

Retirement income in Australia: Part II – Public support





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Summary of brief

Australia's Age Pension is unique; it is broadly affordable and adequate for most but not all Australians: Unlike the main public pensions in many countries, the Australian Age Pension is flat-rate and means tested so benefits reduce as means increase. It costs less than 3% of GDP and keeps most out of poverty, but not renters.

It is an important source of income for most retirees: The typical pensioner is a 74-year-old woman born in Australia and living in coastal New South Wales. She did not receive welfare immediately before claiming the pension (though over a third of pensioners did), owns her home, receives the full pension, doesn't receive a regular private income stream, and has under \$50,000 in assessable assets.

It is also subject to constant reform: To balance the competing objectives, policymakers can adjust a range of Age Pension policy levers, including: (1) eligibility (e.g., via residency and pension age); (2) benefit (e.g., maximum by household type and its indexation); and (3) means testing (e.g., which private resources are tested, how much of these is disregarded, and the rate of benefit withdrawal as such resources increase).

One area of policy attention has been eligibility age: The Age Pension eligibility age is associated with the decision to retire and raising it is likely to increase mature age labour force participation rates. Eligibility age increased for women (from 60 to 65) and is now increasing for both sexes (to 67 by 2023). Further increases to 70 have been abandoned probably because of: (1) a low fiscal imperative; (2) unequal impacts across groups; (3) labour market concerns (e.g., discrimination); (4) a lack of popularity; and (5) a schedule of increase that was faster than in most other countries.

There is occasional debate about the level of maximum pension: The choice of benchmark to which the Age Pension is linked remains subjective and arbitrary and will ultimately be based on political consensus but a link to wages in some form is essential to maintain pension benefits in line with standards of living.

Means testing is the lynchpin of the Australian approach: It is based on policy about (1) which resources to assess and how to measure them; (2) the permissible threshold of resources beyond which pension is withdrawn; and (3) the taper or rate of reduction. It is a useful policy tool, but its potential remains unexplored.

Future reforms of means testing could look at equalising the treatment of assets: Attempts have been made to equalise treatment of different assets in the Age Pension means test (e.g., deeming) but some assets, such as the family home are excluded. Including the family home would allow Treasury to claw back much of the \$2b or about 5% of the pension budget per year that is paid to households with total assets of over \$1m.

Policy decisions about means testing (and age-based taxes) need to consider behavioural outcomes: Means testing drives the share of the population receiving the pension as well as working and saving behaviour. Research suggests that there are economic gains from a greater level of means testing and may result in higher labour supply of prime-age workers. And aggressive means testing of assets along with a more lenient treatment of annuity-type products is justified to disincentivise tax-financed bequests.

Current and projected expenditure suggests that the Age Pension costs are sustainable: It cost about \$45b or 2.4% of GDP in 2018 (2.7% including Service Pensions), a fraction of what other countries spend on public pensions. Recent projections see spending remaining low.

Australian old age poverty is low when taking account of housing, but the system fails renters: A quarter of pensioners who rent alone spent on average less than \$6 on food per day. An increase in rental assistance payments of 40% would reduce lone renter poverty by almost 20 percentage points, at a cost of \$380m.

Summary of featured CEPAR research

Pension eligibility age and retirement: Offering a lump sum in return for delaying access to pensions appears to work better than raising the pension level in delaying retirement. Pegging the retirement age to life expectancy changes is advisable but needs to be based on predictable patterns. While health and retirement are related, research suggests there is no causal link between a higher pension age and health outcomes (proxied by mortality; Box 1).

Treatment of assets in the means test: The exclusion of the family home from the asset test means renters and owners with the same net worth are treated differently. Another inequity is that financial assets are deemed in the income test, while non-income producing land of the same value is only counted in the asset test. Applying more consistency across asset classes in the income and asset tests would contribute to equity, without needing to combine these in a single comprehensive test, as some have suggested. Aggressive asset testing may be justified to avoid subsidising bequests even if this implies high effective tax rates on capital income (Box 2).

How do different countries design the means test? Australia's arrangements involve higher targeted pensions and slower rates of withdrawal than seen elsewhere (except Denmark, where means tested pensions reach further up the income distribution). Australia's asset test has a shallower taper than other countries with such a test but most countries don't take account of asset values at all in their safety-net pension schemes (Box 3).

How do Australian pensioners respond to the means test? Research shows that Australians tend to hold on to their assessable asset balances and under-consume in retirement, even if it means receiving a smaller pension. Median drawdown was only around 10% over an eight-year period and many see their financial assets grow in retirement, particularly couples and home owners. The result is that the median pensioner left bequests (mainly financial) equivalent to 90% of the assets recorded at first observation. A potential reason may relate to precautionary savings because households can't insure against investment or expenditure shocks (Box 4).

Improving the means test: Relative to other choices available, Australia's means testing system provides well for many of those who receive it and does not drastically distort economic activity. Modelling suggests that a more aggressive taper would be a further improvement, increasing labour supply and overall welfare (Box 5).

Modelling fiscal impacts: Researchers have developed a sophisticated approach to modelling changes in the Australian economy. The modelling suggests that population ageing could increase aged care, healthcare and pension costs by 126%, 25%, and 63% respectively. Pension costs could rise to 4.6% of GDP (however, this is based on parameters in place in 2010; Box 6).

Public opinion of government support for retirees: According to a survey, Australians believe older people should receive more government benefits but don't believe their role is necessarily in the workforce. Raising the pension age was also met with widespread opposition. These attitudes present a problem for a government encouraging mature age labour force participation and older people seeking to retain or find work.

Historic old age poverty rates: Absolute poverty among older Australians has declined over the past four decades. But relative poverty (measured as below either 50% or 60% of the median income) has been volatile and is sensitive to small changes in both the maximum rate of the Age Pension and wages at the middle of the income distribution.

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1. Introduction

In 1909 Australia introduced the nationwide Age Pension. It paid \$1 per week – equivalent to about \$65 today – to men over 65 and women over 60 who were 'of good character' and passed a means test, irrespective of contributions or work history. Despite the ebb and flow of pension policy reforms, the Age Pension remains a fundamental pillar of Australia's retirement income system. But what are its key design features and flaws and how well does it serve its objectives?

This series of three CEPAR research briefs explores the current state, and projected future, of Australia's retirement income system, presenting the latest data and highlighting relevant research. Brief 1 described the demographic context, system structure, and overall trends in retirement resources. The present brief, Brief 2, focuses on the public element of retirement income provision, primarily related to the Age Pension. It discusses policy trends, the design of pension access, benefit level, and means testing, as well as poverty and fiscal outcomes. Brief 3 covers private retirement income provision, particularly the superannuation pillar.

2. Overview of the Age Pension and pensioners

A unique form of public support

The Australian approach to retirement income support is unusual. Its main component is the Age Pension (for ease of reference this document will refer to it interchangeably as *the pension*), which pays high benefits for a safety-net, but relatively low benefits for a public pension. In many developed countries, publicly provided pensions are based on the principle of social insurance. They are *rights-based* and *earnings-related* – where claims on future benefits are accumulated through working life and benefits are broadly proportional to earnings. These are often paired with small safety-net schemes for the very poor, where benefits are aggressively means tested. In Australia, by contrast, the *earnings-replacement* function has been delegated to privately provided and managed superannuation and the main public scheme, the Age Pension, is *needs-based* and *means tested* – where benefits reduce gradually for those who are better off (in terms of income and assets) but the majority still receive some payment. It can be thought of as *affluence tested* – excluding the richest rather than just targeting the poor. The maximum benefit is modest because it presumes home ownership; it is complemented by in kind benefits that address specific needs (e.g., health, aged care, and transport); and comes with its own tax offsets (unlike in countries where the gross benefit is higher but taxed).

As such, Australia's Age Pension, which is paid out of general revenue, is relatively inexpensive to provide. While the Age Pension is one of the largest spending items in the budget (about 10% of Commonwealth budget and under 3% of GDP; Figure 9A, Brief 1), Australia has one of the lowest levels of public pension spending in the OECD (OECD various years). Indeed, Australian Government spending on the Age Pension is expected to remain flat as other countries' public pension liabilities swell due to population ageing. Public support via the tax system is discussed in Brief 3, particularly in relation to superannuation.

Competing objectives mean constant reform

Age Pension policy requires the balancing of competing objectives like adequacy, sustainability, economic efficiency, fairness, and simplicity, each with different trade-offs. The policy levers that help with this involve: (1) eligibility (e.g., via residency and pension age); (2) benefit level (e.g., rate by household type and indexation); and (3) means testing (e.g., which private resources are tested, how much of these is disregarded, and the rate of benefit withdrawal as such resources increase).

Over the years, successive governments have sought a slightly different balance of objectives and adjusted policy levers in different and often opposing ways. There has been constant change: as early as two weeks after its

introduction in 1909, the Age Pension was subject to amending legislation (Kewley 1980). Figure 1 provides an overview of policy reforms and reviews in the past three to four decades.

One area of tension has been the trade-off between adequacy and sustainability. Over the past three to four decades, the maximum pension amount and supplementary benefits were subject to both increases and consolidation. But the large increases in benefits to single pensioners in 2009 were introduced alongside a tighter income test to offset some of the costs (see Section 3). A parallel reform took place in 2017 with asset test changes that raised benefits for those with modest assets (by increasing the asset threshold for pension withdrawal) and reduced benefits for those with more assets (by making the rate of withdrawal beyond an increased threshold more aggressive). Again, these changes sought a balance between sustainability and adequacy. Budget savings will accumulate over time but are not at the cost of pension adequacy for low income and asset pensioners. This contrasts with reform attempts that focused on just one of these objectives, which have been less successful – including a 2014 bid to improve sustainability via a gradual cut in the maximum pension (see comments on indexation in Section 3), with little attention to benefit adequacy.

Age Pension design features have also been varied to influence behaviour and correct for unintended responses to the means test. For example, the recent tightening of the asset test is likely to encourage those with more assets to spend these before accessing the pension, reducing taxpayer subsidies of bequests. As well, the income test has been increasingly loosened to exempt more labour earnings and incentivise pensioners to continue working. Furthermore, the income test deeming rules for financial assets – where a standard return on assets is assumed in place of the actual return – is intended to both simplify means testing and reduce incentives to hold low-yielding assets in order to maximise Age Pension income.



1 Age Pension policy over time

Note: AWE denotes Average Weekly Income. MTAWE denotes (Full-time) Male Total Average Weekly Earnings. *40% of an annuity's purchase price is exempt from the asset test until 84 (or after a minimum of five years), at which age 70% of the price becomes exempt. Source: Authors' compilation.

Also, prior to recent reforms, the means testing rules discouraged the purchase of pooled, lifetime income products (see Brief 3, Section 6). The recent reforms address this by: (1) in the asset test, recognising that access to the underlying asset for such products is restricted and so should not be assessed as an available retirement resource; (2) in the income test, recognising that some of the income received is the return of capital; and (3) in both tests recognising that some of the benefit is a longevity premium specific to risk-pooling products like annuities, which should not be penalised by excessive Age Pension withdrawal. Indeed, encouraging greater private pooling of risk can reduce public spending in the long term.

Other reforms seek to redress actual or perceived unfairness in the system. Probably the greatest distortion and source of inequity in the means test is the exclusion of the family home (which was initially included in the assets test but has been excluded since 1912). The current means test design favours those who invested in their property over those who hold non-owner occupied housing assets of the same value. Some redress comes from allowing renters to hold more assessable (non-owner occupied housing) assets before their pension starts being withdrawn. Inclusion of the family home may be politically challenging but could be facilitated via the established, and recently upgraded, Pension Loan Scheme. The scheme enables the receipt of a higher pension by drawing down on housing equity that is then repaid from their (or their partner's) estate after death.

Characteristics of Age Pensioners

Age Pensioners make up about 10% of the population, 14% of voters, and nearly 70% of people aged 65+. Their characteristics are determined by the interaction of pension rules and the demographic, social, and economic factors of the eligible population. These characteristics are summarised in Figures 2A-2O. For a more detailed analysis of the characteristics of older Australians based on the 2011 Census, see Chomik (2014).

The typical pensioner is a 74-year-old Australian-born woman living with her partner in her own home in New South Wales. It's instructive to compare the demographic characteristics over time and to the overall population. For example, 55% of pensioners are now women, compared with 70% of pensioners in 1990. This decreasing trend is due to the narrowing of various gender gaps – men's life expectancies are catching up to women and women's retirement resources are catching up to those of men and eligibility policies are applied more uniformly.

In 2016, only 0.8% of pensioners identified as indigenous, compared to 2.8% of the overall population (ABS 2018a). This reflects the life expectancy difference of indigenous Australians – which is 10.6 years lower than the non-indigenous population (AIHW 2017) – as well as potentially relatively less engagement with government services.

Comparison with the total population reveals that the average pensioner is less likely to be born in Australia (60%) than the average Australian (67%). This is because in a country with net inward migration, cohorts gain migrants as they age. International and internal migration also effects sub-national patterns: New South Wales has a greater share of pensioners (33%) than its total population share (32%), while Western Australia has fewer (9%) than its population share (10%). Pensioners are also unevenly distributed across regions. For example, they make up a fifth to a quarter of voters in the coastal electoral divisions of Lyne, Hinkler, Gilmore, and Cowper.

Most people do not receive other forms of income support immediately before claiming the Age Pension, but over a third (36%) move from other benefits, such as the Disability Support Pension (DSP; paid to disabled people below pension age), Newstart Allowance (paid to the unemployed), or Carer Payments (paid to those whose caring responsibilities inhibit their ability to work). Most pensioners receive the pension for the rest of their lives, though a small share (13%) become ineligible at some point, likely because they inherit wealth.



Note: Having an 'income stream' relates to having assets that pay a regular income from accumulated superannuation contributions or purchased using either superannuation or ordinary monies. Some data refers to 2016. Source: Authors' analysis of DSS (2016; 2018a) and ABS (2018b).

Home ownership is high among pensioners (74%), though lower than for all people aged 65+ (86%; Figure 15A). Partnered home owners are the most common pensioner type (47%), followed by single home owners (27%), single renters (19%) and couple renters (8%; sub-splits not shown). That is, single pensioners are more likely to rent than couples.

Most (62%) receive the maximum pension. Among part pensioners, a third have too much assessable wealth and two thirds have too much income to receive the full pension. In most cases, the income thresholds are exceeded due to income from foreign pensions, property, or financial or business investments – only about 4% of pensioners have wage earnings. Also, only 17% receive regular, superannuation-type income streams.

Finally, most (54%) have assessable assets below \$50,000. As with older people in general (See Brief 1, Section 7), most pensioners' wealth is stored in their home and excluded from means testing. However, in 2016, about 6% of pensioners lived in owner-occupied homes worth over \$1m (the figure was 26% for older non-pensioners; ABS 2018b).

3. Age Pension design

At the heart of a means tested pension are rules about (1) eligibility; (2) benefit levels; and (3) means testing.

Residency

To be considered for the pension, one must have been resident in Australia for a consecutive period of 10 years, with five years in working life, and living in Australia at the time of applying. Such requirements are not uncommon in other countries. In some countries it is enough to be a permanent resident (e.g., United Kingdom and Belgium). In others, such as the Netherlands and Norway, the basic pension is adjusted as a proportion of the expected full years of residency (e.g., 1/40th for each year).

These rules are designed to address *pension tourism*, where someone migrates to take advantage of benefits in a country where they did not contribute during their working life, either via tax or social insurance contributions. Residency requirements were tightened in 2018, saving the Australian Treasury about 0.1% p.a. of the Age Pension budget. It's unclear whether the savings justify the added complexity, but they are in line with a long term move to reduce access to recent mature migrants (Figure 3).

3 Age Pension residency requirements over time

	1909	1952	1962	1985	2018
Main criteria	20 years continuous residency	18 years continuous residency	10 years continuous residency	10 years continuous residency	10 years continuous residency, including 5 years in working life
Other	10% absences allowed	2 years absences allowed	Or 5 years continuous + 15 years not continuous	Or 5 years continuous + 5 years not continuous	Or 10 years + 5 years not on income support
		Longer absences allowed for longer total residence			Or 15 years continuous

Eligibility age: Increasing but still lagging rise in life expectancy

Pension eligibility is the most visible parameter of the retirement income system. But the *pension age* is one of several ages that triggers different treatment for taxes and transfers. The others include the *preservation age*, when one can first draw superannuation, and the *tax-free superannuation age*, when one can first draw their superannuation without tax liability (these are illustrated in Figure 4A).

The pension age was set at age 60 for women and 65 for men for much of the twentieth century (Figure 1). This changed in the 1990s when the Keating Labor government implemented an increase in the women's pension age

from 60 to 65 between 1995 and 2013. In the 2000s, the Rudd Labour government, in conjunction with an increase in the pension benefit level, legislated to raise the pension age for both men and women from 65 to 67 between 2017 and 2023. In 2014, the Abbott Coalition government sought to increase it further to 70 between 2025 and 2035, but the unpopular policy couldn't pass the Senate and was abandoned in 2018.

Such pension age increases are often justified in terms of fiscal sustainability and economic efficiency in the face of longer life expectancies and population ageing (see Brief 1, Section 2 for demographic context).

When the pension was first introduced in 1909, Australian life expectancies at birth (using the period measure) were in the high-50s; they are now in the low to mid-80s. Life expectancy is higher still if we take account of likely future improvements (referred to as cohort life expectancy) or measured at later ages (since surviving past year one and then to later ages is a good part of the battle). Measured in this way, the expected lifespan of a 65-year-old is now over age 90. As a result, pensioners can expect to be in receipt of the pension for some 30 years. And much of this gain in extra years is in healthy years (AIHW 2014).

Increasing the pension eligibility age can limit the number or share of people claiming the pension and therefore reduce pension costs and remove incentives to retire early. As shown in Figure 4C, each of the three actual and proposed pension age changes is estimated to result in about 1m fewer people eligible for the pension, with considerable budget savings. Treasury modelling suggests that a five-percentage-point increase in the workforce participation rates of 50-69 year-olds would boost GDP by 2.4% by 2050 (Treasury various years).

The pension eligibility age can act as a signal to retire, even if some might otherwise choose a different age. Indeed, most older Australians say they retire because they reach the eligibility age, rather than for other reasons such as pursuing leisure activities or going on holiday (Figure 4D). Research overseas (e.g., Lalive and Staubli 2014; Cribb et al. 2016) and in Australia (e.g., Atalay and Barrett 2015; Oguzoglu et al. 2016; Morris 2018) show a link, though of disputed magnitude, between pension age and labour supply (though some program substitution took place, i.e., to Disability Support Pension).

The link is apparent when looking at retirement rates by age and over time. Retirement age is proxied in Figure 4E by the percentage point drop in labour force participation rate at each age after age 50. In 1996, when women's pension age first started increasing the most common age of labour market exit for women was 60. By 2016, this peak moved and became more accentuated at age 65, in line with the changes in the Age Pension over that period. Men also saw changes (Figure 4F). The bi-modal pattern of men's retirement at age 60 and 65 disappeared, shifting to a single peak at age 65. Part of this may relate to joint retirement decisions of couples (Morris 2018) and reduction in the age gap between couples (see Brief 1, Section 2 on demographics).

Eligibility age: Reform challenges

There are various reasons why further increases to the pension age failed in Australia, some of which may apply in other countries.

Firstly, the immediate financial concerns about the cost of the Australian Age Pension has been largely addressed. Official projections show it remaining affordable (see Section 4 on costs) and recent changes to the asset test reinforce its affordability (see comments on means testing reforms in this section). Indeed, it is expected to remain one of the cheapest in the OECD (see Brief 1, Section 6 on international comparisons).

Secondly, applying the higher eligibility age to everyone raised concerns about fairness. Life expectancies are averages and low income Australians live five to six years less than high income Australians (Clarke and Leigh 2011) and are often in poorer health. This can be observed by considering the life expectancy in different parts of Australia (Figures 4G and 4H). While recent increases in life expectancy have been recorded across rich and

poor regions, basic analysis suggests that every extra \$1,000 in average wages for a region in 2012 translated to over one month more in average life expectancy in that region (Chomik 2014).

Much of the labour force response to pension age changes tends to be from the poor, who have fewer alternatives. Their jobs are also more likely to be physically demanding, necessitating earlier retirement. In fact, while average healthy life expectancy has increased alongside average life expectancy, there is limited research on healthy life expectancy by socio-economic group.

Thirdly, concerns that retirement can be involuntary remained unaddressed. More than one quarter of Australians aged over 50 say they experience discrimination in the workplace (AHRC 2015; see also Box 4). Almost 30% of men, for example, retire due to an inability to find employment or sickness/disability (ABS 2017a). While the official unemployment rates for older workers are low, they are unemployed for the longest. With unemployment benefits lagging standards of living the result can be greater poverty rates for those just below pension age.

And finally, public opposition remained. While eligibility age increases are the most common type of pension reform in developed countries, they are also the most visible and controversial type of reform (Chomik and Whitehouse 2010).

Perhaps Australia's attempt to increase the pension age further was before its time. Several countries have increased the pension age to as high as 67, and are planning to increase it further, to 68 (Figures 4I and 4J). The Czech Republic was set to increase it by two months per year, thus reaching age 70 in the late 2060s, but the plan has been abandoned. Some have pegged future pension ages to life expectancy (e.g., Denmark, France, Netherlands, and the UK), taking the debate out of the political sphere. For example, based on life expectancy projections, the Netherlands could have a pension age of about 71 years by 2060. By such measures, the Australian pension was set to reach age 70 about 20 years earlier than elsewhere.

Eligibility age: What next?

For policymakers interested in delaying retirement there are alternative parameters to consider. For example, the debate regarding the Age Pension age is linked to the *preservation age* – when people can first access their super. Currently the preservation age is legislated to increase to 60 by 2024, but concerns have been raised that the seven-year gap between this and the Age Pension age may be too large (Chomik and Piggott 2012a).

The National Commission of Audit (2014) recommended that the two ages be kept to within five years of one another, as any larger gap will encourage people to withdraw their superannuation assets early and rely on the pension in later years. Seven years of self-funded retirement at an income roughly equal to the pension would cost about \$200,000. To put this in perspective, the mean super balance for those aged 60 - 64 in 2015-16 was just \$215,000 (ASFA 2017).

A number of countries have introduced flexible pension ages, where an actuarial adjustment rewards people who delay claiming (e.g., see Box 1 on incentives to delay retirement in the US). This is more difficult with a needsbased, means tested pension and superannuation already provides additional income for those that continue to work and contribute. Nevertheless, investigating such a policy proposal could be pursued by researchers.

In the future, the focus is likely to shift away from the *stick* of pension eligibility to the *carrots* of enabling and incentivising older people to work on their own terms, with policy levers that improve health, skills, and labour market opportunities across different socio-economic groups (See Brief 1, Box 6). For example, researchers at CEPAR are seeking to understand how employers can design workplaces that are more conducive to older people remaining in the workforce.

AGE PENSION AGE

(2017a).



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Box 1 CEPAR research spotlight Pension eligibility age and retirement

CEPAR researchers have contributed to various dimensions of the eligibility age debate. Partner Investigator Olivia S. Mitchell, and her colleagues (Maurer et al. 2017), conducted an online experiment in the US to test an alternative option to increasing eligibility age: offering people a lump-sum in return for delaying their access to Social Security. They found that many would voluntarily accept an actuarially fair lump-sum and continue working. If put into practice this could benefit society as people would continue productive work and pay taxes, while also potentially benefitting individuals since working longer correlates with better health. Their use of a single mortality gradient means that the scheme was progressive (i.e., the actuarial formula would have favoured poorer people who tend to die earlier).

But delaying the pension age may be problematic when the capacity to work is low. This has been explored by CEPAR Associate Investigator Julie Byles, who has a comprehensive body of work on retirement experiences, and the interaction of these experiences with gender and health status. In Byles et al. (2016) she reported on a study involving over 20,000 older Australians and discovered an association between retirement and physical dysfunction among men and women. Retirement was associated with a 5-14% increase in difficulties with mobility and daily activities. The authors also found a link between retirement and psychological dysfunction in men (but not women). This gender difference is potentially due to work playing a more important role in the lives of men than in that of women.

Another project to which Byles contributed (Vo et al. 2015) reinforces this gender difference. Using a different survey of over 200,000 Australians, the authors found that retirement was linked to psychological distress in both genders between 45 and 64, but only in men between 65 and 74. This link was especially strong for those who retired involuntarily.

None of these links are shown to be causative as such. People with poor health are more likely to retire rather than necessarily become sick after retiring. Some argue that forcing people to work longer may in fact be bad for morbidity and even mortality.

This is where other CEPAR research can contribute. CEPAR Associate Investigators Erik Hernaes and Simen Markussen, along with CEPAR Director John Piggott and a colleague (2013), utilised a natural experiment using detailed Norwegian data that allowed causation patterns to be drawn. They report in their 2013 paper that there was no causal effect of changing pension age on mortality for those over the age of 60. They suggest that policymakers should therefore not consider effects on health and life expectancy when discussing or making decisions about the pension age.

Associate Investigator Ralph Stevens (2016) examined the pros and cons of pegging retirement ages to life expectancy rates, as some have suggested for Australia. Stevens proposes ways in which policy can be designed such that eligibility age increases gradually and predictably, and where ideally the average remaining years of life at retirement increases over time.

Finally, in current research, Deputy Director Hazel Bateman and Ralph Stevens (and others) are investigating the behavioural implications of increasing the pension age in the Netherlands.

Benefit level: Setting the maximum and maintaining it over time

How much pension each person receives depends on the maximum level minus that which is withdrawn through the means test. The maximum pension is thus the minimum safety net in retirement. It can be set based on different benchmarks (see Chomik and Piggott 2016 for a discussion). For example, benchmarks can be set by reference to poverty thresholds, average wages or minimum wages, by constructing a *budget standard* for pensioners (see Brief 1, Section 5), the income required to overcome a given level of material deprivation or financial stress (e.g., see Harmer 2009), or even comparing to some proportion of the benefits available in a defined benefit contributory system.

The safety net level of the pension in Australia is designed to ensure that pension payments are automatically linked with the average standard of living. This is proxied by Male Total Average Weekly Earnings (MTAWE).

The pension is pegged (or indexed) to 27.7% of MTAWE for singles, and 41.76% for couples. Including the maximum pension supplements, this translates to about \$23,000 for singles and \$34,000 for couples in 2018.

The share of average earnings at which the pension is set, and the exact measure of such earnings can be arbitrary and subject to distortions over time. Indeed, recent reviews of retirement provision arrangements have recommended changing the benchmark. For example, Harmer (2009) suggested to (1) raise the level for single pensioners – based on analysis of financial stress – and (2) peg it to median net income of a full-time worker – based on the rationale that such a benchmark removes the distorting influence of part-time work, tax, and the tails of the distribution. The National Commission of Audit (2014) suggested linking it to average weekly earnings, arguing that including women's wages is more representative of standards of living. In 2014, the Abbott government (unsuccessfully) sought to adjust the level of the pension by pegging it to prices. This is a common reform in countries seeking to cut benefits by stealth and is politically unsustainable in the long term (Whitehouse et al. 2009).

So, what does the pension level look like when compared to different benchmarks? The answer is presented in Figure 5A, which shows that the maximum single-rate pension (including supplement) is worth between 27% and 37% of different measures of gross average earnings, depending on whether these include female wages, part-timer wages, or if overtime is counted. Maximum pension benefits are a greater proportion of, but still below the level of a full-time minimum salary, the ASFA modest standard (see Brief 1, Section 5), and the commonly defined poverty line (see Section 5). They are well above the Henderson Poverty Line – a poverty standard first established in the 1970s. While enlightening, the choice of benchmark remains subjective and arbitrary and will ultimately be based on the political consensus but a link to wages in some form is essential to maintain pension benefits in line with standards of living.

As well as being benchmarked to the standard of living, the pension is further adjusted to movements in inflation (i.e., Consumer Price Index – CPI – and the Pensioner and Beneficiary Living Cost Index, PBLCI). These tend to affect pension rates over shorter periods as over longer periods wages tend to grow faster than prices. In the twenty years to 2018, the average difference between earnings and price growth was 0.5% per year, compounding to a pension payment that is roughly 30% higher than it would have been were the pension level indexed to CPI alone (ABS 2018e; ABS 2018f).

Automatic indexation to CPI began in 1976 after decades of ad hoc adjustments. Benchmarking to wages began in the 1980's, with governments increasing the pension to 25% of MTAWE on four occasions between 1983 and 1993. In 1997, indexation to MTAWE became automatic, and in 2009, MTAWE benchmarking and CPI indexation were complemented with PBLCI.

Figure 5B shows the estimated historic full pension levels adjusted for inflation (left panel) and average wages (right panel). The estimates suggest that over the very long term, maximum pension rates (including pension supplement) have stayed within a band of about 20-30% of average wages. The chart also shows how earlier periods of haphazard adjustment have generally stabilised with the advent of indexation, how pension rates of singles and couples have diverged (with increasing awareness of the needs of single pensioners), and how the large increases in 2009 were on par with increases in the past (but probably achieved over a shorter time period).

Finally, it's worth remarking that the maximum pension is only one parameter of the system that determines the actual payment. The asset and income limits used in the means test are indexed, but to CPI increases rather than wage growth. Such a practice is a form of *fiscal drag* and erodes the efficacy of the pension system and requires bigger discretionary, and sometimes more politically challenging, sporadic adjustments.

PENSION COMPARED TO BENCHMARKS AND OVER TIME



Figure 5A notes and sources: Periods range between 2015 and 2018, with numerator matched to denominator. Rows 1-3 and 5 based on ABS 2018e; 4 based on ABS (2017b) and ABS (2018c); 6 based on ABS (2018b); 7-8 based on 38 hour per week for 50 weeks per year; 9 based on ASFA (2018); 10-11 based on ABS (2018b), where poverty lines are 50% of median disposable equivalised household income and housing costs are ignored or deducted for after housing cost measure; 12 based on Melbourne Institute (various years). Figure 5B note: Figure should be interpreted cautiously. Average wages are generally based on estimates of Average Weekly Ordinary Time Earnings for all employees, but definitions have changed over time. Also, changes in composition of employee earnings and of the labour force and short-term changes in prices are likely to explain departures from MTAWE. Smoothness of line in early decades is due to gaps in data. Source: Authors' analysis of data from FD (2004), Daniels (1999), DSS (various years), Hutchinson and Ploeckl (2016), ABS (2018e).

Means testing

Means testing is a hallmark of the Australian approach to the retirement income system (as well as the wider welfare system), where focus is on *needs* rather than *rights*. The pension has always been means tested but the income and asset tests were loosened or suspended starting in the late 1960s before being re-established by the mid-1980s. It is a versatile policy lever that is not always fully appreciated by policymakers, especially outside Australia (Chomik and Piggott 2014).

So, what makes a means test? Once we have the maximum pension as a starting point, any reduction based on the means test requires determining: (1) which resources to assess (e.g., types of income and assets) and how to measure them (e.g., actual or deemed); (2) the permissible threshold of assessable resources beyond which the pension is withdrawn (different for different types of income and households); and (3) the taper or rate of reduction (e.g., 50% for every dollar of income over threshold).

Income- and asset-based resources are tested separately in Australia, with the pension amount determined by the more binding of the two tests. The settings are such that the income test tends to be binding for more people. To generalise, those who are worse off financially tend to face the income test, with more gradual withdrawals across the income distribution, whereas those better-off are affected more by the asset test, with a more aggressive rate of withdrawal.

Means testing: Which resources and how are they measured?

The scope of resources that enter the means test are shown in Figure 6A. Income from some assets (financial investments and superannuation account-based income streams) enter the income test as *deemed* income. Deeming applies a standard expected interest rate: currently, the first \$50,000 of such assets for a single person are deemed to earn a rate of 1.75%, and anything above that is deemed to earn 3.25%. The method helps keep payments stable rather than fluctuating with financial markets. It also provides an incentive to invest optimally rather than in low yielding assets to target a certain pension income.

Some assets that are omitted from the asset test include aids for people with disabilities and inherited assets for up to twelve months after inheritance. But one questionable omission is the family home. Countless analysts across the political spectrum have called for its inclusion, at least above a certain high threshold (e.g., Henry 2009; PC 2013; Denniss and Swann 2014; Daley 2017).

The move would address inequity (see Box 2) and allow the pension to better target renter poverty (see Section 5). A small proportion of the primary residence is already included in the asset testing for subsidised aged care (Australia's long term care system). Such a policy would be enabled by the recently expanded *Pension Loan Scheme*, which would allow pensioners to live in their home and receive the pension, some of which would be claimed back from their or their partner's estate (see Brief 3, Section 9).

As shown in Figure 6B, asset testing all net wealth, including the family home above some high threshold, would allow Treasury to claw back much of the \$2b or about 5% of the pension budget per year that is paid to households with total assets of over \$1m, depending on how such an asset test was designed. Thus far, there appears little political appetite for changing this status quo. As a concession, renters can hold more non-own home assets before their pension is withdrawn.

Means testing: Thresholds and tapers

Figures 6C and 6D summarise the effect of thresholds and tapers on the outcome of each test by type of claimant and resources being tested. Thresholds differ by relationship status (to take account of economies of scale available to pensioners) and by tenure (since renters are allowed more non-own home assets than owners). In addition, to incentivise work, the threshold for additional labour earnings is greater in the income test.

For example, couples with an annualised assessable income below about \$8,000 can receive the full pension. If working, they could each earn another \$6,500 before beginning to lose some pension (this is known as the *work bonus*). Once they reach this *lower threshold*, the pension is reduced by 50c for every dollar of assessable income over that threshold (i.e., 50%), until no more pension is paid. As a result, no pension is paid beyond an *upper threshold* of about \$80,000 of assessable income for couples (or \$92,000 including the work bonus) and \$52,000 for singles (or approximately \$58,000 including the work bonus).

The asset test follows a similar schema, with high asset thresholds but an aggressive taper that reduces the pension by \$3 per fortnight for every \$1000 in assessable assets. For example, single home owners receive a full pension with assessable assets of up to about \$260,000 and can receive a part pension with up to about \$600,000 before losing the pension completely. Couple renters can have the most assets before they become ineligible for any pension – just over \$1m.



UNDERSTANDING THE MEANS TEST

Notes: Account-based super income streams are deemed; annuity type income streams are based on actual levels and will be subject to exemptions. Tests are applied on a fortnightly basis but have been annualised here. Figure 6A source: Adapted from Harmer (2009) and DSS (2017). Figure 6B source: author's analysis of ABS (2018b). Figures 6C and 6D are adapted from DHS (2018a) and DHS (2018b).

Box 2 CEPAR research spotlight Treatment of assets in the means test

To what extent are assets treated equally and how do the income and assets tests interact across the wealth distribution? This was the topic of a paper by CEPAR Senior Research Fellow Rafal Chomik and Centre Director John Piggott (2016).

It's well established that the exclusion of the family home means renters and owners with the same net worth could be treated differently. Chomik and Piggott identify other inequities in the asset test. For example, financial assets are counted in the means test according to their value and in the income test according to a deemed level of income. So, in the income test (which is more likely to be binding), \$1,000 of shares is assessed to yield \$17.50 and can reduce the pension by \$8.25, yet \$1,000 of non-income-producing land has no effect.

Such inconsistencies informed the recommendation of the Henry review (2009) to combine the asset and income tests into a single comprehensive test. Chomik and Piggott suggest that (1) the same results could be achieved by retaining separate tests and applying each more consistently across asset classes; and that (2) the test as recommended by Henry would ignore the capacity of individuals to spend down capital to finance their consumption.

The crux of their argument is that the means test must take account of the ability of a person to use assets to fund consumption, not simply generate income. So, it is incorrect to think about a more aggressive asset test as an excessively high capital income tax, as suggested by some commentators. It is instead a recognition that pensioners have the benefit of both capital income and the capital itself, which they can spend down before accessing more of the Age Pension.

Box 3 CEPAR research spotlight How do different countries design the means test?

While means testing is a normal part of the social policy landscape in Australia, it is increasingly being considered elsewhere to ensure adequate incomes while keeping budgets sustainable (IMF 2014). About a third of countries worldwide have some form of means testing of retirement income (SSA various years). But most are residual schemes targeting the very poorest. In fact, in OECD countries, Australia is among four countries with a means tested pension that reaches more than half of the older population (Figure 9C in Brief 1).

CEPAR researchers compare how different countries design their means tested pension schemes (Chomik et al. 2015). As shown in Figures 7A and 7B, Australia's arrangements involve higher targeted pensions and slower rates of withdrawal than elsewhere. Yet, the Australian income taper is not as generous as Denmark's 30%. Australia's asset test is even more generous than the income test (Figure 20).

Chomik and Piggott find that most other countries only make use of an income test, rather than also testing assets. Some have complicated policies and make use of *proxy means testing*. For example, pensioners in Chile are subject to an income test only when a 'targeting instrument' to determine their degree of vulnerability is passed. It is also not always the case that couples are assessed together either, even though pooled resources are usually more indicative of wealth than individual resources. Chile takes this idea even further, considering the whole household, not just the pensioners in it, when assessing means.



Means testing: A case study of recent reforms

The history of means testing reforms is as old as the pension itself. This is unsurprising – means testing is a useful tool that can be altered while keeping the safety-net intact. Two recent examples are instructive.

In 2009, an increase in the maximum pension was complemented with a more aggressive income test taper (and a higher eligibility age in the longer term). The taper changed from a withdrawal rate of 40% of assessable income beyond the lower threshold to a rate of 50%. The result meant that the safety net was enhanced while middle-to-upper-income retirees lost some pension (Figure 8A).

Increasing the taper reduces the *upper threshold* automatically. This means that less pension is paid further up the income distribution and the population share of pension recipients declines (driven by fewer part pensioners). This pattern is demonstrated in Figure 8B, showing historic changes in lower and upper thresholds alongside changes in the taper. Incidentally, the chart also shows how CPI is a poor choice of indexation for lower thresholds, which often decline as a proportion of the pension and need to be sporadically adjusted to take account of changes in standards of living like the pension itself.

Reforms in 2017 were in a similar vein, increasing means testing but protecting the safety net (Figures 8C and 8D). This time the asset test taper increased from a withdrawal of \$1.50 per fortnight per \$1,000 of assets to a withdrawal of \$3. At the same time, people with modest assets benefited from an extension of the lower threshold. They could hold more assets before losing any pension. While raising the taper reduces the number of part pensioners, raising the lower threshold increases the number of full pensioners (and has knock-on effects on the number of part pensioners).

A higher taper can lower pension spending, but it may incentivise some people to reduce their labour supply and savings. Yet, an expanding body of research shows that this is only part of the story (Box 4). Not only does a higher taper affect a smaller subset of the population – since the poor will get the pension anyway, and more of the rich are now beyond the taper – but there may be economy-wide benefits too. Research suggests that more severe means testing can result in budget savings, reducing taxes, and lowering disincentives to work for prime-age workers, leading to an overall net benefit (Box 5). But the versatility of the means test remains unexplored – for example, one could consider a non-linear taper that starts low and increases with assessable resources. Another area of research could be around the interaction of tapers and mortality gradients.

The effect of means testing over time

What are the effects of means testing on the share of pension recipients over time? The answer is shown in the wave-like pattern of Figure 8E. Before World War II, less than 40% of the eligible population (men 65+ and women 60+) received the pension. The recipient share swelled as the means test was progressively loosened in a move toward a universal pension. First by exempting more resources, then reducing the taper, abolishing the income test for people over 70, and eventually abolishing the asset test altogether. By the late 1970s, about 90% of the older population received a pension and those receiving a full pension peaked at 69%. A change of policy direction by the mid-1980s re-introduced means testing and re-established a separate asset test.

Since then, the share of service pensioners decreased, the share of part pensioners increased, and full-rate pensioner shares have remained steady. Currently (in 2018), about 66% of the older population receives an Age Pension (41% on the full rate and 25% on the part rate) and about 4% receive the service pension.

What about the future? Trends and projections are shown in Figure 8F. Treasury has not updated projections for some time. Projections from nearly a decade ago suggest that total recipient shares will remain constant but pensioners will be richer and receive only part pensions. Updated trends are likely to coincide with those of Rice Warner (2018), who suggest self-funded retirees will increase from about 30% to over 40% by 2040.



MEANS TESTING REFORMS AND THEIR EFFECT ON PENSION ELIGIBILITY

Figure 8A adapted from DHS (2018b). Figure 8B source: Authors' analysis of Nielsen and Harris (2010). Figures 8C and 8D are authors' compilations. Figures 8E and 8F based on: Rice Warner (2018), Treasury (various years), Donald (1984), DVA (various years a), Dale (2011), Director of Social Services (various years), ABS (2018c), ABS (2013a), ABS (1966), Whiteford and Angent (2001), DFCS (2001), DSS (2014), DSS (2018a). Note: In Figure 8F Rice Warner projections are for Age Pension only.

Box 4 CEPAR research spotlight How do Australian pensioners respond to the means test?

Some commentators expect that households receiving the Age Pension and facing a more stringent means test would spend their assets to receive more pension. This was the argument against increasing the asset test taper in 2017.

But research by CEPAR Associate Investigators Susan Thorp, Shang Wu, and Ramona Meyricke (along with Anthony Asher) showed that rather than running down assets to access higher aged pensions, Australian pensioners generally maintain their assessable asset balances and appear to 'under-consume', holding on to assets, well into their later years (Asher et al. 2017).

The analysis was based on administrative data that tracked the assets and incomes of full and part age pensioners between 1999 and 2007. They found that over eight years, most pensioner households drawdown very little of their financial assets (median drawdown was around 10% over eight years) and many leave possibly unintended bequests. This is part of a wider literature on the under-consumption puzzle.

The results suggest that on average, younger and wealthier households spend some of their financial wealth, but many households see their financial assets grow, particularly couples and home owners (Figure 9A). Housing assets are usually preserved until very old ages unless a partner dies or moves into residential care, suggesting an element of downsizing or selling assets to fund residential care.

Interestingly, the data shows that consumption among pensioners is low when compared to the Association of Superannuation Funds of Australia benchmarks for a 'modest' and 'comfortable' retirement, even among the wealthier households in the sample (see Brief 1, Section 5, for analysis of the total older population).

One reason may be precautionary saving. Pensioners may be self-insuring for investment shocks (e.g., stock market losses that affect their future income) and expenditure shocks (e.g., health and aged care related costs). But the outcome of low spending profiles is that a large share of pensioner households leave bequests. Of those that passed away, the median pensioner was able to bequeath wealth (mainly financial) equivalent to 90% of the assets recorded at first observation (Figure 9B). Only around 10% of single-person households in the sample exhausted 90% of the initial assets over the eight years.

In summary, rather than rapidly drawing down their assets to maximise their aged pension income, as in many other developed countries, age pensioners in Australia appear to 'under-consume', holding on to assets, and even building a buffer, well into their later years. These findings were instrumental in the debate about greater asset testing.



Box 5 CEPAR research spotlight Improving the means test

How do Australian policies compare to alternatives and how could they work better? Senior Research Fellow Rafal Chomik, along with Centre Director John Piggott, Chief Investigator Alan Woodland, Senior Research Fellow George Kudrna, and Associate Investigator Cagri Kumru, examine the use of means testing as a tool for policymakers. Their work (Chomik et al. 2015) summarises the work of multiple related CEPAR papers.

The authors model the effects of different hypothetical means testing policies in Australia using Overlapping Generations (OLG) models. These models analyse the dynamic and aggregate effects of a policy by tracking people's employment, consumption and saving paths over their lifetime, with different people being at different stages of these paths at each given year. Different policies will affect the overall 'wellbeing' of people in the economy based on gains and losses in work and leisure.

The analysis reveals that Australia's means testing system, relative to the many other choices available, provides well for those that receive it, and does not drastically distort economic activity or incentives. But the review paper does point to some ways in which Australian means testing could be better.

George Kudrna (2016) has modelled the impact of increasing or decreasing the taper from the current 50% rate. The results suggest that a more aggressive taper is superior. A 100% taper rate – where the pension decreases by \$1 for every \$1 over a threshold – is found to increase welfare the most, while a 0% taper rate – i.e. no means testing – is the most distorting and has the smallest positive effect on the economy.

The modelling suggests a move to a 100% taper would reduce pension outlays by 17%, allowing lower income taxes while still maintaining a balanced budget. Higher earning households would respond by working and saving more because they have reduced pension eligibility, and the lower taxes required to fund a smaller pension would further incentivise labour supply for prime age households. The modelling suggests that there would be a long run increase in per capita labour supply, assets, and consumption as shown in Figures 10A-10C (for example, labour supply could increase by over 1.5% in the short term and level out at 0.82% higher over the long run). On the other hand, were Australia to introduce a universal pension (at the current full rate) like New Zealand, pension outlays would increase by 42%, to over 4% of GDP. This would require an additional 11% in income tax revenue to balance the budget.



Chief Investigator Michael Keane and Associate Investigator Fedor Iskhakov (2018) also model the Australian policy settings and similarly conclude that the system could be better targeted. Furthermore, Kudrna, Woodland and Associate Investigator Chung Tran show that in the context of population ageing with widening gaps in life expectancy, means testing is especially effective as it redistributes pension benefits to those in need with shorter life expectancies. This redistributive function would be stronger with a higher taper rate.

A move to a taper of 100% may be politically infeasible and create issues not captured by the models (e.g., a smaller population entitled to the pension may erode support for its safety net function), but the modelling shows the potential of means testing as a policy tool and counters claims that it is economically inefficient.

4. Spending outcomes

How much does the pension cost?

There is often alarm about the effect of population ageing on budgets. In Australia, this may be warranted in the case of health and aged care, which are among the fastest growing items in the budget, but not when it comes to spending on pensions. This is by design, since Australia spends little on earnings related pensions.

In 2018, the Age Pension cost \$45b – which represents about half the welfare budget (under the Social Security Administration Act 1999), 10% of the Australian Commonwealth budget, or 2.4% of GDP. This sounds large, but in most developed countries pensions make up the largest item of spending, and Australia's Age Pension is among the least costly in the OECD (see Brief 1, Section 6 on international comparisons; and Brief 3). It is paid from general revenue and is administered by the Department of Social Services. Including service pensions, administered by the Department of Veteran Affairs, adds another 0.3% of GDP in 2018. Therefore, in total about 2.7% of GDP is spent on what are known as *Age and Service Pensions*.

Sometimes this type of spending is grouped into what is known as *old age pensions* (OECD various years). This category can include civil service pensions (though these are paid by public sector superannuation funds; see Brief 3, Section 8), as well as survivor benefits and wives' pensions (which were available to female partners of pensioners who were below Age Pension age, but is being phased out). The OECD reports that these would all sum to 4.3% of GDP for Australia in 2014, about half the OECD average of 8.2%. Occasionally, analysts also include public 'spending' via the tax system – this is discussed in Brief 3, Section 7.

The pattern of historic and projected spending on Age and Service Pensions is presented in Figure 11. It broadly traces the profile of the recipient population shares presented in Figure 8E, above. Spending rose gradually in the first few decades of the existence of the pension. As the means test was dismantled, spending sharply increased from about 2% in the early 1970s to a peak of 3.5% in the early 1980s. The advent of greater targeting brought this down in recent decades, though higher benefits and the retirement of baby boomers, alongside a still immature superannuation scheme, saw spending increasing slightly in the decade to 2017.

Is pension spending sustainable?

Predicting future pension spending depends on correctly estimating: (1) the increasing share of the eligible population due to demographic ageing; (2) their increasing private wealth, mostly from a maturing superannuation scheme; and (3) the impact of policy design parameters described above – pension eligibility age, benefit level, and means test settings.

Such a projection exercise, looking 40 years into the future, is published by the Australian Treasury every 3-5 years in the Intergenerational Report (see Chomik and Piggott 2012b for an analysis of the IGR). Long term fiscal reporting is now common in developed countries and is designed to assess the sustainability of existing policies. Ideally, these are produced at arms-length from government (e.g., as is the case in the UK). But in Australia, the IGR is a report of the Treasurer and is potentially subject to political capture, which could threaten its credibility. The Parliamentary Budget Office (PBO) also produces medium term projections over a 10-year horizon. Other ad hoc projections are produced by bodies such as the Productivity Commission, consultancy firms and academics.

A selection of these is featured in Figure 11. Successive projections have been more optimistic about the trajectory of pension spending. For example, in 2010 the Treasury expected expenditure to rise one percentage point to reach 3.9% of GDP by 2050 (Treasury various years). More recent projections by the Treasury, the PBO, and Rice Warner see spending remaining flat. Some of this divergence may be explained by differences in

methodology but most is to do with changes in the underlying drivers. For example, (1) even though life expectancies have climbed higher, Australia's rate of ageing has slowed down due to greater skill-based migration which is younger than the general population (Chomik 2015); (2) labour force participation rates, particularly among older people, have increased faster than previously anticipated, increasing the GDP denominator as well as the income and wealth of those age-eligible for the pension; and (3) policy design will accentuate this pensioner wealth effect as the mandated rate of superannuation shifts from 9% to 12% of wages (see Brief 3).

Projections are never valid for long because policies (and therefore pension characteristics) keep changing. For example, the Treasury (2015) modelling assumed that the pension spend would decline based on a proposed policy to cut pensions through indexation reforms and the intention to raise eligibility ages, neither of which went ahead. PBO (2018) took account of most policy changes, but the week it published its estimates the policy to raise the pension age to 70 was abandoned.





Note: All projections normally include both Age and Service pensions, except for Rice Warner and PBO. IGR denotes Intergenerational Report. These reports assume government policy is implemented, which in the case of IGR 2015 included policies to increase the pension age and cut pensions in wage terms, now abandoned. Subsequent reforms, including to the asset test are included in PBO, which also includes increases to pension eligibility age. Source: Director of Social Services (various years), DFCS (2001), DVA (various years a, various years b, various years c), Moore and Whiteford (1986), ABS (2017b), DFAT (2018), DSS (various years), Treasury (various years), PC (2013), PBO (2018), Rice Warner (2018).

Whichever projection is most accurate, the design of the Australian pension is expected to keep the scheme cheap compared to other countries. Even the worst-case scenarios place Australia's Age Pension in the top four most affordable pension schemes, aided by its unique design and Australia's more favourable demographic outlook (see Brief 1, Section 6).

A frugal policymaker may still wish to limit expenditure further. If so, there are five broad policy levers to consider: (1) cut benefits; (2) delay receipt; (3) increase private means; (4) increase the scope of means testing; and (5) increase the bite of the means test.

The Commonwealth Government has failed in attempts to introduce the first two options (reducing indexation from wages to prices and lifting the eligibility age to 70); option three is in progress with respect to higher superannuation savings; option four is politically difficult as successive governments rule out widening the scope of means testing by including the family home; and option five has been partially implemented through tightening of the asset test. Further tightening could be considered, not because there is impetus for greater

savings per se but because such savings could be channelled to more vulnerable pensioners (see next section on the groups truly in poverty). Overall, there is evidence that Australians may want more rather than less spending on pensioners (Box 7).

CEPAR research spotlight Modelling fiscal impacts Box 6

Estimating the long term costs of spending programs often involves a form of micro-simulation (e.g., the typical approach used by the Australian Treasury) in which the numbers of different types of households are projected into the future and interacted with the expected evolution of costs for that type of household. These are then compared with the supply side of the economy – which combines population data, labour participation, and productivity – to estimate GDP. Commonly, this type of analysis assumes there will be little to no behavioural response by households to changes in any of these factors - e.g. if population ageing increases spending and taxes, it is assumed that younger households will not be discouraged from working, which if it were to be the case would have fiscal impacts.

CEPAR Senior Research Fellow George Kudrna, Chief Investigator Alan Woodland, and Associate Investigator Chung Tran, instead chose to build a general equilibrium model of the Australian economy in which behavioural responses are taken into consideration. In their model, households make lifetime decisions based on economic incentives, but dynamically update these choices depending on policy and demographic changes. Admittedly, not all households act so rationally, but the model only requires that on average the different groups do so. It is also anchored in such a way that it can explain current outcomes before turning to the future. The Australian Treasury is building a model based on a similar framework.

Kudrna, Woodland and Tran (2015) show how demographic shifts can affect output, expenditure and taxes. The authors project that between 2010 and 2050, due to population ageing, aged care, healthcare and pension programs costs could increase by 126%, 25%, and 63% respectively. Indeed, they suggest that pension expenditure, based on parameters in 2010, could rise to 4.6% of GDP. The extra costs could by 2050 require an estimated 32% cut to non-age-related spending or a 28% increase in consumption taxes. (Figures 12A-12D).

Though such analyses can be based on simplified assumptions, they provide a helpful measure of what might happen if certain assumptions hold and highlight how different models can arrive at very different results.

2040

2040

2050

2050



Box 7 CEPAR research spotlight Public opinion of government support for retirees

There is considerable evidence that ageism is a problem in Australia (AHRC 2015). But surveys focusing on attitudes to the pension suggest that few object to public support for retirees. Using data from a survey of around 1,500 Australians, the late CEPAR Chief Investigator Hal Kendig, Associate Investigator Kate O'Loughlin, and their colleagues, found that most people believe that older people get less than their fair share of government benefits (Kendig et al. 2015).

About 57% of those surveyed thought the share allocated to older people was too low, while only a very small fraction thought they were receiving too much (Figure 13). Older people were more likely to say that the current transfers were about right.



13 Australians perceive older people receive less than their fair share of government benefits

A non-CEPAR affiliated paper by Hodgkin (2013) focused on answers to a different set of questions in the same survey as that used by Kendig et al. (2015). Hodgkin found widespread support for the idea of the state directing considerable resources towards the support of elderly people. Most respondents in her study (85%) agreed that the government should provide home care and/or institutional care for elderly people in need, and most (80%) agreed that the government should pay an income to those who had to give up working or reduce their working time to care for a dependent person.

They also found that 72% of people believed the society-wide conflict between the young and old to be 'not very strong' or non-existent. Those who did believe a conflict existed between the generations were disproportionately young people and those from low incomes – two demographic sectors for whom the labour market is presumably the most constrained and therefore more inclined to be of the view that older workers should retire to allow others better employment opportunities.

What these survey responses suggest on the whole is that while many Australians may have great respect and admiration for older people, they do not believe that their role in society is within the workforce. In fact, talk of raising the pension age to reduce the cost of the pension was met with widespread opposition when it was proposed and discussed in the media in 2015 (O'Loughlin and Kendig 2016).

These social values present a problem as there are significant incentives – for both society and individuals – to maintain, or even extend, mature age labour force participation (see Brief 1, Section 8). They also highlight the lack of understanding about the *lump of labour fallacy* (Schloss 1891) – that there is a single number of jobs in an economy which people compete for. In reality, more older people in work means a larger economy that generates more jobs for everyone.

5. Poverty outcomes

Poverty alleviation as a key objective

As the first pillar of the retirement income system, a key function of the Age Pension is to alleviate poverty. So how well does it achieve this? The common perception is: not very well. Indeed, old age poverty is often quoted to be high in Australia. But the reality is more complicated.

International comparisons by the OECD show Australia's rate of old age poverty to be higher than that of almost all other developed nations (Figure 1A). The OECD defines the old age poverty rate as the share of the population aged 65+ that have household disposable incomes below 50% of the population-wide median, adjusted for household size (most analyses outside Australia count *people* in poverty rather than *households*) Recent figures show that the average rate of old age poverty across the OECD was 12.5% while the rate in Australia was more than twice that, at 26% in 2013-14, the latest available year of OECD data (OECD 2017; as noted below, more recent data for Australia shows old age poverty at 24%).

But these poverty figures should be interpreted carefully. The high rates are largely due to design features of the Australian retirement income system and because the commonly quoted poverty rates exclude housing from the analysis (Figures 15A-15F).

The role of pension system design

The Australian Age Pension is at a level that is just below the poverty line (drawn at 50% of median equivalised household income). Since many rely on the pension, this translates to a large share of retirees with incomes just under the threshold of poverty, as can be seen in Figure 14G. But it also means that the *depth* of old age poverty is shallow, unlike in South Korea, for example.

As the superannuation system matures and more Australians enter retirement richer, it is expected that fewer will rely on just the pension (see Section 4, above). Thus, the Australian retirement income system is expected to deliver lower OECD-defined poverty rates over time.

The role of housing

The most important factor is home ownership. OECD poverty rates focus solely on cash income, ignoring whether individuals own their home (as acknowledged by the OECD). And a lot of older Australians do own their home (86% in 2016; Figure 15A), which is no trivial matter in a country with high housing costs.

Home ownership can be incorporated in the analysis in two ways. One is to deduct costs from income so that in estimating poverty we compare the population's median income with the incomes of older people *after housing costs*. Since older people tend to own their homes outright we will effectively deduct less from their income. The second method is by adding the value of *imputed rent* (the estimated market rent of an owner-occupied home) to everyone's income. Again, since older people tend to own their homes outright, we will impute more rent for them than for the overall population.

Either method shows old age poverty rates drop significantly, from 24% when housing is excluded to between 10% and 14% (in 2015-16) when it is included. This more complete way of comparing the standards of living between groups shows that older Australians have the same poverty rates as working age Australians (Figure 15C). In fact, since older people can spend their capital in retirement and rely more on home-production (see Brief 1, Section 7), the same poverty rate for older and younger people may mean better standards of living among the old. Reanalysing Australian and other country data using these methods also brings Australia's

poverty rates to the level of the OECD average, debunking the idea that Australia has higher old age poverty rates than other developed countries (Figure 15D). This is in line with similar findings across a smaller set of countries in the past (Whiteford and Kennedy 1995; Ritakallio 2003; Yates and Bradbury 2010).

Recent declines likely to continue

Even measured using the more limited OECD measure, old age poverty has declined over the past decade (Figure 16A). This is due to the incomes of older people increasing faster than the population median (Figure 16B). Underlying this trend is slowing wage growth at the median versus a one-off increase in the pension level in 2009 and subsequent indexation (due to the dynamics of MTAWE, CPI, and PBLCI) that drove faster relative pension increases. As the superannuation system matures, even pensioners in the bottom third of the income distribution could be expected to gain income that may push them above the poverty line.

But the retirement income system is failing lone renters

Concerns about pensioner poverty are not entirely groundless – but they are misplaced. Problems arise from a pension framework whose adequacy relies on an assumption that retirees own their home. Older renters solely reliant on the pension have high poverty rates based on the OECD-defined poverty line. But when housing is included in the analysis, up to half are poor (Figure 15E and 15F). And when we drill down to look at only older renters who live alone, we see that between 60% and 70% are in poverty. The finding has been replicated over the years with little policy response (e.g., Saunders and Wong 2011; Yates and Bradbury 2010; Commission of Inquiry into Poverty 1975).

Renters made up 12% of those aged 65+ in 2016. Single renters, the majority of whom are women, made up 5% (though about 18% of the Age Pensioner population). This largely overlaps with the 5% of people aged 65+ experiencing rental stress (where rent costs are over 30% of disposable income). But decreasing home ownership rates among younger cohorts (ABS 2018b) and potential drops in ownership rates in later life due to divorce (Asher et al. 2017) may exacerbate poverty and threaten the adequacy of Australia's retirement income system. It doesn't help that state governments have been stepping away from social housing provision.

If a relative poverty measure is too abstract, an absolute one may be more illustrative. Recent analysis by Hugo et al. (2018) that found Aged Care homes – which have the advantage of economies of scale – spent on average only \$6 per resident per day on food made headlines around Australia. But looking at spending data of private households in 2016 reveals that a quarter of pensioners who rent alone spent on average less than \$6 on food per day (adjusting for inflation would make the share larger; authors' analysis of ABS 2018b).

What to do?

If lone renters are the people that Australia's retirement income system is failing, what would help? Older renters are entitled to Rent Assistance. But as the next section shows in more detail, the benefit has not kept pace with rental costs. Our analysis suggests that if Rent Assistance could be targeted at older renters it could have a large impact for a small amount of expenditure. For example, a 40% increase in the Rent Assistance received by older renters would reduce their poverty rate by between 5% and 11%, depending on the measure used – for example, when net imputed rent is included in income, poverty would decline from 42% to 31%. And lone renters would see even greater drops in poverty by up to 19%. This would be at a cost of about \$380m p.a. (in 2018 dollars). Since they make up a small segment of the population (less than 2% of the population), the extra rent money they'd pay in the market is unlikely to have a large effect on rent prices. The Parliamentary Budget Office has estimated that gradually increasing maximum rent assistance to the overall population by 30% would cost \$2.2b by 2020 (PBO 2016).



WHY DOES AUSTRALIAN OLD AGE POVERTY APPEAR HIGH? THE ROLE OF SYSTEM STRUCTURE



methodology. This contrasts with methodology used by the Australian Council of Social Service, which adjust incomes of self-employed people, use a different equivalence scale, and result in slightly different estimates. A given % of extra CRA (Commonwealth Rent Assistance) is allocated to all recipients in 2015-16 and then converted to 2018 dollars and scaled up to 65+ population in 2018. Source: Authors' analysis of data from ABS (2018b) and LIS (2018).

WHY DOES AUSTRALIAN OLD AGE POVERTY APPEAR HIGH? THE ROLE OF HOUSING



RECENT TRENDS IN AUSTRALIAN OLD AGE POVERTY

Note: Definition of income changed slightly in 2008, which was applied to earlier years but not 2003-04. Source: Authors' analysis of ABS (2018b).

Box 8 CEPAR research spotlight Historic old age poverty rates

The Australian economy has seen wide ranging reforms in recent decades, of which changes in the retirement income system is only one. When it comes to studying poverty and inequality trends it is important to consider the full context of economic and social reforms.

CEPAR Associate Investigator Peter Whiteford conducted a review of long term income trends across the income and wealth distribution (Whiteford 2013). In doing so he also estimated old age poverty rates over an extended period and by different measures. His analysis, based on poverty of households by age of household head (unlike poverty in this brief, which is of persons), shows that absolute poverty (i.e., 50% of 1982 median, adjusted for prices but not standards of living) saw declines, but that relative poverty (both at 50% and 60% of contemporary median) has been more volatile. Like the analysis in Figure 16C, he shows how both wages in the middle of the income distribution and the maximum rate of the Age Pension, which is close to half of median income, can change relative poverty numbers dramatically (Figure 17).



6. Other Government assistance

The Government provides for Australian retirees in more ways than just the Age Pension. As in some other countries (Figure 18), many older people receive assistance both in paying their rent, and through in kind transfers – non-cash payments received by all eligible for the pension, and even some who are not.



18 Supplementary benefits for pensioners in OECD countries

Source: OECD (various years)

Rent Assistance

Commonwealth Rent Assistance (CRA) is not a discrete program payable under the law, but a supplementary payment available to recipients of social security payments, including those receiving an Age Pension and who pay above a minimum threshold of rent. The exceptions to this are individuals and couples who live in public housing or in residential care facilities that receive government funding.

Payments amount to \$0.75 for every \$1 of rent above a threshold – which, in 2018 was about \$60 per week for singles and \$100 for couples, up to a maximum. The maximum payment was about \$70 per week for singles, and \$65 for couples.

Figures 19A and 19B illustrate the benefit formula in practice. These show how the maximum assistance is reached when rent is about \$150 per week for singles and \$185 for couples. At that point, CRA covers about 45% of rent for singles and 35% for couples. For rents above that, CRA covers increasingly less.

The settings are such that someone living alone who spends \$150 per week on rent and receives the full rate of Commonwealth Rent Assistance, plus the full rate of pension and pension supplement, would be spending 30% of their income on rent. This is the threshold beyond which people are considered to experience *rental stress* (though the rule of thumb may apply differently to older households – for example, it's accepted that retirement income can be lower than working life income without a loss in standards of living). If they find accommodation that costs that level or below they can avoid rental stress. But many pay more than that. Research by Anglicare (2018) suggests that of the accommodation available on the market only 1.2% was affordable to a single person on a pension. Consequently, about 45% of renters aged 65+ pay more than 30% of their income in rent (compared to 43% for ages 15-64; authors' analysis of ABS 2018b).

One problem is that rental assistance parameters are adjusted with consumer price inflation (CPI) but rental prices have been rising faster than CPI in the past decade, rendering the assistance less effective in reducing financial stress. Indeed, over the past decade, CPI for all groups increased by 31% while the rent index rose by 54% (Figure 19C).



DESIGN OF COMMONWEALTH RENTAL ASSISTANCE

Sources: DSS (2018b), ABS (2017c), ABS (2018f).

Social transfers in kind

Public support for retirees does not just come in the form of cash. A significant amount of Federal, State and Local government budgets are allocated to various supplements and concessions for the elderly.

As Figure 20A shows, Australia spends another 1% of GDP on age-related in kind support. This is less than Scandinavian countries and Japan but more than most other developed countries.

Some of these benefits come in the form of concessions which can be claimed by way of a concession card. The Commonwealth issues a *Pension Concession Card* (PCC) and the *Commonwealth Senior Health Card* (CSHC). All pensioners qualify for the PCC with a variety of benefits, such as reduced medicine costs under the *Pharmaceutical Benefits Scheme* and better access to bulk-billed doctors' services. The CSHC is allocated to those of pension age who do not receive a pension. It has similar benefits to the PCC (but excludes some concessions, such as discounts at Australia Post). Three quarters of people aged 65+ have at least one of these cards, though the rate is lower among the better off. Some may instead have an equivalent card issued by the Department of Veteran Affairs.

While these cards are allocated by the Federal Government, State Governments often assign state-specific benefits to holders. For example, in New South Wales (NSW) holders of the PCC are eligible to receive rebates on water and energy. NSW also offers permanent residents aged 60+, who work less than 20 hours per week, the NSW Seniors Card, which gives them access to substantially cheaper public transport.

Altering thresholds or eligibility ages can have knock on effects on the allocation of these types of concessions, which are often valued by recipients more than they are worth. In June of 2017, the government had to pass legislation that restored the PCC for seniors who lost access at the beginning of the year due to reforms made to pension means testing, as discussed in Section 3 (Klapdor 2017).

As discussed in Brief 1 and replicated in Figure 20C, retirement is also resourced by a substantial provision of services that are disproportionately utilised by older households, in particular those related to health (primary care, hospital care, and pharmaceuticals).



SOCIAL EXPENDITURE IN KIND

Note: Concession card data excludes cards issued by DVA. Source: OECD (2018), ABS (2018b)

Disability Support Pension and 'early retirement'

A non-negligible number of eligible pensioners choose to continue receiving the Disability Support Pension (DSP) rather than switch to the Age Pension once they reach the eligible age. DSP is normally a working-age benefit for those with a disability that prohibits them from working and who can pass the income and asset tests. The rate of payment and thresholds for assets and incomes are the same as for the Age Pension. But there are differences in the detail. Those on the Age Pension, for example, can travel outside Australia for up to 26 weeks per year before their payment is cut; DSP recipients can be away for just four weeks. On the plus side, under DSP, Rent Assistance is higher in some circumstances.

The presence of the DSP is of particular importance to policymakers when considering eligibility age changes to the Age Pension, as they may encourage people to choose the DSP instead. But it is unlikely to result in a one-for-one response. There are different estimates of this leakage (see Section 3), most recently as it applied to the increase in women's eligibility age from 60 to 65. This caused some women aged 60-64 to apply for the DSP, but overall, labour force participation for this group of women increased from 16.6% to 45.6%, while the proportion who received social security payments dropped from 60% to below 20% (Whiteford 2014).

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About CEPAR

The ARC Centre of Excellence in Population Ageing Research (CEPAR) is a unique collaboration between academia, government and industry, committed to delivering solutions to one of the major economic and social challenges of the 21st century.

Funded primarily by an initial seven-year grant from the Australian Research Council (ARC), with generous support from the collaborating universities and partner organisations, the Centre was established in March 2011 to undertake high impact independent multidisciplinary research and build research capacity in the field of population ageing.

Renewed funding awarded for an additional seven-year term from 2017-2023 supports an exciting new research program which will deliver comprehensive outcomes with the potential to secure Australia's future as a well-informed nation with world-best policy and practice for an ageing demographic.

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