsidies for owner occupation. Housing equity has also been favourably assessed in Australia under the age pension entitlement tests. However, prior to Bridge et al. 2010 and Ong et al. 2013a and 2013b, housing equity had not been the subject of significant research in terms of its potential role in providing retirement income with more research needed on an appropriate mechanism to draw on housing equity for Australian retirees (Bradbury and Gubhaji 2010; Bradbury 2010b; Productive Ageing Centre 2012c).

In contrast, the role of superannuation has been the subject of increasing media and research attention, as a highly effective tool for accumulating savings and decumulating income in retirement. This is understandable, with total superannuation assets reaching \$1.85 trillion (APRA 2014) as at 30 June 2014, which is roughly equivalent to Australia's gross domestic product (GDP) forecast for 2014 (World Bank Group 2014). Superannuation assets are predicted to reach 150 per cent of Australia's GDP by around 2040 (Productivity Commission 2012).

However, considering the value of homeownership in Australia presently exceeds \$5 trillion (ABS 2013b) with one-third of Australian households owning their home without a mortgage (ABS 2009), there is an imperative to explore the potential of household wealth accumulation and decumulation, particularly given the imminent retirement of 5.5 million Australian baby boomers. While this may seem a relatively small figure compared to the US baby boomer cohort of approximately 77 million (Coleman et al. 2006), Australia's baby boomers nonetheless represent a significant proportion of Australia's total population of approximately 23.5 million (ABS 2012–13).

New and Emerging Housing Equity Release Developments

The question invariably turns to 'how' when looking at options for home equity decumulation. Products such as reverse mortgages and reverse annuity mortgages (RAM), an arrangement in which a homeowner borrows against the equity in their home and receives monthly tax-free payments from the lender), as well as the option of downsizing already exist in Australia, across parts of Europe such as Germany, the Netherlands, Finland, France, as well as in the UK, Ireland, Canada, New Zealand, Singapore and Japan (ASIC 2007; Reifner et al. 2007a, 2007b; Gotman 2011; Bishop and Shan 2008; Smith et al. 2002). In countries such as Australia and the UK which have established mortgage markets, flexible mortgages have also grown in popularity (Ong et al. 2013a). In 2013, a new 'fractional investment' product was launched in Australia enabling investors and property owners to trade partial investments in real property represented by units in a fund linked to a specific property of their choice (DomaCom 2013). Another product that emerged in 2013 allows an older homeowner to grant an investor the right to purchase his/her home in the future at an agreed price today, in exchange for an income stream (POPI Australia 2014). These types of products are perhaps an indication that both investors and property owners are likely to change the way housing equity is viewed in Australia by an ageing population.

Research has also turned to new financial instruments to increase options for funding housing, such as 'housing supply bonds', albeit for the purpose of channelling private investment into the affordable rental market (community housing supply) (Lawson et al. 2012). For instance, established since the 1990s, housing supply bonds, such as the Austrian Housing Construction Convertible Bond (HCCB), have been the subject of considerable research as alternative housing finance in Australia (Lawson et al. 2012). However, attention may now be warranted for a form of government-guaranteed 'retiree housing bond' that allows retired homeowners to decumulate some of their housing equity, through a supportive intermediary, as an exchange-traded housing bond to provide income in later retirement when other liquid forms of assets have diminished. Such an instrument would be consistent, at least at face value, with moves toward asset-based welfare reform and help ease fiscal pressure on governments.

When examining estimates of the size of housing as part of the asset portfolios of Australians, it becomes clear that housing dominates most Australian household portfolios (Headey et al. 2005). The second–largest asset for most households is superannuation, and other asset holdings of considerable value to households are business assets and equity investments (Headey et al. 2005).

Markowitz's classic portfolio selection theory (1952a, 1952b, 2005) asserts that investors select assets based on mean and variance of portfolio returns. However, some researchers, such as

Worthington (2009), note that housing wealth does not readily fit into the *efficient* portfolio as regarded by Markowitz, and instead reasons that positive household finance—knowledge about what the household actually does—is central to better understanding household behaviour. This paper is looking at what the household does in terms of homeownership and how housing equity relates more broadly to the accumulation of wealth for retirement. Consequently, a product such as a government-backed 'retiree housing bond' honours the value of place for older retirees by supporting the perspective of home as not simply a fiscal asset, but a personal asset rich in history, achievement, belonging, security and community. A 'retiree housing bond' could allow the home to once again provide security, belonging and dignity to the older retiree through a safe, supported means of decumulating home equity for cash flow needs in later retirement.

Australia's Productivity Commission report released in November 2013 outlined several options for further policy discussion and development regarding new ways of easing fiscal pressure on an ageing population. In terms of home equity release, one proposal in the 2013 Australian Productivity Commission report was to have individuals contribute around half the annual real increase in their home values towards aged care services. However, this scheme would benefit more those who have been in the property cycle for longer, whereas some older householders may have just paid off their mortgage or still be paying it off, and have not had any time to accumulate equity growth that could be solely theirs. House prices are also cyclical, and therefore other alternatives are needed for times when housing prices are static or dropping. The report also underlines the urgency of more research into alternative products (Productivity Commission 2013).

Another innovative area of research that also started gaining traction in Australia in 2013 was re-framing private and institutional investment in housing as investment in 'infrastructure' (Milligan et al. 2013). This research is likely to continue to revolutionalize the way housing equity is withdrawn in Australia for both investors and property owners.

The Untapped Potential of Housing Equity in Retirement Income Provision

In relation to property wealth, Chiuri and Jappelli (2010) argue that older retirees often do not have enough resources to finance post-retirement consumption and medical expenses, even though they own substantial assets in the form of housing equity. They add that from an economy-wide point of view, the rapid gains in life expectancy and the rising population share of older retirees will undermine the sustainability of national welfare systems unless older retirees are able to finance an increasing portion of their expenditures by accumulated assets. The pattern of low levels of housing equity decumulation could be related to behavioural issues,

such as distorted risk assessments of housing equity decumulation, and/or due to the family home not being regarded as an investable asset, and consequently not regarded as a source of sustainable income. Presumably, Australian retirees' attitudes to savings, cultural characteristics and portfolio choices are related to decumulation patterns. For example, the favourable treatment of the family home in relation to the Age Pension means test, could likely create biases in portfolio choice, for example, with estimates showing that households experiencing financial poverty do not reduce homeownership more than other households. Households who deplete their financial wealth do not liquidate their housing wealth at higher rates than other households (Spicer et al. 2013).

Given the risk of poverty for more than one in three retirees outlined earlier in this paper, the small uptake of home equity withdrawal may partly reflect a largely conservative risk profile of Australian retirees or it may stem from low demand for other reasons, rather than from any failure of financial markets per se. Nevertheless, there could be gaps in personal financial capability, support for cashflow planning in retirement, and potentially a gap in low-risk and more flexible financial products. Response to such gaps involves not only assessment of some of the current mechanisms for accessing housing equity, such as downsizing and reverse mortgages, but also use of some potential new financial products.

However, the move toward housing asset-based welfare draws on the assumption that investment in own-home wealth will yield sound returns as residential house prices continue to increase. Cyclical financial crises highlight the potential riskiness of housing as an investment vehicle, particularly when the timing of equity withdrawal is not well planned. Further, the store of housing equity could rapidly be withdrawn if used as the primary source of income, and the financial instruments that currently exist to enable decumulation of housing equity are complicated and poorly understood. This can result in ill-informed decisions concerning the use of home equity withdrawal mechanisms to support consumption in retirement. There is potential to better support decision-making on home equity withdrawal and policy change, as poor decision-making could expose older Australians to financial vulnerability in their retirement (Ong et al 2013a).

A key characteristic of Australian government social and fiscal policies (e.g. tax expenditures and concessionary asset tests) is the accumulation of wealth in the primary home. As detailed by Ong et al. (2013a), these policies are prefaced on the assumption that homeowners will own their homes outright in old age, hence lower incomes in retirement will be matched by low housing costs, and retirees can therefore get by on smaller pensions. However, easy access to accumulated

housing equity earlier in the lifecycle only reinforces that the focus needs to be on the rate of *outright owners* in planning for the reduction in after-housing poverty rates rather than homeownership rates generally (Heylen and Haffner 2012).

More older Australians are approaching retirement with outstanding mortgage debt, and some retirees may be paying off their mortgage debt using lump sum superannuation payouts that become accessible on reaching the preservation age. This strategy may have tax advantages for some homeowners planning retirement. Those who do not pay off their home using a superannuation lump sum will presumably continue making regular mortgage repayments after they retire (Ong et al. 2013a), again possibly through a superannuation income stream.

The subject of risk management in retirement is also growing in prominence. Doran et al. (2012) outline the retirement risk zone as being commonly defined as the final 10 years of working life (the end of the accumulation phase) and the first 10 years of retirement (the start of the decumulation phase). "It is this 20 year period when the greatest amount of retirement savings is in play and, subsequently, risk is at its zenith" (Doran et al. 2012 p. 6). The concept of a retirement risk zone points to the need to manage risk better in that 20 year period. However, this paper extends that concept to look also at planning to manage risk beyond the first 10 years of retirement, particularly in later retirement when superannuation assets are potentially depleted. Increasing financial capability is important, as the responsibility for financial longevity is increasingly being placed as the responsibility of individual households. In the context of this paper, the increasing emphasis on individual responsibility for financial capability is set in the context of a large gap in take up and supply of appropriate, affordable financial services (Productive Ageing Centre 2012b). The key characteristics of Australian pre-retirees who had made the most plans for their retirement were that they were in the highest household income quintile, who had finished high school, and were aged 55 and over (Productive Ageing Centre 2012b). The finding suggested that those pre-retirees with higher human capital were those most likely to have made more extensive plans for their retirement, indicating potential for policy support of pre-retirees from lower income quartiles. Extra support could better inform management of assets leading into retirement and greater financial capability for retirees in lower income quartiles if they enter a financial crisis.

Table 1 details home ownership rates across Australian capital cities for the pre-retirement population aged 40 to 59 years and for those aged 60 years and over in 2003–04 (ABS 2003–04). Throughout this analysis, we define people who own their home outright and those paying off a mortgage as homeowners. Mean house prices are also shown, with Sydney having a

significantly higher house price, followed by Melbourne, the Australian Capital Territory (ACT) and Northern Territory (NT), Brisbane and Perth, with the remaining cities having lower house values. The 60 years and over population does have a relatively high home ownership rate in Sydney, but the rate is similar in Melbourne and Hobart. What is also of interest, and concern, in Table 1 is that while the proportion of Australians aged 55 to 64 years who are homeowners has remained relatively stable between 1994–96 (80 per cent) and 2009–10 (82 per cent), the proportion of those homeowners with a mortgage has tripled from 10 per cent to 30 per cent in that same time (ABS 2003–04; 2011).

<TABLE 1 HERE>

Outside of the capital cities, there are equally high ownership rates among households located in most areas along the southeast coast of Australia. ABS (2011) Census data showed that just over two-thirds (67 per cent) of Australian households owned their home (with or without a mortgage). The Northern Territory recorded the lowest home ownership rate (46 per cent), and Tasmania the highest (70 per cent) (ABS 2011).

Overall, the literature infers that ensuring appropriate and affordable housing and home care services is a critical component of the policy response to an ageing population both for economic wellbeing, health and for reducing demand on the residential aged care sector (Judd et al. 2012). Some research evidence points to underutilisation of the housing stock of older retirees in supporting and increasing their living standards (Bradbury 2010a, 2010b; Productive Ageing Centre 2012a; Productive Ageing Centre 2012d). In the context of the apparent underutilisation of dwellings, studies by Judd et al. (2010) have found that the vast majority of older people regard their house as suitable for their needs, including pursuing a range of retirement activities, and accommodating family and visitors. The assumption that housing stock is underutilised has also been questioned in research by Batten (1999) and Wulff et al. (2004).

In terms of the financial benefits of homeownership, while the literature points to the rent savings for retirees owning their houses outright, many homeowners may also have significant ongoing costs with their home. These expenses include outstanding debt, rates, insurance, maintenance, depreciation and repairs, as well as the costs for expenses such as transport if their housing is located away from their preferred social networks and services. However, for the vast majority, the benefits of outright homeownership will outweigh even the ongoing costs associated with the home, particularly when compared to rental affordability in retirement (Bradbury 2010a, 2010b).

Looking at the extent to which the equity in housing is utilized to support retirement lifestyles either through downsizing, using security against other debt, or through reverse mortgages is another area of interest. Overall, the research literature indicates that downsizing is a relatively under-researched and under-theorized area of study (Judd 2012). Nevertheless, a relatively common view, as in Chen and Jensen's (1985) study, is that while some older people do draw down assets during the retirement period, most do not decumulate and instead reduce consumption and continue to rely on currently available income.

Research by Chiuri and Jappelli (2010) has also found evidence that older retirees prefer to stay in their homes, unless forced to move through an external shock: the death of a spouse, health problems, entry into a nursing home. As highlighted earlier in this paper, this decision could be due to perceptions of investable and non-investable assets, and perhaps attitudinal change and more housing equity decumulation products would change the perception of the family home as a source of income. Some studies, e.g. Bridge et al. 2010, make the case that the reverse mortgage market has gained momentum in Australia. The industry peak group, SEQUAL (Senior Australians Equity Release Association of Lenders) keeps a record of the activity levels of its members. As at the end of December 2011, SEQUAL estimated there were approximately 42,000 reverse mortgages on issue in Australia, with a total loan book size of \$3.3 billion. While this represents 10 per cent growth in the value of new lending over the 12 months from 31 December 2010, this is still less than one per cent of non-mortgaged retiree housing equity, estimated in 2005 by SEQUAL to be \$345 billion (Moffat 2011), and likely to be conservatively in the order of \$500 billion in 2013 (Johnson et al. 2014). However, in a study conducted by the Productive Ageing Centre (2012e) less than 10 per cent of both retired and pre-retired respondents responded that they had used or intended to use, reverse mortgages or home financing. Also, a very small proportion of respondents (approximately 5 per cent) indicated that they had, or intended to, increase debt more generally (through credit cards and personal loans) and likewise, a similarly small proportion approached others for financial support (Productive Ageing Centre 2012e).

Events surrounding the 2008 global financial crisis may also have influenced confidence in financial products. Some researchers documented potential holes in regulation following the global financial crisis highlighting for example, lack of fiscal discipline, predatory lending practices, intertwined with low quality securitized packages bought by banks around the world – with a disconnect between the mortgages and their owners (Sykes 2010; Allen and Carletti 2010; Leviton 1999). Research by Bridge et al. (2010) details numerous factors impacting the

examination of Reverse Annuity Mortgages (RAMs) used by older people in terms of possible growth factors and the potential implications for their retirement decisions. They argue that while there are risks with reverse mortgages - including some potentially serious financial risks - reverse mortgages also could provide widespread benefits to households and governments by providing access to resources for households who are asset-rich and income-poor (Bridge et al. 2010).

This review of background literature has identified the experience of homeownership in retirement and potential financial options as under-researched. The circumstance of having assets, but not enough income has been highlighted in the literature. We contribute to this literature by providing a better understanding of the experience of home ownership in early and later retirement, and will examine the potential of fiscal assets to support retirement lifestyles.

Data and Method

The empirical component of this paper uses data from the Household, Income, and Labour Dynamics in Australia (HILDA) Survey as the main source of evidence and information on individual and household dynamics. HILDA is a comprehensive, long-term, high quality longitudinal panel survey. The HILDA project was initiated and funded by the former Australian Government Department of Families, Housing, Community Services and Indigenous Affairs (FaHCSIA), now Department of Social Services (DSS) and is managed by the Melbourne Institute of Applied Economic and Social Research (Melbourne Institute).

The HILDA survey collects information on economic and subjective wellbeing, labour market dynamics and family dynamics from a sample of 9,835 Australian households encompassing 25,391 individuals aged 15 and older in 2011 (Melbourne Institute of Applied Economic and Social Research 2012). Individuals in the sample households are tracked over time regardless of whether they remain in the original households. The variables that this paper covers includes those related to fiscal wealth, homeownership and home value, age, and some family and life cycle dynamics, retirement income consumption and financial wellbeing in retirement.

Results

As identified in the review of literature, there is a gap in research regarding data providing evidence on the potential for retirees to use the resources they have to support their retirement. This section provides an overview of descriptive data on the net worth and homeownership rates of retirees, and evaluative data on the potential of housing equity to be drawn on in supporting financial wellbeing in later retirement.

Role of homeownership in building wealth and supporting consumption

Primary Research Question: What is the potential role of homeownership in building retirement wealth and supporting retirement consumption in Australia?

This paper provides an overview of data related to this primary research question. Earlier in this paper, it was established that the number of homeowners in the HILDA survey has overall remained stable at approximately 67 per cent from 2002, to 2006 and to 2010. In terms of net wealth, data from HILDA outlined that the average net worth of Australian households in 2010 was estimated to be \$692,000, which compares with an estimated \$614,000 in 2006. Wealth, however, is concentrated among a relatively small number of very wealthy households, and hence in summarising wealth accumulation among the "typical" Australian household it may be preferable to focus on changes in the median value. Median values, however, have also exhibited a declining rate of growth, rising from \$213,000 in 2002 to \$328,000 in 2006, and then to \$394,000 in 2010 (Melbourne Institute of Applied Economic and Social Research 2012).

Wealth among the HILDA respondents tends to accumulate with age, usually up to the point where individuals enter retirement. After retirement, wealth accumulation tends to slow down, and for some households declines, as they begin living off their savings. In 2010, wealth peaked in the 50 to 59 year age group for couple households and in the 60 to 69 year age group for single person households (Melbourne Institute of Applied Economic and Social Research 2012). Disaggregating this further, the principal place of residence is almost constant across ages, with median equity and superannuation declining with age (Spicer et al. 2013). This again reinforces the need to look at housing equity as a potential source of income for smoothing retirement consumption.

In terms of HILDA data on the composition of household wealth, the mean values of the six asset and five debt classes for the years 2002, 2006 and 2010 are outlined in Figure 1. HILDA data shows that, overall, Australians hold most of their wealth in their homes, with the mean value of this asset increasing considerably since 2002. The results in Figure 1 are across all age groups to demonstrate that people planning for their retirement now, or even in early work life may need to incorporate planning for housing equity decumulation in their later retirement years.

<FIGURE 1 HERE>

Table 2 shows the dominance of housing as an asset class in Australia for those aged over 65 years compared to those aged 45–64 years. The table provides the mean equity values held in the primary home, alongside the mean equity held in all other non-primary home equity classes

in the portfolios of these households, separated by housing equity withdrawal type. In Ong et al. (2013a), housing equity withdrawal type study includes 'no housing equity withdrawal', 'selling up and moving out of homeownership', 'downsizing to a home that leaves a smaller mortgage'; and 'mortgage equity withdrawal in situ'. Among homeowners under 65, the primary home equity of those selling up is around two-thirds of total equity, compared to 45 per cent of those using mortgage equity withdrawal or downsizing, and less than 40 per cent among those refraining from housing equity withdrawal. The table shows that among the over 65s, those most likely to see their best option as 'selling up' are retirees whose primary home equity makes up over 70 per cent of their total equity (Ong et al. 2013a). What is of major concern in an Australian context is that many of these retirees could then be moving into Australian's relatively less affordable rental housing market, with short tenancies and very short notice periods for terminating tenancies. Also worrying is that the Ong et al. (2013a) study found that one in five older homeowners releasing equity by borrowing more against the value of their home had housing equity that was less than 40 per cent of the value of their homes compared to only one in 10 of other older mortgagors. A more cost-effective alternative to the current equity withdrawal options through mortgage instruments such as reverse mortgages would appear needed to ensure older mortgagors retain at least a majority share of their home equity.

<TABLE 2 HERE>

The background literature section of this paper established that older retiree household members are likely to underestimate their financial stress, or adapt to lower standards of living rather than decumulate housing equity. In the context of the potential for under-reporting, data from HILDA shows the proportion of the population aged 45 and over who reported different forms of financial hardship. The measures generally decrease with age, again, despite the decrease in income. This may indicate under-reporting of financial stress in older retired households. There is also an indication of the financial hardship measures in HILDA increased in the oldest two age groups (75-79 and 80+), particularly with respect to asking for help from welfare or community organisations. However, even though the question in the HILDA survey asks about this help in the context of a shortage of money, it is possible that people interpret it to mean asking for help because of disability or illness rather than because of financial need per se (Bradbury and Mendolia 2012). Critical to this research are the dynamics of those households (approximately 1 in 14) who could not pay bills on time and the 1 per cent who went without meals, in terms of the potential drawing down of their housing equity (Bradbury and Mendolia 2012, HILDA data). Table 3 provides information on the indicators of financial stress and

material deprivation from the HILDA survey for Australians aged over 65 against the choice of type of housing equity withdrawal. As shown, people who extract housing equity over age 65 appear to exhibit greater financial stress. In fact, the most financially stressed group is those deciding to sell up and move out of homeownership.

<TABLE 3 HERE>

There is a potential risk for retirees in the later stages of retirement (e.g. 75+) to be more vulnerable to financial stress and poverty. This indicates they may be in need of additional support for cash flow planning, including through decumulating housing wealth. Currently, Government policies (e.g. tax concessions and concessionary asset tests) encourage accumulation of wealth in the primary home as the cornerstone of Australian housing policy (Ong et al. 2013b). However, since the 1990s, housing's role as a pillar supporting retirement incomes policy has weakened as baby boomers use their housing wealth to smooth consumption during their working lives. Young Australian families also now seem more prepared to draw down their housing wealth to meet the acute spending needs that accompany the earlier years of household formation (Ong et al. 2013b). With the ageing profile of the Australian population and the dominance of housing equity in retiree portfolios, intervention may be needed to assist Australians with the management of their housing wealth in later life. Policymakers could consider developing strategies specific to individuals and households reaching retirement and in the post retirement / decumulation phase. In particular, this study suggests a re-focussing of the post-retirement financial planning stage to include new financial products that allow retirees to better manage cash flow and emergent expenditure needs. These products could include the fractionalised decumulation of housing through government-backed 'retiree housing bonds', unit trusts, or loans in addition to reverse mortgages. Greater consumer education on housing equity decumulation options may also assist in expediting the development of new products.

Perceived financial situation of retirees

This section provides data on the perceived financial situation of retirees in Australia using data from HILDA, as well as examining further, the significant proportion that housing equity makes of net worth in Australians aged 65 and over. This data is intended to evaluate the potential of home equity to support retirement financial wellbeing. Data from Wave 11 of HILDA (collected in 2011) details that of the 733 respondents to a question regarding their concern about their financial situation, of those aged 65 to 74 years, 22 per cent agree or strongly agree that they have a real concern about their financial situation. Of the respondents to the same question aged 75 years and over in Wave 11, 16 per cent agree or strongly agree that they have a real concern

about their financial situation. The concern about finances seems strongest for younger age groups, with 44 per cent of respondents aged 45 to 54 years agreeing or strongly agreeing that they have a real concern about their financial situation, and 27 per cent of respondents aged 55 to 64 years. However, the younger respondents have potentially more opportunity to improve their financial situation through future skills, work and income.

<FIGURE 2 HERE>

Figure 2 provides an overview of the proportion of net worth that is made up of home equity, superannuation and all other financial assets (bank accounts, shares outside of superannuation, insurances, bonds, fixed interest, own business, collectibles). This figure shows the very high proportion of net worth that is made up of home equity. For respondents in Wave 10 of HILDA (collected in 2010), aged 65 to 74 years, the median proportion that home equity contributes to overall net worth is 62 per cent, and is 68 per cent for those aged over 75 years. This data underlines the importance of home equity as a potential source of equity and income in retirement, particularly for those Australians who have lower superannuation balances. Disaggregating this data from wave 10 of HILDA a little further, Figure 3 shows the proportion of Australian homeowners aged 65-74 years old and 75 and over against the continuum of home value increments. The median value sits at \$350,000 for those aged 65-74 years and at \$300,000 for those aged 75 years and over. Critically, these values sit closest to the home values of those choosing to 'sell up and move out of homeownership', shown earlier in Table 2, yet again indicating the potential for more cost effective ways to decumulate housing equity in situ.

<FIGURE 3 HERE>

The potential for more cost-effective housing equity decumulation options is reinforced when we examine expenditures in the year following a housing equity withdrawal episode as in Ong et al. (2013a). In determining if the housing equity that was withdrawn was used to replace income or for other uses, Ong et al. (2013a) looked at the increase in household expenditure the year after a housing equity withdrawal incident, as detailed in Table 4. Households with no housing equity withdrawal also exhibited no statistically significant increase in items of expenditure, presumably showing that they were coping for their consumption needs with existing sources of income. However, for those who had utilised 'mortgage equity withdrawal', the statistically significant changes in expenditure were largely for everyday consumption items such as utilities (gas and electricity), groceries (food and household items), telephone and internet charges, and clothing and footwear. The groups with the highest increase in expenditure across most items were those who had 'sold up' or 'downsized'. This data shows that for those

households drawing on their housing equity for income while remaining in situ, they were indeed utilising cash flow from the equity release to replace income. This circumstance again reinforces the potential for new financial products that more efficiently allow housing equity release without the compounding interest associated with reverse mortgages or existing mortgage withdrawal.

<TABLE 4 HERE>

In addition to informing potential new financial instruments that better fit the risk profile and cash flow needs of later retirees, the data in this paper could inform a continuum of options for retirees with different age, income and equity profiles. Such a continuum could support retirees to make more informed choices based on the risks of home equity decumulation options for their circumstances, as well as inform development of new financial products for retirees who do not readily have equity withdrawal options that fit their circumstances or risk profile. New products could also help take pressure off existing Government services that could be prioritized for people who do not have housing equity or any other large asset base. With over a third of retirees already at risk of poverty in Australia (ACOSS 2012), and 5.5 million Australian baby boomers starting to retire, there is a potential looming cashflow crisis haunting retirees in Australia, particularly in later retirement. The significant wealth stored in property is potentially a key part of the solution. However, Government policy would need to focus more on the decumulation phase of retirement, incorporating not only superannuation and other savings, but also housing equity, particularly in times of financial crisis. The place of housing - and home - in the Australian psyche is more than a fiscal asset, it inhabits elements of family, achievement, cultural history, friendships, community and other connections (Easthope 2004). However, as a financial asset, the family home has potential to undergo a revolutionary change from a direct investor private financial asset to a more flexible, and even securitized, financial instrument, taking into account its function for individuals, families, Government and communities. Financial products in retirement are beginning to undergo reframing to accommodate the financial and cultural dynamics inherent in housing equity release. However, there is still sufficient evidence suggesting a need to change public perception of the function of property and to develop regulation, products and advice systems to support the changing role of housing equity in the decumulation phase of retirement.

Conclusion

This paper aims to provide insight into the current and potential utilisation of home equity in supporting retirement and healthy ageing in Australia. In addition, this paper discusses the

potential demand for new financial instruments used to decumulate housing equity to provide income in retirement. In the discussion of potential new instruments, the concept of a retireehousing bond to facilitate low-cost loans was offered as an area for further research, building on the growing body of work on housing supply bonds and other equity release products. The main distinction of a retiree-housing bond is that it would be in situ decumulation, utilising a government-guaranteed, exchange-traded instrument. This arrangement could offer benefits for cash-strapped retirees, as well as for investors looking for depth in fixed interest investments, particularly in residential housing, and benefits for governments looking for a cost effective means of providing suitable health care and aged care services to an ageing population. The literature on the Australian context for homeownership has outlined that Australians have, overall, high levels of homeownership particularly among older age groups, compared to other developed countries. The literature also shows that affordability of housing purchasing and renting has been declining in Australia which potentially impacts on wealth accumulation over the lifecycle and consequently places pressure on other sectors of housing such as the rental market and public housing. The growth of flexible mortgages arrangements has brought benefits for homeowners seeking to meet spending needs, but has also led to increased mortgage debt in the short- and longer-term. The data from HILDA outlined in this paper shows that the primary home value makes up (on average – median) over two-thirds of all net worth for respondents aged 45 and over, despite almost 30 years of the Superannuation Guarantee Charge. When this data is coupled with the 35 per cent risk of living in poverty if aged 65 years and over in Australia (ACOSS 2012), the potential of home equity to assist in financial hardship and maintaining a reasonable standard of living grows in prominence. Even with a 35 per cent risk of poverty after age 65, this paper has outlined that less than one per cent of available housing equity is being withdrawn through reverse mortgages to support retirement consumption. Overall, the research on housing equity liquidity for retirees in Australia has been judged as insufficient by behavioural economists (eg Bradbury and Gubhaji 2010, Bradbury 2010a, 2010b; Munro 2011; Wood and Ong 2012). The literature on the financial lifecycle as it relates to housing equity also shows a gap in research regarding the place of homeownership in supporting retirement consumption and productive, healthy ageing (Courant et al. 1984). The perception of property, and in particular, the family home in Australia needs further examination, as Ong et al (2013a, p. 12) find "too little is known about the attitudes, beliefs, and behaviours that underpin [home equity withdrawal]". The story of housing wealth in Australia can no longer be just about accumulating assets over the life course or managing the transition to older age; it is now

becoming very much about meeting the needs of households of all ages and stages and in a variety of circumstances (Ong et al. 2013a).

The potential circumstance of having assets, but not enough income has been highlighted in the literature, and points to the potential for an increasing role for home equity in supporting retirement lifestyles and aged care. The place of housing equity as a pillar of retirement income needs more research and innovation as part of a suite of options to manage cashflow crises in later retirement. With 5.5 million baby boomer retirees beginning to turn 65, with the bulk of their wealth in housing, while living longer, with increasing health advances (at a cost), the significance of housing equity is increasingly apparent. New financial products, advice tailored to cashflow in the later decumulation phase, and regulation for housing equity decumulation, might contribute to maintaining a decent quality of life for older Australians, particularly when other sources of income have diminished.

Acknowledgement

This paper uses unit record data from the Household, Income and Labour Dynamics in Australia (HILDA) Survey. The HILDA Project was initiated and is funded by the Australian Government Department of Social Services (DSS) and is managed by the Melbourne Institute of Applied Economic and Social Research (Melbourne Institute). The findings and views reported in this paper, however, are those of the author and should not be attributed to either DSS or the Melbourne Institute.

References

- ABS. (Australian Bureau of Statistics.) 2003-04 Survey of Income and Housing Costs: Confidentialized Unit Record File. Cited in http://www.theaustralian.com.au/business/opinion/retirees-need-greater-access-to-home-equity-as-they-use-super-to-pay-mortgage/story-e6frg9if-1226490211720#
- ABS. (Australian Bureau of Statistics.) 2005. Accessed online on November 1 2012 in http://www.reversemortgagewatch.com.au/reverse-mortgage-news-2/sequal-calls-for-government-to-support-equity-release/
- ABS. (Australian Bureau of Statistics.) 2006. *Population Projections, Australia, 2006 to 2101 (Cat. No. 3222.0)* Canberra: Australian Bureau of Statistics.
- ABS. (Australian Bureau of Statistics.) 2009. *Australian Social Trends, March* 2009. (Cat. No.4102.0) Canberra: Australian Bureau of Statistics.
- ABS. (Australian Bureau of Statistics.) 2011. *Australian Social Trends, March 2011. (Cat. No.4102.0)* Canberra: Australian Bureau of Statistics.
- ABS. (Australian Bureau of Statistics.) 2012-13, *Reflecting a Nation: Stories from the 2011 Census.* (*Cat. No. 2071.0*) Canberra: Australian Bureau of Statistics.

- ABS. (Australian Bureau of Statistics.) 2013a. Census data accessed online on November 1. http://www.abs.gov.au/AUSSTATS/abs@.nsf/Lookup/1380.0.55.010Main+Features12011#AUSTRALIA
- ABS. (Australian Bureau of Statistics.) 2013b. *Residential Property Price Indexes: Eight Capital Cities*, *Dec 2013. (Cat. No. 6416.0)* Canberra: Australian Bureau of Statistics.
- ABS Year Book Australia, 2012 Cat No: 1301. Accessed online on 11 December 2013. http://www.abs.gov.au/ausstats/abs@.nsf/Lookup/by%20Subject/1301.0~2012~Main%20Features~Housing%20and%20life%20cycle%20stages~132
- ACOSS. (Australian Council of Social Services.) 2005. *Poverty The Facts*, ACOSS. Accessed online November 2013. http://acoss.org.au/images/uploads/338 Poverty Factsheet.pdf
- ACOSS. (Australian Council of Social Services.) 2012. Accessed online November 2013. http://acoss.org.au/
- Allen, F., and E. Carletti. 2010. "The Global Financial Crisis." *Monetary Policy Under Fiscal Turbulence* 16: 23–47.
- APRA. (Australian Prudential Regulation Authority.) 2014. Statistics: Quarterly Superannuation Performance: June 2014 (issued 21 August 2014). Accessed online September 2014. http://www.apra.gov.au/MediaReleases/Pages/14 16.aspx
- ASIC. (Australian Securities and Investments Commission.) 2007. *All We Have is This House: Consumer Experiences with Reverse Mortgages*, *Report 109*. Accessed online July 2014. http://www.asic.gov.au/asic/pdflib.nsf/LookupByFileName/Rep109_reverse_mortgages_Nov07_pdf
- Batten, D. 1999. "The mismatch argument: the construction of a housing orthodoxy in Australia." *Urban Studies*. 36 (1): 137–51.
- Beer, A. 1993. "A dream won, a crisis born?, home ownership and the housing market." in Paris, C. (ed.) *Housing Australia*. Melbourne: Macmillan, 147–172.
- Berry, M. 1999. "Unravelling the 'Australian housing solution': The post-war years." *Journal of Housing, Theory and Society* 16 (3): 106–23.
- Bishop, T. B., and H. Shan. 2008. *Reverse Mortgages: A Closer Look at HECM Loans*. National Bureau of Economic Research: Cambridge.
- Bradbury, B. 2010a. Asset rich, but income poor: Australian housing wealth and retirement in an international context, Social Policy Research Paper No 41. University of New South Wales: Social Policy Research Centre.
- Bradbury, B. 2010b. "The fourth retirement pillar for rich nations." Paper presented at the conference Inequality and the Status of the Middle Class, Lessons from the Luxembourg Income Study, Luxembourg, June 28–30.
- Bradbury, B. and B. Gubhaju. 2010. *Housing Costs and living standards among the elderly*. University of New South Wales: Social Policy Research Centre.
- Bradbury, B. and S. Mendolia. 2012. *Living Standards after Retirement: Perceptions and Expenditure Patterns*. University of New South Wales: Social Policy Research Centre.
- Bridge, C., T. Adams, P. Phibbs, M. Matthews, and H. Kendig. 2010. *Reverse Mortgages and older people: growth factors and implications for retirement decisions*. Melbourne: Australian Housing and Urban Research Institute.
- Castles, F. 1998. "The really big trade-off: homeownership and the welfare state in the new world and the old." *Acta Politica* 33(1): 5–19.

- Castles, F.G., and M. Ferrera. 1996. "Home Ownership and the Welfare State: Is Southern Europe Different?" *South European Society & Politics* 1 (2): 163–185.
- Chen, A., and H. Jensen. 1985. "Home Equity Use and the Life Cycle Hypothesis." *The Journal of Consumer Affairs (pre-1986)* 19 (1): 37.
- Chiuri, M., and T. Jappelli. 2010. "Do the elderly reduce housing equity? An international comparison." *Journal of Population Economics* 23: 643–663.
- Coile, C.C., and P.B. Levine. 2011. "Recessions, retirement, and social security." *American Economic Review* 101 (3): 23-28.
- Coleman, L.J., M. Hladikova, and M. Savelyeva. 2006. "The baby boomer market." *Journal of Targeting, Measurement and Analysis for Marketing* 14. (3): 191–209.
- Commonwealth of Australia. 2012a. *Living Longer. Living Better*. Canberra: Department of Health and Ageing.
- Commonwealth of Australia. 2012b. Department of Health and Ageing website. Accessed online August 2013. www.health.gov.au
- Courant, P., E. Gramlich, and J. Laitner. 1984. *A Dynamic Micro Estimate of the Life-Cycle Model, Retirement and Economic Behavior*. edited by H.G. Aaron, and G. Burtless, Washington, D.C.: Brookings Institute.
- Dilnot, A., N. Warner, and J. Williams. 2011. "Fairer care funding: The report of the Commission on Funding of Care and Support Final Report." London. Accessed online July 2014 at: http://www.thirdsectorsolutions.net/assets/files/Fairer-Care-Funding-Report%20Dilnot%20July%202011.pdf
- Doling, J., and R. Ronald. 2010. "Property-based welfare and European home owners: How would housing perform as a pension?" *Journal of Housing and the Built Environment*. 25: 227–241.
- DomaCom. 2013. Accessed November 2013. http://www.domacom.com.au/background.html
- Doran, B., M. Drew, and A. Walk. 2012. "The Retirement Risk Zone: A Baseline Study." Griffith Business School Discussion Papers: Finance, Griffith University, Queensland.
- Easthope, H. 2004. "A place called home." *Housing, Theory and Society* 21 (3): 128–138.
- Fox, O'Mahony and L. Overton. 2013. "Equity Release in the UK: Markets, Consumers and the Role of the State". Paper presented at the Health, Wealth and Hearth: Perspectives on an Ageing Australia Masterclass. University of Western Australia: Perth, 14 February.
- Freebairn, J., and D. Warren. 2010. "Retirement Incomes and Employment Decisions of the Mature Aged." *The Australian Economic Review* 43 (3): 312–320.
- Gotman, A. 2011. "Towards the end of bequest? The life cycle hypothesis sold to seniors. Critical reflections on the reverse mortgage financial fashion." *Civitas: Porto Algre.* 11 (1): 93–114.
- Greenspan, A., and J. Kennedy. 2007. "Sources and Uses of Equity Extracted from Homes." Finance and Economics Discussion Series 2007-20. Divisions of Research and Statistics and Monetary Affairs Federal Reserve Board: Washington, D.C.
- Haffner, M.E.A. 2008. "Savings for old age? Housing wealth of the Dutch elderly." *Housing, Theory and Society* 25 (2): 110–131.
- Headey, B., G. Marks, and M. Wooden. 2005. "The Structure and Distribution of Household Wealth in Australia." *The Australian Economic Review* 38 (2): 159–175.
- Heylen, K. and M.E.A. Haffner. 2012. "The effect of housing expenses and subsidies on income distribution in Flanders and the Netherlands." *Housing Studies* 27 (8): 1142–1161.
- Johnson, D., A.C. Worthington, M. Brimble. 2014. "Put it on the house: The promising, largely untapped potential for Australian home equity in retirement." *JASSA The Finsia Journal of Applied Finance* (1): 32–36.

- Judd, B., C. Bridge, L. Davy, T. Adams, and E. Liu. 2012. *Downsizing amongst older Australians, AHURI Positioning Paper No.150*. Melbourne: Australian Housing and Urban Research Institute.
- Judd, B., D. Olsberg, J. Quinn, L. Groenhart, and O. Demirbilek 2010. *Dwelling, land and neighbourhood use by older home owners, AHURI Final Report No. 144*. Melbourne: Australian Housing and Urban Research Institute.
- Kemeny, J. 1980. "Home Ownership and Privatisation." *International Journal of Urban and Regional Research* 4 (3): 372–388.
- Kemeny, J. 1981. "The Myth of Home Ownership: private versus public choices in housing tenure." London: Routledge.
- Lawson, J., V. Milligan, and J. Yates. 2012. *Housing Supply Bonds—a suitable instrument to channel investment towards affordable housing in Australia? AHURI Final Report No.188*. Melbourne: Australian Housing and Urban Research Institute.
- Leviton, R. 1999. *Elderly decision-making about reverse mortgages*. Dissertation, Brandeis University. Massachusetts, USA.
- Markowitz, H. 1952a. "Portfolio Selection." The Journal of Finance 7 (1): 77–91.
- Markowitz, H. 1952b. "The Utility of Wealth." The Journal of Political Economy LX (2): 151–158.
- Markowitz, H. 2005. "Market Efficiency: A Theoretical Distinction and So What?" *Financial Analysts Journal* Sept/Oct: 17-30.
- Melbourne Institute of Applied Economic and Social Research. 2012. *Household, Income and Labour Dynamics in Australia (HILDA) Survey Annual Report 2011.* University of Melbourne: Faculty of Business and Economics.
- Milligan, V., J. Yates, I. Wiesel, and H. Pawson. 2013. Financing rental housing through institutional investment Volume 1: outcomes from an Investigative Panel, AHURI Final Report No 202. Melbourne: Australian Housing and Urban Research Institute.
- Moffat, D. 2011. "SEQUAL calls for government to support equity release" Accessed online on 12 December 2013 http://www.reversemortgagewatch.com.au/reverse-mortgage-news-2/sequal-calls-for-government-to-support-equity-release/
- Munro, C. 2011. "Making every cent count in retirement." Money Management, August.
- OECD. (Organisation for Economic Co-operation and Development.) 2011. *Pensions at a Glance 2011: Retirement-Income Systems in OECD and G20 Countries*. Paris: OECD Publishing.
- Ong, R., T. Jefferson, G. Wood, M. Haffner, and S. Austen. 2013a. *Housing equity withdrawal: uses, risks, and barriers to alternative mechanisms in later life, AHURI Final Report No.217*. Melbourne: Australian Housing and Urban Research Institute.
- Ong, R., S. Parkinson, B.A. Searle, S.J. Smith, and G.A. Wood. 2013b. "Channels from Housing Wealth to Consumption." *Housing Studies*, DOI:10.1080/02673037.2013.783202.
- POPI Australia. 2014. "Property Options for Pensioners and Investors." Accessed 5 August 2014 http://www.popiaustralia.com.au/
- Productive Ageing Centre. 2012a. "Intergenerational Transfers of Time & Money." Facts and Figures No 8. Accessed Nov 1. http://www.productiveageing.com.au/site/projects.php
- Productive Ageing Centre. 2012b. "Financial Anxiety: A Barrier to Accessing Professional Advice." Facts and Figures No 9. http://www.productiveageing.com.au/site/projects.php
- Productive Ageing Centre. 2012c. *Financial Literacy*, Facts and Figures No 10. http://www.productiveageing.com.au/site/projects.php
- Productive Ageing Centre. 2012d. *Ageing Baby Boomers in Australia: Understanding the effects of the global financial crisis.* Canberra: Australian Department of Health and Ageing.

- Productive Ageing Centre. 2012e. *Financial Wellbeing: Concerns and choices among older Australians*. Canberra: Australian Department of Health and Ageing.
- Productivity Commission. 2012. *Default Superannuation Funds in Modern Awards*, Draft Inquiry Report, Canberra.
- Productivity Commission. 2013. *An Ageing Australia: Preparing for the Future*, Commission Research Paper Overview, Canberra.
- Reifner, U., S. Clerc-Renaud, E.F. Pérez-Carillo, A., Tiffe, and M. Knobloch. 2007a. *Study on Equity Release Schemes in the EU Part I: General Report.* Hamburg: Institut für Finanzdienstleistungen e.V.
- Reifner, U., S. Clerc-Renaud, E.F. Pérez-Carillo, A. Tiffe, and M. Knobloch. 2007b. *Study on Equity Release Schemes in the EU Part II: Country Reports.* Hamburg: Institut für Finanzdienstleistungen e.V.
- Reinold, K. 2011. Housing equity withdrawal since the financial crisis, Research and Analysis. Q2:127–133.
- SEQUAL. 2013. "Equity Release Products." Accessed 1 November 2013 http://www.sequal.com.au/what-is-equity-release/equity-release-products#reverse-mortgage
- Sierminska, E. and Y. Takhtamanova. 2012. "Financial and Housing Wealth and Consumption Spending: Cross-Country and Age Group Comparisons." *Housing Studies* 27(5): 685–719.
- Smith, S.J., J. Ford, and M. Munro. 2002. *A Review of Flexible Mortgages*. London: Council of Mortgage Lenders.
- Spicer, A., O. Stavrunova, and S. Thorp. 2013. *How Portfolios Evolve After Retirement: Evidence from Australia*, University of Technology Sydney (UTS) Business School, Working Paper, June 2013.
- Stimson, R. 2011. "Australia's Changing Economic Geography Revisited." *Australasian Journal of Regional Studies* 17 (1): 22–45.
- Sykes, T. 2010. Six Months of Panic: How the Global Financial Crisis Hit Australia. New South Wales: Allen and Unwin.
- Toussaint, J., and M. Elsinga. 2009. "Exploring 'housing and asset-based welfare' Can the UK be held up as an example for Europe?" *Housing Studies* 24 (5): 669–692. DOI: 10.1080/02673030903083326.
- Wilkins, R., and D. Warren. 2012. Families, Incomes and Jobs, Volume 7: A statistical report on Waves 1 to 9 of the Household, Income and Labour Dynamics in Australia Survey, Melbourne: Melbourne Institute of Applied Economic and Social Research.
- Wood, G., and R. Ong. 2012. Sustaining home ownership in the 21st century: emerging policy concerns: Australian Housing and Urban Research Institute (AHURI) Report No 18. Perth, Melbourne: Western Australia Research Centre, RMIT Research Centre.
- World Bank Group. 2014. "Data: Australia." Accessed online 5 August 2014 http://data.worldbank.org/country/australia
- Worthington, A. 2009. Household Asset Portfolio Diversification: Evidence from the Household, Income and Labour Dynamics in Australia (HILDA) Survey. Griffith Business School, Discussion Papers: Finance, Griffith University: Queensland.
- Wulff, M., E. Healy, and M. Reynolds. 2004. "Why don't small households live in small dwellings? Disentangling a planning dilemma." *People and Place*, 12 (1): 58–71.
- Yates, J. and B. Bradbury. 2010. "Home ownership as a (crumbling) fourth pillar of social insurance in Australia." *Journal of Housing and the Built Environment* 25(2): 193–211.

Table 1: Homeownership Rates in Australian Capital Cities, the Australian Capital Territory (ACT) ACT and the Northern Territory (NT) 2003–04; and proportion of homeowners with a mortgage in age range 55-64 years in 1994-96 and 2009-10.

Australian Capital City or Territories	Mean House Price (\$000) 2003–04	Homeownership rate by (%) by age of household reference person, 2003–04		
		40-59 years	60 years and over	
Sydney	590	74	84	
Melbourne	369	86	86	
Brisbane	328	73	79	
Adelaide	265	79	79	
Perth	307	79	78	
Hobart	248	80	84	
ACT and NT	363	75	76	
55–64 y.o homeowners		55-64 y.o homeowners		
1994–96		2009–10		
Overall	With a	Overall	With a	
	Mortgage		Mortgage	
80%	10%	82%	31.4%	

Source: ABS Survey of Income and Housing Costs, 2003–04, Confidentialized Unit Record File and ABS Year Book Australia, 2012 Cat. No. 1301

Table 2: Mean equity profile of older home owners, person-period data from 2002 and 2006 (HILDA), by housing equity withdrawal mechanism and age group, \$000s at 2010 prices

	Equity in primary home	Equity in all other assets	Total	Sample
45-64 years				
No housing equity withdrawal	427.6	674.5	1,102.2	2,403
Sold home and moved out of homeownership	347.3	183.9	531.2	21
Downsized to a home that left them with a smaller mortgage	634.0	768.5	1,402.5	34
Mortgage equity withdrawal in situ	385.9	449.6	835.5	656
65+ years				
No housing equity withdrawal	418.6	419.2	837.7	1,675
Sold home and moved out of homeownership	260.8	114.8	375.6	14
Downsized to a home that left them with a smaller mortgage	527.2	268.1	795.3	31
Mortgage equity withdrawal in situ	613.7	490.4	1,104.0	49

Source: Ong et al's (2013a) data from the 2001-10 HILDA Survey.

Notes: The term 'housing equity withdrawal' is used by Ong et al. (2013a) to encompass three categories: selling up and moving out of homeownership; downsizing to a home that leaves a smaller mortgage; and mortgage equity withdrawal in situ (or trading up). As asset and debt estimates are only available in intermittent waves of the HILDA survey (i.e. 2002, 2006 and 2010), Ong et al. (2013a) pooled the 2002 and 2006 asset and debt estimates for older homeowners by their housing equity withdrawal activities during 2002-03 and 2006-07 respectively. By measuring wealth at 2002 (2006) instead of 2003 (2007), Ong et al. (2013a) are ensuring that wealth portfolios were not be influenced by recent housing equity withdrawal activity. Ong et al. (2013a) also restricted their sample to persons who are homeowners aged 45 years and over in Wave 1 of the HILDA survey. The Wave 1 data on these older homeowners were then matched with their housing data in the adjacent Wave 2, to identify whether or not each homeowner has engaged in in situ mortgage equity withdrawal, downsized, traded up while overmortgaging (hence withdrawing housing equity), or sold up and moved into the rental sector between the two waves. This sample-defining exercise is repeated for homeowners aged 45 and over in every wave and observing their subsequent housing circumstances in the next wave, up to Wave 10 of the HILDA survey. After accounting for various complications detailed in the Ong et al. (2013a) report, the remaining observations formed a pooled dataset of person-period episodes. When person-period episodes have not been appropriate for analysis, for example, could lead to over-counting couple households as two person-period episodes, then household-period episodes have been used.

Table 3: Financial stress and material deprivation experiences of older home owners, by home equity withdrawal mechanism, person-period data 2001-10, per cent column

	65+ years			
Financial stress indicator	Mortgage equity withdrawal in situ	Downsized to a home that left them with a smaller mortgage	Sold home and moved out of homeownership	No housing equity withdrawal
Could not pay electricity, gas or telephone bills on time	11.5	9.3	16.5	5.9
Could not pay mortgage or rent on time	4.8	4.0	8.9	2.5
Pawned or sold something	2.8	4.9	6.3	1.6
Material deprivation indicator				
Went without meals	1.8	1.9	3.2	1.1
Was unable to heat home	1.7	2.8	6.0	1.4
Asked for financial help from friend or family	6.5	7.7	11.6	3.4
Asked for help from welfare/ community organisations	1.5	2.1	3.8	1.2

Source: Ong et al's (2013a) data from the 2001-10 HILDA Survey.

Notes: See notes accompanying Table 2.

Table 4: Incidence of an increase in household expenditure, by age 65 years and over, housing equity withdrawal mechanism and expenditure type, household-period data HILDA 2006-10

	65+ years				
Expenditure item	Mortgage equity withdrawal/ Mortgage increase	Downsized to a home that left them with a smaller mortgage	Sold home and moved out of homeownership	No housing equity withdrawal	
Home repairs, renovations and maintenance	37.1	54.4***	23.8**	36.6	
Education fees	3.0	8.8	6.3	3.2	
Medical expenses	50.0	40.4	52.4	49.7	
Private health insurance	28.0	31.6	22.2**	34.1	
Other insurance	50.8	36.8**	34.9**	50.6	
Motor vehicle repairs or upgrades	46.2	40.4	31.7**	45.0	
Transport costs	43.2	28.1**	28.6**	41.9	
Telephone and internet charges	35.6***	50.9	34.9**	46.9	
Computer and related devices	25.0*	24.6	12.7	18.6	
Audiovisual equipment	25.0	36.8*	38.1**	25.2	
Whitegoods	18.2	49.1***	23.8	22.9	
Furniture	16.7	52.6***	27.0*	17.2	
Holidays	38.6*	36.8	20.6**	30.8	
Groceries	34.8**	29.8**	46.0	44.2	
Meals eaten out	34.1	38.6	34.9	34.7	
Utilities	43.2**	47.4	50.8	52.0	
Clothing and footwear	34.1*	47.4	54.0**	41.3	
Alcohol, cigarettes and tobacco	34.1	42.1**	25.4	28.2	
Sample	134	57	63	3,939	

Source: Ong's et al. (2013a) calculations from the 2006-10 HILDA Survey
***, ** and * denote statistically significantly different from 'no housing equity withdrawal' at the 1, 5 and 10 per cent level, respectively.

Figure 1: Mean Values of Household New Worth Components. 2002, 2006, and 2010

Source: HILDA Annual Report 2011

Notes: Data includes all age groups, not just retirees. "Home" includes the first/primary home – either rented out, not rented out, or owner occupied. "Other property" comprises a second home or holiday home (rented out or not rented out). commercial property, farms, vacant land, other (description provided) or "unsure what type". "Other assets" include insurance policies, household collectibles, any other asset with description. Respondents in Wave 10 of HILDA: 13,526 individuals across 7,357 responding households.

Figure 2: Proportion of Net Worth in Home Value, Superannuation and All Other, by age, Australia 2010

Source: HILDA Wave 10. Observations 45-64 years (3,243); 65 to 74 years (980) and 75 years and over (673).

Figure 3: Percentage of Australian Homeowners aged 65-74 years and aged 75 years and over by Home Value Increment, 2011.

Source: HILDA wave 11. Observations aged 65-74 years (980); observations aged 75 years and over (673).