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The Age Old Problem of Old Age: Fixing the Pension

Simon Cowan & Matthew Taylor

National Library of Australia Cataloguing-in-Publication Data:

The Age Old Problem of Old Age: Fixing the Pension

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ACKNOWLEDGEMENT

The authors would like to acknowledge the assistance of all the staff at The Centre for Independent Studies. Comments and suggestions from John Stone, Dr Peter Boxall AO, Karla Pincott, Robert Carling, Dr Jennifer Buckingham and Ben Phillips on this report are gratefully acknowledged.

However, any errors or omissions remain the authors' responsibility.

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 authors and should not be attributed to either DSS or the Melbourne Institute.



Executive Summary

At \$42 billion this year, the Age Pension is the largest single payment made by the federal government, exceeded only by combined grants to state governments. Annual expenditure is predicted to rise to nearly \$50 billion by 2017–18. The cost of assistance to the aged has risen by more than 50% in the decade to 2013–14, outstripping real GDP growth, while the cost of the Age Pension alone has increased by 35% in real terms between 2007–08 and 2014–15. In part the growth in pension expenditure has been driven by the fact that most people of retirement age (80%) receive some form of pension.

The Australian Treasury's Intergenerational Reports raise real questions about the affordability and sustainability of the nation's retirement incomes system as the population ages. The 2015 Intergenerational Report predicts age-related pensions would increase from 2.9% of GDP in 2014–15 to 3.6% in 2054–55. Other predictions suggest that growth in Age Pension expenditure could be even higher.

The maturation of the superannuation system will not substantially reduce these fiscal pressures.

There are other problems with the pension beyond looming fiscal pressures. The exemption of the family home from the pension assets means test creates significant inequities between homeowners and non-homeowners.

Homeowners tend to have more non-housing assets than non-homeowners. Hence, homeowners have substantially higher net worth, on average, than those who don't own their homes. They therefore have a much greater ability to support themselves. Yet homeowner

pension entitlements are often similar to those with few assets and no other income. Homeowners also face lower housing costs and other advantages over those with no housing assets.

In practice, the emotional connection to the family home, together with the perverse incentives created by the pension system, means the vast majority of pensioners do not use their home to support their retirement.

The solution to the underutilisation of housing lies in acknowledging and supporting the emotional connection to the home, while removing the distortions created by the family home exemption from the assets test and encouraging pensioners to access the equity in their homes over time.

Addressing this underutilisation would both substantially improve pension living standards—increasing income by thousands of dollars each year—and cut the government's pension bill in half.

A three-point strategy is needed. First, the family home should be included in the pension assets means test and the homeowner/non-homeowner distinction in that means test should be abolished.

Second, the government should support pensioners' accessing reverse mortgage products by legislating for a default reverse mortgage product. This product, provided by banks and superannuation funds but guaranteed or insured by government, would provide a regular annuity payment at a low interest rate up to a set equity limit (the greater of 80% loan to valuation ratio or \$100,000 inflated at CPI). It would also ensure pensioners would never be forced to sell their home.

Third, the government should deem income from the default reverse mortgage for the purposes of the pension income test in the same way income from financial assets are treated. This would remove the distorting treatment of housing assets, provide a safeguard for pensioners and ensure the focus of the pension remained on raising living standards.

These reforms should be coupled with other reforms such as increasing the rate of rent assistance for non-homeowning pensioners, increasing the base rate of the pension for singles and couples in line with modest standards advocated by the Association of Superannuation Funds of Australia, and tightening the income means test taper from \$0.50 in the dollar to \$0.60 in the dollar.

This package of reforms would generate significant benefits to both pensioners and the wider community. Our modelling indicates:

- Nearly 98% of pensioners would benefit, with the average benefit exceeding \$5,900 a year; and
- Only 2% of pensioners would be worse off with the average loss less than \$875 a year

Importantly, by moving those with the means to support themselves off the pension the government can increase

the base rate of the pension, providing benefits to those who are completely dependent on the pension.

Tangible benefits would accrue even if housing prices did not rise as fast as predicted, or if interest rates were higher, or if the equity limit were lowered.

The increase in pensioner income is so significant many pensioners would move off the full rate of the pension. More than 70% of single and couple pensioners would move off the full rate and onto the part rate, while more than 24% of single part-rate pensioners, and 32% of couple part-rate pensioners would move off the pension entirely.

In addition to this substantial increase in pensioner income, there would be a very large reduction in government pension spending, with annual expenditure under our simulation falling from \$42.2 billion to \$27.7 billion.

Reports that Australians do not save enough for their retirement typically ignore the impact the family home could have on lifting retirement incomes. Unlocking the \$625 billion of home equity controlled by age pensioners has the potential to be the solution to the rising cost of the Age Pension as well as reducing poverty among pensioners.



Introduction

The population of every major western nation is ageing rapidly. Every one of those countries is facing similar questions about the affordability of their retirement system and its impact on their fiscal sustainability. In Australia, continual warnings about the coming fiscal shock have been delivered for many years—through the intergenerational reports and other publications¹.

In response to this looming crisis and the increasing political influence of retirees, the Australian retirement system has undergone constant reform for the past two decades. Starting with the introduction of compulsory superannuation in the early nineties, government has also:

- legislated to increase the retirement age and align the male and female retirement ages
- changed the benchmarking and indexation arrangements for the pension
- increased the superannuation guarantee rate on several occasions
- introduced and abolished a low income superannuation bonus
- streamlined and simplified the regulation of superannuation
- tweaked the default superannuation fund options

Despite this constant tinkering, the central fiscal challenges of an ageing population remain largely unsolved. Real incomes for pensioners have increased,

but many people experience a much lower standard of living in retirement and many pensioners make do with lower incomes than they could access given their net worth. Many of these reforms have also contributed to the continual growth in the size of government.

Since the introduction of compulsory superannuation, the Australian retirement system has been based on three pillars: an income support payment for those who cannot support themselves (the Age Pension), a system of compulsory private retirement savings (superannuation), and private savings and assets the most significant of which is the family home.

In addition to this three pillar system, governments also provide services and infrastructure for the aged, primarily in the form of subsidised health care and aged care services.

As each pillar is funded and taxed in different ways, and their relative importance varies across the lifecycle, the interaction between them has important ramifications for the living standards of retirees, the cost of ageing to the community, and the incentives created by the system to ensure people adequately provide for themselves in retirement.

While an individual might have any combination of housing assets, financial assets, pension and superannuation, for the system overall to function as intended it is also important that the reliance on these pillars is balanced. Putting too much 'weight' on any one pillar of the retirement system could cause it to fall over.

This report is the first in a series looking at how the weight of the Australian retirement system is balanced on those pillars. It focuses on the family home and the pension. The second report will examine the superannuation system and integrate those reform proposals with the ones that follow in this report.

There are several reasons for this partition. First, superannuation is the most ephemeral of the three pillars. Typically superannuation balances peak on retirement and then rapidly decline, so much so that by age 75–79, average superannuation balances have fallen by almost 75% from their peak around age 60². Many retirees have little or no superannuation—either because they have used it up early in retirement (or in early retirement) or because they had small balances to begin with. By contrast, home ownership rates actually *rise* after the age of retirement. While maturity of the superannuation system over time may change this, for the majority of pensioners their retirement balances on just two pillars.

Second, analysis of the interaction between the family home and the pension is underdeveloped by comparison to the superannuation system. In addition to the sheer number of reviews of the superannuation system, superannuation is integrated in many areas of the pension system. For example, one current reform of pension payments involves deeming superannuation assets in the same way as other assets. By contrast, the family home is excluded from the pension assets means test and is also generally not used to boost retirement living standards.

In particular, the second report will look at superannuation tax concessions and quash the myth that reform of those concessions is all that is necessary to fund the fiscal impact of the ageing population. All three pillars must be based on firm ground for the system to survive the coming storm.

The Pension

The Age Pension is an income support payment for people over retirement age who do not have the means to fully support themselves. The pension is paid by the federal government to four in every five people of retirement age³.

What is the pension for?

The first step in our analysis of the pension is to examine what the pension is designed to do. Ultimately, of course, all income support payments are designed to boost living standards. However, this broad aim can be broken down further into three potential objectives for the pension system. It could be designed to:

1. act as a safety net for those with little or no private retirement savings—meaning the payment would be tightly means tested and focus on alleviating poverty for those most in need;
2. supplement private retirement savings for all or most retirees—meaning the payment would be means tested but the means test would be softer, making the payment quasi-universal;
3. replace private retirement savings or exist independent of them—this would be a universal payment system boosting living standards for all.

While none of those options are cheap, they are sorted in ascending order of overall cost, with a tightly targeted system the most affordable and a universal scheme far and away the most expensive.

There is a widely-held view that, notwithstanding the stated purpose of the pension system, the pension is 'a right' based on contributions through the taxation system⁴. However the pension is not a universal entitlement in Australia, as it is in other countries, though there are some who have argued for a significant revamp of the existing system to create a universal pension scheme⁵.

This belief in the pension being a 'right' is mistaken for several reasons. First, pensions are funded from current revenue paid by current taxpayers and not through contributions to a lifetime social security fund (as is the case in other countries), or compulsory superannuation (where retirees have made direct contributions)⁶.

Second, the idea of a universal pension entitlement goes against one of the fundamental principles of the Australian welfare system: the idea that help should be prioritised for those who cannot help themselves. There is no reason why this principle should not apply to people of retirement age with means. This was the rationale the Harmer Review noted in rejecting the argument for universal pensions⁷.

Last, and perhaps more importantly, this entitlement mentality ignores the already substantial benefits

received throughout the average person's life. Across their working life, the average person contributes at best only slightly more in taxes than they receive in benefits (through cash benefits such as family tax benefits, unemployment benefits or paid parental leave, or in kind benefits such as public health care, roads, public transport facilities, law and order and education).

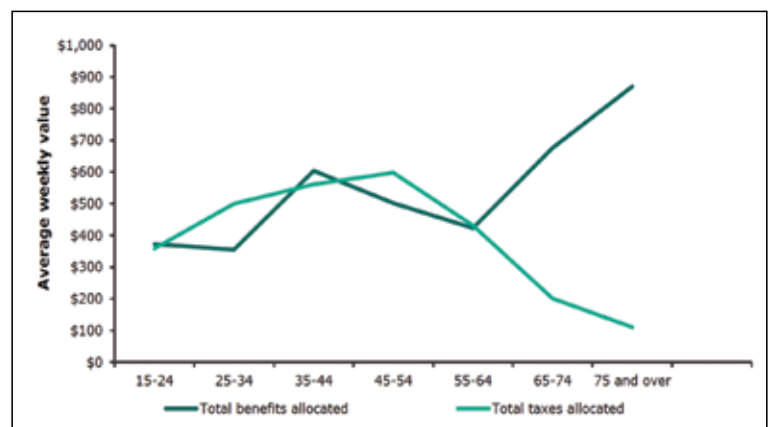
Harmer Review on the role of the pension

The 2009 Pension Review Taskforce headed by Dr Jeff Harmer reviewed the pension system and produced a series recommendations to reform the pension. The Harmer Review assessed the purpose of the pension to be:

"... primarily driven by the objective of providing an adequate level of income to those unable or not required to support themselves."

Upon retirement they substantially reduce their contribution and receive a massive increase in benefits (both in terms of specific income support from the pension and increased in kind benefits through rising health costs). In fact across their lifetime, far from having a right to receive their taxes back in retirement, many people receive far more than they contribute already, as seen below.

Figure 1: Average lifetime taxes paid and benefits received



Source: ABS, Government Benefits, Taxes, and Household Income, Australia 2009–10, Cat. No. 6537⁸

In addition, even leaving aside all the equity arguments against providing pensions for millionaires, there is simply no way the government could afford such a massive entitlement scheme given the current and future fiscal situation.

That said, despite the theory the pension is not universal and is designed to be a safety net targeted at alleviating poverty, in practice it is quasi-universal

scheme that boosts retirement incomes for the 80% of older Australians who are eligible for it⁹. This proportion is expected to remain constant for the next 40 years¹⁰.

The result of this quasi-universality is that in 2014–15 spending on the Age Pension was budgeted to exceed \$42 billion¹¹. It is predicted to rise to nearly \$50 billion by 2017–18¹². It is the largest single payment for the Commonwealth Government (exceeded only by combined grants to State governments).

In fact it is more than twice as large as any other payment (the second largest payment is for Medicare—a significant portion of which could also be considered as falling under the broad heading of spending on the aged)¹³.

Payment rates for the Pension

The maximum pension payment is contingent upon whether the recipient receives the pension as a single or as part of a couple. The single rate of the pension is paid to those who are single and to those who are not living with their partner due to illness. The couple rate is paid to couple households. If, however, only one member of a couple is eligible for the pension they receive half of the couple rate.

Table 1 presents the (maximum) single and couple rate of the pension. These amounts include the maximum amount of the pension supplement and the energy supplement payable to single and couple pensioners*.

Table 1: Maximum pension rates for singles and couples

	Individual	Couples (combined)
Per Fortnight	\$860.20	\$1,296.80
Annual	\$22,365.20	\$33,716.80

Source: Department of Human Services¹⁴

Means testing

As with all income support payments, the Age Pension is subject to means testing. However the pension is a more generous income support payment than the Disability Support Pension, Newstart Allowance and the Parenting Payment, and has a softer means test. In addition, opposition to tightening the pension means test is much higher than any of the three other payments¹⁵.

The pension means test has two limbs, considering both assets and income. The maximum payment is reduced at a particular rate beyond a certain level of income or assets. Pensioners receive the lesser of their payment rates under the two tests. This rate of reduction in the pension is referred to as a taper rate.

Naturally there are different income test thresholds for those who receive the pension as a single or a couple. The asset test thresholds are also different for singles and couples and depend upon whether these pensioners own their home.

Table 2 illustrates the income and assets test thresholds whereby the maximum rate of the pension (full pension) is reduced, and where eligibility for a part-rate pension is lost altogether.

Table 2: Means testing rates for full and part-rate pensions

	Full pension		Part-rate pension	
	Homeowner	Non homeowner	Homeowner	Non homeowner
Single pensioners				
Income test (annual)	\$4,160	\$4,160	\$48,890.40	\$48,890.40
Assets test	\$202,000	\$348,500	\$775,500	\$922,000
Couple pensioners				
Income test (annual)	\$7,384	\$7,384	\$74,817.60	\$74,817.60
Assets test	\$286,500	\$433,000	\$1,151,500	\$1,298,000

Source: Department of Human Services website¹⁶

The income test reduces the full-rate of the pension by 50 cents in the dollar for every dollar earned over the threshold up to the income test limit. The taper rate for the assets test is \$1.50 per fortnight for each \$1,000 of assets above the threshold.

Deeming and the assets test

There is an additional interaction between the assets test and the income test that complicates eligibility – that is deeming. Deeming is one way income generated by pensioners' assets is treated.

Certain types of the assets assessed under the assets test—primarily financial assets—are assumed to earn a rate of return regardless of the actual returns received by pensioners. It is this 'deemed' income that is included in the income test rather than the income the pensioner in fact received from the investment. This deemed income is then added to other forms of assessable income—what is termed ordinary income, such as earnings from employment and income from investment properties.

* These maximum rates include the maximum pension supplement of \$63.90 a fortnight for singles and \$96.40 for couples. They also include the energy supplement of \$14.10 for singles and \$21.20 for couples.

Under current deeming arrangements for single pensioners, the first \$48,000 of assets subject to deeming are assumed to earn a return of 1.75%, while assets beyond this are deemed to earn 3.25%. For couples, the assets threshold at which the rate increases to 3.25% is \$79,600¹⁷. In effect, deeming means that the amount of deemed assets required to remove a pensioner from the full pension is somewhat lower than that implied by the assets thresholds shown in Table 2.

Figure 2 presents the operation of the assets test for single pensioners. The dotted line illustrates how the assets test would operate for homeowner, and non-homeowner, single pensioners in the absence of deeming.

In effect, there are two impacts on pension eligibility for deemable assets; the income test kicks in first (but at a lower taper rate) and then the assets test with its faster taper rate takes over. The solid-line schedule illustrates how this works in practice where a single pensioner has no other assessable assets.

The assets test on the single rate of the pension means that the full rate begins to decline by \$1.5 per fortnight (\$39 per year) for every \$1,000 of assessable assets over \$348,500 for non-homeowners and \$202,000 for homeowners.

However, the deemed income on deemable assets of \$150,154 is \$4,160, which is enough to push single pensioners over the income test threshold and onto a part pension.

From here the income test continues to reduce the Age Pension payment at an annual rate of \$17.5 for each \$1,000 of assets until the assets test takes over at \$490,200 for non-homeowners, and \$239,100 for homeowners. Assets beyond these levels reduce the Age Pension at an annual rate of \$39 per \$1,000 of assets.

The pension system is full of complex interactions between different types of assets, different types of income and indeed different types of pensioners. One way to make it easier to understand is to look at how the pension works for some hypothetical individuals.

Cameo analysis: Mavis

Mavis is single and aged 80. She did not have any superannuation when she retired and her only assets are a 10-year-old car and \$10,000 in a savings account on which she receives 5% interest a year.

Mavis does not own any property and rents a small apartment near her daughter in Sydney's west.

Figure 2: Impact of deeming on Asset test (Single)

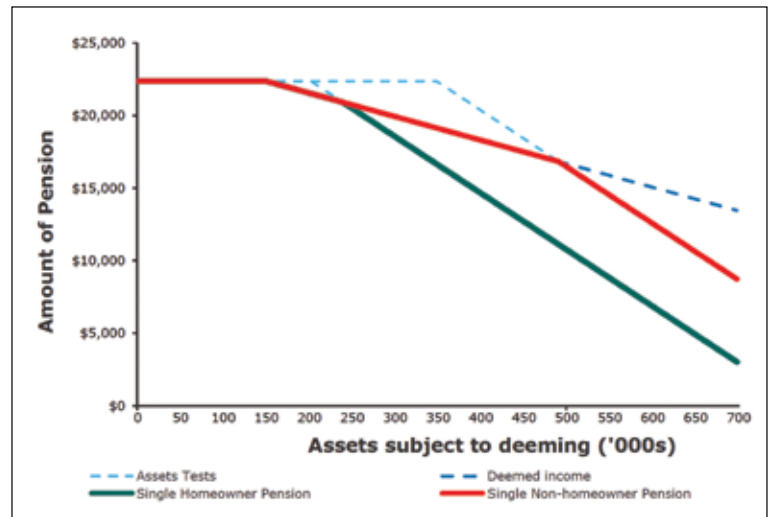
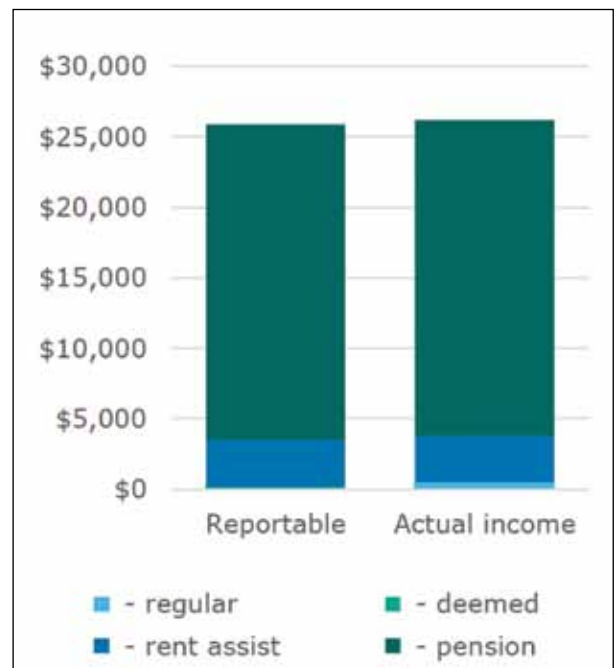


Figure 3: Mavis's income



Mavis receives the full single rate of the Age Pension, together with the full rate of the pension supplements (\$22,365.20 a year) and she also receives rent assistance of just over \$3,300 a year. However as her apartment costs \$300 a week to rent, notwithstanding rent assistance, housing costs eat up a substantial amount of Mavis' income.

Due to deeming, Mavis reports only \$175 a year in income on her \$10,000 savings account but receives \$500 a year in actual income.

Mavis has a total annual income of just over \$26,000.

Figure 4 presents similar information on how the 'effective' assets test works for pensioner couples. For couples, deemable assets of \$263,939 are deemed to earn \$7,384 pushing couple pensioners over the income test threshold and onto a part pension. For couples who own their home, the assets test begins to bite at \$303,200 of (combined) assets and at \$553,800 for non-homeowner couples.

The impact of deeming on pension payments is more complicated where pensioners have other sources of income and assets which are assessable under the assets test but not deemed.

Cameo analysis: Nancy and Gerald

Married couple Nancy and Gerald are both in their 70s and have both retired.

When they retired they had accumulated \$600,000 in superannuation, however over the course of the last decade much of this money has been spent and they have just \$150,000 in shares left of this nest egg.

In addition to their shares, Nancy and Gerald have accumulated an art collection worth \$100,000.

They also own their own home in Boonah in South East Queensland, which is worth \$350,000 and is exempt from the pension means test.

Nancy's art collection is not an income earning asset, so while it is assessable under the assets test, it is not subject to deeming. Only the share portfolio is subject to deeming and is deemed to earn \$3,681 per year (much less than its 6% actual return of \$9,000).

Since Nancy and Gerald do not earn above the \$7,384pa income test cut-off or have assessable assets of more than \$286,500 they receive the full rate of the pension.

Cameo analysis: Leonard

Leonard is divorced and in his late 60s. He still works part-time at the local greyhound track and earns \$200 a week, of which \$250 a fortnight is exempt from the pension means test under the Work bonus.

He owns his own home in Perth worth \$700,000 (exempt from the pension assets test) and also has a holiday apartment in Fremantle worth \$200,000 that he rents out over summer. He receives \$5,000 a year in rental income.

Between the effect of the work bonus and the initial threshold for the impact of the income means test, Leonard's income of \$15,400 is only assessed as \$8,900, and so Leonard is still entitled to a pension of just under \$20,000 a year. His annual income, including the pension, is more than \$35,000.

He has \$900,000 in assets compared to Mavis with just \$10,000 in savings, he also earns \$15,000 a year where she earns nothing. Yet his pension payment is only \$2,370 a year less than hers (excluding rent assistance).

Figure 4: Impact of deeming on Asset test (Couple)

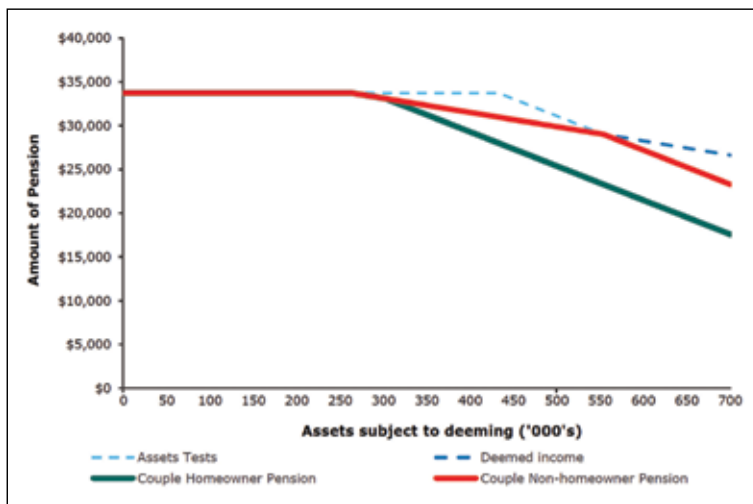


Figure 5: Nancy and Gerald's income

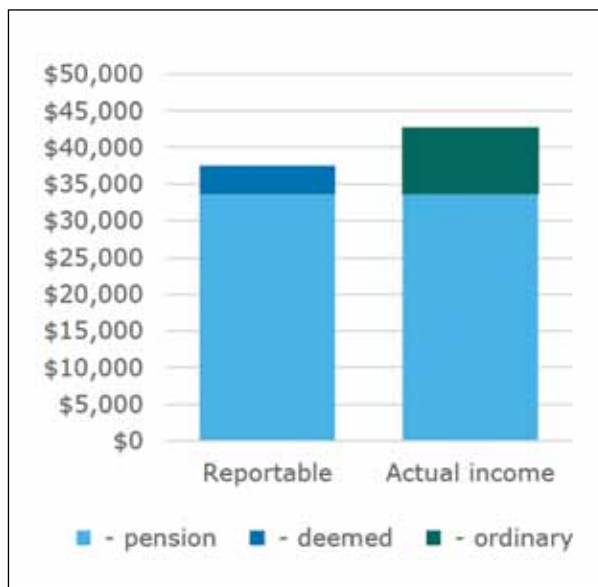


Figure 6: Leonard's income



Cameo analysis: Seema

Seema is a single widow who lives in Melbourne. She dropped out of the full-time workforce in her twenties when she had her first child, and took on only part-time work after that.

What little superannuation she had was long since used up, and after meeting the costs of her deceased husband's long illness, her only cash assets are a bank account containing \$5,000.

Seema's lifestyle and income are very similar to Mavis's. Her means however are not. Like Mavis, Seema has no income other than the meagre interest on her bank account and the Age Pension (\$22,365.20 a year).

However, unlike Mavis, Seema owns her own home. Seema and her husband had purchased a house in Carlton, which has no mortgage and is now worth \$850,000.

Who receives the pension?

As noted above, a significant majority of people over retirement age receive a pension. In fact approximately 1 of every 10 people in Australia is on the Age Pension¹⁸. Between 1993 and 2013, the number of people receiving the pension grew by more than 55%, substantially outstripping population growth¹⁹.

In 2013, women made up more than 55% of Age Pension recipients, though the percentage of pensioners who are women has been steadily falling since 1993 (when nearly 70% of pensioners were women)²¹.

Pensioners who receive the part rate are more likely to have that reduced pension payment as a result of the income test and not the assets test, primarily because the income test kicks in earlier and because the typical pensioner holds mostly exempt assets like the family home²³.

However, among those who are assets tested off the full rate of the pension, nearly all are homeowners (97%) and three quarters of that group are couples²⁴.

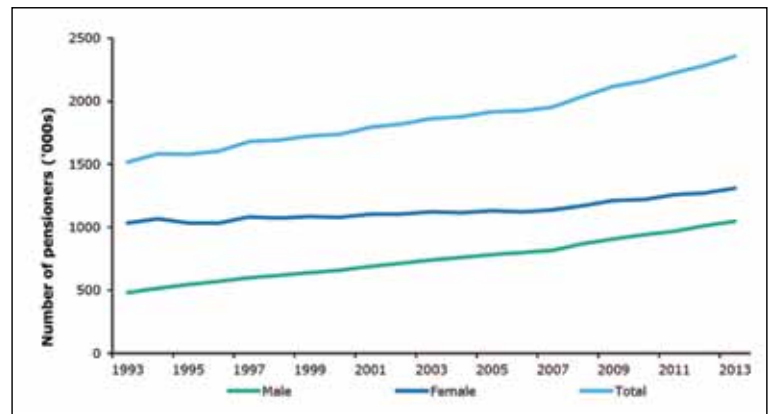
To an extent, this high level of homeownership is unremarkable. After all, people with substantial assets would be expected to own their own home—but there are also incentives in the system that encourage pensioners to store their wealth in housing equity. Chief among these is the exemption of the family home from the assets test but also the lower housing costs associated with homeownership.

With such a large cohort, it is highly unrealistic to think of pensioners as one mostly homogenous group. Beyond the homeowner/non-homeowner and single/couple distinctions noted in the current means test, there are significant differences in asset levels, income levels and standards of living among pensioners within those categories.

Figure 7: Seema's income



Figure 8: Number of pensioners—male and female



Source: Department of Social Services, Income support customers: a statistical overview 2013²⁰

Figure 9: Pension breakdown – full-rate and part-rate



Source: Department of Social Services, Income support customers: a statistical overview 2013²²

It should also be noted that there are pensioners living in very different parts of the country, facing significantly different cost of living pressures as well as other advantages and disadvantages. Despite this, these disparate groups are treated largely the same under current policy settings. While for reasons of administrative costs and complexity this is understandable to some extent, too often this heterogeneity is forgotten in debate.

It is true there is a significant cohort of pensioners who are vulnerable and in need of substantial support, especially those with few assets who have a limited capacity to materially improve their living standards on their own.

Yet some over-65s are able to continue working and most have substantial assets to support their lifestyles in retirement. It does a disservice to the community, and especially those retirees who have very limited means, to conflate these groups when talking about pension policy.

If the pension does not provide sufficient income for an agreed minimum living standard to those who have no other means to support themselves, it fundamentally fails as a policy. The key question is: what constitutes that agreed baseline standing of living?



Assessing the adequacy of the pension

In analysing government pension policy, the obvious question to ask is whether the payment is adequate. It is impossible to answer this question without first considering what adequacy means. Are we talking about adequacy for those who have no other resources or is it assessed against the needs of a broader group? A \$5,000 a year pension may be generous for someone with \$40,000 in other income but manifestly inadequate for someone dependent on the pension alone.

It should also be noted at the outset that adequacy, though important, is not the only consideration of pension policy. Focusing only on supposed adequacy when considering pension policy can create undesirable incentives in the system, such as disincentives for people to save for old age due to generous pension entitlements, and could also encourage people to try and game the eligibility criteria to gain access to government payments (for example, by gifting large sums of money to relatives and close friends on the understanding that this generosity will be returned).

Another key consideration is what expectations taxpayers have for their funds. While taxpayers doubtless support ensuring pensioners do not live in poverty, it is hard to see how it is justified to spend taxpayers' funds providing support to those who have substantial private income, in some cases well above the poverty line.

Adequacy is not as straightforward as it appears

Even the term 'adequate' is itself vague and loaded with subjective overtones. Do we mean 'adequate to continue enjoying a standard of living similar to that prior to retirement'? If so, do we accept the unequal outcomes that this necessarily entails?

There are two broad reference points we could use to assess the sufficiency of the pension. The first is by reference to an absolute level of expenditure that

represents a desired standard of living. The second is by reference to the standard of living of others in the community (which is typically expressed as a percentage of average or median wages).

The distinction between these two standards is important from a policy perspective, as the different methods of

Different incomes and different assets means different needs

There several complicating factors that should be considered when assessing whether the pension is sufficient for retired people to achieve a certain standard of living.

As noted above, pensioners are not a homogenous group and determining whether the pension is not enough for one 'group' of pensioners to live on does not mean that it is insufficient for all groups.

Some pensioners continue to receive income from employment (or their spouse does), others have substantial income from their superannuation and most have housing equity they could draw on to supplement their incomes.

For these pensioners, the level of pension considered to be adequate will be different from that of pensioners wholly dependent on government income support.

Determining where the line should appropriately be drawn is complicated enough for those completely dependent on government support; adding in these other factors makes it exceedingly difficult.

Assessing the adequacy of the pension for all potential groups in society is a task beyond the scope of this report. Time and space restrictions make it necessary to consider the position more broadly, while acknowledging that not situation will be perfectly covered.

calculation could produce significant differences in the amount pensioners would receive. The benefit of using an absolute level of expenditure for determining the adequacy of the pension is that it can more closely reflect the actual expenses of pensioners. One of the downsides is that it would require continual updating to ensure the pension still adequately reflects the appropriate living standards for people on the pension. To an extent this can be ameliorated by indexation, for example to the rate of inflation.

Since the pension is currently benchmarked against Male Total Average Weekly Earnings (MTAWE), adequacy is implicitly tied to the relative living standards of an unrepresentative subset of population. If this is the appropriate way to view adequacy, an important consideration is what group should provide the benchmark.

The advantage of using relative measures of adequacy is that they remove the complexity of constructing specific budgets for expenditure calculations, and ensure pensioners do not lag behind community living standards over time. A key disadvantage is that, given the diversity of incomes and living standards across the community, selecting a benchmark percentage is difficult. Moreover setting the benchmark percentage is arbitrary; for example why would 41.76% of MTAWE be adequate but not 38.96%?

Options for assessing living standards

However, while there are two broad methods for evaluating the adequacy of the pension as noted above, there are many specific approaches that could be adopted. Caution should be exercised in using these measures, as the organisations who developed them have their own agendas that would feed through into the assumptions used to calculate them.

Henderson Poverty Line

The University of Melbourne publishes quarterly updates of the poverty benchmark developed by the Henderson Commission of Inquiry into Poverty in 1973. The September 2014 update gives the following poverty lines.

Table 3: Henderson Poverty Lines

Income unit	\$ per week (incl. housing)	\$ per week (excl. housing)
Single	\$412.23	\$245.98
Couple	\$583.92	\$401.15

Source: Melbourne Institute of Applied Economic and Social Research, Poverty Lines Australia September Quarter 2014²⁵

In addition, a comparison is made between the updated poverty line and pensioners receiving the maximum rate of the pension. For both singles and couples, the maximum rate of the pension exceeds the poverty line²⁶.

The ACOSS Poverty Line

In their report, Poverty in Australia 2014, the Australian Council of Social Service (ACOSS) asserts that anyone on less than 50% of median income is living below the poverty line after adjusting for differences in household income²⁷. They also look at a higher standard of 60% of median income. They found 14.8% of people over the age of 64 fell under the 50% median income poverty line, while 35.7% of people fell under the 60% median income poverty line²⁸.

Figure 10: ACOSS Poverty Line calculations

	50% of median income	60% of median income
Lone person	\$400.30	\$480.30
Couple only	\$600.40	\$720.50

Source: ACOSS, Poverty in Australia 2014²⁹

If you assume the maximum rate of the pension should be sufficient for everyone to be above the 50% poverty line, then in today's terms for the pension would need to be more than \$22,000 for singles and \$33,000 for couples—and for it to be above the 60% poverty line, it would need to be more than \$26,000 for singles and nearly \$40,000 for couples.

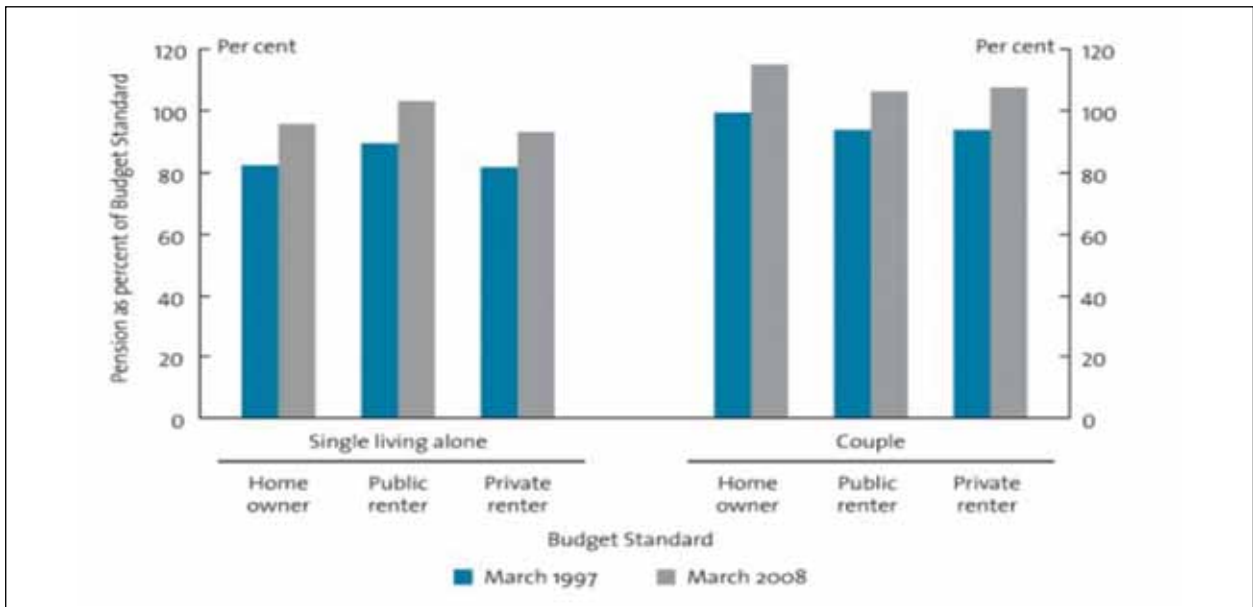
Harmer Review

The 2009 Harmer Review examined the issue of pension adequacy in detail. It found the pension rates paid to couples were adequate but the rate paid to singles was too low³⁰. As a consequence of these conclusions the Rudd government increased the single rate of the pension, as well as introducing the current indexation methods³¹.

The Harmer Review looked at both relative measures and expenditure based measures of adequacy, including updating the UNSW Social Policy Research Centre budget standards developed in the 1990s, and assessing the pension against those standards.

The review found that while the pension rates for singles and couples have both increased since 1997, only the couples rate of the pension was greater than the updated budget standard—the single rate was not.

Figure 11: UNSW Social Policy Research Centre measure



Source: Harmer, Pension Review Background Paper 2008³²

Figure 12: ASFA Retirement Standard

Budgets for various households and living standards (December quarter, 2014)

	Modest lifestyle – single	Modest lifestyle – couple	Comfortable lifestyle – single	Comfortable lifestyle – couple
Housing – ongoing only	\$69.47	\$66.68	\$80.52	\$93.33
Energy	\$41.07	\$54.55	\$41.68	\$56.53
Food	\$77.13	\$159.76	\$110.18	\$198.32
Clothing	\$17.69	\$28.71	\$38.28	\$57.43
Household goods and services	\$26.70	\$36.21	\$75.12	\$88.00
Health	\$40.29	\$77.75	\$79.93	\$141.06
Transport	\$93.92	\$96.58	\$139.96	\$142.62
Leisure	\$74.51	\$111.00	\$225.79	\$309.42
Communications	\$9.32	\$16.32	\$25.62	\$32.60
Total per week	\$450.09	\$647.57	\$817.07	\$1,119.32
Total per year	\$23,469	\$33,766	\$42,604	\$58,364

The figures in each case assume that the retiree(s) own their own home and relate to expenditure by the household. This can be greater than household income after income tax where there is a drawdown on capital over the period of retirement. Single calculations are based on female figures.

Source: The Association of Superannuation Funds of Australian, ASFA Retirement Standard December 2014³⁴

The ASFA Standards

A common adequacy methodology that is used when considering living standards in retirement is the one published by the Association of Superannuation Funds of Australia, which “benchmarks the annual budget needed by Australians to fund either a comfortable or modest standard of living in the post-work years”³³.

It is worth noting that the modest lifestyle still budgets nearly \$19 a week for ‘cinema, plays, sport and day trips’, \$25 a week for ‘lunches and dinners out’ and \$36.97 a week for ‘domestic vacations’ for couples and \$30 a week for lunches and dinners out for single

females³⁵. This is not necessarily an indication that the modest lifestyle budget is overly generous, only that it is not a miserable standard of living.

On the other hand, the comfortable lifestyle includes substantial allowances for overseas vacations and a budget (albeit small) for ongoing home renovations³⁶.

If you include the generosity of the deeming provisions, certain exemptions for portions of income earned from employment, and the possibility of accessing home equity to boost income, an individual or couple could afford to fund a lifestyle well above the comfortable level and still be receiving the pension.

Comparing measures of adequacy

Comparing the various measures of adequacy can provide guidance on two questions. First, is the maximum rate of the pension enough to ensure a minimum living standard for those who have no other income or assets? Second, is the income means test set at a level of income where a person is receiving the pension but should not be a priority for government support?

While the current rate of the single pension is below the adjusted ACOSS 60% threshold and the ASFA modest standard, it compares favourably with the adjusted ACOSS 50% poverty line and the adjusted Henderson poverty line.

Certainly it seems the base level of the single pension is in line with the measures of adequacy surveyed here. This data does not make a strong case for an increase in the full rate of the pension based on the poverty of single pensioners.

This conclusion should not be surprising. In addition to the discretionary increase in the pension under the Rudd government there were also increases in 2000 related to the introduction of the GST, and recently in relation to the carbon tax. As a consequence, the pension has been steadily growing in real terms for decades³⁷.

The current full rate of the couples pension exceeds the adjusted Henderson poverty line and compares favourably with the adjusted ACOSS 50% poverty line. The maximum rate of the pension for couples is even closer to the ASFA modest standard than that of their single counterparts (the full rate of the pension is less than \$1 a week below the modest budget of the ASFA standard).

The couples pension is below the ACOSS 60% threshold, which accounts for the large difference in observed relative poverty in the ACOSS report between the 50% level and the 60% level.

Again, this data would not support the contention that the bulk of pensioners are living in poverty and so require an increase in the base level of the pension. In fact, despite the increase in the rate of the single pension under the Rudd government, this data appears to suggest that couples continue to do slightly better than singles.

The data does show however that income test thresholds are too generous for those with substantial incomes.

For single pensioners, the income level at which the pension cuts out is noticeably above the level of income necessary to sustain a comfortable lifestyle according to the ASFA standards.

This suggests that, at least at the top end of the income distribution, the income test is significantly too generous.

Figure 13: Income benchmark for singles – minimums*

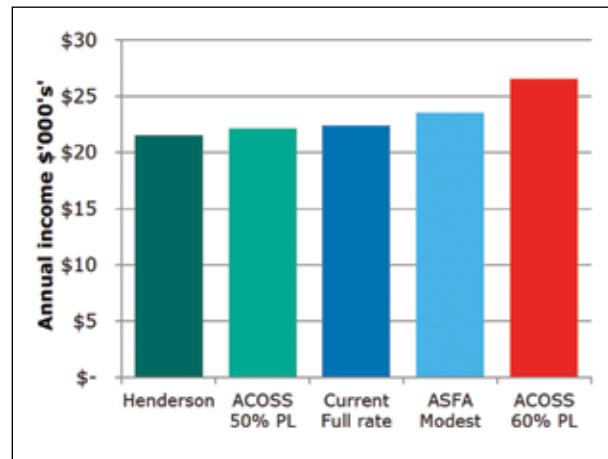


Figure 14: Income benchmark for couples – minimums

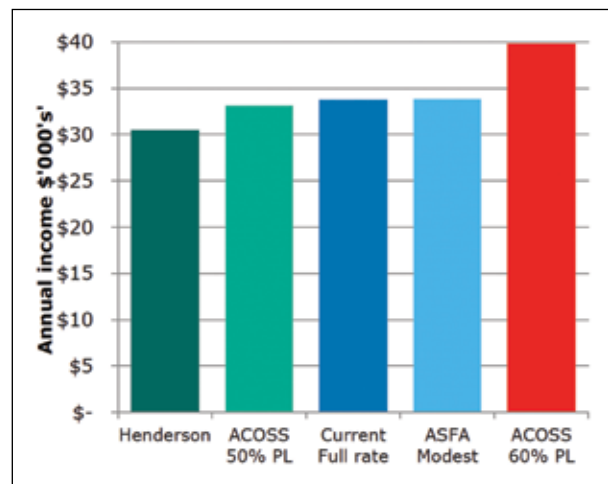
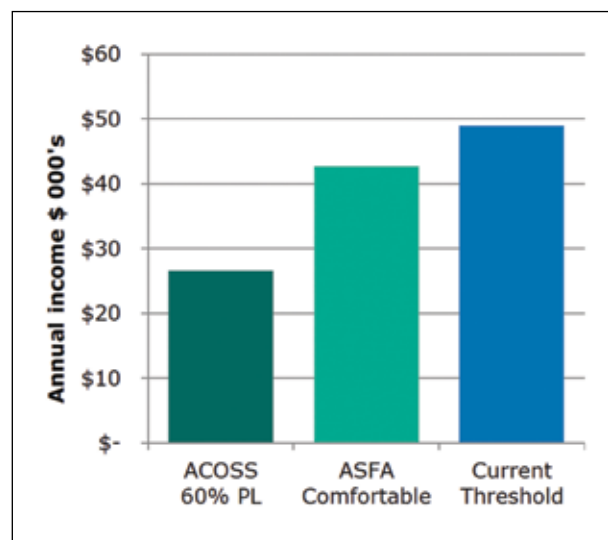


Figure 15: Income means test thresholds – singles



* For Figures 14, 15, 16 and 17 – data calculated prior to December 2014 is inflated using December 2014 CPI data, pension thresholds are current as at 20 March 2015.

Furthermore, if we argue that one of the main purposes of income support payments is to ensure no-one lives in poverty, it is hard to see how providing support to people with incomes at nearly twice the poverty line is justified.

It is worth remembering the current threshold has exemptions for some of the income earned from employment, in addition to generous deeming provisions. Not only that, it doesn't include potential equity drawdown from property that could supplement incomes for homeowners—an avenue for increasing pensioner living standards that is currently very under-utilised.

The upper threshold at which the pension cuts out under the income means test for couples is much higher, even relative to the ASFA comfortable standard, than it is for singles.

If we accept the ASFA comfortable lifestyle is a reasonably high standard of living—especially when compared with other income support recipients—it is hard to see how we justify providing pensions to couples with incomes more than \$10,000 a year above these levels.

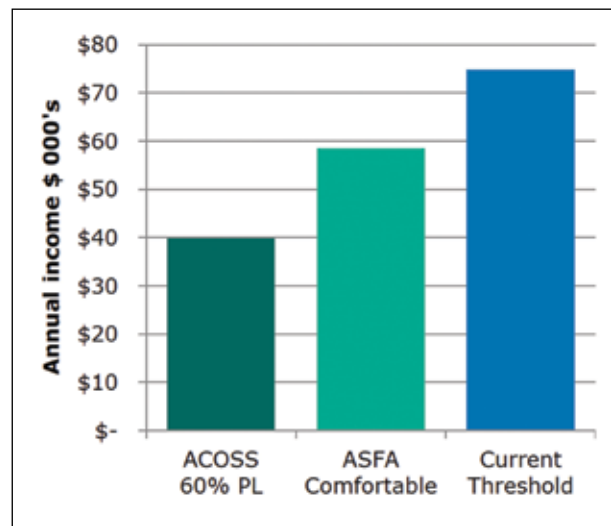
The income test threshold is more than double the Henderson poverty line and the ACOSS 50% poverty line. It is more than twice the full rate of the pension. Indeed, in relative terms the couples income test threshold is more generous when compared with the maximum rate of the pension than the single pension is.

It is hard to see why the threshold needs to be so much higher.

The pension is adequate and too generous to the well-off

The data surveyed above suggests two key conclusions with regard to pension adequacy. First, the evidence refutes the contention that all, or even most, people

Figure 16: Income means test thresholds—couples



receiving the pension live in serious poverty. There is no case for an across-the-board rise in the rate of the pension on the basis of poverty alone.

Second, the evidence suggests the pension income means test is not tightly targeted enough to exclude those with more substantial incomes. Serious consideration should be given to reducing the level at which the pension cuts out altogether, particularly for couples, which will result in an increase in the rate of the taper.

Third, if we are looking to boost the living standards of pensioners we should be looking at reallocating existing pension expenditure from the relatively well-off to those completely dependent on government support. We must also examine methods of raising living standards that do not rely on increases in the pension rate.



The rising cost of the pension

As noted above, the Age Pension is the largest single spending program in the Commonwealth Budget³⁸. It represents 15% of federal government expenditure (excluding intergovernment transfers)³⁹. As a consequence the cost of the pension is a key determinant of the fiscal sustainability of the budget.

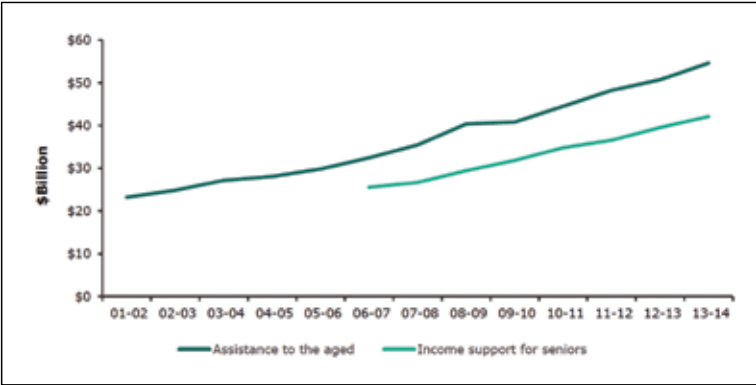
The nation cannot ignore this fiscal aspect when considering the appropriateness of the pension settings. While recipients may desire more generous payments, or to lower the means testing levels, this must be balanced against other spending priorities and the overall level of government spending.

Current costs of assisting the aged

Since 2001–02, the budgetary cost under the heading of assistance to the aged has risen by more than 135% in nominal terms. In real terms it has grown by more than 50% in the decade to 2013–14⁴⁰. It has risen faster than total government spending, and both have outstripped GDP growth. The main element of assistance to the aged is income support for seniors (mostly the Age Pension), which has increased by 65% in nominal terms between 2007–08 and 2014–15 and nearly 35% in real terms over the same time.

Even when adjusted for inflation and increases in the number of pensioners, there has been a significant increase in costs; the real budgetary cost of assistance to the aged increased on a per pensioner basis by nearly 20% between 2003 and 2013 and the real budgetary cost of the Age Pension rose by nearly 10% on a per pensioner basis between 2007 and 2013⁴².

Figure 17: Commonwealth budget expenditure on assistance to the aged (nominal)



Source: Final Budget Outcome 2003–04 to 2013–14⁴¹

Why have pension costs grown?

Several factors can have an impact on the overall cost of the pension to the budget, including real increases in the rate of the pension, changes to eligibility requirements as well as demographic changes. While these factors would tend to increase the costs of the pension, factors such as the increasing maturity of Australia’s superannuation system should result in a reduction in the cost to the budget of assistance to the aged.

The percentage of the population receiving a pension has increased from approximately 9.2% in 2002–03 to 10% in 2012–13, however this alone cannot explain such a substantial increase in pension costs⁴³. There has also been a significant increase in real costs per pensioner.

There are several reasons for this increase in real expenditure. First, pensioners were over-compensated for the introduction of the Carbon Tax and this compensation has not been removed despite the abolition of the tax⁴⁴. This compensation included both

cash advances (via the Clean Energy Advance) and an ongoing supplement to the pension (the Energy Supplement, formerly the Clean Energy Supplement).

Second, there was also a one-off discretionary increase in the pension of \$1,560 under Kevin Rudd in response to the Harmer Review. The 2009–10 budget estimated the cost of this increase to rise from slightly less than \$3.3 billion in 2010–11 to more than \$3.7 billion in 2012–13, nearly \$13 billion across the forward estimates⁴⁵.

Third, pensions are indexed twice yearly to the higher of movements in either the Consumer Price Index (CPI) or the Pensioner and Beneficiary Living Cost Index. However, they are also benchmarked against MTAW⁴⁶. This has led to a substantial real increase in the value of the pension as growth in MTAW has significantly outstripped growth in CPI.

Projected future cost

While the short term trend in pension costs has been inexorably rising, perhaps of greater concern is the expected future costs of pension increases.

Ageing population

When the pension was first introduced, the age of eligibility (65) was 10 years more than the average male life expectancy of 55⁴⁷. A person born in 2015, however, would expect to live past the age of 91, and while the eligibility age for the pension is expected to increase slightly it has not begun to keep pace with increases in life expectancy⁴⁸.

Currently there are approximately 4.5 people of working age for every person over the age of 65⁴⁹. This has already fallen from as high as 7.5 people of working age for each person aged 65 and over in 1970⁵⁰. In the 2015 Intergenerational Report, Treasury predicted that by 2055 this ratio will have shrunk to 2.7, as the number of Australians aged 65–84 will more than double and the number of people aged 85 and older will nearly quadruple⁵¹.

While the recent report from the Productivity Commission noted that a 'bewildering range' of demographic models are available, and that a variety of demographic predictions have been made which have not been realised in the short term, it too predicted significant increases in the population over 65⁵².

However while the specifics of demographic projection are variable, the overall impact on the budget is clear. Australia is facing an unprecedented number of retired people, most of whom will be receiving the Age Pension. Since pensions are paid from current revenue, this means that a smaller proportion of taxpayers will be paying for a larger number of pensioners.

Impact of superannuation system maturity

The effect of the ageing population on government pension expenditure has not gone unnoticed by

politicians, though their responses have not to date been effective in combating the expected cost increases.

One of the most important tools in combating the effect of the ageing population was supposed to be the development of the compulsory superannuation system. Subsequently there have been many attempts to reform the superannuation system to try and extend its coverage.

These attempts have been only partially successful for reasons we will explore in a subsequent report. However the maturation and extension of the superannuation system will not offset the increased expenditure required by the ageing population; the most noticeable change in pension payments brought about by superannuation will be to move people from a full pension to a part pension. A number of studies show the number of people moving off the pension altogether will remain stubbornly low. In part this is caused by perverse incentives in the pension system that encourage manipulation of the superannuation system.

Some estimates put the number of pensioners at 4 out of every 5 people of retirement age⁵⁴. Other estimates indicate that 70% of those of pension age are on the pension⁵⁵. There is expected to be little change over the next 40 years, with estimates of between 67% and 80% of those of retirement age still on the pension. The main benefit from superannuation maturity is that a greater proportion of pensioners will be receiving a part pension⁵⁶.

Figure 18: Productivity Commission demographic profiles

Age group (years)	2012	2020	2030	2040	2050	2060	2100
Population shares (%)							
0-14	18.9	18.9	18.2	17.1	16.7	16.5	15.4
15-49	48.8	48.8	45.3	43.7	42.5	41.7	39.2
50-64	18.1	17.9	17.1	17.6	17.5	16.8	16.5
65-74	7.8	9.2	9.8	9.8	10.0	10.5	10.2
75-84	4.5	5.1	6.8	7.8	8.1	8.5	9.4
85+	1.9	2.1	2.7	4.0	5.1	5.9	9.3
100+	0.0	0.0	0.1	0.1	0.2	0.3	1.3
65+	14.2	16.4	19.4	21.6	23.2	25.0	28.9

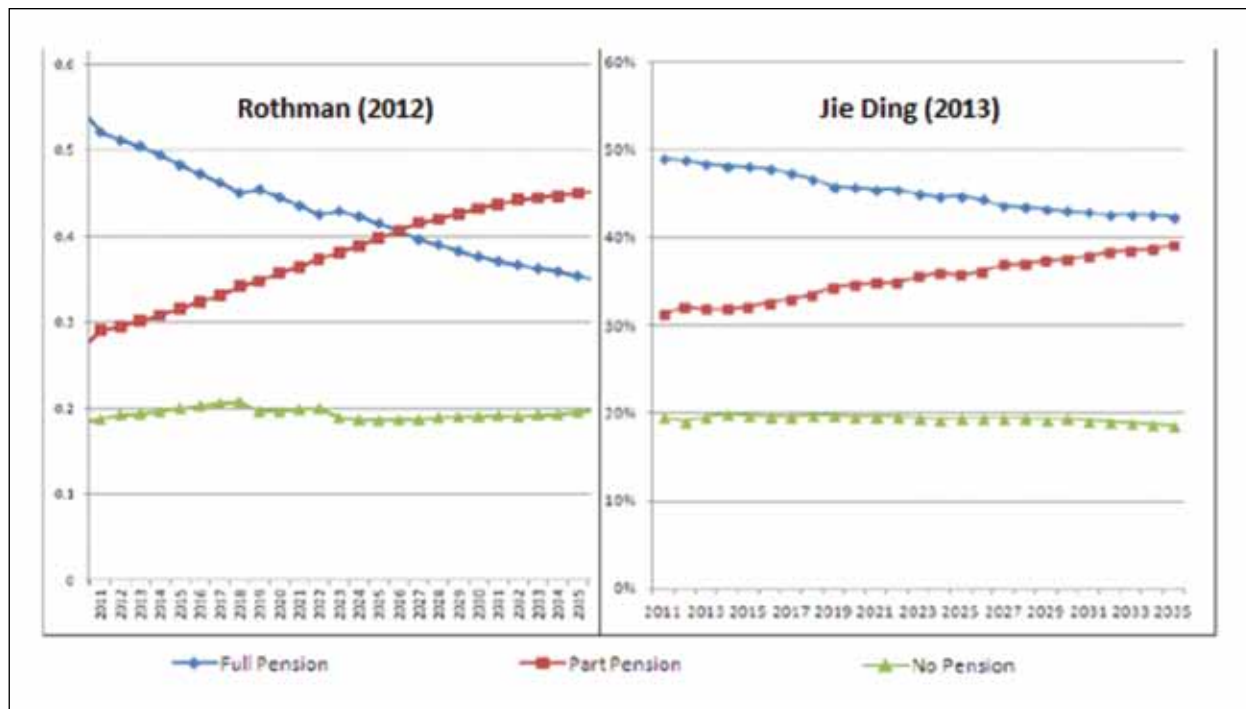
Source: Productivity Commission, *An Ageing Australia: Preparing for the Future*⁵³

The savings from this will not be as substantial as hoped. Indeed, Treasury estimates cited in the 2009 Harmer Pension Review Report claim the maturation of the Superannuation system will only reduce the total value of pension spending by 6%⁵⁸.

Estimates of cost increases

The 2010 Intergenerational Report modelled the impact of an ageing population on the cost of the pension. It found age-related pensions would rise from 2.7% of GDP in 2009–10 to 3.9% of GDP in 2049–50⁵⁹. The 2015 Intergenerational Report found that, under the policy settings in place at the time the report was released,

Figure 19: Estimates of the proportion of the population 65+ receiving a pension



Source: Jie Ding, *Superannuation Policies and Behavioural Effects: How much Age Pension*⁵⁷

pension expenditure would increase from 2.9% of GDP to 3.6% of GDP⁶⁰.

Others have disputed these findings, arguing that even the higher estimate in the 2010 Intergenerational Report was likely to be too low, and when the impacts of behavioural effects are included, the expected cost is likely to be 13% higher than predicted⁶¹.

It is perhaps surprising then that the 2015 Intergenerational Report found that if proposed changes to indexation, together with an increase in the pension eligibility age, were implemented there would be a fall in pension expenditure of 0.2% of GDP in 2054–55⁶². This estimate relies on pension increases being limited to CPI indexation to 2028–29 (from then on the pension would rise in accordance with average weekly wages) as well as the pension eligibility age continuing to increase to reach 70 by 2035⁶³. However this assumption is very much at odds with current trends; on top of multiple discretionary increases in recent years, benchmarking pensions to earnings has caused regular increases well above CPI. Indeed, as can be seen in Figure 20 below, increases in the rate of the pension have substantially outstripped CPI for more than a decade.

Beyond this, an additional consideration is warranted. These models do not (and arguably cannot) include the political impact an ageing population might have.

As the Productivity Commission notes, by 2060 more than 51% of voters will be over 50 years of age, and we have already seen a strong trend towards politicians promising discretionary increases in the pension to win votes⁶⁴. The rising voting power of those of retirement age may build further pressure on

politicians to provide additional increases in the pension rate and/or expanded eligibility criteria. There is a significant risk that models that fail to factor in this political dimension will systemically underestimate the fiscal impact of the ageing population.

Raising the pension age

One proposed response to this has been to increase the age at which the pension can be accessed, though these increases are being phased in very slowly. The demographic case for doing so is clear and there is little need to revisit it here. It is one prosecuted by Andrew Baker in TARGET30—Tax Welfare Churn and the Australian Welfare State⁶⁵. Government policy to increase the pension age is already in train and should be seen as a welcome development.

However increasing the pension age is not a sufficient solution to this problem. It does nothing to address the inequities and inefficiencies in the system. It does not save enough money, nor does it address the perverse incentives created by the interaction of the superannuation system, the pension and the family home.

Increasing the pension age should be but one part of a comprehensive reform of the pension system.

Benchmarking and indexation

Under current policy settings, the maximum rate of the pension is increased on the 20th of March and September each year. Current indexation policy calculates pension increases according to movements in either

the Consumer Price Index (CPI) or the Pensioner and Beneficiary Cost of Living Index (PBLCI). The maximum rate of the pension is increased twice a year in line with whichever of the CPI and PBLCI indices increase by the greatest amount.

The CPI is an overall measure of consumer prices; it attempts to capture increases in the prices of a basket of goods and services that is representative of what the average consumer would purchase. This basket is updated over time to reflect changes in consumer tastes and changes in the products available to consumers.

While CPI indexation would ensure the value of the pension remains constant in real terms, this may not be enough to ensure pensioners maintain the same standard of living. If the basket of goods used to calculate the CPI does not reflect the goods and services pensioners actually consume, there is the possibility pensioners

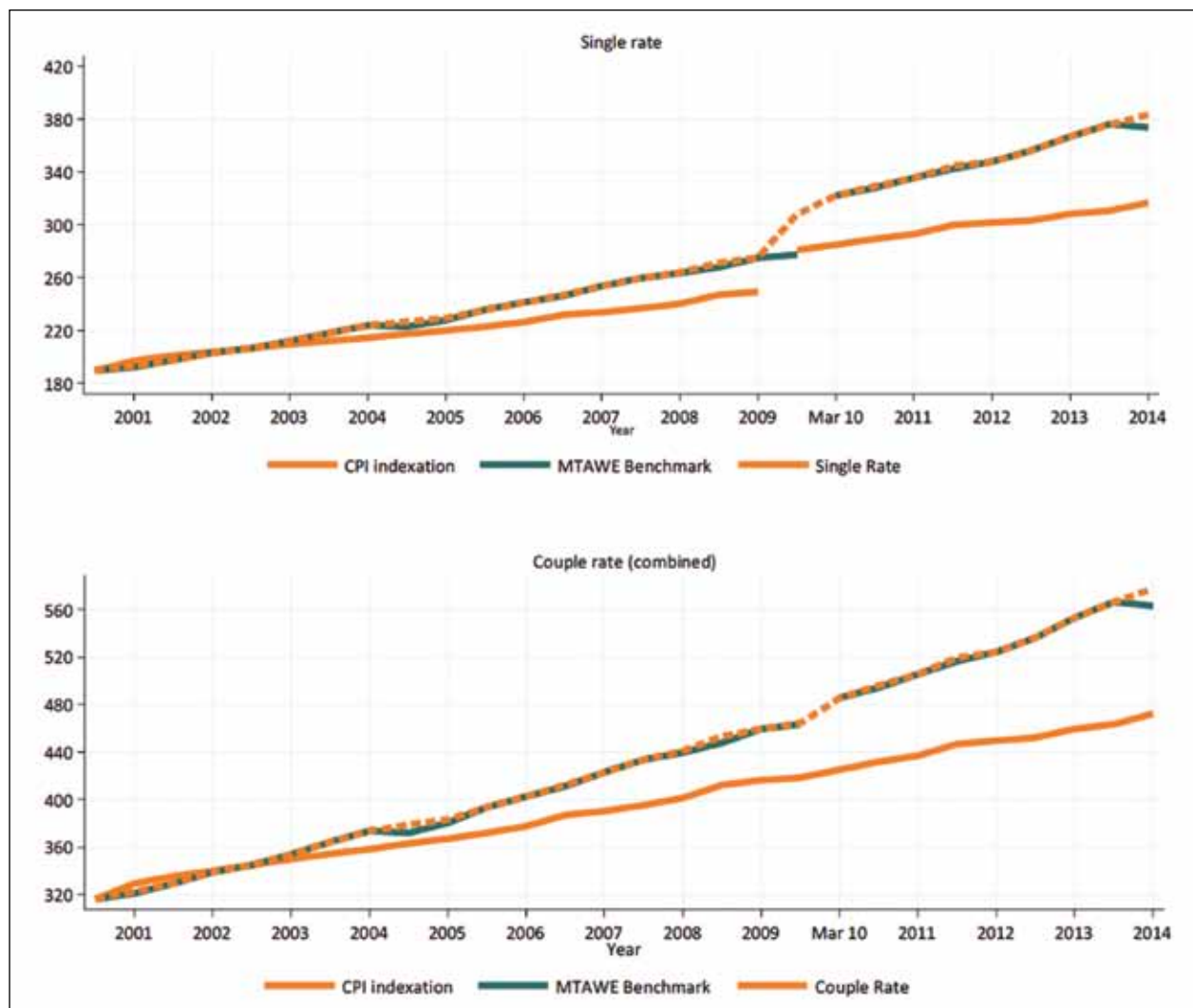
might face price rises at a greater rate than those for consumer prices more generally—with a resultant fall in their standard of living.

The PBLCI is a cost of living index that specifically reflects changes in the prices of the goods and services pensioners and other income support recipients are likely to purchase. PBLCI indexation means the pension maximum rate is maintained at a value that affords them a particular standard of living.

Though the basket of goods used in the calculation of the CPI and the PBLCI may differ, indexation to either of these ensures the value of the pension would remain the same, in real terms, as prices increase over time.

However there is an additional element of this regular pension review that has led to sustained real increases in the rate of the pension over time. Since 1997 the pension has also been benchmarked to MTAW each March and September*. The MTAW benchmark involves

Figure 20: Indexation arrangements for the (weekly) maximum rate of the pension for singles and couples



Source: Australian Government (2014) Guide to Security Law: Maximum basic rates of pension from 14 November 1963 to Present Date; ABS (2014) Consumer Price Index Australia June 2014 Cat. No. 6401.0; ABS Average Weekly Earnings Australia Cat. No. 6302.0 May and November 2000 to 2014.

* MTAW benchmarking occurred prior to this but in an ad hoc fashion. The Howard government legislated automatic benchmarking to MTAW in 1997. For more detail on the history of pension indexation see Michael Klapdor Changed indexation of pensions and tightened eligibility for all benefits Budget Review 2014–15, Australian Parliamentary Library, 2014.

topping the couple rate of the pension to 41.76% of MTAWÉ in the event that the greater of CPI and PBLCI indexation is insufficient to bring the pension up to this level; the benchmark for the single rate is then 66.33% of the combined couple rate. Insofar as MTAWÉ increases faster than prices, this benchmarking increases the value of the pension in real terms.

Figure 20 gives a sense of the extent to which MTAWÉ benchmarking has outstripped price increases since September 2000. The dotted gold line presents the actual single and (combined) couple pension maximum rates. The green line presents the MTAWÉ benchmark* and the solid gold line illustrates how the pension increases would have occurred had the pension rates been indexed to CPI without MTAWÉ benchmarking since March 2000†.

The figure indicates the single rate of the pension has more than doubled since September 2000 (102%), far more than the 67% increase that would have occurred had pensions been indexed to CPI†. For couples, the pension has increased by 83%; also considerably more than the 50% increase that would have been observed if the pension were only subject to CPI indexation.

While it is imperative that the pension's indexation arrangements are sufficient to ensure pension payments reflect pensioner's cost of living, the MTAWÉ benchmark has delivered real increases in the Age Pension far in excess of the average increase in pensioner cost of living. Projections by the Parliamentary Budget Office indicate that if the government is unable to legislate a return to CPI indexation in 2017, as it proposed in the 2014–15 Budget, these real increases will make a significant contribution to future Age Pension outlays⁶⁶.

* The discontinuity in the MTAWÉ benchmark between September 2009 and March 2010 is the result of a change in the way the benchmark was calculated. Prior to 2010 benchmarking was implemented via the single rate with the benchmark set at 25% of MTAWÉ. The 'member of a couple' rate was then 83.52% of the single rate.

‡ The discontinuity in the single pension rate between March 2009 and September 2009 is the result of the award of a \$30 a week increase in the single rate of the pension in September 2009 just before the introduction of the new benchmarking arrangements.

† This includes the \$30 per week increase in September 2009 and is therefore larger than the increase in the CPI over this period.



The family home

For most people, the two biggest assets they will own in their lives are their superannuation and their family home. It is no surprise that these assets form a significant core of savings people could use to support themselves in retirement.

Home ownership rates

Despite concerns about rising house prices and people of limited means being shut out of the property market, the percentage of the population who own their own home remains high. This is especially true for people of retirement age as can be seen below.

Perhaps the most surprising feature of this graph is that the overall proportion of people owning property continues to increase for people over the age of 75, albeit only slightly.

The percentage of age pensioners who own their own home (75%) is slightly lower than the percentage of homeowners among all those of pension age, but it remains very high⁶⁸.

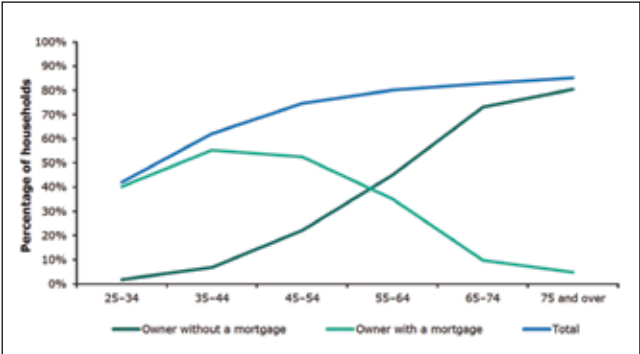
Value of equity in the family home

Another important point is that by the time people retire and reach pension age, approximately 90% of those who do own their own home do not have a mortgage. In many cases retirees have used a portion of their superannuation to pay off the remainder of their mortgage and/or upgrade their home.

This means both singles and couples 65 years and over have more equity in their home than the average homeowner.

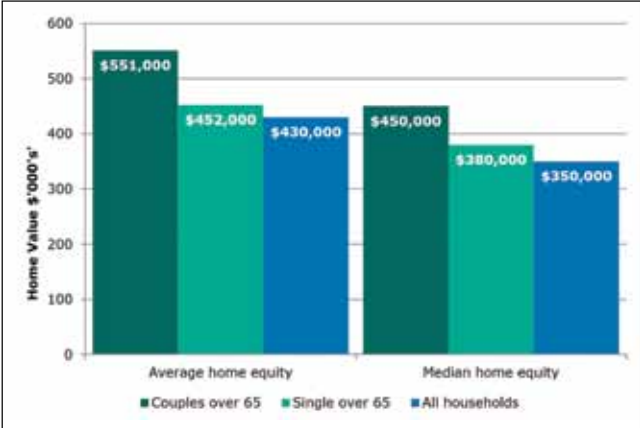
In addition to this, the appreciation of home equity is outstripping the growth rate of pension payments and increasing much faster than inflation; between 1994–95 and 2011–12 median house prices rose 4% per year in real terms⁷⁰.

Figure 21: Home ownership rates



Source: ABS Cat. 4130.09 Housing Occupancy and Costs, 2011–12 ALL HOUSEHOLDS, Selected household characteristics by age of reference person⁶⁷

Figure 22: Home value statistics 2011–12



Source: ABS Cat. 4130.19 Housing Occupancy and Costs 2011–12, OWNER HOUSEHOLDS, Value of dwelling and equity in dwelling by selected life cycle groups⁶⁹

The current pension cohort has clearly benefited from those substantial increases in house prices over the years.

It should be noted that, while the concessional tax treatment of property (for example capital gains tax exemptions for primary residences) may have added to demand for housing and made housing an attractive vehicle for investment, it is not clear this is the primary driver for increased house prices⁷¹.

For pensioners there is an additional incentive to the concessional tax treatment; the exemption of the family home from the pension asset means test makes housing an attractive investment.

Consequently, while the value of home equity held by pensioners is slightly lower than the average for all over-65s, home ownership remains high.

Given how heavily housing equity dominates the assets of pensioners, the significant (and growing) political power of those of pension age may be one factor driving the reluctance of governments to initiate substantial supply side reforms to the housing market.

Another element worth exploring briefly is potential divergences between property asset values for different pensioners, especially between homeowners in different states and the differences between those in cities and those in rural and regional Australia.

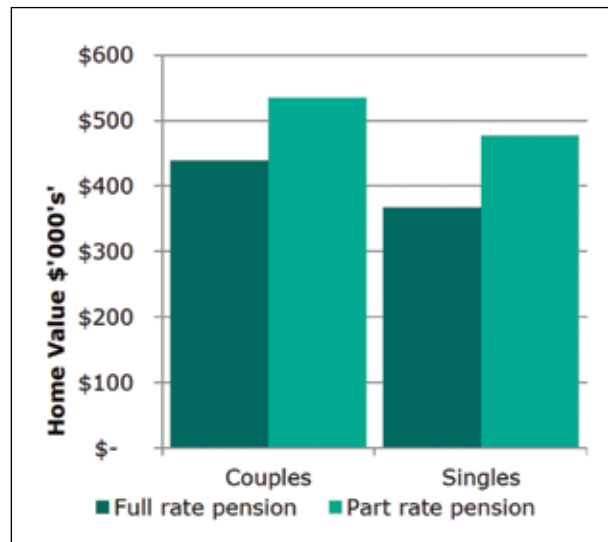
Not surprisingly, house prices in Sydney, Melbourne and Perth are higher than those in Adelaide and Hobart in particular. Another clear difference is between property prices in the city versus those in regional areas, which suggests homeowner pensioners in Sydney and Melbourne have substantially more net worth than those in rural and regional Tasmania. However, their pension entitlements remain the same.

Housing costs

It is important to note the family home serves a purpose beyond mere accumulation of assets to sustain someone in retirement; it also meets the need for shelter. Pensioners who do not own their own home face additional costs to meet this requirement.

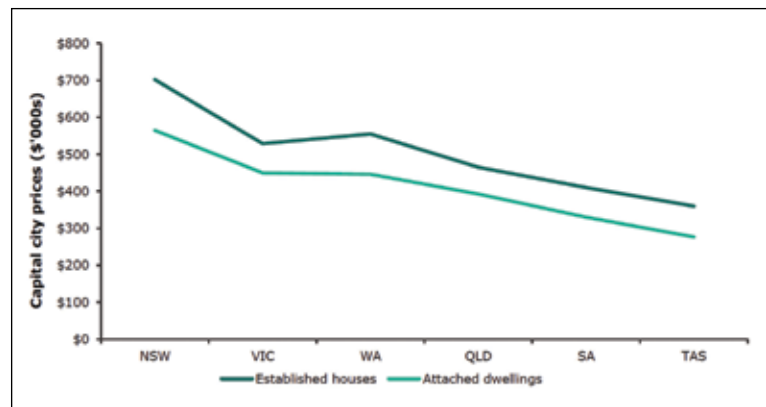
This leads to a substantial difference in housing costs between those who own their own homes and those who rent. These costs

Figure 23: Pensioner housing wealth HILDA 2010



Source: Household, Income and Labour Dynamics in Australia Wave 10

Figure 24: Capital city median house prices



Source: ABS Cat. 6416.04 Residential Property Price Indexes: Eight Capital Cities Median Price (unstratified)⁷²

Figure 25: Differences in median house prices between capital cities and rest of state



Source: ABS Cat. 6416.04 Residential Property Price Indexes: Eight Capital Cities Median Price (unstratified)⁷³

also vary across the life cycle, with people over 75 less likely to have a mortgage, and more likely to facing lower housing costs.

For those over-65s still paying off a mortgage, the cost differential for owning your own home is much less than for those who do not have to make mortgage payments, though on average these costs are still substantially below the cost of renting in the private rental market. These trends also largely apply if you break the costs down by singles and couples.

To meet these extra costs, the government provides additional assistance to pensioners who rent housing, in the form of rent assistance. Rent assistance of up to \$128.40 a fortnight is available for single pensioners paying more than \$114 a fortnight in rent, with the full rate payable for those whose rent is more than \$285.20 a fortnight. For couples, rent assistance of \$120.80 is payable for those whose rent is more than \$185.40 in rent per fortnight with the maximum rate kicking in for those paying more than \$346.47 a fortnight.

When comparing these thresholds with the 2011–12 housing cost data, some allowance needs to be made for inflation and potential differences between pensioner-only data and data for the entire over-65 population. However it is clear that for private renters the full amount of rent assistance covers only approximately a quarter to a third of the additional costs they face when compared to homeowners without a mortgage.

The Harmer Review in 2009 similarly noted the problems with rent assistance⁷⁶. It is worth noting the relatively small budgetary impact of rent assistance compared with the level of the pension. While the pension (together with the supplement) is budgeted to cost just under \$42.2 billion for 2014–15, rent assistance for those on the pension is budgeted at just over \$667 million⁷⁷.

The family home is an untapped asset

The family home is not widely viewed as a retirement savings tool; it invokes complicated emotions, particularly for those who have lived in their home for long periods of time and raised children there.

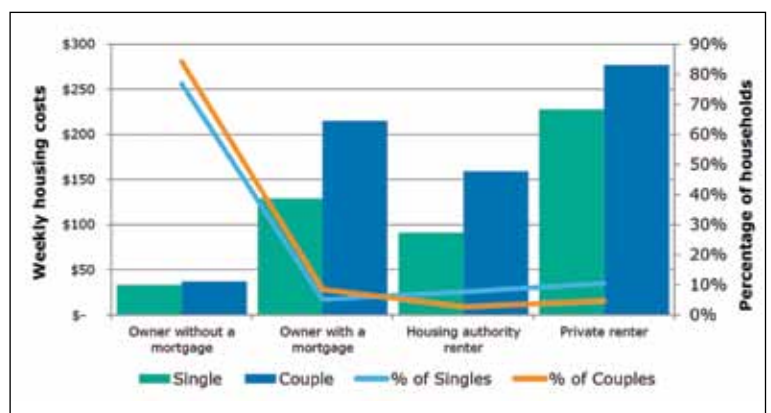
Surveys suggest the vast majority of people would prefer to 'age in place', remaining in their home as long as possible⁷⁸. A 2010 Australian study found that while between 55% and 65% of responders would consider moving to a more suitable dwelling, 91% of them would prefer to stay in their own home—citing diverse reasons including proximity to family and friends, familiarity with the community and access to health, shopping and transport services⁷⁹.

Figure 26: Average weekly housing costs by age group



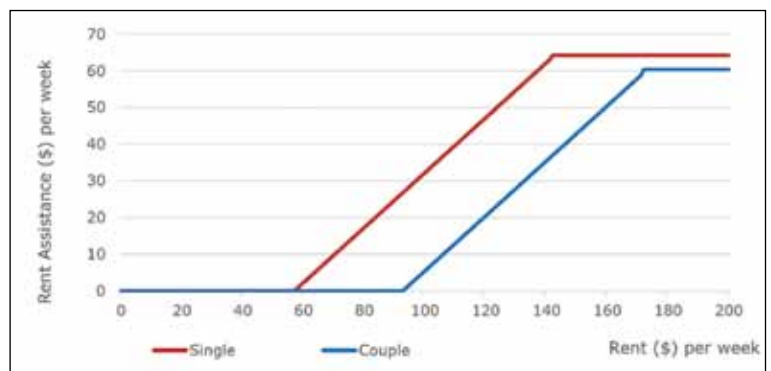
Source: ABS Cat 4130.08 Housing Occupancy and Costs 2011–12: ALL HOUSEHOLDS, Housing costs by tenure and landlord type and age of reference person⁷⁴

Figure 27: Average weekly housing costs—singles vs couples



Source: ABS Cat 4130.15 Housing Occupancy and Costs 2011–12: SELECTED LIFE CYCLE GROUPS, Housing costs by tenure and landlord type⁷⁵

Figure 28: Rent assistance



Source: ABS Cat. 4130.19 Housing Occupancy and Costs 2011–12, OWNER HOUSEHOLDS, Value of dwelling and equity in dwelling by selected life cycle groups⁶⁷

It is likely these factors are leading to a significant reluctance to consider selling the family home to supplement retirement income among those soon to retire. The MLC Quarterly Australian Wealth Sentiment Survey Q3 2014 found just 11% of Australians plan to sell their family home to fund their retirement, while 40% intend not to sell their home and 42% were unsure⁸⁰.

Reverse mortgages in the private market

A reverse mortgage involves borrowing a sum of money against your existing asset (in this case your home). A reverse mortgage operates differently from a regular mortgage under which repayments are made, the level of equity in the home increases and the loan balance reduces. Typically in a reverse mortgage, no repayments are made and the balance of the loan and the interest accrued increases, while your level of equity in the home reduces over time. A reverse mortgage can involve lump sum payments, or a regular payment stream like an annuity or a line of credit that can be accessed as the borrower requires.

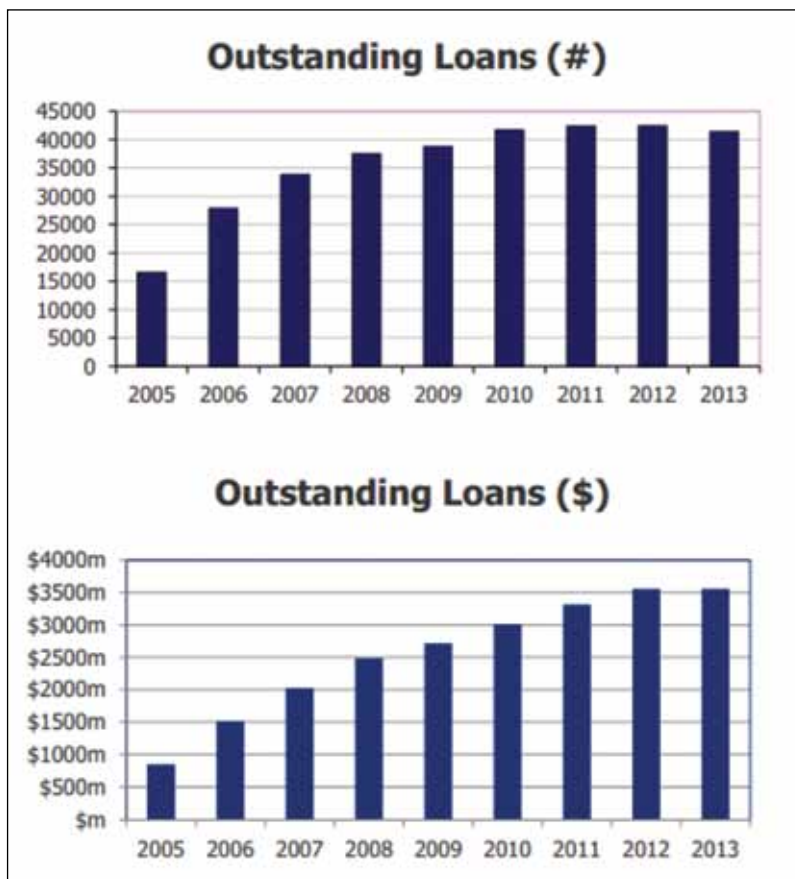
Rather than selling their home, pensioners could remain in their home and continue to live in the same community while supplementing their retirement incomes via a reverse mortgage. Yet the MLC survey found this option was not overly popular, with only 8% of Australians planning to draw down equity in the family home in retirement⁸¹.

To date there has been little interest in reverse mortgages in Australia. Recent growth in the reverse mortgage market has been slow to non-existent, as the number of mortgages remained almost unchanged between 2011 and 2012 and actually fell in 2013, while both the number of outstanding loans and their value has plateaued significantly after strong growth in the mid 2000's⁸².

Only a small percentage of those loans are used to provide a regular annuity payment. While 91% of outstanding loans in 2013 were to people of pension age, just 6% of the loans settlements in 2013 were income stream products (though those looking to use equity in their home for regular income purposes also have the option of line of credit products which are not included in those figures), with the bulk being used to retire other debt and house renovations⁸⁴. Interestingly 77% of outstanding loans are in capital cities, where home equity values are higher, the property markets are bigger and there is a greater number of potential finance providers⁸⁵.

While there are a number of private market products available for pensioners who want to access the equity

Figure 29: Reverse mortgages in Australia by number and value



Source: Deloitte Reverse Mortgage Survey 2013⁸³

in their home, including reverse mortgages and home equity conversion mortgages, the terms of these loans vary considerably. A comparison of some of the products available shows this variability.

Each of these products also has fees payable. Since 2012 a statutory negative equity protection is available, under which the loan value cannot exceed the value of the property, though this may not apply to reverse mortgages entered into prior to 18 September 2012⁸⁷.

While the maximum Loan to Valuation Ratio (LVR) of the private market products surveyed is 45% of property value, in the United Kingdom (which has a more developed reverse mortgage market) the maximum LVR is typically 50%⁸⁸. In the United States the maximum is higher still, but in part this may have to do with their government insured reverse mortgage products (discussed below).

Table 4: Summary of reverse mortgage products

Condition	Range in the market
Interest Rates	6.7% to 7.05% (as at December 2014)
Loan to Valuation Ratio at age 60	15% (available from limited providers)
Maximum Loan Amount at age 60	\$500,000
Loan to Valuation Ratio at age 65	15% to 25% (not available from all providers)
Maximum Loan Amount at age 65	\$150,000 to \$500,000
Loan to Valuation Ratio at age 70	20% to 25%
Maximum Loan Amount at age 70	\$200,000 to \$1,000,000
Loan to Valuation Ratio at age 75	20% to 30%
Maximum Loan Amount at age 75	\$200,000 to \$1,000,000
Loan to Valuation Ratio at age 80	25% to 35%
Maximum Loan Amount at age 80	\$250,000 to \$1,000,000
Loan to Valuation Ratio at age 85	25% to 40%
Maximum Loan Amount at age 85	\$250,000 to \$1,000,000
Loan to Valuation Ratio at age 90	25% to 45%
Maximum Loan Amount at age 90	\$250,000 to \$1,000,000

Sources: Australian Seniors Finance Lifetime Loan, Bank SA Senior Access Plus Home Loan, Bankwest Seniors Equity Release Home Loan, Commonwealth Bank Equity Unlock Loan, Macquarie Bank Reverse Mortgage, and St George Senior Access Plus Home Loan as at December 2014⁸⁶

The government option

In addition to the solutions provided by banks and other lenders, the government recognises the capacity of the family home to assist in raising living standards, through its Pension Loan Scheme. It is available to people of pension age with real estate assets who "receive a reduced, or nil, rate of a qualifying payment for the scheme due to the application of either the income or the assets test, but not both"⁸⁹.

It provides fortnightly payments with interest compounding fortnightly and added to the balance of the loan. The loan can be voluntarily repaid, or repaid when the real estate security is sold, or from the pensioner's estate after they have passed away.

The interest rate and maximum LVR under the government scheme are more generous than the private sector equivalents, but the terms of the loan are more restrictive. Borrowers are limited in the amounts they can borrow, not only by their borrowing capacity but by reference to their pension eligibility. This creates a situation where pensioners who have a low or nil pension payment can borrow larger sums of money than those who have similar capacity to borrow but are receiving a higher pension payment.

Despite the capacity for the Pension Loans Scheme to boost living standards, it is not a popular scheme. The nominal value of loans under the scheme in 2014 was just \$31.9 million, up from just \$30.9 million in 2013⁹¹. The carrying value of the Pension Loans Scheme (\$30m due to certain discounts) is dwarfed by other Commonwealth loans schemes like the Aged Care Zero Real Interest Loan (which has a carrying value of \$222.75m) and the Student Financial Supplement Scheme Loan (with a carrying value in excess of \$600m)⁹².

Table 5: Government Pension Loan Scheme

Condition	Range in the market
Interest Rate	5.25% (as at December 2014)
Loan to Valuation Ratio at Age 60	21%
Loan to Valuation Ratio at Age 65	25%
Loan to Valuation Ratio at Age 70	31%
Loan to Valuation Ratio at Age 75	38%
Loan to Valuation Ratio at Age 80	46%
Loan to Valuation Ratio at Age 85	56%
Loan to Valuation Ratio at Age 90	68%
Maximum annual payment (part-rate pensioners)	The difference between their part-rate payment and the full rate of the pension
Maximum annual payment (eligible non-pensioners)	The full rate of the pension

Source: Department of Human Services website and Social Security Act 1991 (Cth)⁹⁰

Why are the take-up rates on reverse mortgages so low

The lack of popularity of equity release schemes is somewhat surprising. While knowledge of reverse mortgage products may be somewhat limited, the concept of borrowing against the equity in your home is hardly unknown. If, as some claim, poverty is a key concern for retirees why do more of them not seek to boost their living standards by utilising their main asset?

The table below makes clear just how few retirees access the equity in their home; while the figures are representative estimates (that assume pensioners and non-pensioners are equally likely to take out a reverse mortgage), the fact that less than 1.1% of people of retirement age have taken out a reverse mortgage indicates there is enormous unused capacity to utilise housing equity.

Table 6: Estimated reverse mortgages take-up rates—private market

Comparison	Estimated value	Reverse mortgages expressed as % of:
Reverse mortgages outstanding (2013)	41,435	
Reverse mortgages to 65+	37,706	91%
Australian population 65+ (2014)	3,456,188	1.1%
Number of homeowners 65+ (2011–12)	2,898,129	1.3%
Number of pensioners (2014)	2,423,842	1.56%

Sources: ABS Cat.3101 Australian Demographic Statistics Jun 2014, Department of Social Services, September 2014 Payment Demographic Data, ABS Cat. 4130.09 Housing Occupancy and Costs, 2011–12, James Hickey, Deloitte Reverse Mortgage Survey 2013, Deloitte Touche Tohmatsu (2014) ⁹³

To the extent this issue has been examined at all, the evidence provided has been limited to small surveys, focus group data or, in some cases, simply anecdotes. One often-cited motivating factor is an aversion to risk and debt, with particular concerns about the perceived riskiness of reverse mortgages⁹⁴. While an aversion to risk is understandable for those on fixed incomes with little or no capacity to work, this does not justify underwriting this aversion with taxpayers' money. Part of this aversion to reverse mortgages also seems to be driven by a lack of understanding of the products

available and the safeguards already in place. The government also has options to reduce the perceived riskiness of these products, which are canvassed below.

The aversion to debt is much less reasonable when the alternative is to receive taxpayer-funded handouts. To an extent some may rationalise this by the strong (but erroneous) belief that the pension is a right 'earned' by paying taxes during their working lives.

There are two other key reasons behind the reluctance to take out reverse mortgages. One is desire to use the house as insurance against potential future health costs and living costs. A 2007 US study found that only 6% of those aged 50–65 planned to use home equity to fund ordinary living expenses in retirement (with 72% stating that they would not do so) and more than half of those would downsize their home rather than borrow against it⁹⁵. Of those who responded they wouldn't use the equity in their home, 44% said that they were maintaining their residence as insurance against living and health expenses⁹⁶.

While it may be logical on the part of retirees to keep a pool of money to meet emergency expenses, this does not make it in the best interests of taxpayers or society. It doesn't make sense to allow the equity kept in reserve for a rainy day to extend to a million dollars or more worth of assets that are exempt from the pension means test. Nor does it make sense that these rainy day savings should be limited to an illiquid asset like housing equity—if keeping a pool of money in reserve is good policy why should it matter how that money is kept?

Keeping some money in reserve for future health costs is also more understandable in the context of the US health system—where substantial out-of-pocket costs may be incurred for medical care—than in Australia where taxpayers already fund universal health care.

This does not mean pensioners should be compelled to completely run down their savings before they can access government support. It simply means that it is illogical to exclude significant sources of wealth from pension means testing, and therefore paying a higher pension now, on the grounds pensioners might possibly need more money later on in life, even if the government may have to eventually supplement dwindling pensioner savings. Those retirees with significant asset balances but no income would need to convert those assets into an income stream in the absence of the pension. It is hardly unreasonable to ask them to supplement their pension with that income.

The second motivator is far more troubling. 20% of respondents to that US survey who were not going to use their home equity cited bequest motives as the reason why⁹⁷. This corresponds with research on broader savings trends cited by the Productivity Commission that

found that for nearly 10% of people bequest motives were driving saving decisions⁹⁸. A study for National Seniors Australia also found a difference in attitude among those aged 50 and over between bequeathing the family home and other assets, with more than 51% of people believing that it was somewhat or very important to leave the family home to their children and nearly 10% more people believing it was very important to leave the family home to their children than to leave other assets⁹⁹.

There is also evidence to suggest that bequests play a larger role in limiting access to housing equity than surveys suggest. A 2011 study found that, of 1,699 deceased estates with a total net value of \$872 million, more than \$495 million in assets were property assets, and of those estates where there was no surviving spouse, children were the primary beneficiary in more than 90%¹⁰⁰. A 2010 report projected that annual housing inheritance would nearly double between 2009 and 2025 (from \$16 billion to \$31 billion) and that the number of estates with housing assets would also nearly double during that period¹⁰¹.

It may be that the bequest impact is partly accidental; a result of pensioners holding assets in reserve against future shocks and then passing away before accessing those assets. However there is clearly a significant proportion of retirees who are living on the pension without accessing the equity in their home for the purpose of passing that home onto their children. There is no justification for government providing a pension in these circumstances.

Given the high cost of the pension and the relative underutilisation of family home equity, in light of the possible boost to living standards that could be achieved, this situation must change. The government cannot afford to subsidise bequests by providing pensions to people who have assets that can be used to support themselves in retirement.

The government should foster greater awareness of the option of reverse mortgages, especially its own scheme.

Boosting the take-up rates

Moves by the government to set legislative standards for reverse mortgages in 2012, particularly by incorporating a statutory no negative equity provision, may have boosted the development of the reverse mortgage market, though it's too early to tell if this impact will be ongoing. Under these provisions, lenders cannot hold

borrowers liable for debt in excess of the value of the property¹⁰².

However, these changes will not address the perverse incentives in the pension system. The government should look at further ways of reducing the perception of risk for reverse mortgages and incentivise the utilisation of home equity through changes to the pension means test.

Home Equity Conversion Mortgages in the US

A guide to possible reforms to boost reverse mortgage take-up can be found in the reverse mortgage system in the United States. There, Home Equity Conversion Mortgage (HECM) loans represent the overwhelming majority of reverse mortgages; some slightly older estimates put the figure at more than 90% of the market while others suggest it is as high as 95%¹⁰³.

HECM loans are under the supervision of the Federal Housing Authority (FHA) within the US Department of Housing and Urban Development. These loans are insured by the FHA, and the US government sets particular terms for HECM loans (including the types of properties that can be mortgaged, the fees for the mortgage insurance and other services, minimum age for participation in the scheme and maximum LVRs)¹⁰⁴.

The maximum LVR has changed in accordance with US regulations. The 'Initial Principal Limit' is calculated by reference to the house price and median prices in the area and a factor representing the borrower's age and expected interest rates. That factor (similar to an LVR) could be as high as 0.8 or above¹⁰⁵. However, as a result of the global financial crisis, the US government has tightened this cap so that in effect the maximum LVR is typically 66%¹⁰⁶.

HECM loans come in a variety of different types, from a regular monthly payment to a line of credit that can be accessed when the borrower requires (the most common type of plan)¹⁰⁷.

Importantly, under HECM loans there is no recourse to the borrower beyond the value of the property; and if the value of the property is not sufficient to clear the debt, the lender instead has recourse to the federal insurance.

The HECM scheme was designed to be self funding: that is, the cost of payouts on the insurance should be met over time by the premiums paid on the HECM loans. While there have been doubts about this funding model from time to time, steps have been taken to try and reduce any potential burdens on taxpayers for this insurance¹⁰⁸.



The unequal treatment of the family home causes pension problems

Underlying the Australian welfare system are two broad principles of fairness. The first is that assistance be targeted towards those who are least able to help themselves and therefore the most in need (the principle of vertical equity). The second is that people who are in broadly similar circumstances should receive a similar level of support (the principle of horizontal equity). These are not the only principles of the welfare system, but they are arguably the most important.

The exemption of the family home from the pension assets test offends both vertical and horizontal equity. Pensioners with substantial wealth in their home receive substantial pension payments diverting resources from those who need more assistance (a vertical equity issue).

At the same time those pensioners who have their wealth bound up in their house receive a greater pension payment than those with an equal level of wealth that is not invested in housing. The exemption of the family home from the assets test is a choice not to treat all assets the same and therefore in effect a choice not to treat all retirees with the same levels of wealth equally. This is a horizontal equity issue.

A more equitable policy would ensure that where people who have the same lifetime savings, the composition of their assets doesn't matter—some will invest in property and others will hold their savings differently—but all who have roughly the same wealth should receive the same pension payment. In practice, people who choose to save via their own home receive the same pension payment as those who have a substantially lower lifetime income. This incentivises home ownership.

These problems can be demonstrated in a number of ways. As can be seen in Figure 30 below, pensioners who own their own home

have substantially greater wealth on average than those who do not. For full-rate pensioners, homeowners have more than nine times the net worth of non-homeowners. Single pensioner homeowners have more than \$400,000 in assets, on average, while couple homeowners have in excess of \$500,000 in assets. In addition to having a greater net worth, homeowner singles and couples also have more non-housing assets than their respective non-homeowning counterparts on average. Yet the pension payments received by these two groups are the same.

For part-rate pensioners, the asset discrepancy between homeowners and non-homeowners is less stark—though the overall value of their assets is higher.

Figure 30: Average wealth for full-rate pension recipients, 2010



Source: Household, Income and Labour Dynamics in Australia Wave 10

Figure 31: Average wealth for part-rate pension recipients, 2010



Source: Household, Income and Labour Dynamics in Australia Wave 10

Another way to demonstrate how this unequal treatment incentivises homeownership is to show the extent to which the family home dominates the average net worth of pensioners across society-wide wealth quintiles.

Overwhelmingly, the poorest single pensioners are those who do not own their own home. While they are eligible for additional rent assistance (if they are renting) they have little or no assets of any significance and are likely to be wholly dependent on the pension to meet all of their expenses.

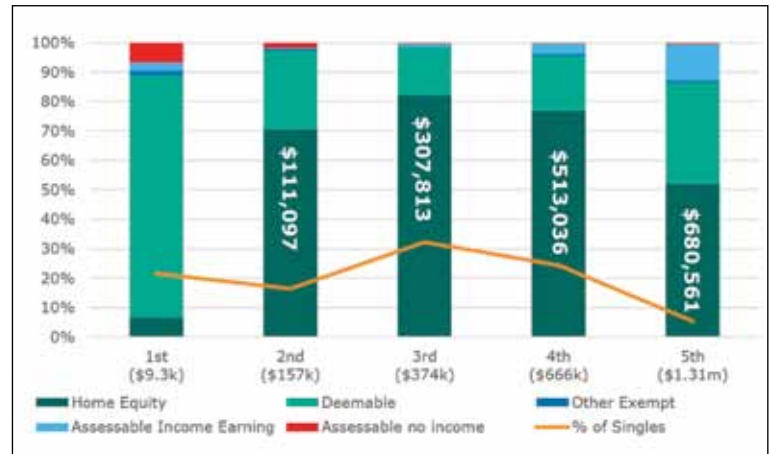
Moving up the wealth quintiles clearly shows the bulk of wealth increases are held in the family home. Indeed, of the extra \$148,000 in assets between the bottom quintile and the 2nd quintile, 75% of this difference is in home equity. Of the \$216,000 difference in assets between the 2nd and 3rd quintiles, more than 90% is home equity, while 70% of the \$293,000 difference between the 3rd and 4th quintiles is also found in home equity.

It's not until the 4th wealth quintile that single pensioners hold more than \$100,000 on average in non-exempt assets—well below the asset test threshold even allowing for deeming—and it's not until the top quintile that you can see substantial assets other than the family home.

This suggests that, except for people with other sources of income that impact their pension eligibility, people in the bottom three quintiles, and even some in the fourth quintile, would all on average be eligible for a full pension or a significant part pension. In effect, the pension treats people with \$500,000 or \$600,000 in assets as being in the same position as those with less than \$10,000.

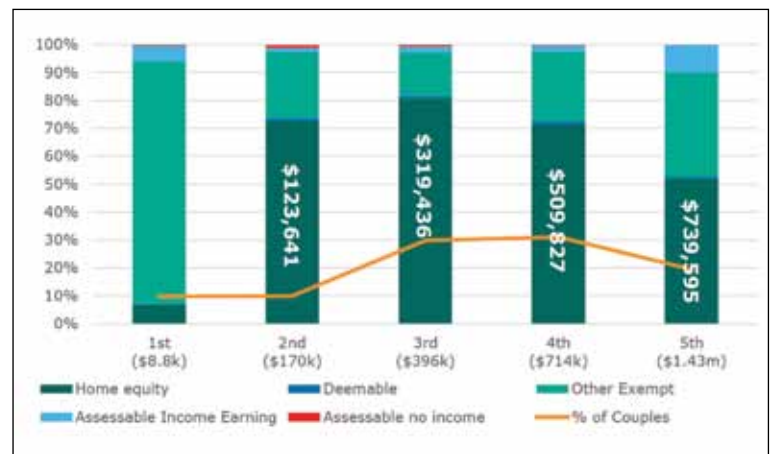
The only acknowledgement of home equity in the pension means test is in the asset test thresholds through the difference between the homeowner and non-homeowner means test. However, the gap between these two tests does not adequately reflect the actual value of home equity held by pensioners. The difference between the thresholds for the homeowner and non-homeowner assets means test in 2015 is \$146,500 (it was \$131,500 in 2010), which effectively means that \$146,500 is the notional expected value of homeowner equity.

Figure 32: Single pensioners' wealth—composition and distribution by population quintiles of household net worth (including home equity), 2010*



Source: Household, Income and Labour Dynamics in Australia Wave 10

Figure 33: Couple pensioners' wealth—composition and distribution by population quintiles of household net worth (including home equity), 2010



Source: Household, Income and Labour Dynamics in Australia Wave 10

Yet in reality, even in 2010 dollar terms, large numbers of single pensioners have much greater equity in their home than this; pensioners in the top 3 quintiles have home equity between two and six times the implied value on average.

For couples the situation is broadly similar, as can be seen in Figure 33.

More than half of the difference in wealth over the first three quintiles is solely due to home equity and every quintile other than the first holds more than half their wealth in their home.

* Note the values in brackets under each quintile in the graphic represents the average value of assets held by a pensioner within that quintile

The gap can also be seen in the cumulative distribution of housing equity reported by single age pensioners in the 2010 wave of HILDA who own their own home (see Figure 34). The assets test thresholds for non-homeowners for July 2010 are overlaid in order to emphasise the extent to which the exemption of home equity from the assets test favours home-owners.

Were home equity included in the assets test, at least 48% of full-pensioners would see their payments reduced with 3.7% or more moved off the Age Pension altogether. About 12% of part-pensioners would also be moved off the Age Pension by virtue of their level of housing equity alone before considering any other assessable assets that they might hold.

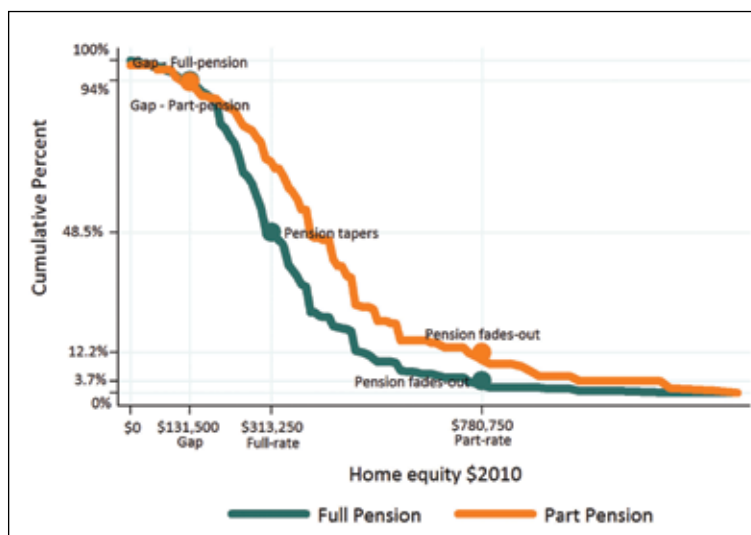
Figure 34 also presents the gap between the assets test threshold for single homeowners and non-homeowners, which is \$131,500. The figure underlines how the lower assets test threshold for homeowners is little consolation for non-homeowners, as 94% of full and part pensioner homeowners have housing equity above this amount.

Figure 35 presents the same information for those who reported receiving the Age Pension as a couple. This figure indicates that almost half or more of couples on the Age Pension would see their pension payments reduced if the principal residence exemption were abolished, but very few full or part rate pensioners would be moved off the pension entirely – about 4%-5%.

The inequity of the principal home exemption from the assets test is no less pronounced for couple age pensioners. The figure shows that of those full- and part-rate pensioners who have home equity, nearly 97% have equity greater in value than the gap in the assets test thresholds between couple homeowners and non-homeowners.

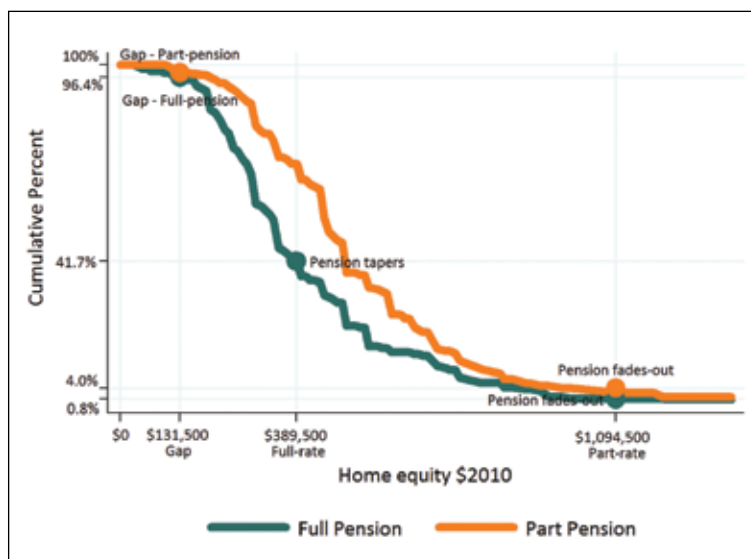
There are several negative effects of ignoring the extent of home equity among pensioners. The first is that it undermines the ability of

Figure 34: Distribution of home equity for single pensioners



Source: Household, Income and Labour Dynamics in Australia Wave 10

Figure 35: Distribution of home equity for couple pensioners



Source: Household, Income and Labour Dynamics in Australia Wave 10

the pension assets test to target payments at those with fewer means. Figure 36 presents a scatterplot of the assessable income and assets of single full pensioners (orange diamonds) and single part-rate pensioners (green circles) in the 2010 wave of HILDA. It also displays singles who were of Age Pension age but did not receive the Age Pension at the date of interview (gold squares).

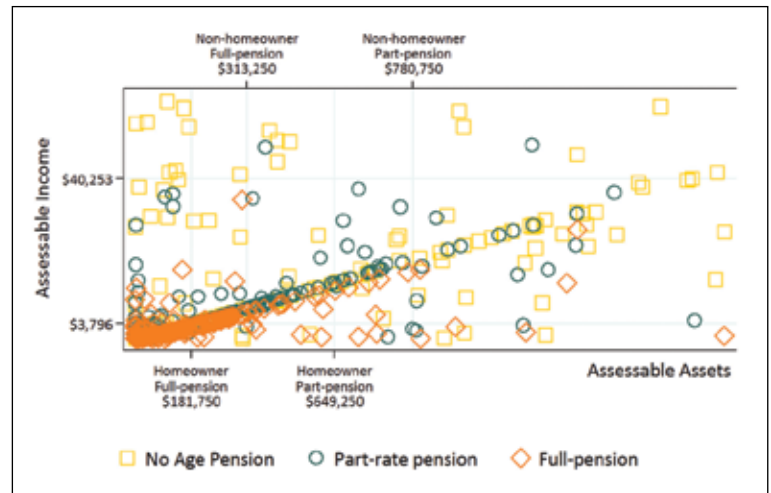
The pension amounts in the figure are broadly consistent with the operation of the pension means test. Those who reported receiving the full rate are mostly those with fewer assessable assets and low private incomes. By contrast, those who reported receiving a part rate pension have assessable incomes and assets above the thresholds at which their payments would taper as a consequence of the income or assets test, possibly both.

The linear pattern of payments for full- and part-rate pensions that is visible in the figure reflects the fact that much of the assessable income for these pensioners is deemed income. The deeming provisions, explained earlier, give rise to a relationship between income and deeming assets that is ostensibly linear.

The obvious pattern of payments in Figure 36 is in stark contrast to Figure 37. Figure 37 presents the same categories of singles of Age Pension age, but instead of assessable income and assets these categories are displayed according to their total household income (excluding government transfers) and net worth (including home equity).

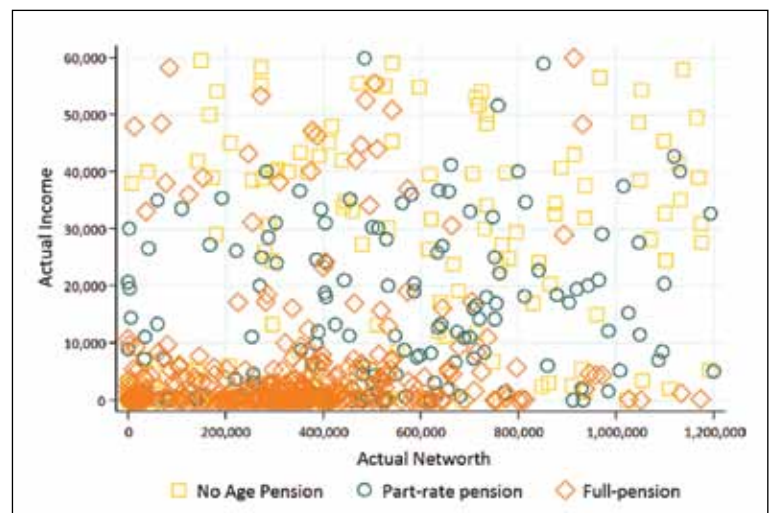
While the distribution of pensioners for total income is similar to the diagram above showing assessable income, there is a marked difference between the distribution for total household net worth and assessable assets. When we include home equity, we find many full-rate pensioners reside in very high net worth households. Indeed, a non-trivial number of full-rate pensioners have total household net worth in excess of \$600,000.

Figure 36: Age Pension payments for singles by assessable income and assessable assets



Source: Household, Income and Labour Dynamics in Australia Wave 10

Figure 37: Pension payments for singles by private income and total housing net worth



Source: Household, Income and Labour Dynamics in Australia Wave 10

Figure 38 and Figure 39 tell a similar story for couples. When viewed in terms of assessable income and assessable assets, which excludes the principal residence, Figure 38 suggests a well targeted Age Pension where the full rate goes to couples with the lowest income and assets.

However, Figure 39 underlines how this is no longer the case when we consider total household income and household net worth, which includes home equity. While full rate couple pensioners tend to be those with low (private) household income we observe full rate age pensioners with a net worth in excess of \$600,000. There are also part rate pensioners with a net worth of more than \$800,000.

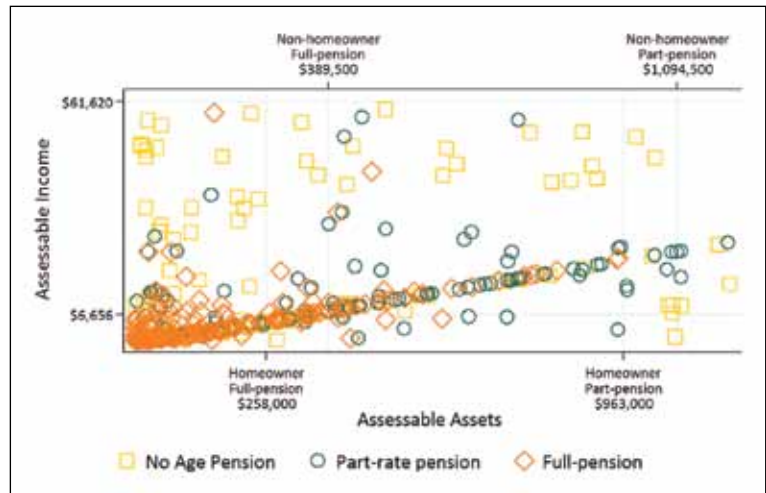
It is important to realise the vertical and horizontal equity problems outlined in this section are not accidental. They are the result of a deliberate policy choice; by excluding the family home from the assets test, the government elects to categorise pensioners by the less equitably distributed assessable assets rather than by net worth. The question that needs to be asked is whether this choice is correct.

Conceptually, there is little doubt that net worth provides a more accurate assessment of pensioners' potential to increase their living standards than the artificial distinctions between asset classes embodied in the assets test.

In the economic sense, housing is an asset like any other—it can produce an income through rent, it could produce a capital gain and it can be used to produce an income stream via a reverse mortgage. It is really only the sentimental attachment to the family home that makes it a different sort of asset.

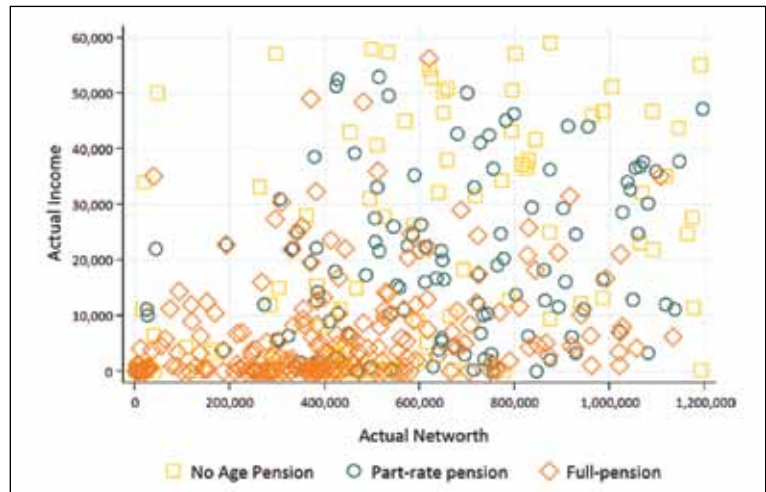
Yet it is possible to age in place, remaining in the family home, and still substantially reduce pension expenditure. Boosting the income of pensioners through accessing the equity in their homes is hardly a revolutionary idea, yet it is one that is largely underutilised.

Figure 38: Age Pension payments for couples by assessable income and assessable assets



Source: Household, Income and Labour Dynamics in Australia Wave 10

Figure 39: Pension payments for couples by private income and household net worth



Source: Household, Income and Labour Dynamics in Australia Wave 10

Two types of pensioners

What all the evidence above indicates is that there are two broad archetypes receiving a substantial pension. The first is a pensioner with few assets and no income whose living standards are increasing as a result of pension increases but is certainly not living an extravagant lifestyle (similar to our cameo of 'Mavis'). These pensioners fit the stereotypical image of a pensioner, but they are far from the bulk of the pension cohort. The other archetype is the 'asset-rich, income poor' pensioner (represented by 'Leonard' and 'Seema' in our cameos). This type of pensioner has much more wealth than pensioners like the 'Mavis' types and there are more of them than you might think.

It is important to note that the living standards of the Leonard/Seema pensioner types, while higher than those of the Mavis types, remain well below their potential because the equity in their homes generally remains untapped, at least until they enter aged care. The difference is not so much in their actual living standards but in their capacity to boost their living standards. They could be living better, and helping them to do so will help the government focus on the 'Mavis' pensioners.

This suggests a key to reform of the system is for the government to reassure those who could be accessing equity in their home that their home will remain 'safe'. The easiest way to do this is for the government to act as guarantor or insurer for eligible reverse mortgages—similar to the US HECM system—which in effect creates a backstop that ensures no-one will be compelled to sell their homes because of a reverse mortgage, and gives banks confidence to lend to higher LVRs. Given the equity limits on reverse mortgages, this is likely to be low risk and certainly more cost-efficient under the correct policy settings than providing many of those pensioners with tens of thousands of taxpayers' dollars each year.

'Leonard/Seema' types and 'Mavis' types—similar pension, different capacities

Mavis types

- Few assets (do not own their own home)—low net worth

- Receives full rate of the pension

- Often receive rent assistance

- Highly dependent on government support

Leonard/Seema types

- Has some income earning assets—often from superannuation or rental properties

- Most of their wealth is in their home—exempt from the pension means test.

- Receives a full or substantial part rate pension



Recommendations for reform

It is important that reform of the pension system is not considered in a vacuum. The interactions between the pension system, the superannuation system and the other services that impact people of retirement age need to be considered in concert. In particular, as Australia’s retirement system is supported by three pillars, changes to some of those pillars may affect the foundation of the retirement ‘house’.

This report proposes reforms that are not intended to be taken in isolation but as a package that recasts the relationship between the family home and the pension. A subsequent report in this series will look at reforms to the superannuation system that will complement the reforms proposed here.

Increase the rate of rent assistance for pensioners

As noted above, there is a significant discrepancy in housing costs between pensioners who own their own home outright and those who are renting in the private market. While rent assistance bridges some of this gap, it neither covers

the additional housing costs of renting nor addresses the ways the overall system advantages homeowners.

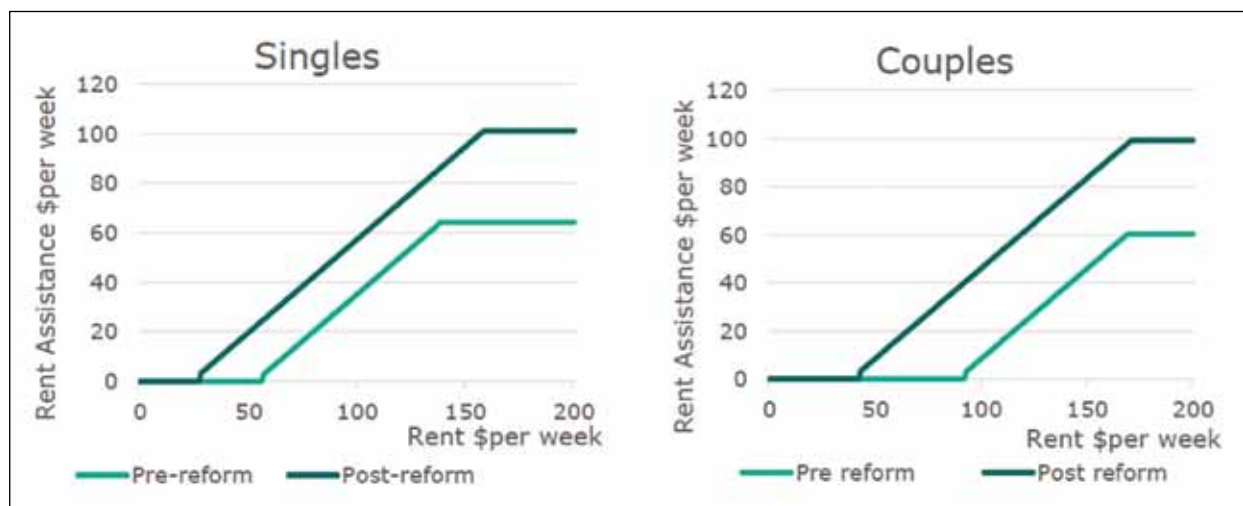
To that end, the thresholds for rent assistance should be broadened, and rent assistance should cover three of every four dollars of additional rent beyond the initial threshold (up to a maximum of just over \$200 for singles, just under for couples).

This revised rate will more adequately reflect the costs faced by pensioners renting apartments in capital cities in particular, raising the living standards of many non-homeowner pensioners.

Table 7: New rent assistance parameters

Fortnightly	Current payment	Current Threshold	New Payment	New Threshold
Single - Min	\$0	\$114	\$0	\$55
Single - Max	\$128.40	\$285.20	\$202.50	\$325
Couple - Min	\$0	\$185.40	\$0	\$85
Couple - Max	\$120.80	\$346.47	\$198.75	\$350

Figure 40: Rent assistance reforms



Remove the arbitrary deeming thresholds and consider raising the deeming rate

The concept of deeming is important, because it gives pensioners certainty of income in light of uncertain (and lumpy) returns on investments. By deeming income, both the pensioner and the government know what the pension payments will be, and they won't constantly change every fortnight based on different investment returns, nor does the government have to seek repayment where returns exceed those expected. More importantly, pensioners are not underpaid in the expectation of returns that do not eventuate. On that basis it makes sense that the deeming rate should be conservative.

However, deeming should not be set to artificially low rates and so become a de facto way of boosting pensioner incomes.

The deemed rate of return does not reflect the rate of return available in the market. The first deeming threshold (a rate of 1.75%) in fact assumes a real loss on investments. While a low rate of interest may make sense on a daily transaction account, it is unrealistic to believe that pensioners would hold substantial assets making such a low rate of return. Even the 3.25% rate of deeming that applies above the threshold is a very low return.

Even with official interest rates at the lowest level in many decades, interest rates on a 12-month term deposit in late 2014 were as high as 3.75%¹⁰⁹. The average annual investment return on superannuation in Australia since inception is 7.1%, while the average ASX return over that period has been 10.4%¹¹⁰.

While the asset portfolio allocation of pensioners (particularly older pensioners) may be more biased towards low risk, fixed interest products, a deeming rate of 3.25% is too generous and 1.75% is just unrealistic. This suggests that as a first step the lower threshold (with its real loss) should be removed and the deeming rate be adjusted back to 3.5%, which would now apply to all income.

Include the family home in the assets test

All the evidence above on the importance of home equity to pensioner assets, and the inequities in the current system between homeowners and non-homeowners, make a clear case for including the family home in the assets test. It is simply inequitable for a pensioner with no savings or assets, and renting an apartment, to receive the same pension payment as someone with hundreds of thousands of dollars in assets—regardless of whether the value of those assets are realised.

Excluding the family home from asset means testing also creates a large incentive to own and live in your home in retirement. It creates artificial distinctions between different classes of assets and encourages over-investment in housing equity at the expense of other investments, it discourages pensioners from downsizing their homes (though there are schemes designed to alleviate this problem)—all factors that are undoubtedly contributing to Australia's problem with housing affordability.

The main arguments against treating the family home as an asset to be utilised in retirement are emotional. Many pensioners do not in fact view their home as an asset that can help fund their retirement. Most choose not to access the equity in the family home and many of those who do use the home to help support themselves only do so when they move into aged care.

It may be a largely unintentional consequence of this emotional position, but it is an undeniable fact some pensioners are making choices that result in them having a lower living standard than they could. While you can argue this is a choice they should be able to make—for example some pensioners choose to 'go without' in order to provide financial support to their kids—this is not a choice the taxpayers should be expected to fund. That lower living standard isn't a choice for people completely dependent on the pension.

Acknowledging these emotional beliefs are strongly held is important, but not more important than the benefits that could accrue to aged pensioners and taxpayers if

the family home were included in the assets test. The government should ensure that the reverse mortgage market is well regulated and supported so the emotional connections to the family home can be maintained, while the equity in the family home is released.

The basic principle that underpins the means test should be that \$500,000 in shares is treated the same as \$500,000 in real estate assets and the same as \$500,000 in savings. Including the family home in the assets means test goes some way to reinstating that balance (it should be noted that there are other incentives in the system for homeownership—especially cheaper housing costs—that are still retained under these reforms).

None of this should prevent government from removing obstacles preventing pensioners moving to smaller, more appropriate housing. In some ways, this would be a better outcome for both pensioners and the taxpayer than the solution proposed here, yet one that may not be feasible politically or socially.

Support development of the reverse mortgage market—the default annuity product

Having included the family home in the pension assets test, the government should also move to ensure pensioners can adequately access the equity in their home to boost living standards, encourage them to take out reverse mortgages and, importantly, continue to reassure pensioners their homes can never be taken from them under a government guaranteed/insured reverse mortgage scheme.

Beyond this, given the government currently pays tens of billions of dollars annually to boost living standards in retirement, both through pensions and tax concessions for superannuation, the government has a financial incentive to support alternative sources of income such as reverse mortgages. If government pension payments are replaced to some extent by private annuity payments, and increasingly, superannuation returns, there is the potential for government to save tens of billions of dollars every year.

On both the individual level and the government level, there are benefits to reverse mortgages becoming a mainstream financial product and an accepted, familiar phase of retirement.

One way to do this is to massively expand the Pension Loans Scheme to provide these annuities. However the potential cost to government of underwriting an expansion in the Pension Loans Scheme of the scale required should not be underestimated. Over the decades, trillions of dollars in housing equity would need to be converted into income streams, a huge investment of government funds.

Yet, given in time these investments will yield regular predictable returns, there is no reason why government should have to administer a scheme of this size and lend money using taxpayers' funds. The government does not run the superannuation system, it simply oversees and regulates it. So too it could do here.

This is not a radical concept. For one a government-backed reverse mortgage scheme exists in the US and there have been calls for a similar scheme to be introduced in Australia for aged care costs.

There are other relevant analogies. As the government bears the cost of public provision of health and education services (billions of dollars each year), individuals accessing health and education provided by the private sector reduces government expenditure. It makes fiscal sense for government to provide incentives for people to access these private services, even if these incentives cost money (as long as this cost doesn't exceed the savings). This is one of the main justifications for the provision of private health insurance rebates; moving people out of the public sector health system saves money. Similar justification can be made for the Medicare levy surcharge.

Another good example is the education bursaries canvassed in TARGET30: School Funding on a Budget whereby the government would provide additional funding for low-income students to attend private schools¹¹¹. Since the funding per student in government schools is \$7,200 higher than the funding for non-government schools, \$1,500 in additional funding could save the government around \$5,000 a year per student.

However unlike health and education, the government should not have to provide a subsidy to private reverse mortgage providers to deliver these products.

The government could insure or guarantee a standard form default reverse mortgage annuity product for the family home provided it meets certain conditions:

- A minimum and maximum loan to value ratio based on the age of the participant (ideally with a maximum LVR of 80% of property value by age 100)
- A set fee schedule—including general establishment and ongoing fees as well as a fee for provision of the government guarantee
- Requirements for participation in the scheme, including a minimum age for participation (linked to the retirement age), a minimum property value, and potential eligibility for the pension
- An agreed process for valuation of properties for participation in the scheme and review of these valuations by government to ensure they cannot be gamed
- It should reflect real growth in both annuity payments and home equity over time, and that value should be passed on to pensioners
- The payments would be in the form of a regular annuity payment with limited flexibility for other drawdowns
- A process is included for regular review of the terms of the mortgage—including the rate of growth of home equity, the rate of interest and the level of the annuity payments

Other conditions (for example limits on other indebtedness) should also be included and the terms under which the government insures or guarantees the loan should be subject to regular review.

The government should also offer a form of this product through the Pension Loan Scheme (which in substance is not that different from the current scheme) to ensure even pensioners who had limited access to private reverse mortgage funding would have access to a reverse mortgage in some form.

The other advantage of the government offering a competing product is that it creates a floor price, encouraging existing providers of reverse mortgages to compete to provide better terms. The product should also be an attractive investment as it effectively has a government guaranteed return equal to the interest rate on the loan, which is likely to be better than the current rate on long-term government bonds.

The risk to government of default on these loans is very low. The US scheme was designed in such a way that the fees paid for the government insurance cover the cost of defaults. In Australia the risk would probably be lower still; even if the property market falls, it is unlikely to fall 20% across the board (which is the level to which it would need to fall to activate the government guarantee). In one sense the government is already exposed to a type of downside risk because it is paying hundreds of thousands of dollars in pension payments to these pensioners already for no return. However, the upside is high.

The other step the government could take which should substantially expand the funds available in the reverse mortgage market is to open up the default reverse mortgage product to superannuation funds for investment. There are significant synergies between these types of reverse mortgages and superannuation annuity products. There are large overlaps in the clientele for super funds and this product and, perhaps most importantly, it is a low-risk, long-term investment—exactly the profile that a super fund is looking for in its investments. Opening this product up to super funds should mean that government capital is not tied up waiting for the system to mature and the returns to come in. The savings, on the other hand, will accrue straight away.

It is worth noting that, in its report *An Ageing Australia*, the Productivity Commission also makes a recommendation for a government-backed equity release scheme that could fund age-related expenditures, including aged care and health¹². There seems no good reason to exclude the largest age related expenditure, the age pension, from such a worthy scheme.

Deem income from the family home

By creating a default reverse mortgage product and by including the family home in the pension assets test, the government would have gone a long way towards boosting living standards for pensioners. However, the final step that makes this work is to link the two reforms by shifting the focus of the pension means test to

living standards. The way to do this is to deem annuity payments under the default reverse mortgage product as income for the purposes of the pension means test.

There are three reasons for doing this. First, having removed the artificial distinction between different classes of assets under the means test, it would be odd to ignore the fact that real estate assets can, and do, generate income the same as other assets. A house is not a car or a caravan that depreciates in value until it is sold.

One way to deal with this income problem would be to impute rent to the home, but this system would be a horrid, complicated mess.

A better way is to acknowledge that equity in the home can be accessed through products such as a reverse mortgage and that this income stream is not materially different from an income stream from an equivalent financial asset. By ignoring the impact of this income stream on pensioner living standards, the government is in effect maintaining a subsidy for homeowners at the expense of non-homeowners.

The second, and possibly more compelling, reason for deeming income from the family home is that including the family home in the pension assets test may not be a sufficient incentive to force a change in attitudes. Pensioners may feel they are being forced out of their homes, which is not the case, and they may worry that their living standards will fall.

Worse still, simply including the home in the assets test may be framed as a punishment for owning your own home, ensuring (politically, at least) that the reforms could never be implemented and the massive gains in pensioner living standards that can be accessed by following the recommendations in this report will be lost.

The third reason is that two houses with roughly similar values may not have the same income producing capabilities—for example, the annuity on a \$500,000 property in Sydney might be different from a similar value property in northern Tasmania. By assessing home equity both against the assets test and the income test, these factors can be included and the potential of the family home to raise living standards can better be gauged. Under an income test, the lower annuity stream from houses that have a lower expected growth rate or face higher interest rates results in a higher pension payment, unlike the static valuations under the assets test.

There are other reasons as well. Pensioners who can access the equity in their home should be receiving a lower pension payment than those who do not have a home to mortgage. This is a fundamental principle of the welfare system and should be reflected in the pension in the same way it is reflected elsewhere. Deeming income from the default annuity would also channel pensioners into a product that provides them with a regular income stream similar to the pension, which will in turn alleviate the pressure on the pension itself. In practical terms it will also enable a more accurate assessment of the value of the family home in the pension means test.

Pensioners should be actively assisted and encouraged to access the equity in their home. The simplest way to do this is to calculate pension payments on the basis that homeowners are in fact accessing the equity in their home.

How deeming would work

Ideally, issuers of default reverse mortgage products will provide the details of the annuity payment made under that mortgage to the government, who would then include that income in calculation of pension payments. As the terms of the reverse mortgage change over time, the level of equity decreases, and the means test evolves, so too would the pensioner’s payment change.

For those who have not entered into a reverse mortgage product, the government would simply assume the pensioner is receiving income from a default reverse mortgage annuity product on a similar property. Once the pensioner has entered into a default reverse mortgage product, that estimation would be replaced by the actual payments being received, and the pension payment adjusted accordingly. For more information on how this process might work, see the note below on the valuation of home equity.

Having calculated the level of the annuity, that payment is included under the income means test in the same way deemed income from shares is assessed and the pension payment adjusted accordingly.

Annuity payments—how to calculate the deemed income stream

Annuity calculations are relatively straightforward, but over the course of long periods of time (for example, the decades between retirement and death) small variations in the initial rates may lead to significant differences in the annuity payments. Therefore care must be taken in selecting these rates, and they should be periodically reviewed to ensure they reflect the real rates pensioners would face.

A basic home equity annuity model to complement the pension would feature a constant payment, a loan interest rate, a growth rate for the house value, and would be calculated to give a set payment until the net equity value reaches the desired minimum equity amount or would calculate a payment that would last until a set age.

This report uses an annuity model that allows for real increases in the amount of the annuity payment over time, and incorporates a set interest rate and home equity growth rate. Our annuities are calculated on the basis that they are entered into at age 65 (for simplicity of calculation it is assumed that any annual payment is made at the start of each year) and will reach the set residual value at the end of the year when the pensioner reaches 100.

It should be noted that in practice the rates may vary from pensioner to pensioner, and the income will be deemed off the actual income generated, not the

theoretical model. Our parameters below represent an estimate of expected average terms.

Table 8: Expected key parameters for the default reverse mortgage annuity

Parameter	Rate
Interest rate on loan	5.25%
Housing equity growth rate	6%
Growth in annuity payment	3%
Inflation	2.5%
Residual value	The greater of \$100,000 (inflated in line with CPI) or 80% Loan to Valuation Ratio
Minimum equity value to participate in the scheme	\$125,000
Annuity age range	65 to age 100

Interest rate

Our interest rate is the same as the rate for the PLS: 5.25%. The PLS interest rate has been set at 5.25% since 25 December 1997, suggesting it is relatively stable¹¹³. These rate is above the current level of mortgage interest rates in the market but below the level of reverse mortgage interest rates. However, if the government is willing to lend amounts of money to pensioners at this rate, it is difficult to justify selecting a higher rate. It is worth noting that, given the changes to the reverse mortgage market proposed below, it is expected that private providers would at least be able to match this rate, if not better it.

Housing equity growth rate

We have assumed the value of housing equity would grow at 6% a year nominal. This represents a full percentage point below the annual growth rate in median house prices between 1994–95 and 2011–12 and substantially below the double figure rates of growth seen in some areas of Australia in recent years¹¹⁴.

While the annuity calculation is sensitive to the rate of growth in housing equity value, these calculations take place across a 35-year span—meaning that short term fluctuations should be smoothed out significantly over the longer term.

As can be seen from the chart below, while there have variations between years, including periods of slower growth and higher growth, in the longer term the variations are not so wild as to be a factor of significant concern.

There may be areas of Australia, particularly some of the poorer rural and remote areas, where property prices grow significantly slower than the median for long periods of time. This is something the government should monitor and may require targeted intervention on a case-by-case basis. It should be noted that the lower growth in house prices that would result in a lower

annuity payment would also result in a higher pension payment, as the deemed income would have a lesser impact on eligibility.

We have also run some annuity calculations assuming between a 3% and 5% p.a. growth rate (essentially meaning a 35-year period of just 0.5% to 2.5% p.a. real housing equity growth); the outcome of these calculations are set out in Appendix I: Sensitivity Analysis.

Growth in annuity payment

We have assumed a 3% annual growth rate for our annuity payment; this represents an annual real increase of 0.5%. In order to maintain the benefit of this annuity over time, the annuity payments under this scheme should roughly keep pace with the growth in the maximum rate of the pension.

Pensions have experienced real growth in recent years, partly because of discretionary increases but also because of the benchmarking of pensions to wages. The current government has flagged a reduction in the generosity of the indexation where pensions would only increase at the rate of inflation. However it is more prudent to assume that pensions will continue to experience a small amount of real, annual growth, consequently giving an annuity growth factor of 3% in nominal terms.

Inflation

The Reserve Bank of Australia inflation target is a band between 2% and 3%. We have chosen the middle of this band for our inflation forecast, 2.5%.

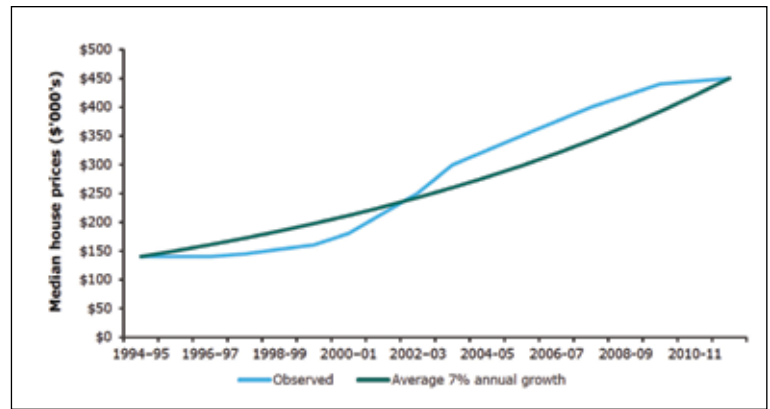
Residual value

The residual value is the minimum amount of equity left in the property at the end of the life of the loan. In short, it is what is left after the annuity has been paid. It can be expressed as a set dollar amount but is typically calculated as a maximum loan to valuation ratio (the amount of the loan divided by the value of the equity, expressed as a percentage and known as LVR). There is no guarantee that the pensioner would receive the residual value upon sale of the property.

There is a range of different residual values that could be used, and those residual values often vary with age (so the older the borrower, the higher LVR they could have). In the private market options surveyed above, the maximum LVR ranges between 25% and 45%. The government PLS allows for a 68% LVR for those aged 90.

We have chosen a hybrid residual value where the residual amount is the greater of \$100,000 (inflated at CPI) or a maximum LVR of 80%.

Figure 41: Median house prices 1994–95 to 2011–12



Source: ABS Cat. 4130.01 Housing Occupancy and Costs, ALL HOUSEHOLDS, Housing costs by selected household characteristics, and dwelling values (note the observed figures are biennial observations—it is assumed that growth is linear across the interim periods)¹¹⁵

There are several reasons for selecting this increased rate. First, as can be seen above, the government scheme increases maximum LVR by age but stops increasing at age 90 where the ratio is 68%. If you extrapolate that trend to age 100 you end up close to 80% LVR and, as the annuity payments build up the balance of the reverse mortgage over time, at age 90 the LVR under our scheme is only 68%—suggesting that anyone who does not live past 90 would not push up against the 80% LVR limit anyway.

Second, this provides a reasonable buffer against movement in house prices as well as extra funds for retirees to access to pay for their age care, or to leave to their children. It does not leave pensioners destitute as a result of accessing the equity in their home.

Though currently reverse mortgages do not have such a high LVR, banks have some comfort with that level of exposure to property prices: 80% LVR is the level at which lenders under a standard mortgage typically require lenders' mortgage insurance¹¹⁶.

It is also prudent for the terms of the annuity to be revisited every 5 years to ensure the parameters remained accurate and the payments were not overly diminishing household equity. Outside of a catastrophic and lasting fall in house prices, by simply freezing the annuity the government and/or lender could manage their risk. A reduced annuity payment would also reduce deemed income, thereby increasing pension entitlement for those periods.

Beyond this, as the risk already lies with government because of the substantial sums of money it is currently paying these pensioners, it is in the government's interest to allow for greater leverage. It is also likely that a sustained and significant collapse in house prices would have very negative impacts on the government anyway, as the global financial crisis showed, and the risk of this is slight.

Minimum equity value

As we have set the minimum residual value to \$100,000 it is assumed that pensioners will have at least \$125,000 in home equity before they can access this scheme. There is nothing preventing pensioners with a lesser value of equity in accessing the scheme, but for the purposes of this report we have assumed they will not do so.

It is worth noting again the dispersion in property values across the country. Pensioners in Sydney and Melbourne in particular are likely to have much higher property values (and potentially higher growth rates as well).

However, the minimum value for the scheme is well below the median property value for all capital cities (and most of the rest of the country as well), meaning that participation in the scheme should be available to more than 95% of pensioner homeowners.

Age range

We have assumed that the annuity would have to last from pension eligibility age (currently 65) up to and including age 100. This is a relatively conservative estimate as many people will not be eligible for the pension from age 65 and many more will pass away before 100. As the pension eligibility age increases, so too will the annuity age (so when the pension eligibility age is increased to 70, the annuity would last until 105).

Cameo update—Mavis

Comparing the living standards of Mavis under the current regime and our proposed reforms shows the extent of the gains possible by accessing home equity even for those who do not own their own home.

Remember that Mavis has \$10,000 in savings but is otherwise completely dependent on the pension. She receives the maximum rate of rent assistance but this barely covers a fraction of the rent on her Sydney apartment.

Mavis receives an increase in the base rate of her pension from \$22,365.20 to \$23,469 and her rent assistance payment goes from the maximum rate of \$128.40 a fortnight up to \$100 a week. This does not meet the full cost of her rent but does give her an extra \$1,850 a year in assistance.

These reforms increase Mavis's total income from its current level of \$26,204 a year to more than \$29,169, an increase of 11.3%

Cameo update—Seema

Seema currently has the same living standards as Mavis, yet her income should be much higher and her dependence on government should be much lower.

Seema's annual annuity payment would be more than \$34,700, much higher than her current pension payment.

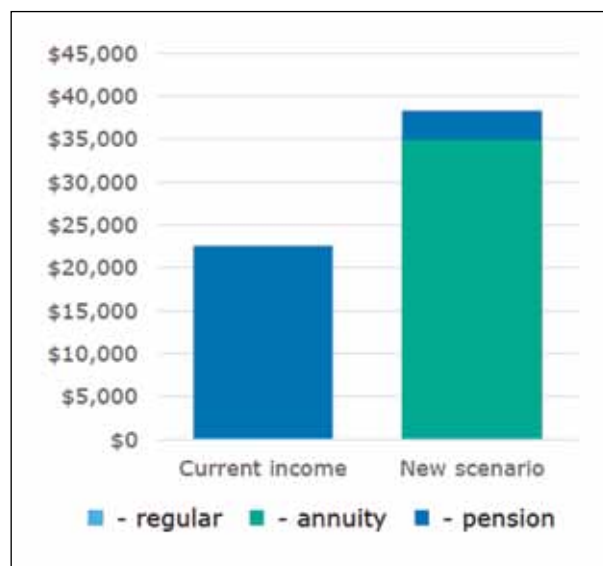
On the other hand her pension payment falls to \$3,405, saving the taxpayer nearly \$19,000.

This is an 85% reduction in pension payments to Seema yet her income goes from \$22,565 to \$38,324. This is an increase of nearly 70% - a massive lift in Seema's living standards.

Figure 42: Mavis under our reforms



Figure 43: Seema under our reforms



Cameo update—Nancy and Gerald under our reforms

Nancy and Gerald, with their \$350,000 home, \$100,000 art collection and \$150,000 share portfolio are in a much better spot than Mavis but were still receiving a significant pension.

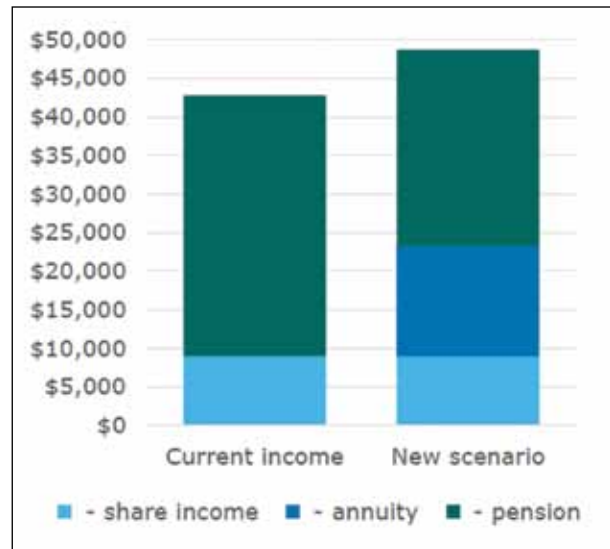
Nancy and Gerald are also going to be better off under our reforms, as they access the equity in their Boonah home to improve their living standards and reduce the pension burden on the government.

Their current pension payment of \$33,716.80 will be reduced to \$25,290.57 a year but they will be able to access equity in their home of \$14,296 a year.

This takes their annual income from its current level of \$42,717 to \$48,689, an increase of 14%.

The taxpayer will also save more than \$8,300 p.a.

Figure 44: Nancy and Gerald under our reforms



Cameo update—Leonard under our reforms

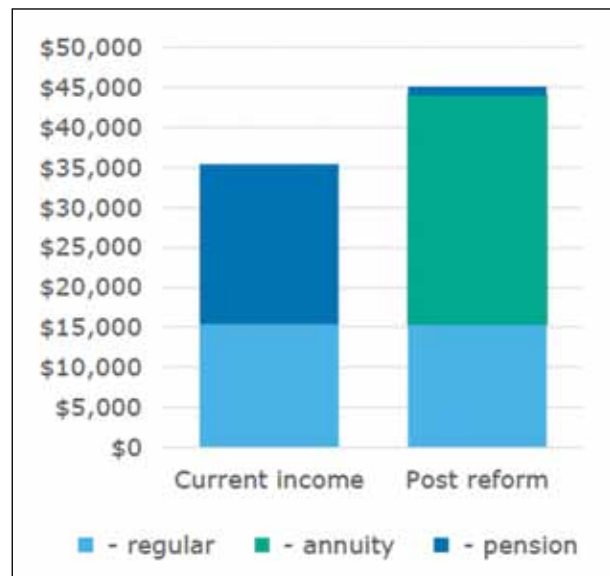
Leonard has both the largest personal income (\$15,400 from his job at the greyhound track and his beach house) and the most assets (his \$700,000 home and his \$200,000 beach house). He also gets a pension of nearly \$20,000.

Leonard shouldn't be receiving such a generous pension, he can get a much better outcome for himself and the taxpayer if he accesses the equity in his home.

Leonard can get an annuity of nearly \$28,600 a year from his \$700,000 home. His pension payment then reduces to \$1,087. His income though increases from \$35,395 to \$45,079, an increase of 27% over his current situation.

In addition, the taxpayer saves more than \$18,900 a year, a reduction of 95%.

Figure 45: Leonard under our reforms



A note on valuation of home equity

An important step in including the family home in the pension assets test is determining how to value those homes. It is one that is often overlooked by those who advocate for the inclusion of the home in the assets test. In some cases, recent sale prices or median prices in the area could provide a guide but these indicators are crude tools and ill-suited to the assessment of pension claims, especially for pensioners who have held their homes for decades. The expansion of the reverse mortgage system through the default reverse mortgage, and the inclusion of deemed income from it in the pension income means test, largely solves the thorny issue of home valuations.

For pensioners who access a reverse mortgage, which should be the vast majority of pensioner home-owners, an initial valuation would be conducted by the reverse mortgage provider upon entry into the mortgage (the cost of which would be included in the application fee). This valuation would likely be updated periodically as the reverse mortgage was adjusted over time to reflect changing circumstances. This valuation would be reported to the government as part of the approval process for the government guarantee/insurance, and

subject to that valuation being unreasonable, would be accepted as the value for the purposes of the assets means test. Competition among reverse mortgage providers should ensure robustness of the valuation process.

However, procuring a reverse mortgage product is not mandatory and some pensioners may choose not to get one, or not have sufficient equity to qualify for one. One simple solution is for the government to assess the pensioner's home under its own reverse mortgage scheme even if it doesn't end up paying the mortgage.

In addition to this, over time the government will build up a substantial database that tracks home valuations from approved default reverse mortgages, as well as sale values as these mortgages are paid out. Comparing a property with others featuring similar characteristics, in a similar location with similar socio-economic conditions, will enable the government to estimate an expected valuation for that property with relative accuracy. It will also be able to estimate an annuity stream that could be generated from property.

These estimates will form the basis of the asset values and deemed income for pensioners who do not have a reverse mortgage. Over time these valuations would be reassessed to ensure they remained accurate. Pensioners could also request a valuation for their property (for a fee) if they were unhappy with the estimates provided.

Funding the annuity streams

Another relevant consideration may be how the stream of reverse mortgages will be financed. However with Australia's current superannuation assets estimated to be \$1.6 trillion as of June 2013, and projected to climb to \$5 trillion by 2043, there should be ample funds under management to provide the cash flow required to convert pensioner equity into income streams (the value of pensioner home equity is roughly \$625 billion^{117*}). This reverse mortgage asset class should be attractive to superannuation funds, who favour steady returns over the longer term.

Once the scheme reaches maturity, and as the mortgaged properties are sold, there will be a steady flow of cash back into the system, which participating financial institutions may use to provide the annuity payments. Prior to this there will be a need for liquidity to provide annuity payments in the years leading up to the assets sales reaching a level that is sufficient to fund annuity payments.

Tighten and simplify the means test

The homeowner/non-homeowner distinction in the pension means test is an unnecessary contrivance due to the exclusion of the family home from the assets test. Including the home in the assets test allows for simplification of the assets test.

In addition, the current means test for the pension is very generous for those at the top end of the income and assets distribution. People with hundreds of thousands of dollars in assets are receiving a substantial pension, while the various exemptions for certain types of income and underestimation of deeming combine to undermine the effectiveness of the income test.

The reforms described above will significantly tighten the assets test.

Similarly, the income test can be tightened to ensure that pension payments are directed to those most in need. The lower threshold (\$4,160 a year for singles and \$7,384 for couples) should remain but, particularly

in light of the deeming changes for the family home, the taper rate should increase to 60 cents in the dollar.

The increase in income from the annuity and the increased base rate more than offsets the reduction in pension payments from this change for the vast majority of low wealth, income pensioners.

Indexation

Though the government has committed to the removal of the MTAW benchmark from the Age Pension indexation arrangements from July 2017 and return the Age Pension to CPI indexation, this reform is yet to be legislated.

As noted above, the current indexation arrangements have led to a ratcheting up of the real value of pension payments over time. MTAW benchmarking ensures that in years when wages grow faster than prices (as they mostly do), pensioners receive increases in their payment. When prices jump ahead of wages, pensioners are shielded from any reduction in the real value of their payment while the living standards of employed Australians fall.

Proponents of the MTAW benchmark, such as ACOSS, argue it is necessary so that pensions do not 'fall behind community living standards,' but MTAW is not a measure of any particular standard of living, let alone one that reflects a generally accepted community standard¹¹⁸. It is a measure of the gross wages paid to men and ignores the fact that 45.9% of all employed Australians are women.

The 2009 Harmer Review into pensions and, more recently, the National Commission of Audit have described the MTAW benchmark as an anachronism. This is a rather kind assessment, as automatic MTAW benchmarking has been in place only since January 1997 when women made up 43% of employed Australians. If the purpose of benchmarking is to reflect "community living standards", then surely Australia's 5.3 million working women should be considered part of that community.

While the removal of the MTAW benchmark is projected to save as much as \$6.9 billion in Age Pension outlays by 2024–25, it would be naive to think the deeming and indexation reforms the government has proposed will be sufficient to constrain Age Pension expenditure in the medium term¹¹⁹.

Rather than tying pensions to a multiple of gross wages, or to the average basket of goods pensioners might

Table 9: New asset means testing rates for full and part-rate pensions

Assets test	Current full pension		New full pension
	Homeowner	Non homeowner	All pensioners
Singles	\$202,000	\$348,500	\$350,000
Couples	\$286,500	\$433,000	\$400,000

* As of June 30 2013 there were 1,766,926 age pensioners who own their own home. If the percentage of singles and couples is the same in the pensioner homeowner population is the same as that in the wider pensioner population then this suggests single pensioners account for 763,312 dwellings and pensioner couples for a further 501,807. Using the average home equity values for singles and couples aged 65 and over contained in Figure 22 suggests an approximate estimate of total age pensioner would be \$625 billion.

have bought in the very distant past, the Age Pension should be indexed to the PBCLI. This will ensure the Age Pension increases in line with the pensioner's cost of living, thereby maintaining its real value in a manner similar to CPI indexation.

Rather than legislated automatic real increases in the Age Pension, increases in the maximum rates should be considered by government on a discretionary basis in the context of what is affordable given the state of the budget. While these discretionary increases need not occur every year, they should occur every few years or so to ensure pensioners do not fall too far behind the rest of the community.

If inflation were to remain at 2.5% and MTAW were to grow at 4%, indexing the pension to CPI and removing the MTAW benchmark would see the pension fall to 16% of MTAW by 2055. While it is highly unlikely the ageing electorate would tolerate a pension freeze for this period of time, the absence of a sunset clause in the government's 2014–15 budget proposal to remove the MTAW benchmark invites these sorts of comparisons¹²⁰.

If the pension is to be periodically increased in line with wages, it should be benchmarked to Average Weekly Earnings, those of men and women, as suggested by the most recent Commission of Audit. It should also take into account the taxes that are paid out of these earnings to fund real increases in the pension.

While the 2014–15 budget proposes a pension freeze it also contains no plans to return bracket creep to the wage earners who pay for pension increases. If bracket creep is to continue until 2020–21, as is assumed in the Intergenerational Report, a wage earner with earnings equal to MTAW would see their average tax rate increase from 22.6% to 25.6% after taking into account income tax, the Low Income Tax Offset and the Medicare Levy. A single pensioner on the maximum rate does not pay any tax net of the Senior Australians and Pensioners Tax Offset.

This means that MTAW has increased by 27%, over the period, real disposable income has increase by just 4%. By contrast, the real increase in pensioner's disposable income would be 9%.

Under the above assumptions regarding CPI and MTAW growth, a wage earner with earnings equal to MTAW would see their income increase by \$6,664 in real terms between now and 2020–21. However, after five years of bracket creep their real disposable income will increase by only \$2,862.

A better approach to benchmarking would be to top the pension up to a multiple of the after-tax income of an average wage earner.

Raise the base rate of the single and couples pension

Given the relatively broad cross-section of pensioners who currently receive the full rate of the Age Pension, the cost of rises in the maximum payment of the pension is substantial. It also provides additional benefits to those who could be accessing the equity in their homes, in effect alleviating the need for those pensioners to secure reverse mortgage products.

There has been significant and sustained real growth in the base rate of the pension for some years. In addition to those that accompanied the introduction of the GST and the introduction of the carbon tax, there was a one-off increase in the single rate of the pension of \$1,560 in 2009 in response to the Harmer Review.

On this basis a proposal to increase the pension in the current environment should be approached with caution. There is little evidence that across the entire pension cohort the pension is materially insufficient.

However, the proposed changes to the assets means test (including the family home) and to the income means test (increasing the taper rate to \$0.60 for every dollar, deeming income from the family home), together with changes to indexation will impact all pensioners. The intention of these changes is not to leave those at the bottom end of the income and assets distribution worse off, but to target the pension more appropriately and reduce the distorting impact of ignoring a typical pensioner's main asset.

The above reforms will substantially change the pension system; the expected result is that the number of people receiving the full rate of the pension would dramatically fall. Those pensioners who remain on the full rate of the pension will be those who have the lowest net worth and the least income. In effect they are those who need the most assistance. To that end, a small, one-off rise in the base rate of the pension should ameliorate any potential negative impacts of these reforms on those people.

Another important consideration is the political ramifications of pension changes. Directing some of the savings from these reforms (which are substantial) towards those who would otherwise not benefit is likely to make these reforms much more politically saleable and hopefully break the political logjam over pension reform.

It is worth noting that with this proposed increase the full rate of the pension would equal or exceed the minimum adequacy measures canvassed in the section above on adequacy including the Henderson Poverty Line, the ACOSS 50% poverty line and the AFSA Modest Standard.

Table 10: New pension rates for singles and couples

	Singles		Couples (combined)	
	Current	New	Current	New
Per Fortnight	\$860.20	\$902.65	\$1,296.80	\$1,298.69
Annual	\$22,365.20	\$23,469	\$33,716.80	\$33,766



Boosting living standards in retirement by unlocking home equity

This section examines how age pensioners who own their own home can boost their living standards by converting their home equity into an income stream.

Benefits from the default annuity product

Taking the default annuity product described above, and applying that to income and asset data from the Household, Income and Labour Dynamics in Australia (HILDA) survey, shows the potential of this reform package to substantially lift retirement incomes.

Comparing income from the default annuity settings vs current policy settings

Figure 46 shows that under our reforms single pensioners who do not have any other income and currently receive the full rate of the pension (\$22,365.20) are better off regardless of their level of net worth. Their income is higher, for all levels of housing equity, than it is now.

For those around the median home equity values (between \$300,000 and \$500,000), the rises in income are substantial. They are many thousands of dollars a year better off if these reforms are implemented.

For couples the situation is broadly similar, with gains across the entire spectrum of net worth.

Figure 46: Total income (annuity plus pension) for singles by housing equity

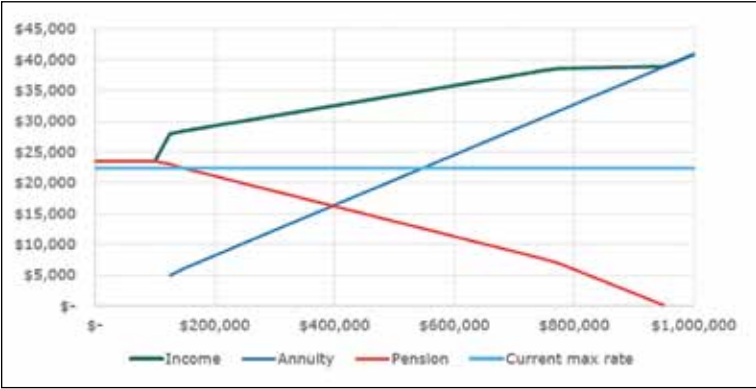
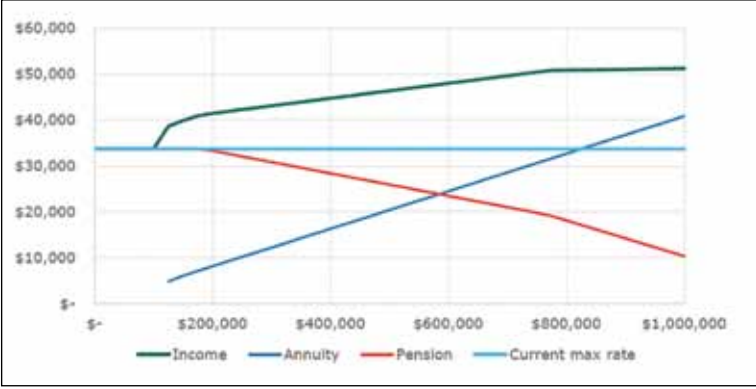


Figure 47: Total income (annuity plus pension) for couples by housing equity



* The data used to construct the simulated estimates of pension payments and reported private incomes comes from the 10th wave of HILDA. Before the Age Pension simulator is applied to the income and assets data required to simulate Age Pension payments they are updated so as to provide income and assets values that are appropriate for the application of the March 2015 Age Pension policy settings. Ordinary income and deemed income are updated by 3.9% per year for each year (or part thereof) between 2010 and March 2015. Deemable assets, and non-deemable assessable assets, are updated by 6%.

Even more so for couples than for singles, those with housing equity around the median level (i.e. those around the \$400,000 to \$600,000 level) see massive gains in potential living standards with an increase in income of more than \$10,000 a year.

Comparing income across simulated net worth quintiles from HILDA

Another way to look at the increases in income is to assess the benefits that accrue across net worth quintiles. Figure 48 presents average annual Age Pension payments and average private income for age pensioners in each quintile of net worth—which includes home equity—for singles and couples. As expected, the average pension payments for those in the bottom quintiles are the largest at \$22,066 for singles and \$33,288 for couples, slightly less than the maximum pension payments for March 2015*.

These figures show that, on the whole, pensioners are not receiving a good rate of return on the assets they have saved for retirement, as private income is low at every level of net worth. Most of their net worth is tied up in housing assets, which are not generating income to support living standards. It also shows the significant dependence on the pension to boost income despite the accumulation of wealth—even high net worth households can receive a large pension payment provided the bulk of their net worth is in housing (and earns little income).

Indeed, only age pensioner households in the top two quintiles face any significant means testing of the Age Pension, and even then the average amount of income received from the Age Pension is far from trivial. Single age pensioners in the 4th quintile receive \$18,853 while the top 20% receive \$14,288. Couples in the 4th quintile receive average payments of \$29,724 while pensioner households in the top 20% receive average payments of \$18,655.

Figure 49 presents the same wealth distribution, assuming that the reforms proposed above are implemented.

For singles in the bottom quintile, the proposed increase in the full rate of the pension provides a significant benefit; the average pension payment for single age pensioners in the bottom quintile increases from \$22,066 to \$23,091. Meanwhile those in the top quintile no longer receive a pension at all, yet their total income more than doubles.

Figure 48: Simulated annual income at age 65 by quintile of net worth—current

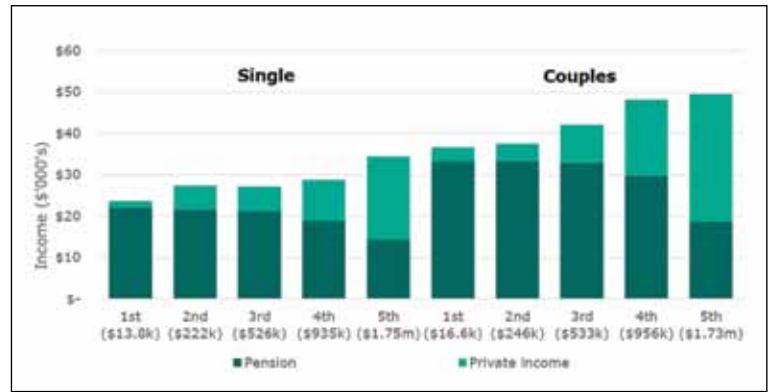


Figure 49: Comparison of simulated annual income by quintile of net worth—singles

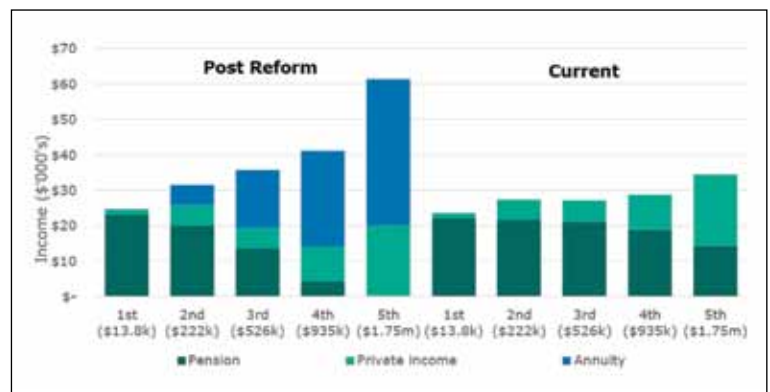
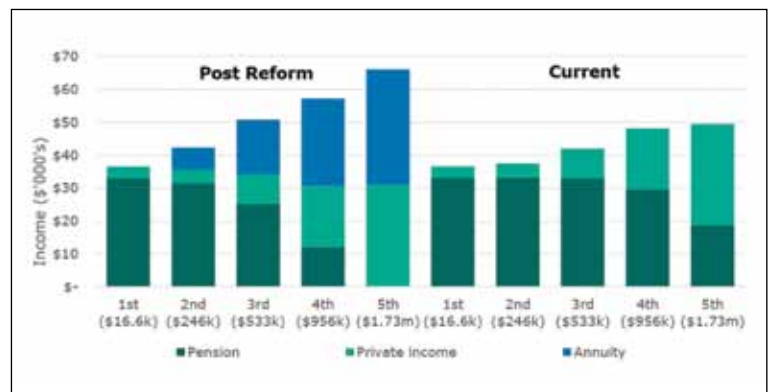


Figure 50 –Comparison of simulated annual income by quintile of net worth - couples



For both singles and couples, including the principal residence in the pension means test will lower the pension payments of homeowners in all quintiles. Like single households at the top of the wealth distribution, couple households in the top quintile will no longer receive the Age Pension.

* The data used to construct the simulated estimates of pension payments and reported private incomes comes from the 10th wave of HILDA. Before the Age Pension simulator is applied to the income and assets data required to simulate Age Pension payments they are updated so as to provide income and assets values that are appropriate for the application of the March 2015 Age Pension policy settings. Ordinary income and deemed income are uprated by 3.9% per year for each year (or part thereof) between 2010 and March 2015. Deemable assets, and non-deemable assessable assets, are uprated by 6%.

Age pensioner couples with few assets and no income will benefit from the increase in the full rate of the pension but, equally importantly, they are likely to benefit from the increase in the rate of rent assistance (which is not included in the simulation below).

Pensioners in the top four quintiles see strong gains as total household incomes benefit from home equity annuities. Pensioners in the top four quintiles see an average increase in their incomes of between \$4,800 and \$16,500 a year.

Winners and losers

Turning from the more specific to the aggregate level, we can see the benefits to pensioners are quite high. An overwhelming majority of pensioners are winners under our proposed reforms, and the average gain for the winners substantially exceeds the average loss for losers. Even allowing for potential deviations in interest rates, house price increases and maximum LVRs, our simulations show strong benefits to many pensioners (for more information see Appendix I: Sensitivity Analysis).

According to our simulation,[†] a combination of strong growth in housing prices and an opportunity to draw down a significant amount of that equity ensures that nearly 98% of age pensioners would experience an increase in their incomes by an average of \$5,900 a year. The relatively small percentage of those whose incomes decline (2.2%) experience an average loss of \$864.

Lifetime benefits and costs

The benefits of the reforms proposed in this paper are not merely temporary. They will lead to ongoing, real benefits in terms of increased living standards and lower government spending. Turning again to our cameos we see lifetime increases in income for all[§].

Mavis increases her total retirement income by nearly \$82,000. For Leonard, his overall total retirement income under our reform proposal increased by nearly \$640,000, despite a drop in his total lifetime pension payments of more than \$1.17m.

Table 11: Winners and losers under our reforms

	Winners	Losers	Total
Ave change in income	\$5,924	-\$864	\$5,777
% of pensioners	97.8%	2.2%	100
Number of pensioners	2,371,382	52,460	2,423,842 [‡]

Figure 51: Mavis aggregate pension payments and income age 65 to 100

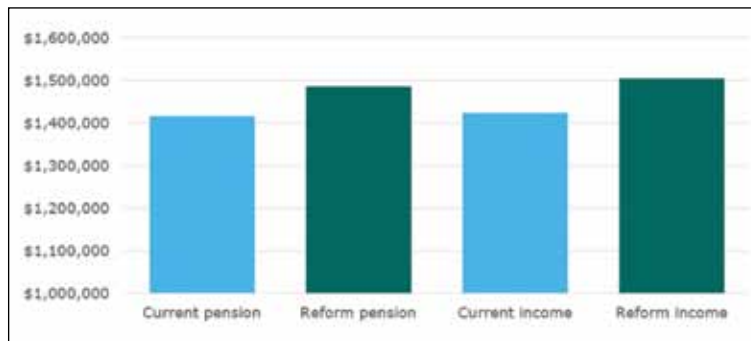


Figure 52: Leonard aggregate pension payments and income age 65 to 100

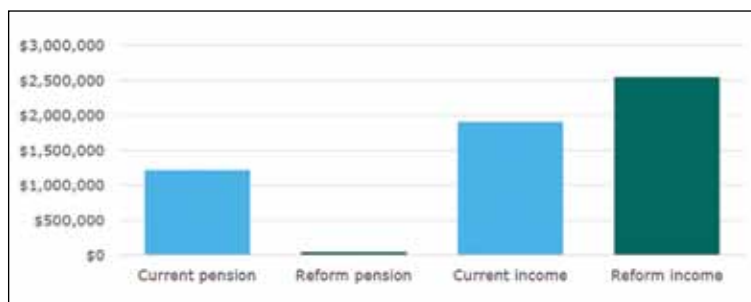
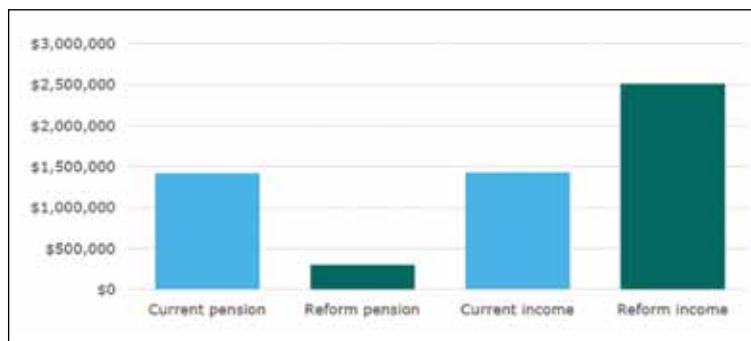


Figure 53: Seema aggregate pension payments and income age 65 to 100



[†] Note the winners and losers calculations are based on 2010 HILDA data simulated under current pension entitlement conditions (which is updated to 2015 dollars and weighted for comparison with current pension expenditure and entitlements) not actual pension data.

[‡] Note this is the pension cohort given in the September 2014 DSS Payment Demographic Data.

[§] Note, for the purposes of this analysis we have assumed that all our cameos are 65 years old again, with their current income and asset holdings. In addition we have assumed that Mavis and Seema spend all the interest on their savings accounts (rather than roll it over), Nancy and Gerald's 6% return on their share portfolio is split 2.5% roll over and 3.5% spent, Leonard stops working at age 70 and that over time his rental yield remains constant at 2.5%

Seema sees a bigger rise in her total income in retirement than Leonard. She receives an extra \$1.083m in income and costs the taxpayer \$1.11m less over her retirement.

Finally, Nancy and Gerald see a smaller increase in their total retirement income, a still substantial amount exceeding \$418,000, despite a reduction in total pension payments of more than \$486,000.

For three of our cameos, they gain the benefit of releasing equity in their homes to supplement their retirement and allowing the government to focus on the truly needy (our mavis cameo). There is also the potential for the government to consider handing back to taxpayers some of the benefits of this reduction in expenditure in the form of personal income tax cuts.

Having examined the overall gains and losses under different scenarios, we now give an indication of how these gains and losses are distributed across age pensioners with different levels of net worth.

Figure 55 presents the simulated changes in income under our reforms. The overwhelming majority of age pensioners across the entire distribution of net worth experience increases in their incomes. Many of those with modest wealth benefit from the increase in the maximum rate of the pension with increasing gains as we move up the wealth distribution and encounter pensioners with increasing amounts of home equity. Few pensioners incur a reduction in their total income and where this occurs the reductions are small in magnitude.

There will be some losers under these reforms; it is impossible to responsibly pass reforms that leave every single person better off. These reforms are not riskless, but nor are they reckless. The bulk of the pension cohort would be much better off and that makes these reforms important and timely. These reforms provide one of the best realistically achievable outcomes for the overwhelming majority of pensioners.

Of those that do lose out—a very small minority of pensioners—they generally lose only small amounts. It should be remembered pensioners who don't own their homes may also benefit from the revised and expanded rent assistance scheme and so they too end up as overall 'winners' from our reforms.

In any event, the significant benefits to the budgetary position that would accrue from these reforms also make them a priority for implementation.

Figure 54: Nancy and Gerald aggregate pension payments and income age 65 to 100

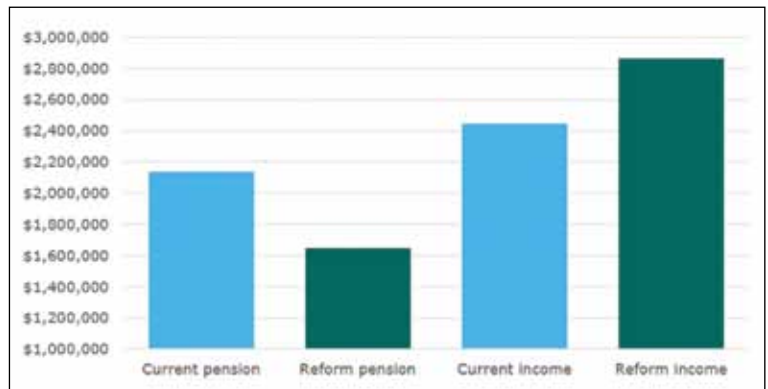
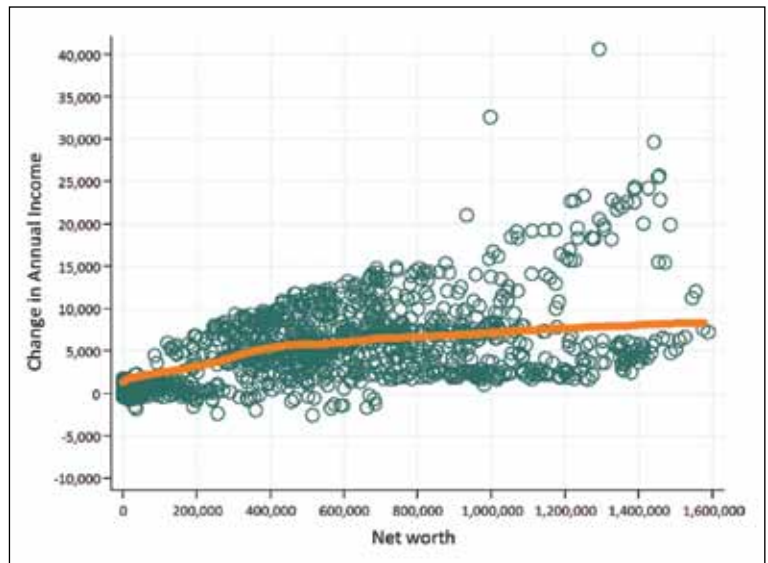


Figure 55: Change in income by net worth including reverse mortgage annuity income





Pension savings

The reforms proposed in this paper will have a significantly positive impact on the living standards of pensioners. This is an important goal of reform in its own right. However, the reforms will also significantly reduce the burden of the ageing population on the taxpayer and this is an equally important goal—especially in light of the fiscal impact of the ageing population.

Under our base case scenario pension expenditure decreases by a third.

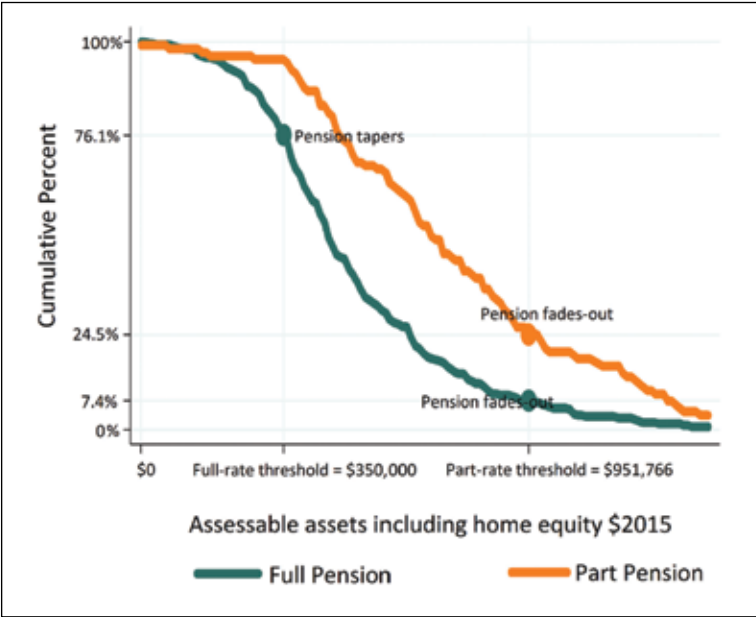
It should be noted that some of the savings identified below may be offset by increased government spending on aged care, as pensioners who previously accessed the equity in their home to pay for their aged care may have smaller equity balances to contribute. It is beyond the scope of this report to estimate how much additional spending may result from this, as it is dependent on a number of factors including:

- the age at which pensioners enter into reverse mortgages compared to the age at which they enter aged care (both of which may impact the level of equity remaining in the home);
- the length of time they spend in aged care; and
- other related factors (such as the level of care needed).

Table 12: Simulated Commonwealth Government Outlays on the Age Pension

Current expenditure	Expenditure under our reforms	Savings
\$42.2 billion	\$27.7 billion	\$14.5 billion

Figure 56: Cumulative distribution of assessable assets for single pensioners



It is highly unlikely, given the size of the savings predicted to result from the reforms, that the additional aged care costs will make taxpayers worse off overall.

In addition, in Appendix I: Sensitivity Analysis we look at how movements in interest rates, property prices and LVRs could impact these savings estimates, though in all scenarios billions of dollars of savings each year are found.

Figure 56 provides an insight into how our proposed means test produces these reductions in pension outlays. The figure presents the cumulative distribution of assessable assets, which now includes home equity, for those who reported receiving the full-pension and a part-pension in the HILDA survey in 2010. As in Figure 34 and Figure 35, these curves begin at 100% because no single pensioners in the study are in debt in excess of their asset holdings. The new asset test thresholds are marked out on the horizontal axis to provide an indication of the likely percentages of pensioners that are likely to be subject to more stringent means testing of their assets.

Under our proposed assets test thresholds, at least 76% of single full-pensioners would face a reduction in their pension, with 7.4% moved off the pension altogether (green schedule). Despite facing a more generous assets test threshold under our proposed assets test, single homeowners face a reduction in their pensions that is largely the result of the inclusion of home equity in assessable assets. This is in contrast to single non-homeowners whose assessable assets are left unchanged and now face a slightly softer assets test.

The figure indicates that about a quarter of single part-pensioners would be shifted off the Age Pension under our proposed assets test for having assessable assets that are above the value at which the (now higher) maximum rate of the pension fades out (\$951,766).

These percentages are indicative only, as they take no account of how income, whether deemed or earned, would impact Age Pension payments. For this reason, these percentages are likely to be conservative estimates of how the proposed means test would impact upon age pensioners with these levels of assets.

Figure 57 suggests a similar pattern of results for couple pensioners. Even without the impact of our proposed tightening of the income test, including the family home in the assets test would shift 74.6% of full-pension couples onto a part-pension and 6.7% off altogether. Just under 33% of part-pensioners would lose eligibility.

Figure 57: Cumulative distribution of assessable assets for couple pensioners

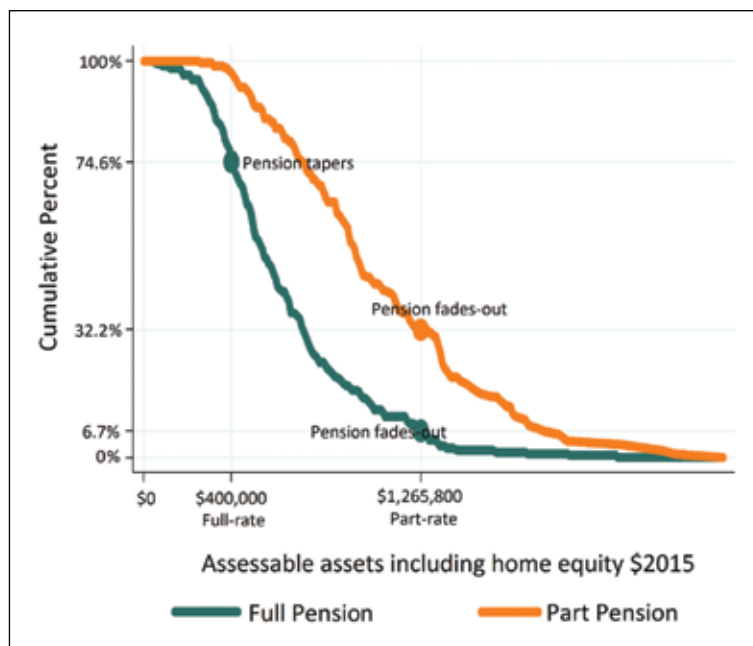
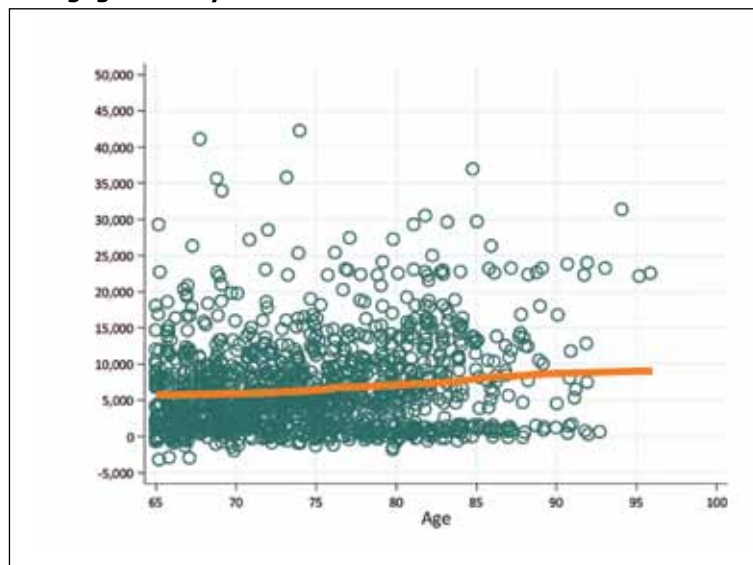


Figure 58: Change in income by current age including reverse mortgage annuity income



Grandfathering existing pensioners

While typically reforms to entitlements of those of retirement age or nearing retirement age feature substantial grandfathering for existing pensioners, it should not just be assumed that this is the best option. Indeed, those pensioners who are older than retirement age are likely to gain even greater benefit from accessing their home equity than the simulated results above.

To illustrate this point, Figure 58 presents a similar plot of simulated income changes that would result from our proposed reforms. In contrast to Figure 55, the simulated income streams from home equity are not assumed to begin at the age of 65 but at whatever age the responding person was when interviewed for the

10th wave of the HILDA survey. For those age pensioners who were over the age of 65 this simulation provides higher annuity payments than those observed in Figure 55, as the housing equity that was observed in wave 10 of HILDA need only be drawn down from their actual age to age 100.

If we look at the distribution of these gains across net worth quintiles, the opportunity to boost the retirement incomes of current pensioners becomes clear. For singles, the second through the fifth quintiles incomes are between 2% and 10% a year higher than under expected conditions and every quintile does better than both current incomes and the simulated results under expected conditions.

For couples the benefits are less stark but still positive, with the third, fourth and fifth quintiles all receiving an extra \$900 to \$2,275 a year in income.

These figures give an indication of how age pensioner incomes would change if the new means test were applied immediately rather than on the cohort of 65-year-olds at the time the means test were introduced. The average benefit increases from \$5,777 to \$6,900, as the winners pick up an extra \$1,148 on average and the average loss falls by \$5 a year.

If these settings were applied to existing pensioners, the total pension expenditure would fall by more than \$16.4 billion a year. Even allowing existing pensioners to opt into this scheme could deliver thousands of dollars in extra income, and billions in reduced pension expenditure, each year.

Figure 59: Current single pensioners' income by quintile

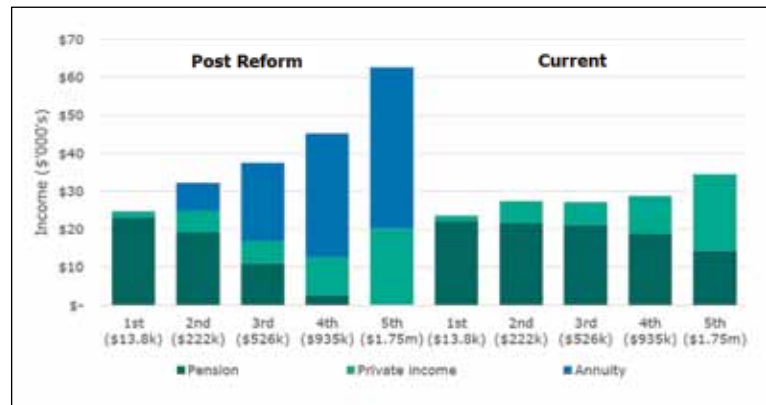


Figure 60: Current couple pensioners' income by quintile

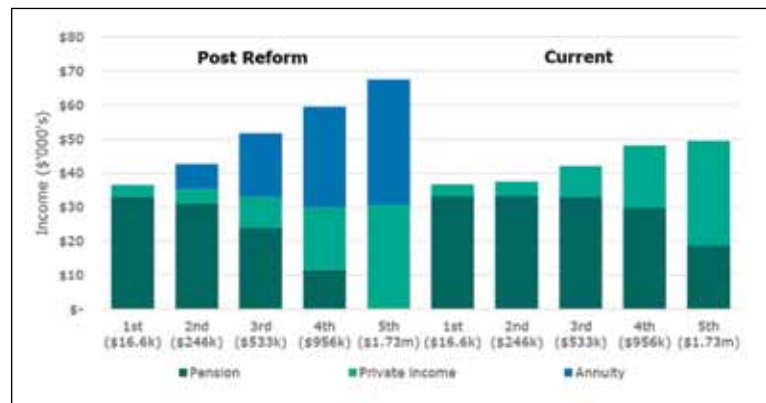


Table 13: Winners and Losers – current cohort

	Winners	Losers	Total
Ave change in income	\$7,072	-\$859	\$6,900
% of pensioners	97.8%	2.2%	100
Number of pensioners	2,371,382	52,460	2,423,842



Conclusion

The importance of getting Age Pension policy right is clear. Not only is the Age Pension the single largest payment in the Commonwealth budget but more than 2.4 million Australians receive the payment.

Unfortunately, there are significant problems with Australia's pension policy that will have serious economic and fiscal consequences as our population ages. While the stereotypical view of pensioners is that they live in extreme poverty, this is not the case. The pension is in fact too generous to those with significant assets and higher income, providing government assistance to those with the means to support themselves. The effect of this is that 4 of every 5 people of retirement age are on the pension. In addition, the means test is quite complicated and the deeming provisions understate income.

The biggest cause of these problems is the exclusion of the family home from the assets means test. This offends some of the most important principles of Australia's welfare system—vertical and horizontal equity. It also means that the pension means test does not align with pensioners' net worth, and people with substantial assets receive the same pension payments as those with little or no assets.

This key flaw in the pension means test has other consequences as well. Pensioners who own their own home have significant advantages over pensioners who don't own their home, from lower housing costs to preferential tax treatment. It encourages pensioners not to see their home as an asset that can support them in retirement. It incentivises over-investment in housing assets and under-investment in income-generating assets that could be used to boost living standards.

There are several important pension reforms the government should undertake, such as lifting the rate of rent assistance for pensioners, revisiting pension indexation and streamlining and tightening the pension means test. However, there are three key reforms that can fundamentally change the nature and scope of the pension for the better. These reforms would significantly improve the living standards of the overwhelming majority of pensioners and substantially reduce government pension expenditure:

Including the family home in the pension assets test;

Supporting the use of reverse mortgages by legislating for a government insured or guaranteed default reverse mortgage annuity product; and

Deeming income from the family home under the pension income means test in accordance with the default reverse mortgage

The impact of these changes would be immense. They would allow the government to focus pension expenditure on those who have few assets and little income, boosting the base rate of the pension. By implementing this reform package, pensioners in all walks of life would see substantial increases in their real income, while their homes would remain safe under government protection. 97.8% of pensioners would see an average benefit of more than \$5,924 a year. Just 2% of pensioners would be worse off, and the average loss would be less than \$875 a year.

Substantial benefits would still accrue, even if the assumptions in this report about interest rates, maximum LVRs and home equity growth rates are too optimistic.

Beyond the significant boost in pensioners' living standards, taxpayers would save \$14.5 billion a year in pension expenditure as more than 75% of full-rate pensioners move onto the part rate of the payment and more than a quarter of singles and more than a third of couples, on the part rate would lose their eligibility altogether. As the superannuation system matures, it is likely that the numbers moving off the part-rate will increase.

The simple fact is that Australians are directing a significant proportion of their savings into an asset (the family home) that is underutilised in retirement. The answer is not to force people to sell their homes, or to punish them for diligent saving or for increasing house prices; instead the government should help those people access the equity in their homes to fund their retirement, while ensuring that those who do wish to sell their properties can do so.

It seems that the solution to the coming pension crisis was at home all along.



Appendix I: Sensitivity analysis

There are always risks in forecasting income and asset prices over long periods of time. The fact that median house prices grew at a rate of 7% p.a. in recent decades, while persuasive evidence, is not proof these returns will continue into the future. To be worthwhile reforms, the proposals in this report need to be able to withstand a variety of market conditions.

Therefore, it is beneficial to simulate pensioner incomes with a number of key variables changed, to see what the impact would be across different quintiles of net worth.

The Scenarios

We have looked at six different combinations of interest rates, return on home equity and loan to valuation ratios.

These scenarios reflect different terms that might arise under the default reverse mortgage product such that the estimated amounts of income received from home equity, and the deemed income to be included in the assets test, would be lower than those presented in the

body of our report. Other elements of our reforms (for example, the revised income means test taper and the revised asset test thresholds) would remain the same, though in cases of substantial hardship caused by extended periods of low returns, the government may wish to consider discretionary relief for pensioners.

Again a distinction should be drawn between short term fluctuations in house prices and the long term accumulation of value in the family home. The housing market, like all markets, will have periods of strong growth and may at times fall in value. Over the course of a 35-year annuity these fluctuations will even out; it is the long term rising trend that lifts living standards across retirement.

Scenarios where house prices increase by 6% a year provide the highest average gains for age pensioners, as they provide those who own their homes with greater amounts of equity to draw down for a given rate of interest on the debt.

Table 14: Different scenarios for the default reverse mortgage product

	Scenario 1	Scenario 2	Scenario 3	Scenario 4	Scenario 5	Scenario 6
Maximum LVR	Higher of 80% or \$100k	50%	50%	50%	Higher of 80% or \$100k	Higher of 80% or \$100k
Interest rate on loan	5.25%	5.25%	6.7%	6.7%	5.25%	5.25%
Return on home equity	5%	6%	6%	5%	4%	3%

Scenario 1

Figures 61 and Figure 62 present the average amounts of income that single and couples pensioners would receive before and after the reforms proposed in this report. The income is broken down by pension payments, private income and home equity annuities. Scenario 1 makes an assumption of 5% p.a. growth in home prices but is otherwise the same as the base case.

The simulations for this scenario suggest that even if there were a reduction in home equity returns to 2% below their current long term average, there would still be a substantial real increase in pensioner income across all single net worth quintiles. Couple pensioners in the top four quintiles also all benefit from these reforms under this scenario. There is a minor negative change for the bottom quintile of couple pensioners, most likely those with modest assets but comparatively higher level of income, perhaps because one of them is still in the workforce. Couples in the bottom quintile who receive the maximum rate of the pension will benefit from our proposed increase in the maximum rate and likely from additional rent assistance as well.

Importantly, even with more modest growth in home prices, age pensioners would experience an average increase in income of \$3,136 overall. Just under nine in 10 age pensioners would receive an increase in income of \$3,673 on average, while the 12% who saw a reduction in their incomes would lose an average of \$961 a year.

Figure 63 illustrates the change in income before and after the reforms under the Scenario 1 assumptions. Even with slower growth in home prices, gains accrue to age pensioner households across the entire distribution of household net worth, on average, with a significant lift for those households in the middle of the wealth distribution.

Figure 61: Single pensioner income under Scenario 1*

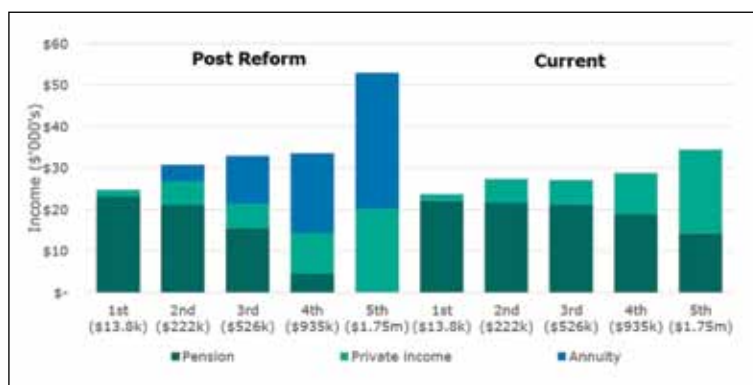


Figure 62: Couple pensioner income under Scenario 1

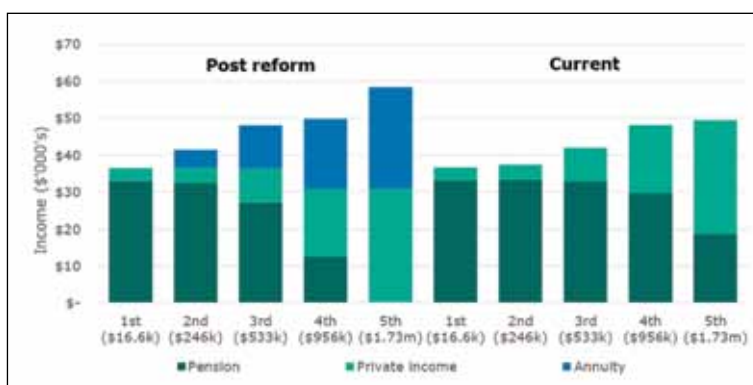


Figure 63: Change in income by net worth in Scenario 1

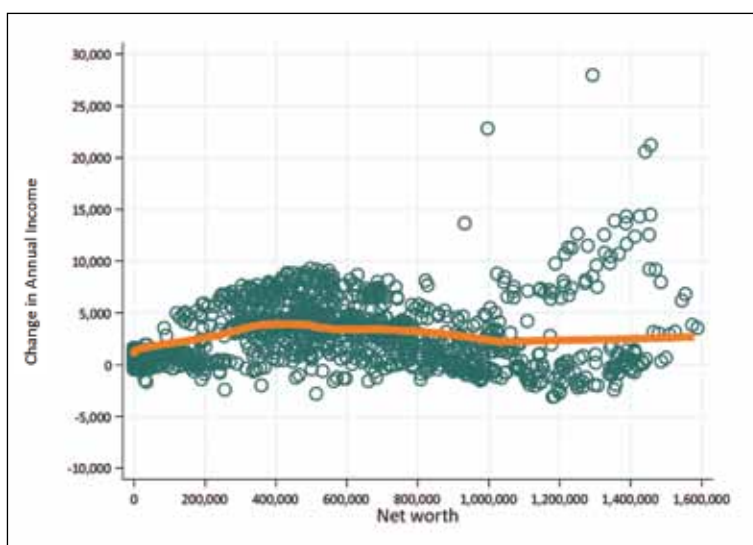


Table 15: Winners and Losers under Scenario 1

Scenario 1	Winners	Losers	Total
Ave change in income	\$3,673	-\$961	\$3,136
% of pensioners	88.4%	11.6%	100
Number of pensioners	2,143,221	280,621	2,423,842

* Note that, while the threshold levels of these net worth quintiles are the same as the 2010 levels cited in an earlier section, these figures are inflated to 2015 dollars and represent the average asset levels for the simulated cohort (which is slightly different to the cohort in that earlier section).

Scenario 2

The next three scenarios look at a substantially tightened reverse mortgage market where the amount of equity available to be drawn down is limited to 50% of their home value. This is a relatively unlikely outcome as the government has more control over this factor: by implementing reforms of the reverse mortgage market it can give lenders the confidence to lend to higher LVRs.

We see that, even if the amount of equity that pensioners can draw down under this proposed regime is substantially tightened, there are still benefits from pursuing this policy.

Scenario 2 presents simulated estimates of post-reform income with 6% growth in home prices and 5.25% interest on home equity annuity payments. While the largest gains go to those in the top quintile of net worth, who tend to have the highest amount of housing equity, there are strong gains for singles across all net worth quintiles with average annual gains of between \$1,000 and \$5,000 for quintiles one through four.

For couples the gains are more modest. Again, the same asset poor but higher income pensioners in the bottom quintile receive slightly less and pensioners in the fourth quintile loss just under \$480.

Looking at the aggregate position, again we see that four in five pensioners would be better off under this scenario, with the average benefit exceeding \$3,000. The remaining pensioners would be worse off by an average of \$1,485.

The scatterplot of income and net worth again shows the strong gains from the proposed reforms, especially for those with assets between \$200,000 and \$800,000, and the bulk of the bigger losers having in excess of \$1 million in assets.

Figure 64: Single pensioner income under Scenario 2

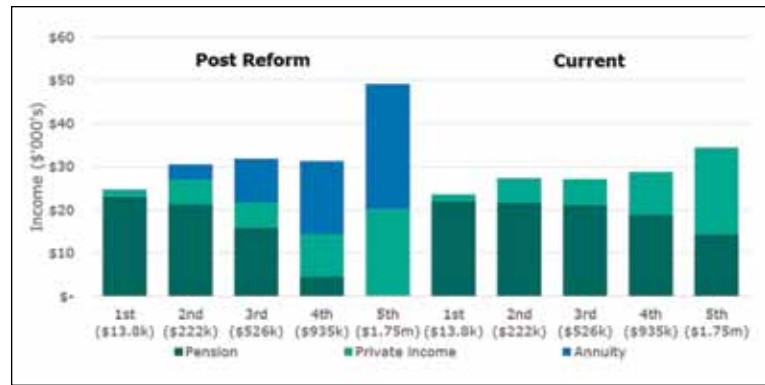


Figure 65: Couple pensioner income under Scenario 2

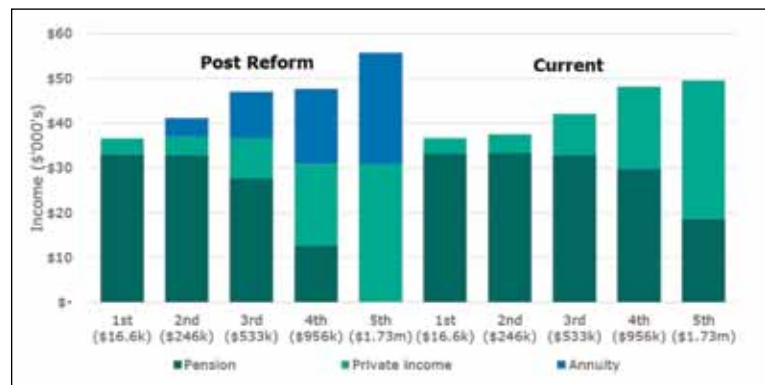


Figure 66: Change in income by net worth in Scenario 2

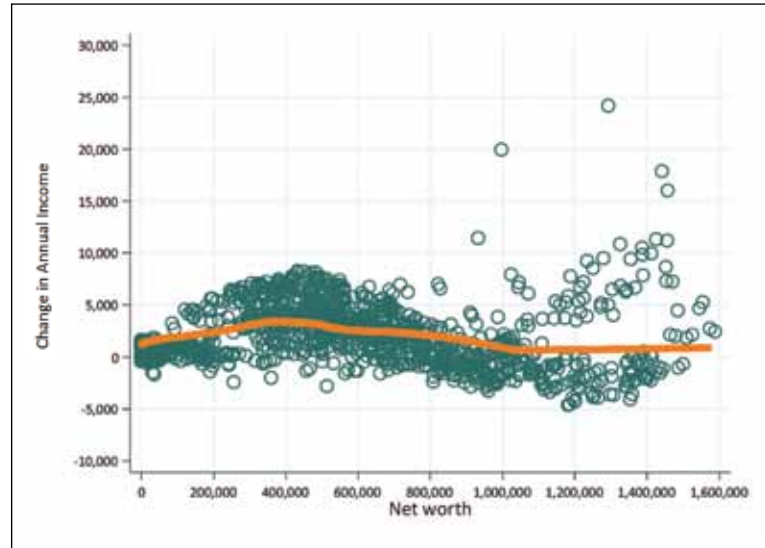


Table 16: Winners and losers under Scenario 2

Scenario 2	Winners	Losers	Total
Ave change in income	\$3,166	-\$1,485	\$2,251
% of pensioners	80.3%	19.7%	100
Number of pensioners	1,947,217	476,625	2,423,842

Scenario 3

In this scenario the reforms proposed in this report are applied onto the current average interest rates and maximum LVRs available in the reverse mortgage market (assuming home equity continues to grow at 6%).

For singles, average gains accrue to all but the fourth quintile (-\$1,771). The couples in the fourth quintile, in addition to those in the bottom quintile, all face an average loss of \$2,344. While these income reductions are not insignificant they are incurred by those with an average household net worth of just under a million dollars. Consequently, these households have scope to rearrange their asset holdings to increase their incomes. For those in the bottom quintile of net worth—those with less than \$20,000—this is not an option open to them.

Again there is a small loss overall for couples in the bottom quintile, similar in magnitude to that in Scenario 1 and in expected conditions. It should be noted again that those losing out are not those on the full rate of the pension; they will benefit from the proposed increase in the base rate.

In these bleaker scenarios, age pensioners are not receiving the sort of income increases observed in Figure 55. While age pensioners with a net worth of less than \$400,000, on average, receive an increase in their incomes there are many pensioners with assets of between \$800,000 and \$1.4 million who experience reductions in their annual incomes. This is a result of the higher interest rate on the reverse mortgage eating into home equity at a faster rate—thereby reducing their income stream. However, it should be kept in mind that age pensioners with significant wealth holdings are those most likely to have the greatest amounts of private income and are therefore those who would experience income reductions from a comparatively high base.

A comparison between Scenario 3 and Scenario 4 below, which assumes a lower growth in house prices, underlines the central role house prices play in determining the incidence and extent of age pensioner average income gains. A 6% return on home equity, even in the face of the same 6.7% interest rate, is able to ensure 65% of age pensioners' incomes increase by an average of \$2,235, which is slightly less than the average income loss for those who lose (\$2,855).

Figure 67: Single pensioner income under Scenario 3

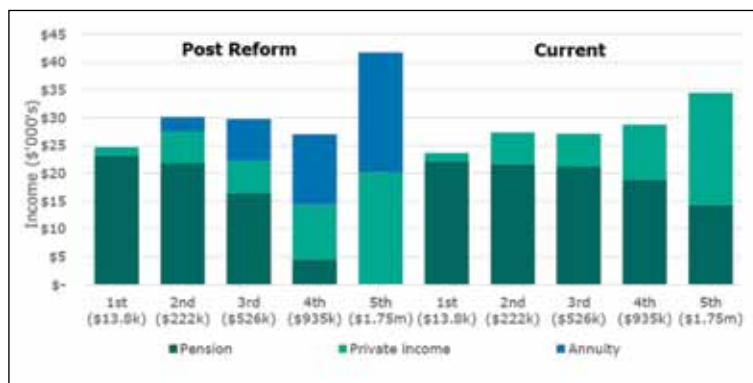


Figure 68: Couple pensioner income under Scenario 3

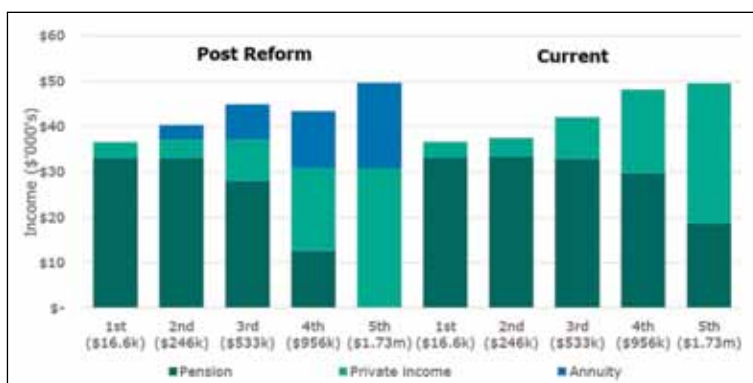


Figure 69: Change in income by net worth in Scenario 3

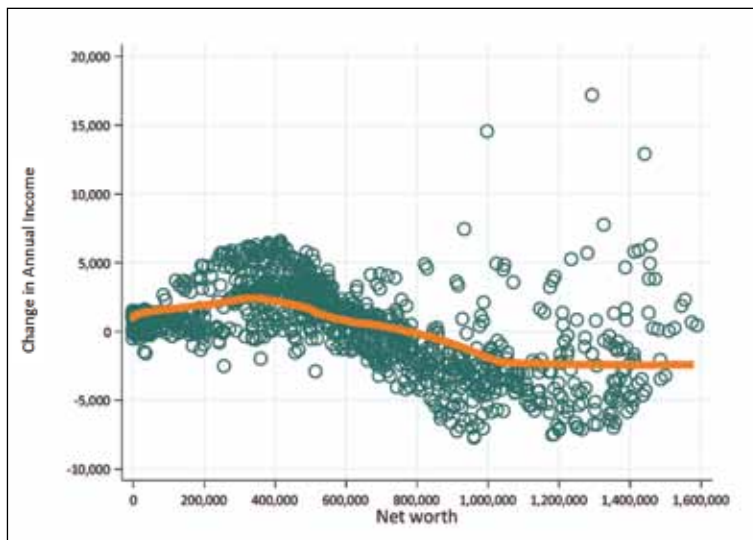


Table 17: Winners and losers under Scenario 3

Scenario 3	Winners	Losers	Total
Ave change in income	\$2,235	-\$2,855	\$496
% of pensioners	65.8%	34.2%	100
Number of pensioners	1,595,602	828,240	2,423,842

Scenario 4

Even if there were lower than expected home equity growth, we still see some benefits from the reforms proposed in this report for a majority of pensioners. Figure 70 illustrates the impact of policy settings that allow age pensioners to only access their home equity up to a maximum of 50% LVR, with an interest rate of 6.7% and a home equity return of just 5%. All but single pensioners in the fourth quintile experience increases in total income, on average.

Couples in the fourth quintile of household net worth also experience a loss of income, of more than \$8,000 on average, while single households in that quintile lose slightly less (\$5,430). Couples in the top quintile experience a smaller average loss of \$5,237 as they have a greater stock of home equity to draw upon. Again, these losses accrue to households with an average net worth of approximately \$1 million dollars or more (those in the top quintile of net worth have wealth of \$1.7 million).

A scatterplot of income and net worth shows that in as far as the benefits accrue under this scenario they primarily benefit those with a household net worth under \$500,000.

It is positive that, even in this near worst-case scenario there are more winners than losers. Even with slower growth in house prices, slightly more than half of age pensioners experience an increase in income with an average gain of \$1,708, though this is somewhat less than the average loss of income for those who lose (\$4,101).

In one sense this result actually demonstrates the unfairness of the current policy. People with more than a million dollars in assets are receiving substantial pensions that render them worse off if they have to rely on their own assets. If the pension is supposed to be a safety net, these pensioners should not be caught in it. These pensioners also have the option to downsize their houses and use the proceeds of sale to boost their incomes in other ways.

Figure 70: Single pensioner income under Scenario 4

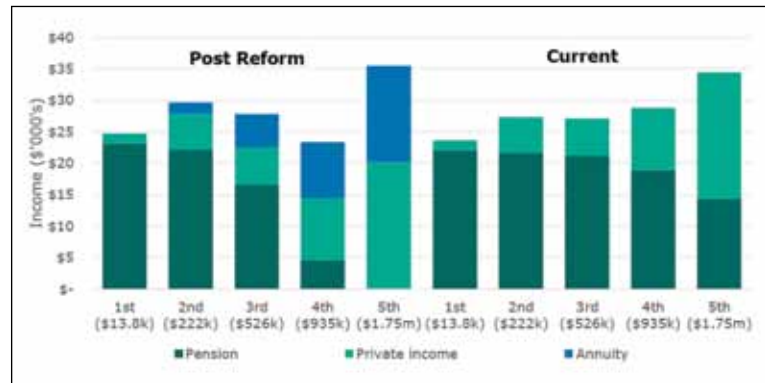


Figure 71: Couple pensioner income under Scenario 4

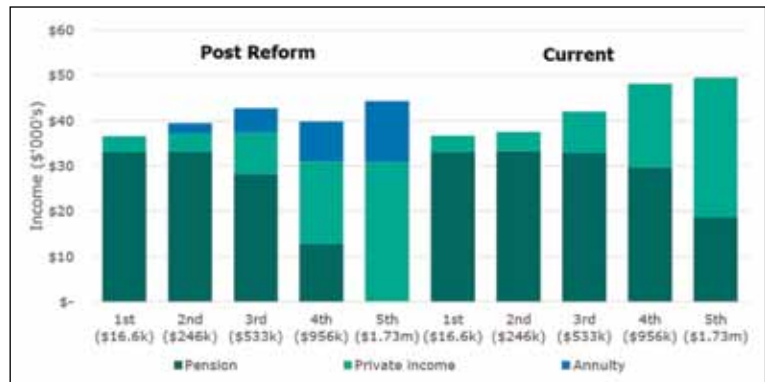


Figure 72: Change in income by net worth in Scenario 4

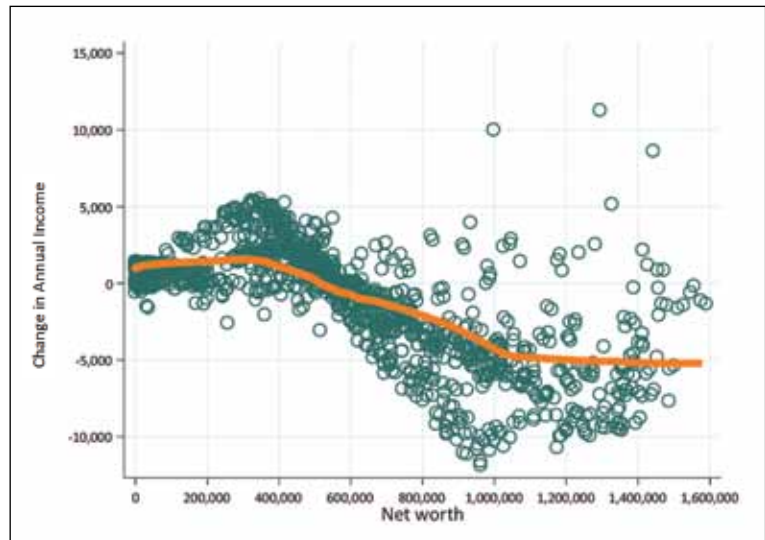


Table 18: Winners and losers under Scenario 4

Scenario 4	Winners	Losers	Total
Ave change in income	\$1,708	-\$4,101	-\$1,054
% of pensioners	52.4%	47.6%	100
Number of pensioners	1,271,094	1,152,748	2,423,842

Scenario 5

The remaining scenarios examine what would happen if home equity growth rates stalled substantially. While median house price growth over the last few decades has averaged 7% there is a possibility it may slow in coming decades, particularly given the increasing levels of personal debt in society. In some respects these scenarios are more likely than those where interest rates substantially increase or the structure of the reverse mortgage market doesn't change, as property returns are less able to be influenced by government. It is also worth noting too that these scenarios do not incorporate any changes in investment behaviour that might occur if property investment delivered such low returns.

Even if real home equity growth was just 1.5% (ie nominal growth was 4%) on average substantial gains would accrue to singles in all but the fourth quintile. These benefits are perhaps not as substantial as those under more favourable conditions, but the benefit still averages between \$1,000 and \$3,200 a year for the bottom quintiles.

For couples the second and third quintiles (around \$3,000 a year on average) and the fifth quintile (\$1,600) see benefit under this scenario. However the losses for the fourth quintile are much lower than under Scenario 4 (around \$3,700).

Looking at the overall distribution of changes in income and net worth shows strong gains for those with household net worth under \$800,000. It should not be surprising that those with net worth above \$800,000 experience losses, on average, under this scenario. These pensioners tend to hold most of their net worth in housing assets and this scenario assumes that those assets deliver lower returns.

This more positive outcome is borne out in the distribution of winners and losers. We can see that almost 70% of pensioners end up better off under our reforms with the average win being nearly \$2,477 per annum.

Figure 73: Single pensioner income under Scenario 5

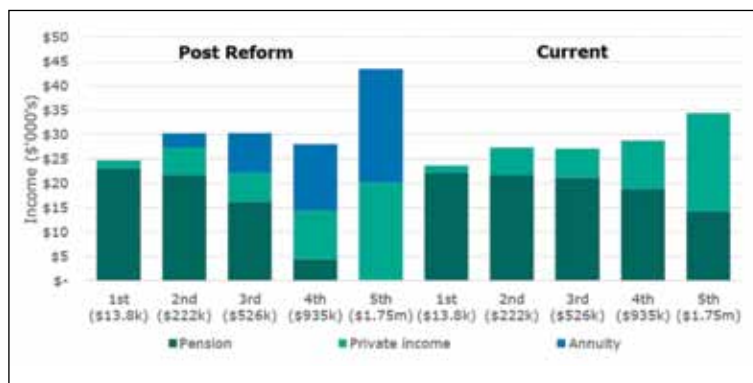


Figure 74: Couple pensioner income under Scenario 5

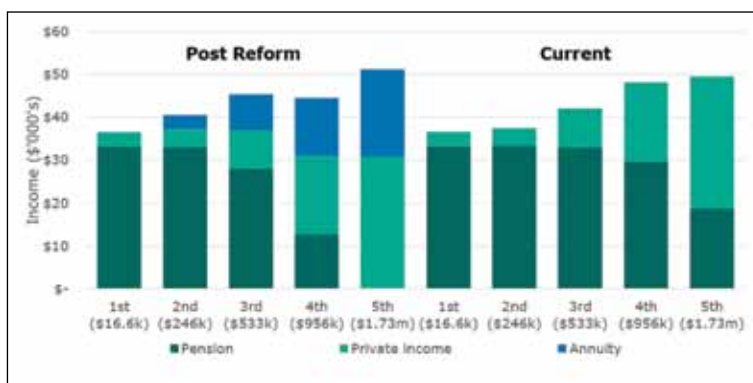


Figure 75: Change in income by net worth in Scenario 5

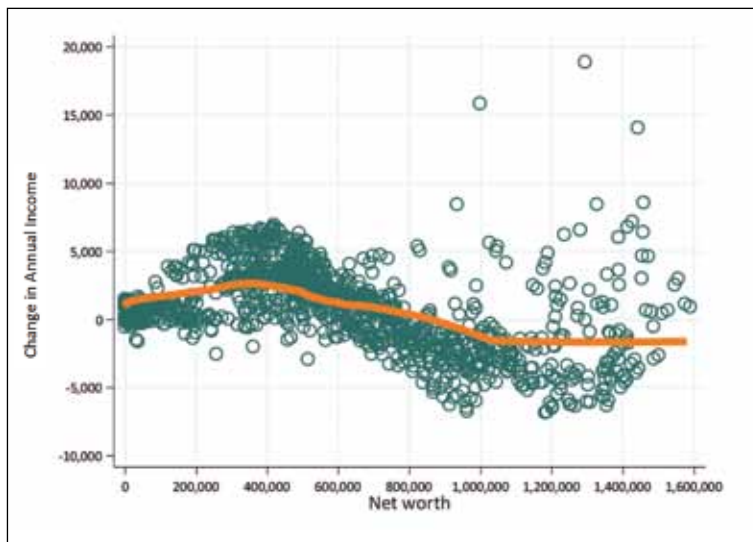


Table 19: Winners and losers under Scenario 5

Scenario 5	Winners	Losers	Total
Ave change in income	\$2,447	-\$2,492	\$926
% of pensioners	69.2%	30.8%	100
Number of pensioners	1,677,405	746,437	2,423,842

Scenario 6

The final scenario considers what would happen if the return on housing equity was barely positive in real terms for decades. It assumes that the real rate of return would average just 0.5% p.a. (a nominal return of just 3%). This return is less than half the average return on median house prices in recent decades, and would be likely to have significant effects on the economy as a whole (which have not been modelled in this analysis).

Even in this disaster scenario, it is only singles in the fourth quintile of household net worth that are adversely affected, losing on average \$4,766.

The situation for couple pensioners shows some benefit over the status quo for the second and third quintiles but the benefits are not as clearly defined as they are for singles (just \$1,000 to \$2,000 a year). The top two quintiles are worse off by between \$4,000 and \$7,700 on average.

That the benefits under this scenario are lower than under some of the more positive scenarios is hardly surprising. Give the over-capitalisation of pensioners in housing assets, you would expect a scenario where those investments massively underperformed to give these kinds of results. That these risks are not more prominent now is primarily because pensioners are shielded from these negative impacts by taxpayers.

Looking at changes in income by net worth shows the distributional effects of our reforms, though this impact is exacerbated by the current inequities in pension spending (with high net worth pensioners still eligible for substantial pension payments). The good news is that the benefits do accrue strongly to those most in need.

Looking at the winners and losers under this scenario shows that while the average change in income is negative (-\$722) the majority of pensioners are better off with an average increase in income of \$1,795.

However, as can be seen below, there are alternative means testing and deeming options that the government could consider to ameliorate the impact of a prolonged stasis in real house prices.

Figure 76: Single pensioner income under Scenario 6

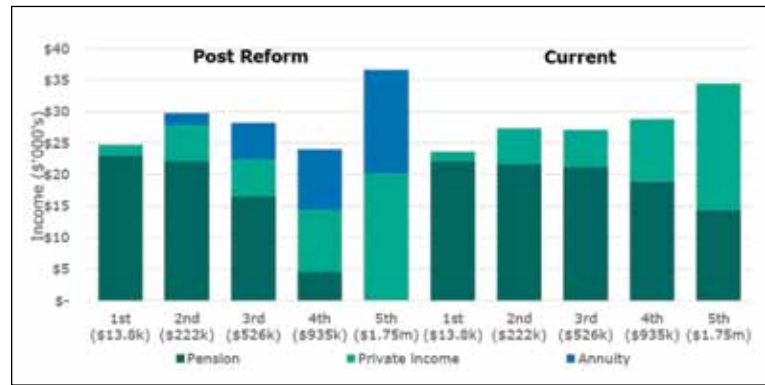


Figure 77: Couple pensioner income under Scenario 6



Figure 78: Change in income by net worth in Scenario 6

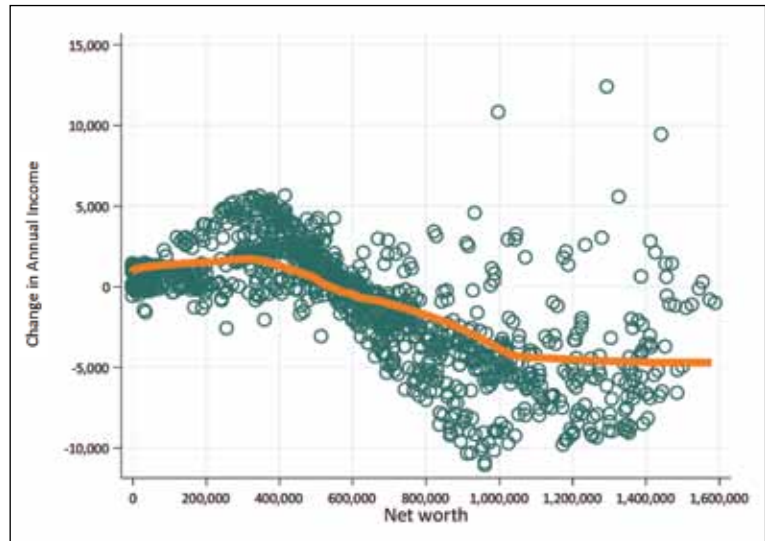


Table 20: Winners and losers under Scenario 6

Scenario 6	Winners	Losers	Total
Ave change in income	\$1,795	-\$3,876	-\$772
% of pensioners	54.7%	45.3%	100
Number of pensioners	1,326,612	1,097,230	2,423,842

Aggregate pension spending under reform scenarios

As would be expected, government outlays are largest for our bleakest scenarios. The lower annuity payments from home equity that eventuate under these scenarios ensure greater financial support from the taxpayer; however, even under these scenarios savings of more than \$12 billion are possible.

The lowest government outlays would eventuate under Scenario 1, where age pensioners are able to draw down a greater proportion of their home equity. Under this scenario Age Pension outlays are estimated to be \$29.2 billion and savings of \$13 billion are possible.

However, in all cases the substantial reduction in government spending over the current system gives the government flexibility to ensure that the most vulnerable in society are protected.

Table 21: Government pension savings under the different scenarios

Scenario	Current expenditure	Expenditure under Scenario	Savings
Scenario 1	\$42.2 billion	\$29.2 billion	\$13 billion
Scenario 2	\$42.2 billion	\$29.5 billion	\$12.7 billion
Scenario 3	\$42.2 billion	\$29.8 billion	\$12.4 billion
Scenario 4	\$42.2 billion	\$30 billion	\$12.2 billion
Scenario 5	\$42.2 billion	\$29.8 billion	\$12.4 billion
Scenario 6	\$42.2 billion	\$30 billion	\$12.2 billion

Alternative deeming and means testing schedules

The reforms proposed in this paper represent a significant change from the current pension settings. They will significantly alter the pension payments and incomes of the pension cohort, boosting living standards and reducing government expenditure. These reforms would prepare Australia's Age Pension system for its future fiscal challenges.

However the degree of change, together with the potential exposure of pensioner income to volatility in the housing market, may mean it is politically easier to implement these reforms in stages. The government could consider including just 75% of home equity or reverse mortgage income in the means test or even 50% of the equity or income initially.

Under expected conditions, the primary effect of the softer means test would be to provide additional gains to pensioners with substantial assets. This suggests that in normal conditions there is not a strong case (other than political considerations) for a softer means test.

However, in conditions substantially worse than those expected (for example, with a much tighter reverse mortgage market and a lower rate of home equity growth) there may be some merit in the softer means test. For example, a 50% exemption for home equity and income under Scenario 4 conditions sees the number of winners growing from 52.4% to nearly 92.5% and the average loss for those worse off under the reforms dropping from nearly \$4,101 to \$874.

Revised means test under expected conditions

Assuming that 75% of home equity and 75% of reverse mortgage income is included in the means test (a 25% exemption), on average the benefits continue to grow as net worth grows. While the pattern of average income gains and losses is similar to the expected outcome from our reforms, the extent of the losses is considerably lower.

For singles, while the bottom two quintiles gain between \$1,000 and \$5,000 on average, the benefits quickly climb to over \$10,000 a year for the third quintile and up to \$27,000 for the top quintile.

With the exception of the minor discrepancy affecting the averages for couples in the bottom quintile all other couple pensioners receive significantly more income than they do under the expected conditions without any home equity exemption. Couples in the

Figure 79: Single pensioner income in expected conditions under 25% exemption

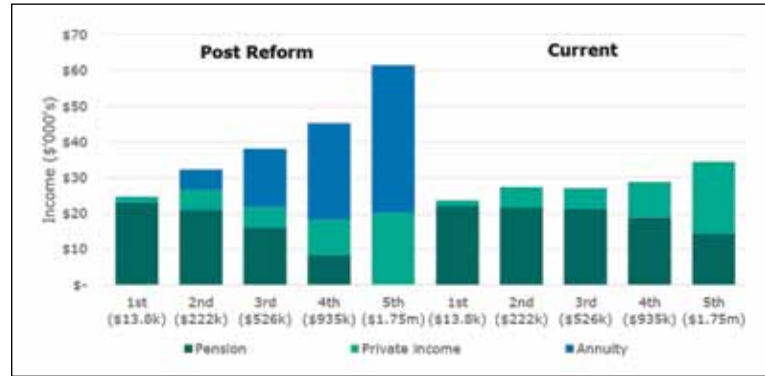


Figure 80: Couple pensioner income in expected conditions under 25% exemption

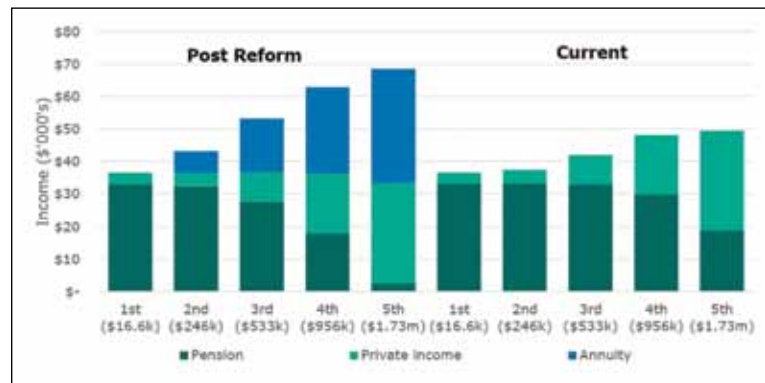


Figure 81: Change in income by net worth under 25% exemption

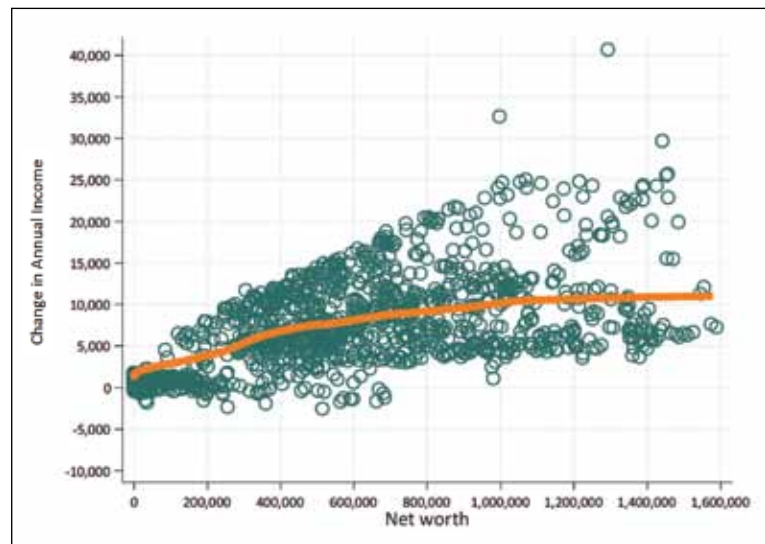


Table 22 – Winners and losers under a 25% exemption

	Winners	Losers	Total
Ave change in income	\$7,647	-\$851	\$7,469
% of pensioners	97.9%	2.1%	100
Number of pensioners	2,373,173	50,669	2,423,842

second quintile gain \$5,700, while the third, fourth and fifth gain in excess of \$11,000 a year.

As expected, the benefits increase roughly in line with house equity; those with substantial equity benefit much more than those without it.

The average benefit under this softer means test is \$1,420 a year higher than under a no exemption means test but the number of people who benefit is basically unchanged under either means test.

The trends identified above, under a 25% exemption, are also present for a 50% exemption and the benefits to those with substantial net worth continue to grow. Single pensioners in the top three quintiles are the primary beneficiaries under these conditions with benefits ranging from \$13,000 a year on average to more than \$30,000.

For couples in the top four quintiles the benefits are also substantial ranging from an extra \$6,000 for those in the second quintile up to more than \$23,000 for those in the top quintile.

Again, looking at the scatterplot of change in income by net worth we see the strong correlation between current net worth and increasing benefit from these reforms. As these benefits are still being largely funded by pensioners accessing the equity in their homes this is fair.

Again the number of winners and losers remains more or less the same, but under a 50% exemption the average benefit grows by \$1,500 over a 25% exemption (almost \$3,000 more than under our proposed means test settings).

The downside of providing exemptions to the means test is that the taxpayer savings from these reforms is reduced. By providing a 25% exemption, the loss of savings is nearly \$4 billion a year and the 50% exemption would cost more than \$8 billion a year.

This suggests that under expected conditions, a softer means test would simply deliver windfall gains to those who benefit anyway.

Figure 82: Single pensioner income in expected conditions under 50% exemption

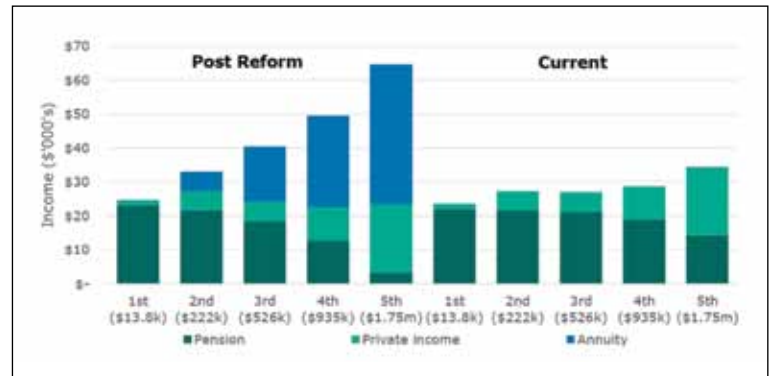


Figure 83: Couple pensioner income in expected conditions under 50% exemption

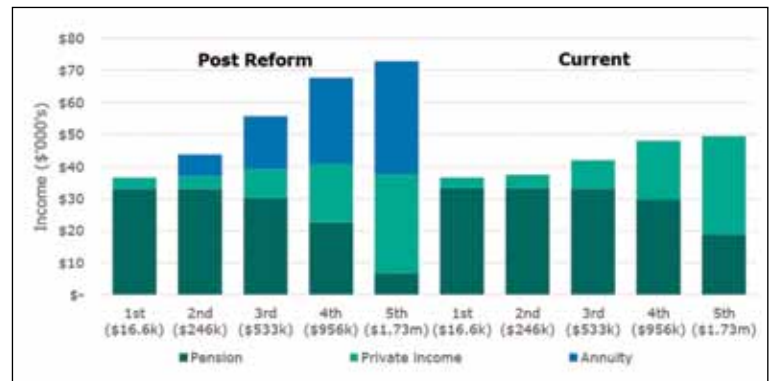


Figure 84: Change in income by net worth under 50% exemption

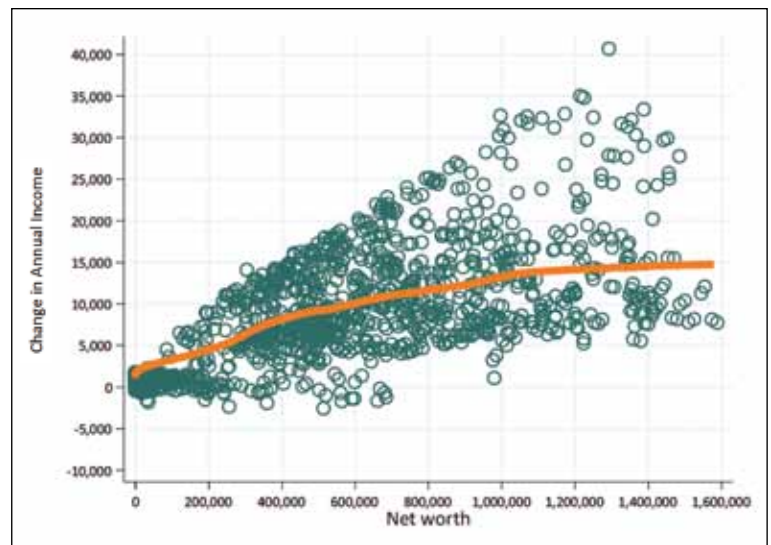


Table 23: Winners and losers under a 50% exemption

	Winners	Losers	Total
Ave change in income	\$9,446	-\$878	\$9,240
% of pensioners	98%	2%	100
Number of pensioners	2,375,546	48,296	2,423,842

Table 24: pension savings under various exemptions under expected conditions

Scenario	Current expenditure	Expenditure under Scenario	Savings
No exemp	\$42.2 billion	\$27.7 billion	\$14.5 billion
25% exemption	\$42.2 billion	\$31.8 billion	\$10.4 billion
50% exemption	\$42.2 billion	\$36.1 billion	\$6.1 billion

Revised means test under Scenario 4 conditions

However a 25% exemption under Scenario 4 (where the housing equity growth rate is just 5%, the interest rate is 6.7% and the maximum LVR is 50%) goes a long way to improving outcomes for those pensioners who might otherwise be worse off. While the pattern of average income gains and losses is similar to that where there is no exemption, the extent of the losses is considerably lower.

Single pensioners in the fourth quintile experience a small loss (less than 15% of loss under Scenario 4 without any exemptions) but small gains of between \$1,000 and \$4,000 accrue to the other quintiles.

With the exception of couples in the bottom quintile all pensioners receive significantly more income than under they do Scenario 4 without any home equity exemption. Indeed the losses for quintiles four and five are limited to \$2,000 to \$3,000 (down from \$5,000 to \$8,000), while the second and third quintiles see benefits approximately double.

The 25% exemption is enough to cause a significant uplift in the tail end of the income/net worth scatterplot, while losses again largely accrue to those households with net worth under \$800,000.

With a 25% exemption under Scenario 4 conditions, the number of winners grows from 52.4% to nearly 69.5% of pensioners. The amount lost by those worse off also reduces substantially, falling by more than \$1,806.

Figure 85: Single pensioner income in Scenario 4 under 25% exemption

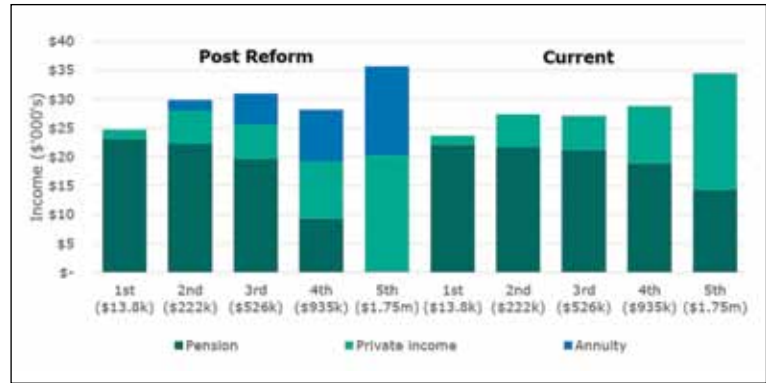


Figure 86: Couple pensioner income in Scenario 4 under 25% exemption

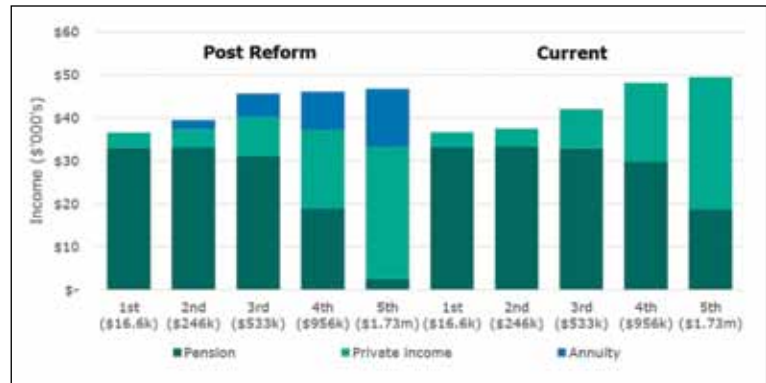


Figure 87: Change in income by net worth under 25% exemption in Scenario 4

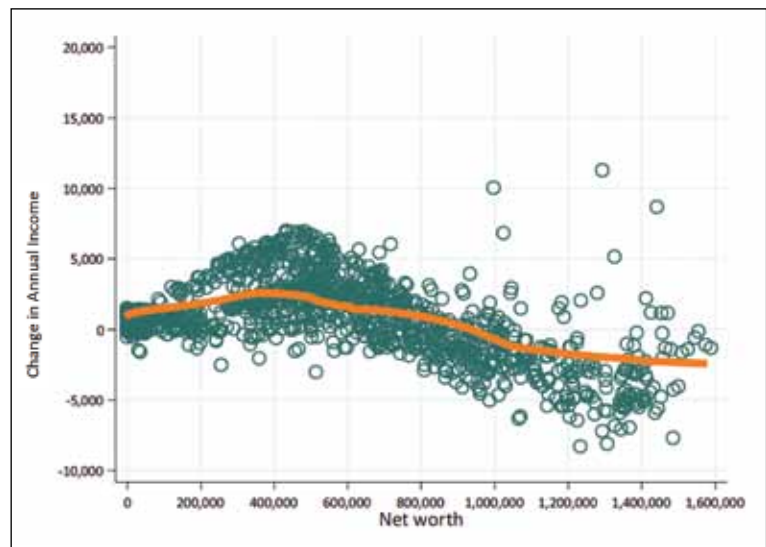


Table 25: Winners and losers under 25% exemption and Scenario 4 conditions

	Winners	Losers	Total
Ave change in income	\$2,211	-\$2,295	\$836
% of pensioners	69.5%	30.5%	100
Number of pensioners	1,684,488	739,354	2,423,842

A 50% exemption under these conditions would deliver benefits across the spectrum of net worth, though the primary difference between the 25% exemption and the 50% exemption is that additional benefits seem to accrue to those with substantial net worth.

Single pensioners in all quintiles now see gains, varying from \$1,000 to more than \$5,500, with the largest gains seen by those in the third quintile. The fourth and fifth quintiles are between \$3,000 and \$6,000 better off than under a 25% exemption, with the fourth quintile more than \$10,000 better off than under normal Scenario 4 conditions.

Couples see strong gains in the top four quintiles of between \$1,750 and \$4,800. The top two quintiles go from losers under the 25% exemption to winners, with a turnaround of between \$4,500 and \$6,000.

Figure 90 emphasises how effective a 50% exemption would be in increasing average incomes over the entire distribution of net worth. The overall trend line remains positive and the bulk of the increase in income is between \$400,000 and \$800,000 in assets.

Under a 50% exemption and Scenario 4 conditions, the distribution of winners and losers approaches that observed under the expected conditions with no exemption. Nearly 93% of pensioners end up in front with the expected benefit of \$2,887. The number of losers is less than 8% and their average loss falls by more than \$3,000 to just \$874.

Unfortunately the benefits to the taxpayer are much lower if these exemptions are applied. Under a 50% exemption and Scenario 4 conditions, pension expenditure is only reduced by just over \$3 billion a year—substantially less than the \$7.6 billion saved under a smaller exemption.

Figure 88: Single pensioner income in Scenario 4 under 50% exemption

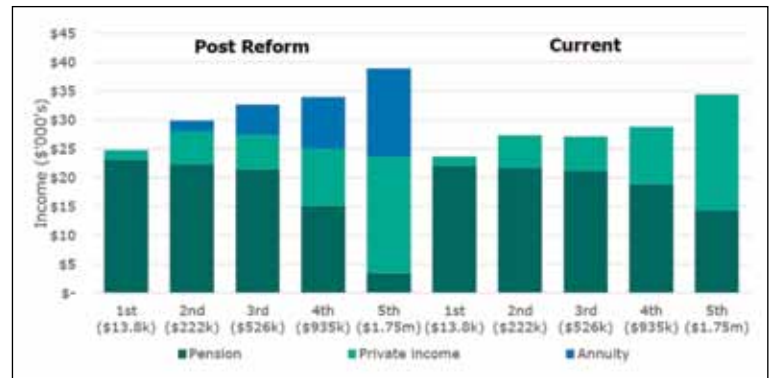


Figure 89: Couple pensioner income in Scenario 4 under 50% exemption

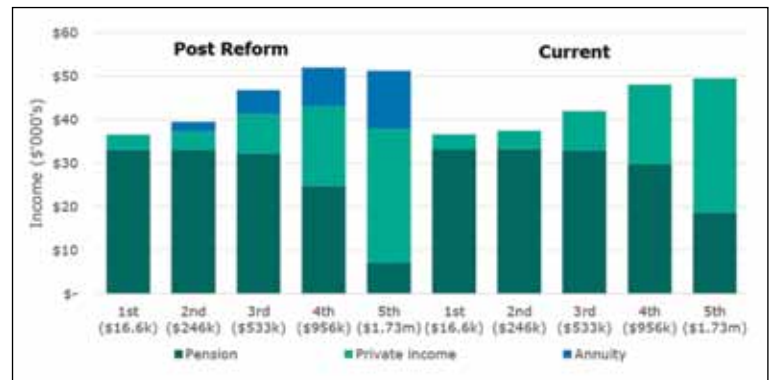


Figure 90: Change in income by net worth under 50% exemption in Scenario 4

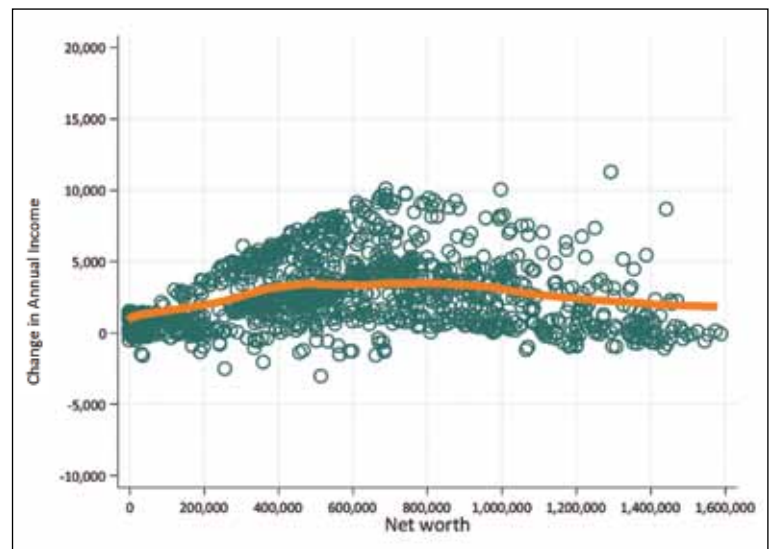


Table 26 – Winners and losers under 50% exemption and Scenario 4 conditions

	Winners	Losers	Total
Ave change in income	\$2,887	-\$874	\$2,601
% of pensioners	92.4%	7.6%	100
Number of pensioners	2,239,324	184,518	2,423,842

Table 27: Government pension savings under various exemptions under Scenario 4

Scenario	Current expenditure	Expenditure under Scenario	Savings
Scenario 4 no exemption	\$42.2 billion	\$30 billion	\$12.2 billion
25% exemption	\$42.2 billion	\$34.6 billion	\$7.6 billion
50% exemption	\$42.2 billion	\$38.9 billion	\$3.3 billion

Revised means test under Scenario 6

The final analysis examines what would happen in a depressed property market if the government exempted 25% of home equity and annuity income or 50% of home equity and annuity income.

A 25% exemption is enough to ensure that the average income change is positive for single pensioners across each net worth quintile (though the benefit to the fourth quintile is just \$6.58 a year). Quintiles two and three benefit by between \$2,500 and \$4,200 a year on average.

The pattern for couples is broadly similar though only quintiles two and three benefit (by between \$2,000 and \$4,000). The losses for those in the top two quintiles are markedly less (dropping from \$7,600 to \$1,400 for the fourth quintile and from \$4,250 to \$1,850 for the fifth quintile).

While those with very substantial asset balances (in excess of \$1 million) are still adversely affected by lower property prices, a 25% exemption does deliver benefits to a significant majority of those with household net worth under \$800,000.

Under a 25% exemption, the number of winners increases from 54.7% to 71.9% and the average loss among those who are worse off nearly halves. The result is that more than 1.7 million pensioners would be left better off by these reforms, with an average benefit of \$2,348.

A 50% exemption would obviously have a bigger impact on the distribution of gains.

For single pensioners benefits accrue to all five quintiles, with the third, fourth and fifth quintiles all receiving benefits of between \$5,500 and \$6,000 on average. Again we see the main difference between the 25% exemption and the 50% exemption is in the top two quintiles—who are collectively more than \$4,500 better off on average under the 50% exemption. The bottom three quintiles benefit by less than \$600 on average.

Figure 91: Single pensioner income in Scenario 6 under 25% exemption

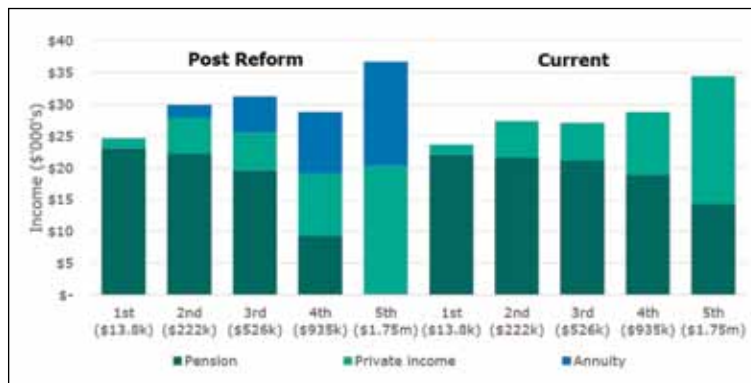


Figure 92: Couple pensioner income in Scenario 6 under 25% exemption

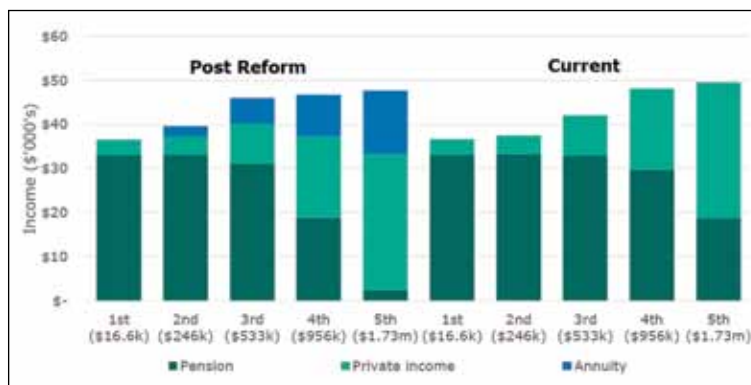


Figure 93: Change in income by net worth under 25% exemption in Scenario 6

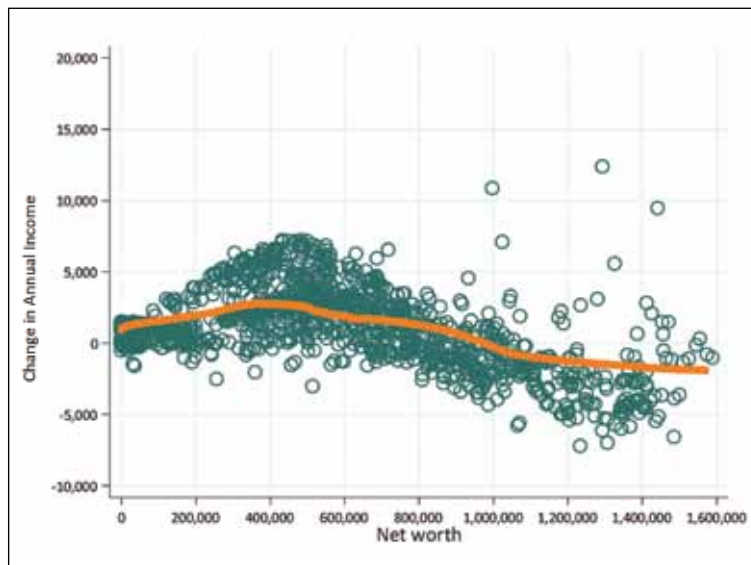


Table 28: Winners and losers under 25% exemption and Scenario 6 conditions

	Winners	Losers	Total
Ave change in income	\$2,348	-\$2,041	\$1,114
% of pensioners	71.9%	28.1%	100
Number of pensioners	1,742,292	681,550	2,423,842

For couple pensioners we see benefits ranging from \$2,000 to \$3,000 for those in the second and fifth quintiles. For those in the third and fourth quintile the benefit is between \$4,500 and \$5,133. The benefit flows primarily to the top two quintiles for couples as well, with an average increase of more than \$5,000 over the 25% exemption (compared to just \$400 for the bottom three quintiles).

However the primary positive message from the 50% exemption is that even an extended downturn in the property market would not be enough to prevent these reforms from providing benefits across the net worth distribution. The gains may be greatest for those between \$400,000 and \$1 million in net worth but the overall trend is positive.

As expected, there are many more winners than losers under this scenario, with the number of winners climbing to just under 95%. They would receive an average of just over \$3,000 each per year while the 5.2% of losers would suffer average losses of just \$815. The average benefit is \$2,876 across the pensioner population.

The exemption of a portion of this equity from the pension means test will, as before, have an adverse impact on the pension savings possible under our reform model. The savings would be limited to just \$3.4 billion under a 50% exemption in Scenario 6 (though \$7.6 billion could be saved for a 25% exemption scenario). There would still be benefits to taxpayers under these exemptions, especially if the government chose to phase in the new means test (starting at 50% exemption then moving gradually to 0%) or if the property market continued to perform as expected.

Figure 94: Single pensioner income in Scenario 6 under 50% exemption

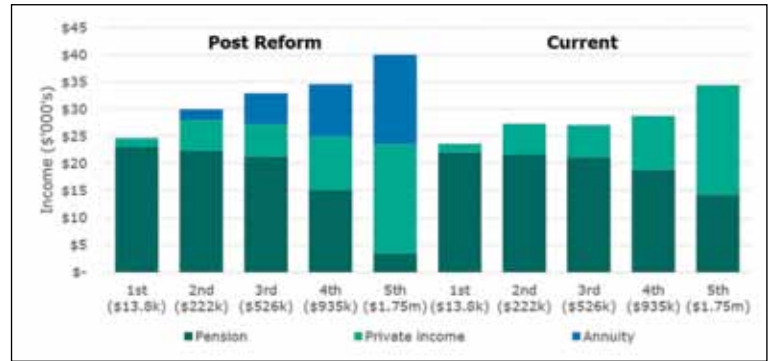


Figure 95: Couple pensioner income in Scenario 6 under 50% exemption

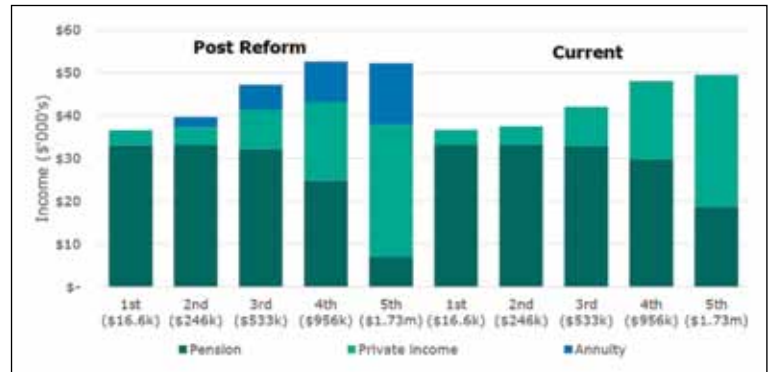


Figure 96: Change in income by net worth under 50% exemption in Scenario 6

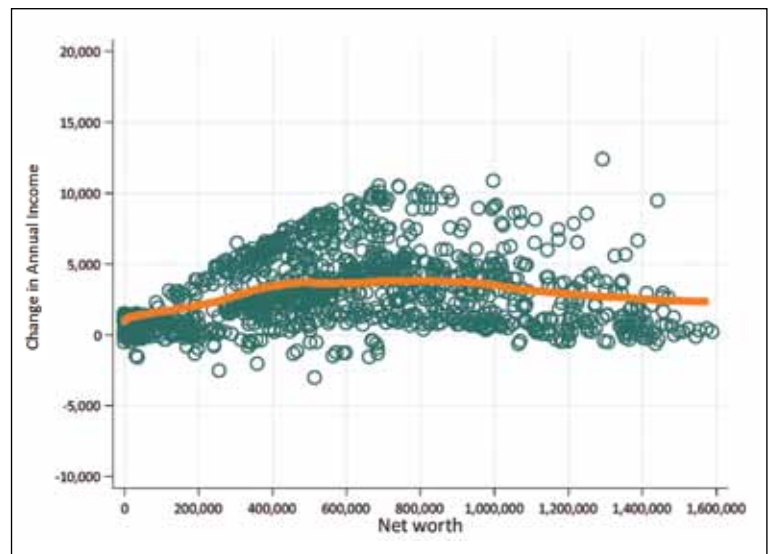


Table 29: Winners and losers under 50% exemption and Scenario 6 conditions

	Winners	Losers	Total
Ave change in income	\$3,079	-\$815	\$2,876
% of pensioners	94.8%	5.2%	100
Number of pensioners	2,297,232	126,610	2,423,842

Table 30: Government pension savings under various exemptions under Scenario 6

Scenario	Current expenditure	Expenditure under Scenario	Savings
Scenario 6 no exemption	\$42.2 billion	\$30 billion	\$12.2 billion
25% exemption	\$42.2 billion	\$34.6 billion	\$7.6 billion
50% exemption	\$42.2 billion	\$38.8 billion	\$3.4 billion

Appendix II: Assets data in the Household, Income and Labour Dynamics in Australia (HILDA) survey

The Household, Income and Labour Dynamics in Australia (HILDA) Survey is a longitudinal, or panel, survey of a sample of households which began in 2001. HILDA collects information about economic and subjective well-being, labour market dynamics and family dynamics. The initial wave of HILDA consisted of 19,914 individuals aged 15 and over across 7,682 households.

At the time of writing, the most recent HILDA data available for general release was from the 13th wave collected in 2012. This report, however, exclusively uses data from the 10th wave which was collected in 2010. Wave 10 is the most recent data collection that includes data on the asset holdings of households, which is necessary to model how the assets test, in addition to the income test, impacts upon the Age Pension payments of those who are eligible to receive the Age Pension.

The 10th wave of HILDA includes data on 17,855 individuals across 7,317 households. Of those included in the study, 13,526 were responding persons for whom the study contains detailed information on income and personal assets, of whom 5,323 were single and 8,203 were partnered. Of those who were partnered, 401 had partners who were not also responding persons.

Using the variable **_bncap** to assess eligibility for the Age Pension for single responding persons and those partnered to responding persons reveals 2,378 responding persons at wave 10 were of Age Pension age*. Of the 401 responding persons with a partner who was not also a responding person just 47 were of Age Pension eligibility age (11.7%). Leaving aside responding persons whose partners were not responding persons, a total of 2,331 responding persons of Age Pension age reported receiving the pension at the time of the survey, 797 responding persons reported receiving the pension as a single age pensioner and 788 reported receiving the payment as part of a couple. Of those who received the Age Pension as a single, just 14.7% were partnered (117).

Even without the use of the responding person sample weights, those responding persons who reported receiving the Age Pension at their date of interview in 2010 appear to be broadly representative of the characteristics of age pensioners who were on payment at June 30, 2010. Overall, 57.1% of responding persons who reported that they received the Age Pension were partnered, which is exactly the percentage indicated in the Department of Social Services (DSS) administrative data on the Age Pension as of June 30, 2010¹²¹ (excluding those responding persons whose partners were not also responding persons).

Given the importance of homeownership in the Age Pension means test it is similarly heartening that the percentage of homeowners among those who reported receiving the Age Pension is close to the figure reported by DSS. The 76.7% of pensioners who were homeowners when surveyed in HILDA in 2010 is only a slight over-sampling compared to the 71.4% observed in the DSS administrative data at June 30, 2010.

Homeowner status was determined according to whether the responding person resided in a household that had positive housing equity; that is, whether **_hwhmvai** less **_hwhmdti** was positive for the responding person's household.

The HILDA survey includes a set of questions pertaining to household wealth in one of every four waves, the most recent of which was wave 10 which occurred in 2010. Though data on equity in the principal residence is collected in each wave, it is only in these 'wealth module' years that the household member who is 'best placed' to answer these questions is asked to report on the household's assets and any debt held against them (Section S: Other Assets).

The wealth module in the household questionnaire includes a suite of questions on holdings of shares, managed funds, property trusts (listed and unlisted), trust funds (including family trusts), government bonds, corporate bonds, debentures, certificates of deposit, mortgage-backed securities and businesses (including farms). There are also questions on vehicles, life insurance policies, antiques, works of art, cemetery plots and other substantial assets.

Each responding person is asked questions pertaining to (Section J: Wealth) the values of cheque accounts, savings accounts, keycard/EFTPOS accounts, other Transaction Accounts, fixed term deposits, cash management trusts in their name and those held jointly with other household members. Responding persons are also asked questions about their superannuation balances. These responding person asset values are aggregated and provided at the household level. The variables used in this report are the imputed household level variables[†].

Table 31 shows how the HILDA wealth variables were grouped to produce the asset measures presented in Figure 30, Figure 31, Figure 32 and Figure 33. This grouping reflects, as well as possible, the way these assets would be treated under the assets test for the Age Pension under current policy settings.

The Guide to Social Security Law explains that assets "...are generally assessed at their net market value ...

* This does not include one responding person who reported that they did not know if they currently received the Age Pension from the Australian Federal Government and another who refused to provide this information.

† See p. 73 of Summerfield et. al. HILDA User Manual Release 12, Melbourne Institute of Applied Economic and Social Research, 2013 for further discussion of the imputation methods used in the wealth module of HILDA.

the amount which a person would expect to receive if they sold the asset on the open market less any debts or encumbrances”[‡]. Fortunately HILDA contains data on debts associated with the home, other property and businesses owned by the household. The debt variables provided in the HILDA data are therefore subtracted from the related asset values before inclusion in the asset variables used in the construction of these figures as indicated in the table. Where this calculation provides a negative value it is recoded to zero.

It is certainly possible that these are not the only leveraged assets held by HILDA households. Equity holdings can be leveraged through margin loans and motor vehicles can be financed by car loans. The analysis in this report assumes that any debts associated with assets outside of the home, other property and businesses owned by the household are negligible.

Most of the HILDA variables in the table are derived from the data collected at the household level. The exception to this is the household’s superannuation holdings, which are constructed using the person level variables **_pwsupwi** and **_pwsupri** for the responding person and their partner, in preference to the household variables **_hwsupwi** and **_hwsupri**. This is necessary because the superannuation holdings of each member of a couple might receive a different treatment under the assets test.

Section 4.8.2.10 of the Social Security Guide explains that the “...main factors that govern the assessment of an income support recipient’s superannuation investments for social security purposes are the recipient’s age and

whether the recipient has unrestricted access to the superannuation investment”[§]. For those who are yet to reach Age Pension age, superannuation is exempt from the assets test. Once the eligibility age has been reached, superannuation balances become an assessable asset and are deemed to earn income. From January 1st, 2015 superannuation balances are subject to the same deeming provisions as other financial assets, those that were described earlier in this report. Section 4.8.2.40 of the Social Security Guide confirms that this is also the case for the superannuation holdings of a partner for pensioner couples and partnered pensioners who receive the pension as a single**.

The ***wsupwi** variables contain information on the superannuation holdings of those who self-report that they have ‘completely retired’, while the ***pwsupri** variables provide data on the superannuation holdings of those who have yet to ‘completely retire’. The analysis in this report does not take responding persons self-reports of ‘complete’ retirement to be the equivalent to the definition of obtaining ‘unrestricted access’ to superannuation for the purposes of social security law.

For the purposes of Figure 30, Figure 31, Figure 36 and Figure 38 we use the super balances of the responding person and their partner regardless of whether they report that they are ‘completely retired’. We then use the variable **_bncap** to determine whether one, or both, members of a pensioner couple should have their superannuation balances classified as a deemed asset or as an exempt asset according to whether the responding person and/or their partner have reached Age Pension age.

Table 31: HILDA variables used to describe household assets

Deemed assets	HILDA variable
Cash investments	_hwcaini
Equity investments	_hweqini
Own bank accounts	_hwcbani
Joint bank accounts	_hwjbani
Superannuation balances for those above Age Pension age (Consistent with treatment of superannuation after January 1, 2015).	_pwsupwi, _pwsupri
Assessable assets not deemed – Income earnings	
Other property less other property debt	_hwopvaf - _hwopdtf
Business value less business debt	_hwbusvf - _hwbusdf
Assessable assets not deemed – Not income earnings	
Collectibles and other assets	_hwcolli
Vehicles	_hwvechf
Exempt assets	
Superannuation balances of those below Age Pension age	_pwsupwi, _pwsupri
Apportioned value of home less apportioned value of debt	_hwhmvai - _hwhmdti

‡ Section 4.6.6.10, General Provisions for the Valuation of Assets accessed October 10, 2014.

§ Section 4.8.2.10 Principles for Assessing Superannuation Investments, accessed September 11, 2014.

** Section 4.8.2.40 Treatment of Non-Income Support Recipient Partner’s Superannuation Investments, accessed September 11, 2014.

For the purposes of the simulated estimates of couple's Age Pension payments (described in Appendix II) we take a different approach. Here we take partner's superannuation balances as deemable assets which is tantamount to assuming that, where one member of a couple receives the age pension, their partner has also retired and chosen to access their superannuation at that time.

The quintiles of household net worth presented in Figure 32 and Figure 33 are constructed from the HILDA variables **_hwnwip/n**. with quintile cut-points calculated using the full sample of households, weighted according to **_hhwth**. This is an overall measure of household net worth that takes into account liabilities that may be attached to those assets and therefore includes assets that are exempt from the Age Pension means test.

Responding persons were classified as full or part-rate pensioners according to whether the responding persons report of their fortnightly pension payment (**_bncapa**) is above or below the fortnightly maximum rate of the Age Pension at their date of interview, taking into account whether the responding person receives the Age Pension as a single or as a member of a couple. Of the 1,543 age pensioners sampled in HILDA for whom this variable can be constructed, 58.3% are full-rate pensioners which compares favourably with the 59.9% observed in the DSS administrative data at June 30 2010.

The annual income measure used in Figure 37 and Figure 39 is full-year regular private income (**_hifpiip/n**), which excludes Australian government transfers and irregular income, whether public or private. As in Figure 32 and Figure 33, the measure of household net worth is constructed from **_hwnwip/n**.

Appendix III: Modelling the Age Pension means test

This report makes extensive use of a microsimulation model of the Age Pension means test developed by one of the authors. The model is written in the Stata® statistical programming language and makes extensive use of Stata®'s matrix programming language Mata®. The model's code combines the processing speed and mathematical syntax of Mata® and the more user friendly data processing and command syntax of Stata®.

The model is a Stata® *.ado* command called **agepension** that can be run over data in a Stata® data file, provided the file contains sufficient information to calculate the annual pension payments of income units. In this setting, users must submit variables that contain information on annual (assessable) income, assessable assets, whether

the income unit is a single or a couple and whether the income unit owns their home.

The **basefile** option alerts the command that it is to be run over a data set that is currently in memory and the **generate ()** option tells the command the variable names it is to give to the simulated Age Pension payments.

The following is an example of the Stata® syntax used to simulate the pension payments of a sample of income units in a Stata® data file containing the variables *income*, *assets*, *partner* and *homeowner* to generate the variable *agepension* using the Age Pension policy settings that were in place between 1 July 2010 and 19 September 2010.

```
agepension income assets partner homeowner, basefile generate(agepension) period(Jul-10)
```

The **period()** option tells the command where to find to find the Age Pension policy settings in the Age Pension parameter sheet. The following is an extract from the parameter sheet for 1 July 2010 to 19 September 2010.

parameter	single	couple	period
Maximum rate (fortnightly)	644.2	485.6	Jul-10
Homeowner's full-pension asset test threshold	181750	258000	Jul-10
Non-homeowner's full-pension asset test threshold	313250	389500	Jul-10
Asset taper rate (dollars per \$1,000 in assets)	1.5	1.5	Jul-10
Homeowner's part-pension asset test threshold	649250	963000	Jul-10
Non-homeowner's part-pension asset test threshold	780750	1094500	Jul-10
Full-pension income test threshold	146	256	Jul-10
Part-pension income-test threshold	1548.2	2370	Jul-10
Income test taper (cents per dollar per fortnight)	50	50	Jul-10
Maximum pension supplement (fortnightly)	56.9	85.8	Jul-10
Minimum pension supplement (fortnightly)	30.6	46.2	Jul-10
Energy Supplement	0	0	Jul-10

The **agepension** command merges this piece of the parameter sheet into the Stata® data file and then submits the input variables to a Mata® function that converts these variables into Mata® column vectors and inputs each of the values in the *Jul-10* part of the parameter sheet into Mata® scalars. It then simulates pension payments for each income unit, taking care to use the scalars that are relevant to an income unit that is single (*income=0*) or a couple (*income=1*) and whether the income unit owns their home (*homeowner=1*).

The average Age Pension payments across the population quintiles of net worth presented in Figure 48, Figure 49, Figure 50, Figure 62, Figure 61, Figure 70 and Figure 71 were estimated using the command in this way. They do, of course, use more recent policy parameters.

The *assets* variable used in the simulations contained in the report is the sum of the assessable assets contained in the first, second and third panels of Table 31. Since these are asset values in 2010 dollars the sum of these

asset values was updated using an annual growth rate of 6% to provide a value for assessable assets that is consistent with the July 2014 asset test thresholds used in the model.

The *income* variable used in the simulations is more complicated. Assessable income for the purposes of the Age Pension income test includes what is termed ordinary income in addition to the income that is deemed to be earned on the deemable assets listed in the first panel of Table 31.

The HILDA data set includes a range of income variables that appear to be analogous to many of the types of income that are included in the definition of ordinary income under Social Security Law. Table 32 lists the HILDA variable used in the construction of the ordinary income variable, used in the modelling in this report.

In contrast to the variables in Table 31 not all of these are imputed variables and therefore contain missing values. More specifically, neither **_bifdiva**, **_oifrnata**, **_oifroya** nor **_oifwkci** are imputed so there is the potential for some pensioners to have missing values for our estimate of ordinary income which precludes simulation of counterfactual pension entitlements. The extent to which this occurs is examined in the following appendix.

Deemed income is calculated by simulating deemed income on the sum of deemable assets listed in the first panel of Table 31 using a modelling approach that is similar to that used to simulate pension payments. Prior to simulation, the value of deemed assets is updated by an annual growth rate of 6%. Total assessable income is

Table 32: HILDA variables used in constructing an estimate of ordinary income

HILDA variable label	HILDA variable name
Gross financial year wages and salaries	_wsfes
Gross financial year incorporated business wages and salary	_bifiga
Gross financial year business dividends from incorporated business	_bifdiva
Unincorporated business financial year income	_bifip, _bifin
Financial year rental	_oifrnata
Financial year royalties	_oifroya
Financial year regular workers' compensation/accident/sickness insurance	_oifwkci
Financial year foreign pensions	_bnffpi

then calculated by adding ordinary income and simulated deemed income and updating this amount by an annual growth rate of 3.9%.

The approach used to produce the post-reform simulations of Age Pension payments is exactly the same as that used to produce the pre-reform (March 2015) estimates with three exceptions:

The post-reform *assets* variable includes home equity, which is exempt under the pre-reform policy settings.

The post-reform *income* variable includes the simulated annuity that could be earned from the income unit's home equity.

The policy settings used to simulate the Age Pension payments are different, as outlined earlier in the report.

Appendix IV: Simulating reverse mortgage income streams and estimating budget outlays on the Age Pension

The post-reform estimates of average household income illustrated in Figure 49, Figure 50, Figure 55 to Figure 60 and Table 11 to Table 13, all include estimates of the average annuities that could be drawn from their home equity. Similarly, all of the simulated changes in annual incomes shown in the first appendix include these simulated annuity incomes. This Appendix describes how these annuities were estimated and how the average gains and losses and the estimated budget outlays were calculated.

Of the 1,585 responding persons in HILDA who reported receiving the Age Pension at the date of interview in 2010 (and, where partnered, were partnered to a responding person), 111 were members of a couple where at least one partner failed to provide information that would enable the calculation of the income unit's total private income or the income units ordinary income. These 1,474 age pensioners are distributed across 1,097 households. After performing a simulation of age pension payments for these households 73 household were found to have either assessable assets or assessable income inconsistent with receipt of the age pension. The simulations in this report were performed on the remaining 1,024 households containing 1,379 age pensioners. There were no missing values for home equity for any of the 739 homeowner households in this sample. All are assumed to have control over their household's home equity.

The datafile containing these 739 households is first converted into a long file that nests the years of age of single pensioners or, for couples households, the ages of the younger partner. Each household is given 45 rows to represent age 65 to 110 marked out by a variable called *age* which denotes each of these ages.

A Stata® *.ado* command called `maxpension` is then run over this data file. For each household in the data file this command executes the following steps:

1. Generate a variable that represents a stopping rule. Each row containing a value for *age* that is less than or equal to 100 is coded as 0 while those greater than 100 are coded as 1.
2. Generate a variable, *asset*, that represents the value of the housing asset. The command allows for growth in the value of the housing asset at the Consumer Price Index in addition to a real growth rate.
3. A minimum housing equity variable is then created. This can be specified as a percentage of the value of the housing asset or as an absolute amount of equity. Where a percentage is specified this refers to the percentage of the value at each age and not a percentage of the initial value of the asset at age 65. The command also allows for the construction of a

minimum housing equity variable that is the greater of a percentage or an absolute amount, this is the so called "hybrid" minimum equity amount mentioned earlier in the report.

4. The command then executes a loop whereby potential initial annuity payments are chosen to determine whether, conditional upon the initial amount of home equity, this amount can provide a given level of nominal growth in annuity payments until the age of 100 without depleting the pensioner's equity in the home to a level that is below the minimum allowable home equity specified for that simulation.

More specifically, the loop tracks the following steps for potential initial annuity values beginning at \$45,000 and proceeding down to \$0 unless a positive value of initial annuity payment is found that fulfills these conditions:

- 4.1. Generate a variable that represents annuity payments beginning with the current value for age 65 and growing at a nominal rate up to the age of 110.
- 4.2. Generate a variable that represents the cumulative value of the negative equity loan. At age 65 this is equal to the first annuity payment. Beyond age 65 the interest charged on the previous period's loan value is added to the previous period's loan value and the current period's annuity payment.
- 4.3. Generate a variable that represents the household's equity in the home. This is merely *asset* less the value of the negative equity loan given the current value of the initial annuity payment.
- 4.4. The next step is to compare the equity value to the stopping rule variable. A new variable is generated that is set equal to 0 for those ages where home equity is larger than the minimum allowable home equity and 1 for those ages where it is not. The loop terminates when this variable is equal to the stopping rule variable.

The vast majority of the households in the sample do not have a level of initial home equity that could provide them with an initial annuity payment of \$45,000, and real increases every year until they reach 100, even if very strong growth in house prices were assured. When these large values of initial annuity payment are modelled all of the simulated home equity values will be below the minimum allowable home equity. What the loop attempts to do is to determine the highest possible initial annuity payment that could keep home equity above the minimum allowable home equity up until the age of 100.

For those with extremely low amounts of initial home equity this amount will be \$0. For those with very large amounts of initial home equity, an initial annuity payment of \$45,000 with real increases for the next 35 years might be possible without reducing home equity below the minimum allowable amount.

Having simulated the largest possible income stream that could be earned from these projected home values, the initial equity payments for each household are then included in the calculation of total assessable income used to simulate Age Pension payments under our proposed reforms to the Age Pension test.

The quintiles of household net worth shown in Figure 49 to Figure 61, Figure 62, Figure 70 and the analysis in Appendix I, are estimated using the HILDA variables **_hwnwip/n.** with quintile cut-points that utilise the household weights (**_hhwth**). This variable is also used in the construction of Figure 32 and Figure 33 though these figures use all age pensioner households with valid wealth data rather than the more restrictive sample used in the simulations which require valid income data and non-zero simulated pre-reform pension payments.

The estimates of the number of age pensioners who would experience an increase, or a decrease, in their Age Pension payments in Table 11 to Table 13, Figure 48 to Figure 50, Figure 55 to Figure 60 and the analysis in Appendix I required a re-weighting of the HILDA survey data. The purpose of this re-weighting is to attempt to ensure that each of the responding persons in the data file represent, as accurately as possible, the number of people in the age pensioner population who share their demographic characteristics.

Since HILDA comes with responding person weights that attempt to re-weight the sample so that it reflects the Australian population for that survey year we begin by estimating a cross tabulation of partner status, applying the responding person weights for wave 10 (**_hhwtrp**). We then compare this to the same cross-tabulation that appears in the Department of Social Service's *Income Support Customers: A Statistical Overview 2010*

publication. The frequencies for these cross tabulations are shown in the first and second panels of Table 33.

Since partner status is an important determinant of pension payments it is important that the sample reflect the correct concentration of this characteristic within the population. Given the primacy of homeownership in determining the parameters of the Age Pension under the current assets test, and its close correlation with total assets, an ideal weighting strategy would be one that weighted the HILDA data to reflect the concentration of home owners and non-homeowners within the population of single and couple age pensioners. Sadly, the publicly available DSS administrative data extracts do not currently provide this cross tabulation. For this reason we weight the sample to reflect the concentration of single and partnered age pensioners within the population of men and women.

The third panel of Table 33 presents the coefficients used to scale the responding person weights in HILDA so that they match the frequencies of single and partnered age pensioners within each gender.

This approach scales the HILDA responding person weights in an attempt to match the population frequencies as at June 30, 2010. The next step is to scale these weights so that they reflect these population characteristics for September 2014. Unfortunately the DSS administrative data extract for September 2014 only contains frequencies for single and partnered pensioners. Table 34 presents the frequencies for single and partnered age pensioners for September 30, 2014 with the coefficients used to scale the weights to ensure they match the frequency of single and partnered age pensioners for September 30, 2014.

After implementing the simulation methodology described in the previous Appendix, the average gains and losses and the estimates of budget outlays are calculated by weighting the simulated pension payments by the HILDA weights after scaling them by the inflation factors shown in Table 33 and Table 34.

Table 33: Frequency of Single and Partnered Age Pension by Gender in HILDA and the population of Age Pensioners at June 30 2010

Department of Social Services 2010	Male	Female	Total
Single	270,185	654,183	924,368
Partnered	666,496	562,311	1,228,807
HILDA Wave 10			
Single	291,551	519,138	810,689
Partnered	486,976	481,421	968,397
HILDA to DSS Inflation Factor			
Single	0.926716081	1.260133144	-
Partnered	1.368642397	1.168023414	-

Table 34: Frequency of Single and Partnered Age Pension by Gender in the population of Age Pensioners at September 30 2014

	Department of Social Services 2014	2010 to 2014 Inflation Factor
Single	1,052,442	1.138553044
Partnered	1,371,400	1.116041819
Total	2,423,842	-

The frequency of winners and losers throughout the report are the sum of these scaled frequency weights for those whose individual incomes increase or decrease. The total pension outlays, total private income and total annuity income aggregates are calculated by summing these individual income values after having multiplied them by these weights. It should be emphasised that these estimates are weighted at the responding person level rather than the households level. Since the Age Pension simulator provides Age Pension payments at the income unit level, the simulated pension payments for couples are divided by two.

One way to assess the extent to which using HILDA data on income and assets, when combined with the weighting approach described above, can produce accurate estimates of budget outlays is to compare simulated total Age Pension outlays with those contained in the budget papers.

Using the HILDA responding person weights and the scaling factors presented in Table 34 with the September 2014 Age Pension policy parameters produces simulated

Age Pension budget outlays of \$42,201,643,983. According to the 2014–15 DSS Portfolio Budget Statement, 2014–15 expenditure on the Age Pension is forecast to be \$41,965,548,000¹²³ which suggests a 0.56% overestimate of Age Pension outlays.

In light of the relatively small sample of survey data upon which the models were run and the rudimentary weighting methodology employed, these simulated estimates are closer to observed outlays than might have been expected. The fact that the modeling does not perfectly replicate overall budget outlays is not so much a problem insofar as the primary objective of this report is to explore the distributional implications of current, and proposed, retirement incomes policy rather than to forecast future budget outlays on the Age Pension.

It is likely that much of the discrepancy is due to the simplicity of the weighting approach, however it is also likely that the assets and income HILDA data is unable to perfectly replicate the actual values that are used by Centrelink in the calculation of pension payments.

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