

THE TREATMENT OF HOUSING ASSETS FOR AGE PENSION AND AGED CARE ELIGIBILITY PURPOSES: OPTIONS AND ISSUES

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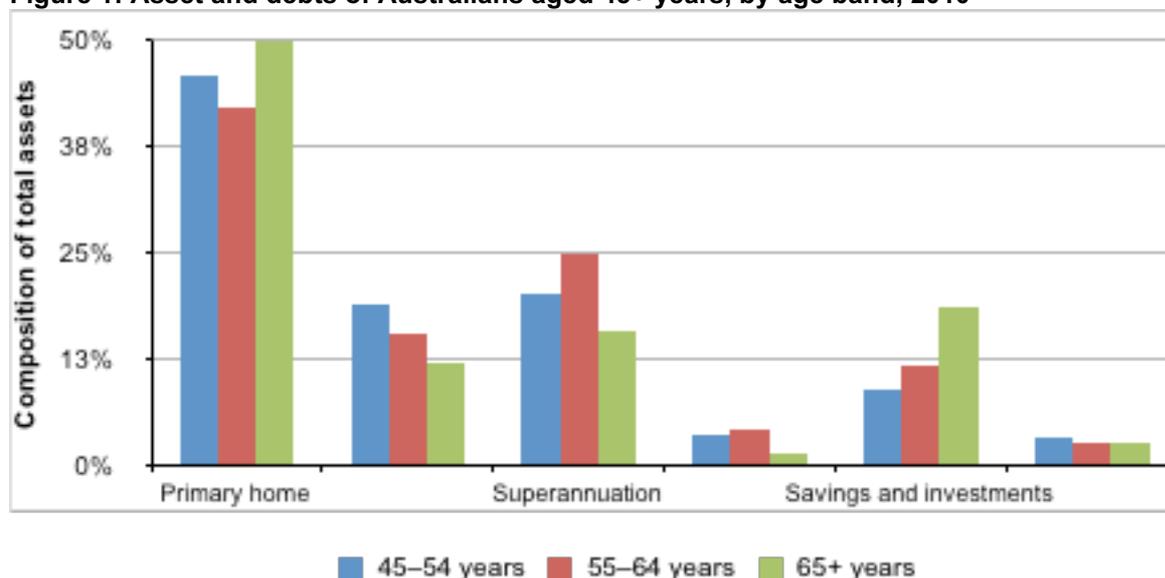
1. Background

In Australia, most housing subsidies are provided to encourage homeownership (Wood et al., 2010). While renters receive Commonwealth Rent Assistance or public housing rebated rents, and all rents are GST-exempt, the amount of housing subsidies received by owners far outweighs the amount received by renters¹. Direct assistance to home purchasers are provided in the form of the First Home Owners Grants, and indirect assistance is offered through non-taxation of imputed rent, imputed rent exemption from the GST, stamp duty concessions, as well as the family home's exemption from capital gains tax and land tax. The family home is also exempt from the means test for pensions (and other income support payments), which is particularly relevant to this paper.

Australian taxation and transfer policies promote the accumulation of housing wealth over the life course, and this is especially evident among elderly Australians. Figure 1 presents a snapshot of the asset and debt portfolios of Australians aged 45+ in 2010. The family home is the most important store of wealth among Australians in mid-to-late life, representing over 40 per cent of their total assets. The prominence of the family home in asset portfolios is greatest among those aged 65+, making up 50 per cent of their total assets in 2010, compared to 46 per cent (42 per cent) among those aged 45-54 years (55-64 years). On the other hand, superannuation's share is lowest among the 65+ age group, contributing only 16 per cent to their total assets. The oldest age group benefited less from the compulsory superannuation guarantee introduced in the early 1990s, and are at a stage in the life cycle when decumulation rather than accumulation of wealth is expected.

¹ Wood et al. (2010) estimated the average housing subsidy received by private renters in 2006 at \$901 (1.1% of income), while homeowners received an average of \$2,201 (2.5% of income).

Figure 1: Asset and debts of Australians aged 45+ years, by age band, 2010



Source: Household, Income and Labour Dynamics in Australia Survey, 2010. Reproduced from Ong et al. (2013b).

There is a consensus in the literature that high levels of home ownership are an important pillar supporting welfare in old age. The assumption has been that older, low-income outright owners will have negligible housing costs because they are no longer paying off mortgages, and can therefore get by on smaller pensions (Kemeny, 1980; Castles, 1998). Their home also provides a safety net for households after retirement savings are depleted, and this is viewed as a benefit for both retirees as well as the wider community (Kelly et al., 2013). Its benefits extend beyond the economic realm; it is commonly accepted that home ownership is both a financial asset and an important source of ontological security in old age (Colic-Peisker et al., 2015).

The capacity of the family home to provide the range of financial and non-financial benefits described above, especially in retirement, offers a strong rationale for exemption of the family home from the pension means test. However, debates reverberate within policy circles around continued exclusion of the family home from the pension means test. There is a renewed interest in housing as the source of asset based welfare given its fungibility following the introduction of innovative equity release products (Ong et al., 2013b; Haffner et al., 2015). Growing fiscal worries about escalating age care and social security expenditure as the population ages have also spawned strong policy interest in the use of accumulated housing wealth to support needs in retirement (Productivity Commission 2011).

This paper examines alternative ways of treating housing assets for age pension and aged care eligibility purposes. Section 2 reviews the current regime and existing proposals to alter the treatment of housing assets in means tests. Means testing of the family home could compel the drawdown of housing equity to support retirement needs. Hence, this paper goes on to discuss the issues associated with two key forms of equity release in Australia – downsizing and in situ mortgage equity withdrawal – in section 3. We conclude by highlighting some of the broader issues that need to be considered in designing policies that seek to reform the treatment of housing assets within either the tax and transfer system.

2. The treatment of housing assets in the means test

2.1 Current treatment of housing assets

Under current tax-transfer parameters, the family home is completely exempt from means tests determining income support payment eligibility. When the exemption was introduced in the early 1900s, it was motivated by a desire to increase the capacity of persons for independence from their family members and relatives in old age, so as to free up the latter to make more productive contributions to the economy (Fisher, 1912; in Productivity Commission, 2015). The family home exemption has since remained embedded within the Australian retirement incomes system.

Prior to 1 July 2014 the family home was not an assessable asset determining ongoing residential aged care fees. However, commencing 1 July 2014, new aged care means testing arrangements were introduced which counted part of the value of the family home in the assets test determining eligibility for government subsidised residential aged care funding. The family home is assessable unless it is occupied by the aged care recipient's partner or children, or some other protected person². The net market value of the family home up to a capped amount of \$159,423.20 (as at 20 March 2016), is assessed. These changes only apply to those entering aged care from 1 July 2014 onwards (DSS, 2015).

For those entering residential aged care from 1 January 2016 onwards, the rental income from the aged care recipient's former family home will also be assessed under new means test rules (DSS, 2016).

2.2 Equity and efficiency issues

The preferential treatment of owner-occupied housing in the income support system could be the source of adverse equity and efficiency impacts. Cowan and Taylor (2015) highlights issues from the perspectives of both vertical and horizontal equity. The family home exemption results in the payment of income support to some who have substantial wealth tied up in their principal residence, at the expense of those who do not own their own home (see also ACOSS, 2015). Hence public funding is not targeted on those in greatest need. Moreover, the current treatment of housing assets in means tests advantages pensioners with a significant proportion of their wealth tied up in the family home relative to those with the same level of wealth, but stored in a more diversified wealth portfolio. Hence, individuals with the same means (as measured by their total wealth) are treated differently under the current system (Henry et al., 2009).

The non-neutral treatment of housing assets offers powerful incentives to accumulate wealth in home ownership that can cause inefficiencies in housing markets; so, for example, it encourages 'empty nester' older households to under-occupy housing thereby making it more difficult for growing younger families to access affordable housing that meets their space needs. Moreover, for income poor, these incentive effects could have perverse consequences, as the equity released could generate an income stream to help meet acute spending in old age

In fact the means test exemption of the family home is part of a package of housing subsidies that fuel the demand for housing which, in markets where supply is price inelastic, are capitalised into house prices (Wood and Ong, 2012). Furthermore, owner-occupiers response to incentives in the tax-transfer system is resulting in unbalanced wealth portfolios

² Protected persons include, The carer and close relative must be eligible for an income support payment.

that are over-exposed to price risks in housing markets (Wood et al, 2010). Yet the family home is one of the few asset classes where price risk cannot be hedged, a market failure that was presciently pointed out by Shiller (2003) ahead of a Global Financial Crisis that highlighted how important that risk can be to individual home owners, as well as the national economy.

2.3 Proposals

A number of proposals have been put forward over the years to modify the income support payment means tests in order to address some of these efficiency and equity concerns. With regard to the age pension system, a key proposal is inclusion of the family home in the assets test. This has been put forward by the Henry Review (2010), National Commission of Audit (2014) and the Productivity Commission (2015), among others. Wood et al. (2010) modelled the potential impacts of including the family home in the assets test, and increasing home owners' asset free thresholds to the same level as renters. This re-designed assets test is then tenure neutral.

Their population weighted modelling results, reproduced in table 1 below, indicate that over half of all income support recipients would receive reduced income support payments if the assets test system were tenure neutral. The average fall in income support payments was estimated to be \$2,400. Age pensioners make up over 800,000 of the 1.1 million recipients adversely affected by the reform. Overall, the budget savings would be \$5.1 billion, of which \$3.5 billion is lower payments to age pensioners. More recently, the Productivity Commission (2015) also conducted modelling on the impacts of including the family home in the assets test, and estimated that 46 per cent of age pensioners would receive a lower pension.

Table 1: Impacts of making the assets test regime wholly tenure neutral, 2006-07 asset values, 2008-09 taper rates, by income support payment type

	Age Pension	Disability Support Pension	Other income support payment	All
Number receiving ISP under current regime ('000s)	1321.3	264.5	491.1	2076.9
Number of ISP recipients whose payments are reduced ('000s)	838.9	81.8	210.9	1131.6
Mean reduction in payments to ISP recipients (\$)	\$2630	\$1125	\$2616	\$2435
Total increase in revenue to government (\$)	\$3.5 billion	\$0.3 billion	\$1.3 billion	\$5.1 billion

Source: Household, Income and Labour Dynamics in Australia Survey, 2006. Reproduced from Wood et al. (2010) Table 6.2.

A second possible reform involves deeming the expected return from the family home and including this imputed 'income' within definitions of assessable income governing eligibility and entitlement to income support. The Henry Review (2010) proposed this change to the income test as part of a wider reform package that replaces the dual income and assets test with a single comprehensive means test. Under the single test income would be deemed on a wide range of assets, including both income-producing and non-income-producing assets.

A third proposal is specific to aged care funding and has recently been canvassed by the Productivity Commission (2015). It recommends including more of the value of the family home in the means test for residential aged care than is currently the case, and including assets in the means test for home care services (as well as residential care), to better align it with individuals' capacity to pay.

It is generally acknowledged that proposals to include the full value of the family home in age pension and aged care eligibility and entitlement tests would be politically impossible. Such a move fails to appreciate housing's function as both a consumption good, which provides shelter and non-shelter benefits, and an investment good that generates an imputed rental income stream and real capital gains (Wood et al., 2010). An option that has enjoyed more widespread acceptance is to cap the assets test exemption on the family home for determining age pension eligibility, as is the case with the post-July 2014 aged care means test rules. Proposals to cap the value of the family home in pension assets test have been put forward by the Henry Review (2009), National Commission of Audit (2014) and Productivity Commission (2015) among others. The National Commission of Audit (2014) have specifically recommended that a threshold for inclusion of the family home in the age pension means test be set from 2027-28 onwards at the indexed value of a residence valued in 2014 at \$750,000 for couples and \$500,000 for singles.

2.4 Issues

Notwithstanding potential equity and efficiency gains, the implementation of proposals to include the full or partial value of the family home in means tests would raise a number of policy design and implementation issues.

The first relates to the 'optimal' level of the cap on the exemption. Policy simulations by Wood et al. (2010) and the Productivity Commission (2015) indicate that setting the cap at relatively generous rates would limit loss of pension entitlement to those with very large housing wealth values. If the assets test threshold were set at \$550,000 for singles and \$700,000 for couples (equivalent to the 90th percentile of home owners' housing equity distribution in 2006), only 12.3 per cent of age pensioners would be affected. However, the budget savings will be small. The Productivity Commission (2015) finds that setting the exemption cap at a 2010 median value of \$440,000 adversely affects only 10.6 per cent of age pensioners³. However, there is significant variation in property prices with more age pensioners likely to be affected in expensive housing markets in the larger capital cities like Sydney. There may be a case for setting different cap exemptions that reflect geographical variation in house prices as well.

Some consideration also needs to be given to the relationship between the means testing of the family home for aged care and age pension eligibility, as any consideration of including the family home in means testing would limit its availability for aged care financing.

Furthermore, current pensioners have made their home purchase and investment decisions on the basis of tax-transfer parameters that favour owner occupied housing, and were expected to remain in place. In light of this, grandfathering provisions are a likely part of any reform package in order to assist with transitional arrangements that avoid major disruption in housing markets.

³ However, the same report notes that notwithstanding the limited effects, the reform "provide a much needed signal from the Australian Government that the home is an asset that can be drawn upon by older Australians" (Productivity Commission, 2015, p21).

3. The drawdown of housing equity in old age

If means tests for age pensions include the family home as part of assessable assets or under deemed income rules, it will have at least two consequences for housing decisions (assuming grandfathering arrangements that protect the position of current retirees). Households in the earlier stages of housing careers will buy lower value homes than would have been the case under existing arrangements. On the other hand, those approaching retirement have an incentive to drawdown their housing wealth by either downsizing (selling up and then purchasing a lower valued home), or making use of equity release products (allowing *in situ* withdrawal of equity), to keep housing wealth below exemption thresholds. However, the evidence from Australian studies (see Judd et al., 2014; Productivity Commission, 2015) strongly suggest that most older people prefer to age in place, and are averse to either downsizing or releasing equity through financial products. It is then likely that many in this group will retain housing wealth above exemption thresholds through into retirement. Binding means tests are then likely to cause some, if not most, to involuntarily roll out housing equity to meet higher unanticipated age care costs. Unfortunately the present tax-transfer system imposes a further set of penalties on downsizers and borrowers using mortgage equity withdrawal (MEW), i.e. equity release through debt-financed products. These penalties are an impediment to the introduction of housing wealth into means tests, and are explained below.

3.1 Downsizing

In the transfer system, the net proceeds from downsizing – i.e. the difference between the amount gained from the sale of the former home and the amount folded back into the purchase of a new home – will be an assessable asset that can reduce income support payment entitlements, or even leave clients ineligible for support (DSS, 2013)⁴. If the equity released is re-invested in financial investments, the investment is also subject to income test deeming rules (DSS, 2014)⁵. Ong et al. (2013b) show that among income support payment recipients who downsized between 2001-2010, and were 45 years or older (in 2001), 60 per cent would experience a cut in their income support payment entitlements. Those affected lose an average \$2,000 (at constant 2010 prices), a 20 per cent reduction in their income support payment⁶.

Taxation is also the source of an important financial penalty. Stamp duty is a transaction tax on the transfer of property that is formally paid by the buyer on a sliding scale of marginal rates that rise with property price. Ong et al. (2013b) find that on average, 8 to 10 per cent of the housing equity that older owners released on downsizing is eaten into by stamp duty liabilities. When legal costs and other moving costs are added into the mix, the average older home owner loses over 10 per cent of their proceeds from downsizing.

These financial penalties could be addressed by introducing stamp duty exemptions, or relaxing means test rules on older owners that release housing equity. But there are other impediments to the release of housing equity. Often elderly home owners (and their adult children) have strong emotional attachments to the family home, as well as its surrounding community (Ong et al., 2013b). But shortages of appropriate and affordable dwellings in neighbourhoods where older owners would like to stay prevent them from downsizing, and remaining in familiar communities (Ong et al., 2013b; Judd et al., 2014). Reforms should

⁴ There is a caveat here. If the equity is immediately spent on consumption there are no such worries about binding means tests.

⁵ When re-invested as a financial asset, the equity released may earn a stream of taxable interest which may in turn affect Family Tax Benefit entitlements. However, this is unlikely to have a significant impact on aged pensioners, most of whom would no longer have dependent children (Ong et al., 2013b).

⁶ However, the reductions in income support payments are often countered by the interest or dividends earned when the sale proceeds are re-invested in financial assets that yield positive returns.

therefore consider accompanying supply side solutions that offer options to downsize while allowing older owners to exercise their preference for ageing in place.

3.2 MEW Products

MEW products are alternative options to downsizing because they allow some equity release by increasing the debt secured against the family home, which can be used to fund old age needs without necessitating a move out of the family home. The application of means tests to the proceeds from MEW appears to be less onerous. If the amount released is \$40,000 or less, and spent within 45 days, it is not asset tested. If the amount released is more than \$40,000, the first \$40,000 is exempt from the assets test for 90 days, while the excess is immediately assessable (DSS, 2000). Deeming provisions do apply if the equity released is rolled into a financial investment. However, the amount of equity released using MEW is usually much lower than through downsizing, and therefore potentially spent more quickly. The median amount of equity released by home owners (between 2001 and 2010) using MEW and aged 45+ in 2001 was around \$40,000, compared to roughly \$120,000 released by the same age group when downsizing over the same period (see table 4 in Ong et al., 2013b). Hence the equity released through MEW is less likely to result in binding means tests.

However, MEW raises a range of other concerns, especially the risks associated with debt-financed equity release. MEW products are innovative types of mortgage loans, but they still have to be repaid at some point in the future. During loan terms borrowers are exposed to investment risks because future outstanding loan principal amounts are uncertain, as is the future value of their home, leaving older owners apprehensive about exactly how much housing equity they will have left for emergencies, or bequests. These MEW investment uncertainties are more sensitive to fluctuations in housing and mortgage market conditions than are traditional mortgage loan products (Ong et al., 2013b).

Government could play an effective role in mitigating these risks by offering insurance that helps hedge investment risks. For instance, the US Home Equity Conversion Mortgage (HECM) program is federally insured; it ensures that borrowers will never end up with negative equity, while lender losses due to negative equity are picked up by the Federal Housing Administration (Federal Housing Administration, 2010). In Australia, the Productivity Commission (2011) has recommended a government-backed aged care equity release scheme that will allow an older home owner to use their housing equity up to a specified limit to help finance their accommodation and care costs. The Productivity Commission (2011:106) notes that a “government-backed ... equity release scheme may be more acceptable to some older people. The higher uptake of government-sponsored schemes, relative to private provider schemes, in the US suggests that the added security from government backing can help dispel nervousness about using the products”.

4. A housing asset based welfare system – some broader issues

Policies to include the family home in means tests, or encourage the drawdown of housing equity via downsizing or MEW, represent a general move towards housing asset based welfare. Any policy approach that encourages reliance on housing wealth to meet needs in old age must consider whether housing assets will remain an adequate base for supporting the retirement needs of the broader population in the future.

There are already signs of a decline in the propensity of younger generations to accumulate housing wealth. When measured on a person (rather than household) basis we find home ownership rates among under 55s have been declining for over 20 years. Most striking in table 2 is the falling share of home owning 25-34 year olds, which declined from 56 per cent

in 1982, to only 34 per cent in 2011. These trends will in part reflect the growing HECS debt burden of the young, and their 'forced saving' through the superannuation guarantee. However, policies that roll back the preferential treatment of the family home (such as including the family home value in the pension means test) will further weaken incentives to accumulate wealth in owner occupied housing.

But while these changes in policy weaken the incentive to store savings in housing, they could have a positive offsetting impact. This is because house price pressures will ease, thereby helping to improve access to home ownership, and stabilize or even reverse the downward trend in home ownership rates among generations X and Y. However, the decline in home ownership is not restricted to the under 35s; the home ownership rate has also declined among those approaching retirement (45-54 and 55-64 years), which suggests that in an era of increasingly precarious employment and rising indebtedness, some owners are failing to cling on as home owners (Wood et al. 2013). Indeed, Yates and Bradbury (2010) project falls in the home ownership rate for the over-55s into the future unless generations X and Y make unusually late entries into home ownership.

Table 2: Home ownership rate (as measured on a person basis), by age band, 1982-2011, per cent

Year	25–34 yrs	35–44 yrs	45–54 yrs	55–64 yrs	65+ yrs	25+ yrs
1982	55.5	75.4	78.3	81.9	74.4	71.3
1990	52.6	76.4	80.2	82.0	79.1	72.0
1996	43.3	70.6	80.7	81.1	80.0	69.0
2000	45.1	69.7	79.2	83.2	82.3	70.1
2002	46.0	69.4	79.9	82.4	81.2	70.3
2007	38.5	63.8	74.6	81.8	82.1	67.3
2009	37.7	62.1	74.5	80.9	81.8	66.4
2011	34.0	60.0	72.4	78.7	81.0	64.3
% point change 1982 to 2011	-21.5	-15.4	-5.9	-3.2	6.6	-7.0

Source: Survey of income and housing from the ABS. Reproduced from Wood et al. (2015).

Falling rates of home ownership are one of at least two major threats to housing asset based welfare policies. The other is sharp falls in house prices. The housing wealth of older Australians is of course vulnerable to downturns in housing market conditions. We cannot be sure that the favourable economic circumstances that have benefited baby boomers' wealth accumulation years will be repeated during the wealth accumulation years of subsequent generations (Olsberg and Winters 2005; Forrest and Izuvara 2009). If we witness the sharp declines in house prices that many countries suffered during the GFC, housing equity will prove to be an unreliable asset base to draw on in order to meet retirement needs. It is curious that moves toward an asset based welfare approach have not been accompanied by the introduction of financial instruments that allow ageing owners to hedge these price risks (Shiller, 2003).

Housing asset based policies may also introduce new inequities into society. Older renters, and owners unfortunate enough to live in areas where the capital values of their homes are weak, could be disadvantaged within a housing asset based welfare system. Single older women have relatively low levels of super, and their assets are more concentrated in the family home than other groups. They are therefore more exposed to the investment risks associated with asset based welfare. While asset based welfare will in principle help to

better target income support programmes and government services on the most disadvantaged, their actual implementation could primarily serve budget saving aims and expose those affected to new risks and uncertainties that they cannot hedge. If so those groups with few if any assets, or wealth concentrated in the housing asset class, will fall further behind. If budget savings are the main motivation, it might be more efficient and equitable to reform housing tax concessions. These concessions are largely received by higher-income older home owners (Yates, 2009). Curbing these concessions would prove to be a more equitable way of achieving budget savings while also improving the efficient functioning and resilience of housing markets.

References

- Australian Council of Social Service (ACOSS) (2015), *Tax Talks 4: Three Foundations for a Secure Retirement*, Submission to the Australian Government's retirement incomes review, Australian Council of Social Service, Sydney.
- Australian Government (2015), *2015 Intergenerational Report: Australia in 2055*, Available at: http://www.treasury.gov.au/~media/Treasury/Publications%20and%20Media/Publications/2015/2015%20Intergenerational%20Report/Downloads/PDF/2015_IGR.ashx
- Castles, F. (1998), The really big trade-off: Home ownership and the welfare state in the new world and the old, *Acta Politica*, 33(1), 5-19.
- Colic-Peisker, V., Ong, R. and Wood, G. (2015), Asset poverty, precarious housing and ontological security in older age: an Australian case study, *International Journal of Housing Policy*, 15(2), 167-186.
- Cowan, S. and Taylor, M. (2015), *The Age Old Problem of Old Age: Fixing the Pension*, Research Report, April, Centre for Independent Studies.
- Department of Social Services (DSS) (2000), *4.6.5.90 Assessing Home Equity Conversion Loans*, Available: <http://guides.dss.gov.au/guide-social-security-law/4/6/5/90> (Accessed 21/03/2016).
- Department of Social Services (DSS) (2013), *4.6.3.80 Exempting the Principal Home – Sale Proceeds (from 01/07/2007)*, Available: <http://guides.dss.gov.au/guide-social-security-law/4/6/3/80> (Accessed 21/03/2016).
- Department of Social Services (DSS) (2014), *4.4.2 Deeming of Financial Investments*, Available: <http://guides.dss.gov.au/guide-social-security-law/4/4/2> (Accessed 21/03/2016).
- Department of Social Services (DSS) (2015), *Income and Assets Assessment for Aged Care Home Costs*, Available: <http://www.myagedcare.gov.au/aged-care-homes-costs-explained/income-and-assets-assessment-aged-care-home-costs> (Accessed 21/03/2016).
- Department of Social Services (DSS) (2016), *Aged Care Means Test Assessments*, Available: <https://www.humanservices.gov.au/customer/services/aged-care-means-test-assessments> (Accessed 21/03/2016).
- Dockery, A.M., Duncan, A., Nguyen, H. and Ong, R. (2015), *Securing Our Future: Meeting the Challenges of WA's Ageing Population*, Bankwest Curtin Economics Centre, Focus on Western Australia series, Issue #6, November.
- Federal Housing Administration (2010), *Consumer Fact Sheet for Home Equity Conversion Mortgages (HECM)*, 1 November, Available at: <http://portal.hud.gov/hudportal/documents/huddoc?id=DOC13006.pdf> (Accessed 19/12/2014).

- Fisher, A. 1912, *Invalid and Old Age Pensions Bill, Second Reading*, 19 December, no.50, House of Representatives Official Hansard, Commonwealth of Australia.
- Forrest, R. and Izuhara, M. (2009), Exploring the demographic location of housing wealth in East Asia, *Journal of Asian Public Policy*, 2(2), 209-221.
- Haffner, M., Ong, R. and Wood, G. (2015), Mortgage equity withdrawal and institutional settings: An exploratory analysis of six countries, *International Journal of Housing Policy*, 15(3), 235-259.
- Henry, K., Harmer, J., Piggott, J., Ridout, H., Smith, G. (2009), *Australia's Future Tax System: Report to the Treasurer*, Commonwealth of Australia, Canberra.
- Judd, B., Liu, E., Easthope, H., Davy, L. and Bridge, C. (2014), *Downsizing Amongst Older Australians*, Final Report No. 214, Australian Housing and Urban Research Institute, Melbourne.
- Kelly, J-F., Hunter, J., Harrison, C., Donegan, P. (2013), *Renovating Housing Policy*, Grattan Institute, Melbourne.
- Kemeny, J. (1980), Home ownership and privatisation, *International Journal of Urban and Regional Research*, 4(3), 372-388.
- National Commission of Audit (2014), *Towards Responsible Government*, February, Commonwealth of Australia, Canberra.
- Olsberg, D. and Winters, M. (2005), *Ageing in Place: Intergenerational and Intrafamilial Housing Transfers and Shifts in Later Life*, Final Report No. 88, Australian Housing and Urban Research Institute, Melbourne.
- Ong, R., Haffner, M., Wood, G., Jefferson, T. and Austen, S. (2013a), *Assets, Debt and the Drawdown of Housing Equity by an Ageing Population*, Positioning Paper No. 153, Australian Housing and Urban Research Institute, Melbourne.
- Ong, R., Jefferson, T., Wood, G., Haffner, M. and Austen, S. (2013b), *Housing Equity Withdrawal: Uses, Risks, and Barriers to Alternative Mechanisms in Later Life*, Final Report No. 217, Australian Housing and Urban Research Institute, Melbourne.
- Ong, R., Wood, G. and Colic-Peisker, V. (2014, published online), Housing older Australians: Loss of homeownership and pathways into housing assistance, *Urban Studies*, DOI: 10.1177/0042098014550955.
- Productivity Commission (2011), *Caring for older Australians*, Report No. 53, Final Inquiry Report, Canberra.
- Productivity Commission (2013), *An Ageing Australia: Preparing for the Future*, Commission Research Paper, Canberra.
- Productivity Commission (2015), *Housing Decisions of Older Australians*, Commission Research Paper, Canberra.
- Shiller, R. J. (2003), *The New Financial Order: Risk in the 20th Century*, Princeton University Press, New Jersey.
- Wood, G. and Ong, R. (2012), *Sustaining Home Ownership in the 21st Century: Emerging Policy Concerns*, Final Report No. 187, Australian Housing and Urban Research Institute, Melbourne.
- Wood, G., Colic-Peisker, V., Berry, M. and Ong, R. (2010), *Asset-Poverty and Older Australians' Transitions onto Housing Assistance Programs*, Final Report No. 156, Australian Housing and Urban Research Institute, Melbourne.

- Wood, G., Ong, R. and Cigdem, M. (2015), *Factors Shaping the Dynamics of Housing Affordability in Australia 2001-11*, Final Report No. 244, Australian Housing and Urban Research Institute, Melbourne.
- Wood, G., Smith, S., Ong, R. and Cigdem, M. (2013), *The Edges of Home Ownership*, Final Report No. 216, Australian Housing and Urban Research Institute, Melbourne.
- Wood, G., Stewart, M. and Ong, R. (2010), *Housing Taxation and Transfers*, Final Report, Research Study for the Review of Australia's Future Tax System, Available: [http://www.taxreview.treasury.gov.au/content/html/commissioned_work/downloads/Wood Stewart and Ong.pdf](http://www.taxreview.treasury.gov.au/content/html/commissioned_work/downloads/Wood%20Stewart%20and%20Ong.pdf)
- Yates, J. (2009), *Tax Expenditures and Housing*, Brotherhood of St Laurence and Australian Housing and Urban Research Institute, Melbourne.
- Yates, J. and Bradbury, B. (2010), Home ownership as a (crumbling) fourth pillar of social insurance in Australia, *Journal of Housing and the Built Environment*, 25, 193-211.