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# What's the best way to close the gender gap in retirement incomes?

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This paper expands upon an earlier 2015 submission by John Daley, Grattan Institute CEO, Brendan Coates, Australian Perspectives Fellow and Danielle Wood, Budget Policy and Institutions Program Director to the Senate Inquiry into Economic Security for Women in Retirement.

This paper uses data from the 2014-15 ATO 2 per cent sample of the personal income tax system the 2015-16 ABS Survey of Income, Expenditure and Housing Microdata file and 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 based on these data should not be attributed to either DSS or the Melbourne Institute.

## Abstract

Australia has a persistent gender gap in retirement savings and incomes. Many commentators – particularly those associated with the superannuation sector – advocate for more generous superannuation tax breaks to boost retirement incomes. But expanding already-generous caps on superannuation contributions would likely *worsen* gender inequality in retirement savings. Other proposals to provide more top-ups to the superannuation savings of low-income earners, or particularly to women, are at least somewhat targeted at the problem.

But super is simply the wrong tool to provide material support for the retirement of low-income earners. With the Age Pension and Rent Assistance, government already has the right tools for assisting lower-income Australians. These tools can deliver much more targeted support to women at greatest risk of poverty in retirement, including existing retirees, without worsening the gender gap in retirement incomes.

I propose two reforms that together could provide a boost to the retirement incomes of Australia's most vulnerable women. First, better targeting super tax breaks to the purposes of superannuation would reduce the gender gap in superannuation savings. Second, a targeted boost to the Age Pension for retirees who do not own their own home, delivered as higher Commonwealth Rent Assistance, would do the most to reduce the risk of women experiencing poverty in retirement, while also reducing the gender gap in retirement incomes.

## 1 Introduction

Australia has a persistent gender gap in retirement savings and incomes. Men's superannuation balances at retirement are on average twice as large as women's. Men also have much larger non-superannuation savings. This means that women, particularly single women, are at greater risk of poverty, housing stress and homelessness in retirement.

The gender retirement savings gap has several causes. The biggest is that women have lower average lifetime earnings. On average, women spend less of their working lives in paid work than men, are more likely to work part-time, and earn lower wages than men even when they work the same hours. Beyond the Age Pension, Australia has a *contributory* retirement income system. Those who save more and accumulate greater assets have higher incomes in retirement. Since women tend to earn less than men over the working lives, they accumulate fewer retirement savings, and receive lower incomes in retirement.

Closing the gender gap in lifetime earnings would do the most to improve the retirement savings of women. This would require a range of policy responses that go well beyond the scope of retirement income policy, including cultural changes to promote gender wage equality and achieve a better balance in caring responsibilities between men and women, as well as measures to further improve the workforce participation of women.

This paper instead focuses on potential changes to retirement income policies that could help address the gender gap in retirement incomes, and argues against policy changes that could make the problem worse.

An important starting point when considering reforms is determining the problem we are trying to solve. This paper identifies two particular problems related to the gender gap in retirement savings. First, women retire with comparatively less savings than men, resulting in relatively lower incomes in retirement. Second, women are at much greater risk of absolute poverty in retirement due to their smaller retirement savings, especially when they do not own their own home. A third problem, which is beyond the scope of this paper, is ensuring that women's interests are protected under family law in the event of separation.

Many commentators – particularly those associated with the superannuation sector – advocate for more generous superannuation tax breaks to boost retirement incomes of women. Yet expanding already-generous caps on superannuation contributions would likely *worsen* gender inequality in retirement savings. Most women do not make any additional voluntary contributions to their super, let alone additional contributions sufficient to close the gender gap. All the evidence shows the current generous annual caps on pre-tax contributions are predominately used by older, high-income men to reduce their tax bills.<sup>2</sup>

Other proposals to provide more top-ups to the superannuation savings of low-income earners, or particularly to women, are at least somewhat targeted at the problem. In particular, the now-renamed Low Income Superannuation Tax Offset (LISTO) will ensure that low-income earners are not disadvantaged when contributing to superannuation. LISTO will cost the budget around

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<sup>2</sup> For example, see Daley, *et al.* (2015); Daley, *et al.* (2016).

\$800 million a year.<sup>3</sup> Other more sophisticated measures to boost the retirement savings of low-income earners – such as Industry Super Australia's proposed *Super Seed* contribution of \$5,000 to be paid automatically into the superannuation accounts of younger low-income earners – would do more to close the relative gap in retirement incomes between men and women, but at a significantly higher cost to the budget.<sup>4</sup>

However, it is unclear that topping up superannuation accounts is the best way to improve retirement incomes for low-income earners. Measures to boost the retirement incomes of low-income earners delivered through the tax and superannuation systems are inherently less well targeted than an increase in income support payments, because they are directed at individuals, not households, and only assess households' income, and perhaps super assets, but not other wealth. And by providing large transfers early in life, at least some of the benefits will be provided to those with temporarily low incomes but high *lifetime* incomes.

In fact, superannuation is just one part of Australia's retirement incomes system, alongside the Age Pension and other voluntary savings, including the family home. And with the Age Pension and Rent Assistance, government already has the right tools for assisting lower-income Australians in retirement.

I propose two reforms that together could help close the gender gap in retirement incomes and provide a boost to the retirement incomes of the most vulnerable women.

First, better targeting super tax breaks to the purposes of superannuation would reduce the gender gap in superannuation savings. As our 2015 report for the Grattan Institute, *Super tax targeting*, shows, super tax breaks provide the greatest boost to high-income earners who don't need them.<sup>5</sup> Most of these high-income earners are men. Better targeting of super tax breaks could free-up revenue to provide more targeted support for retirement incomes for people who need it most, and to reduce marginal effective tax rates for low- and middle-income earners to encourage greater female workforce participation.

Second, a targeted boost to the Age Pension for retirees who do not own their own home, delivered as higher Commonwealth Rent Assistance, would do the most to alleviate poverty in retirement. Single women who are retired and do not own their own home are the group most likely to rely almost solely on the Age Pension, and are at the greatest risk of poverty in retirement.

The remainder of this paper explores the particular problems related to the gender gap in retirement incomes, identifies the components of Australia's retirement income system that could be used to close the gap, and evaluates commonly cited proposals for solving them. I conclude by expanding on how my preferred reforms to retirement income policy would help close the gender gap in retirement savings, and boost the incomes of retired women at the greatest risk of poverty.

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<sup>3</sup> Daley, *et al.* (2016)

<sup>4</sup> For example, Industry Super Australia (2015a), pp.39-40, proposes a government-funded *Super Seed* contribution of \$5,000 to be paid automatically into the superannuation accounts of low-income workers aged 27 through to 36.

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<sup>5</sup> Daley, *et al.* (2015), p.26.

## 1 What is the problem we are trying to solve?

The gender gap in retirement savings is a complex issue with a number of causes. This paper identifies two particular problems related to the economic security of women in retirement:

1. Women retire with comparatively less savings than men, resulting in relatively lower incomes in retirement.
2. Women are at much greater risk of absolute poverty in retirement due to their smaller retirement savings, especially when they do not own their own home.

I identify the causes of each of these problems and offer solutions to each. Importantly, I show how several other proposals intended to solve one of these two problems may in fact worsen the other, and would come at significant cost to the budget.

A third problem, which is beyond the scope of this paper, is ensuring that women's interests are protected under family law in the event of separation.

While it is clear that there is a considerable gender gap in retirement savings, it does not necessarily follow that women will suffer worse outcomes in retirement as a result. Most Australians approaching retirement are living with a spouse or partner, where the household pools their resources to fund living standards in retirement. However, it is important that an equitable distribution of household assets occurs in the case of separation.<sup>6</sup>

<sup>6</sup> The Family Law Act was amended in 2002 to enable retirement savings in the form of superannuation to be evaluated and divided after separation (Attorney General's Department (2016)). In a survey of divorcees separated after June

### 1.1 Problem: women save less for retirement since they earn less

The first problem that policy makers may wish to address is the relatively lower retirement savings of women. On average, women have just over half the superannuation savings of men at retirement age. As of 2015-16, a man aged 60-to-64 could expect to retire with average superannuation savings of \$270,710, whereas a woman of the same age could expect only \$157,050.<sup>7</sup>

Women accumulate fewer retirement savings than men, because they earn less over their working lives. While this is particularly the case for older women who earned less and did not benefit from compulsory superannuation contributions for much of their careers, it is also true for younger women today. For example, the average woman aged 30-to-49 makes pre-tax superannuation contributions of \$4,500 a year, one-third less than a man of the same age (\$6,600).<sup>8</sup> As a result, men aged 35-to-39 had average superannuation savings of \$64,590 in 2015-16, compared to less than \$48,874 among women of the same age.<sup>9</sup>

The poor targeting of superannuation tax breaks exacerbates the gender gap in retirement savings since tax breaks deliver the

2001, Sheehan, *et al.* (2008) found that more separating spouses are now either dividing superannuation or taking it into account when dividing other property, compared to before the law was amended.

<sup>7</sup> Median account balances are much lower, especially for women, reflecting the larger portion of women who report no superannuation savings at retirement. The median account balance for a man age 60-to-64 was \$110,000 in 2015-16, compared to just \$36,000 for women of the same age. Clare (2017), p.5.

<sup>8</sup> *Ibid.*, p.9.

largest boost to the retirement incomes of high-income earners, most of whom are men. Half the value of superannuation tax breaks boost the retirement incomes of the top 20 per cent of income earners.<sup>10</sup> Superannuation tax breaks cost a lot – almost \$35 billion a year in foregone revenue, or well over 10 per cent of income tax collections – and the cost is growing fast.<sup>11</sup> Lower-income earners, who are mostly women, have to pay more in other taxes – both now and in the future – to pay for the tax breaks that largely benefit high-income men. In fact, Industry Super Australia estimates that 67 per cent of super tax breaks go to men and only 33 per cent to women. As a share of total tax breaks, men therefore obtain twice the support for retirement savings as women.<sup>12</sup>

The gender savings gap extends well beyond superannuation. Although research on this issue remains limited, according to one study the accumulated wealth of single men in 2006 was, on average, 14.4 per cent higher than that of single women. The gender wealth gap among single men and women more than doubled between 2002 and 2010, from 10.4 per cent to 22.8 per cent.<sup>13</sup>

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<sup>10</sup> Daley, *et al.* (2016), p.28.

<sup>11</sup> Treasury (2018). It is often cautioned that one cannot simply add together the Treasury's 'revenue foregone' tax expenditure estimates for contributions and earnings tax breaks into one figure. However, we estimate the degree of 'double counting' in combining the 'revenue gain' tax expenditure estimates from abolishing each of these tax breaks at less than \$1 billion a year over that period (Daley, *et al.* (2015), p.23).

<sup>12</sup> Industry Super Australia (2015a), p.23.

<sup>13</sup> Cassells, *et al.* (2015), pp.4-5. Studies of the gender wealth gap in Australia are largely confined to comparisons between single female and single male households, because Australian data collections do not enable an analysis of the gender wealth gap among partnered men and women.

## 1.2 Problem: women are at greater risk of poverty in retirement

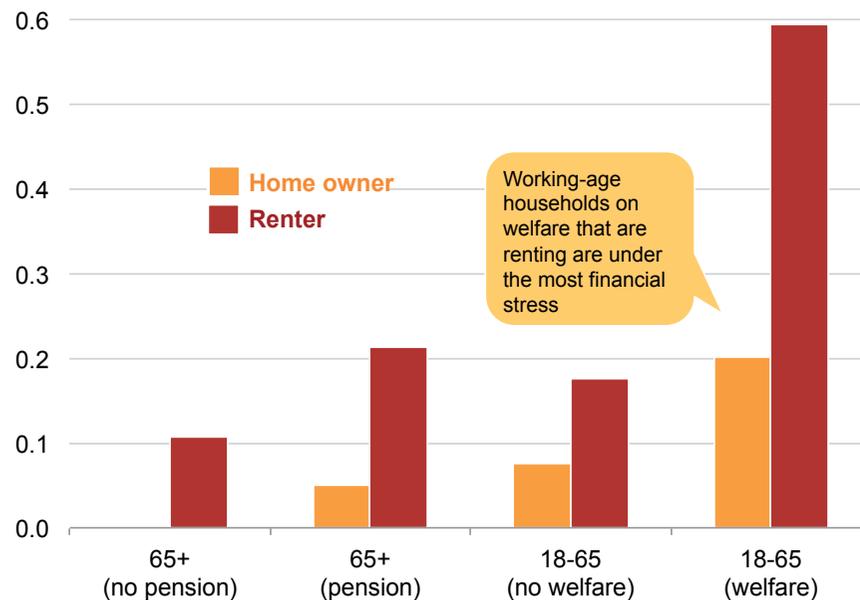
A second problem is that women's lower average savings through their working lives leaves them much more vulnerable to poverty in retirement than men, especially when living alone. Single-woman households aged 55-to-59 and not yet retired had median financial assets of \$99,000 in 2013-14, compared to \$130,000 for single-man households and \$330,000 for couple households.<sup>14</sup> Women can also expect to live longer than men, and so may spend longer in retirement.

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<sup>14</sup> AIFS (2015), p.19.

**Figure 1: Renters are under much more financial stress than home owners**

Average number of financial stresses per household, 2015-16



Notes: 'Financial stress' is defined as money shortage leading to 1) skipped meals; 2) not heating home; 3) failing to pay gas, electricity or telephone bills on time; or 4) failing to pay registration insurance on time. 'Pension recipients' include everyone over the age of 65 who receives government benefits (excluding unemployment and student allowances). 'Welfare' includes every welfare type excluding parental benefits or the family tax benefits. Recipients of these benefits and no other benefits are included in the 'no welfare' category. Sources: ABS Household Expenditure Survey 2015-16, Grattan analysis.

As a result, single renters, especially women, are most likely to suffer poverty in retirement.<sup>15</sup> More than 80 per cent of older single-woman households that rent are what the ABS calls 'low economic resource' (LER) households<sup>16</sup> – income- and asset-poor households that are at risk of high levels of financial hardship.<sup>17</sup> In contrast, just 4 per cent of elderly home-owning couples are low economic resource households, compared to 76 per cent of elderly couples that rent. It's clear that most retired households at risk of poverty are renters, whereas very few retirees who own their own home are at risk of poverty (Figure 1).<sup>18</sup> This suggests that measures to boost the incomes of retirees should focus on people who don't own their own home.<sup>19</sup>

<sup>15</sup> For example, *ibid.*, p.21 find that 60 per cent of single-woman households aged 65-to-69 had a disposable income of less than the ASFA's modest retirement standard, compared to just 34 per cent of single men.

<sup>16</sup> ABS (2013). The ABS defines low economic resource (LER) households as those who are simultaneously in the lowest two quintiles of both equivalised disposable household income and equivalised net worth distributions. It therefore excludes from the population of interest people with either relatively high incomes or relatively high wealth, and as a result is more likely to correctly classify people most likely to be at risk of economic hardship, compared to measures using income or wealth alone. Unlike the ABS, but consistent with Yates (2015), I exclude imputed rents from the definition of disposable income.

<sup>17</sup> Grattan analysis of ABS (2013).

<sup>18</sup> Yates (2015), p.73.

<sup>19</sup> Previous Grattan Institute research has identified the need to ensure that those towards the bottom of society (often identified as the bottom 20 per cent by income) have enough resources to enable them to pursue lives with meaningful opportunities. This ideal tends to have broader support across political divides (Daley, *et al.* (2013), p.21).

## 2 Australia's retirement income system

Australia's retirement income system exists to ensure older Australians have sufficient income to enjoy a reasonable standard of living in retirement. Like most countries, Australia relies on a combination of public pensions and private savings to meet a broad range of retirement income needs. In particular, our retirement income system seeks to meet the minimum needs of all Australians, enables individuals to boost their retirement income via private savings, and spreads risks between the public and private sectors in a fiscally responsible way.

### 2.1 The four pillars of Australia's retirement income system

Australia's retirement income system is made up of four pillars. Each plays a particular role in achieving the overall objectives of the system.<sup>20</sup>

First, the **Age Pension**, provided by government, guarantees a minimum 'safety net' level of income in retirement for those with little other income or assets. The Age Pension is targeted through age, residency and means tests.<sup>21</sup> It supports people who live longer than expected and exhaust their private savings (i.e. it provides insurance against 'longevity risk'), and it supports people who earned comparatively little over their working life due to

<sup>20</sup> Some authors identify three pillars, either by combining all superannuation savings into one pillar, or by separating out compulsory and voluntary superannuation savings but ignoring voluntary savings beyond superannuation such as housing assets (see Treasury (2009), p.9). Following the approach of Yates (2015), we identify housing as a separate pillar of the system.

<sup>21</sup> Around 60 per cent of Age Pension recipients started receiving payments within one year of reaching the eligibility age (Productivity Commission (2015), p.44).

periods of unemployment, caring responsibilities or working part-time.

Second, compulsory private saving via the **Superannuation Guarantee**, currently set at 9.5 per cent of wages, is designed to address behavioural biases that would otherwise lead people to save too little for their retirement. The Super Guarantee is legislated to rise to 12 per cent of wages between 2021 and July 2025.<sup>22</sup> Compulsory super contributions benefit from generous tax breaks, which arguably compensate people for the compulsion to lock-up earnings in superannuation, although the 'value' of this compensation is very unequally distributed, since high-income earners receive a large tax break (in terms of tax avoided) per dollar of compulsory superannuation contributions, whereas low-income earners receive less compensation (typically delivered as government top-ups through the LISTO).

Third, **voluntary private savings**, including pre- and post-tax voluntary super contributions, other financial assets, and investment property, provide individuals with the flexibility to save more to meet their retirement income goals. Several of these savings vehicles are tax-preferred, especially voluntary pre-tax super contributions and investment property via negative gearing and the capital gains tax discount. As Section 2.2 shows, these voluntary savings are large for many households.

<sup>22</sup> The Superannuation Guarantee was introduced in 1992-93, with compulsory contributions rising from 3 per cent of wages in that year to 9 per cent from 2002-03 and 9.5 per cent in 2013-14. The rate will remain at 9.5 per cent until 2021, then increase by half a percentage point each year until it reaches 12 per cent in July 2025.

Finally, **home ownership** supports living standards in retirement, since home-owning retirees do not need to set aside income for rent. The family home tends to be Australians' largest single financial asset. Home ownership also provides insurance against longevity risk and rising housing costs.

Australia's four-pillar retirement system is well regarded internationally.<sup>23</sup> It spreads the responsibility and risk of providing retirement incomes in a fiscally sustainable way, and has helped Australia deal with the challenges of an ageing population.

### 2.2 How important are each of these pillars?

While Australia's retirement income system has several pillars, many commentators equate retirement savings with superannuation. And most analyses of the gender gap in retirement incomes also focus solely on the disparity in superannuation savings between men and women. But super is the least important part of Australia's retirement income system, and will remain so in the foreseeable future (Figure 2).

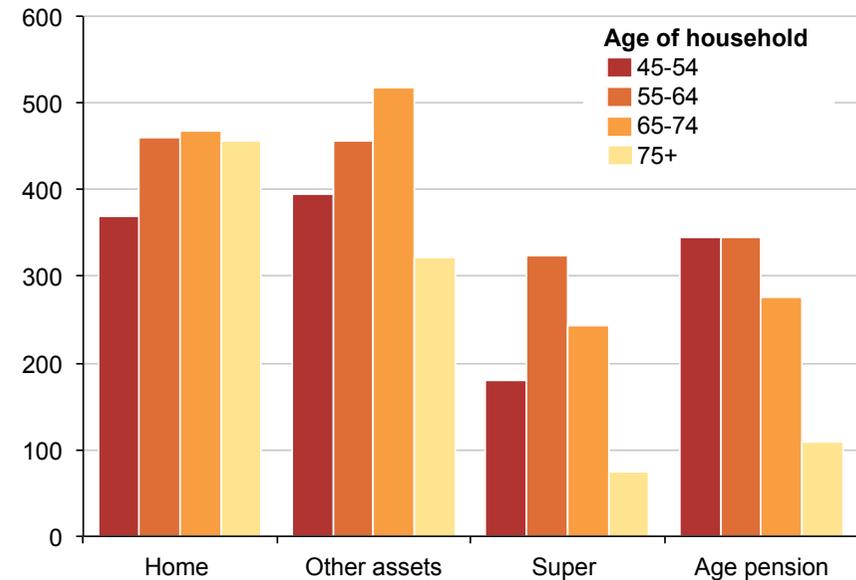
Superannuation savings account for only 20-to-25 per cent of the wealth of households (Figure 3). Even without counting the family home, many Australians save as much outside as inside the super system. For older households in particular, assets other than super are often even larger than the value of homes.<sup>24</sup> And women save less via superannuation than men.<sup>25</sup>

<sup>23</sup> Mercer (2016).

<sup>24</sup> This analysis includes non-investment assets in net wealth, notably vehicles and household effects, since these assets support living standards in retirement, either as a potential source of income, or by providing in-kind services to their owners (what economists call imputed rents). Yet even when these components

**Figure 2: Superannuation is the least important 'pillar' in Australia's retirement income system**

Mean wealth per household by type and age, \$ thousands (\$2013-14)



Notes: 'Home' is net of related mortgage liabilities; 'other assets' are net of other liabilities; 'super' excludes at least some defined benefit schemes. Net present value of Age Pension is based on average annual pension payments received by households in each age group in 2011-12, inflated forward to \$2013-14. The annual average Age Pension payment is converted into a capital value using a discount rate equal to the Age Pension indexation rate of 4 per cent and an average life expectancy for those aged 65 now of 89 years for women and 86 years for men. The net present value of lifetime Age Pension payment assumes that the average real pension currently received by households in each age group continues to life expectancy. It does not account for future expected increases in private retirement saving before retirement, especially for households aged 45-to-54 and 55-to-64, where the bulk of households are not yet retired.

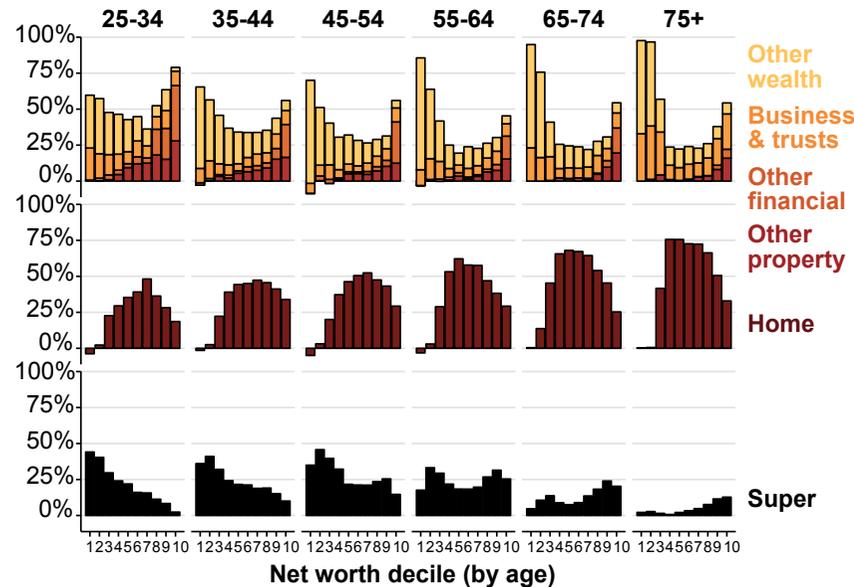
Source: Daley, Coates, Wood et al. (2015), Figure 2.1.

of household wealth are excluded, many households report significant non-super assets (Daley and Coates (2016a)).

<sup>25</sup> Senate Economics Committee (2016), p.10.

**Figure 3: Many Australians save as much outside superannuation as they do inside, across most ages and levels of wealth**

Household net wealth by wealth percentile, age and source



Notes: 'Home' is net of related mortgage liabilities; 'other property' is net of other property loans; 'business assets & trusts' are net of related liabilities; all 'other wealth' is net of all other liabilities; 'super' assets excludes some defined benefit schemes.  
 Source: Grattan analysis of ABS (2015).

It is true that many households with little wealth report a larger share of savings in superannuation than in other assets, but only because their total savings are small. For such low-wealth households, the Age Pension will always be their main source of retirement income.

Owner-occupied housing remains the most important source of wealth for most households of any age or wealth level. High-

wealth households of a given age hold comparatively less of their wealth in housing, reflecting their larger financial asset holdings, both inside and especially outside of superannuation.

Nor will superannuation replace the Age Pension as the most important component of retirement incomes for the vast majority of retirees. The capital annuity value of the average Age Pension payments that households aged 65 and over can expect to receive over their remaining lives is larger than the average superannuation savings of these households.<sup>26</sup> The present value of Age Pension payments that will be received by those aged 55-to-64 and set to retire in the next few years is also larger than the average superannuation savings of these households.

These patterns partly reflect the immaturity of the superannuation system. It will be another two decades before typical retirees have been contributing at least 9 per cent of their wages to super for their entire working lives. But even younger generations that have been paying the 9 per cent Superannuation Guarantee since they started work tend to save more outside superannuation (Figure 3).<sup>27</sup>

The enduring importance of non-super savings should come as no surprise. While compulsory superannuation forces people to save more via super, there is little evidence that non-super savings have fallen very much in response.

<sup>26</sup> This is consistent with estimates by the Actuaries Institute (2015), p.7, which estimates the value of the full rate Age Pension for people retiring today at the age of 65 at \$816,000 for couples, \$419,000 for a single man and \$482,000 for a single woman – far more than expected average super balances.

<sup>27</sup> For a more detailed analysis of trends in asset holdings by age, see Daley, *et al.* (2016); Daley and Coates (2016b).

A 2007 Reserve Bank of Australia study found that each extra dollar of compulsory superannuation savings was accompanied by an offsetting fall in non-super savings of only between 10 and 30 cents.<sup>28</sup> As a result, compulsory super has added a lot to private savings in Australia – an estimated 1.5 per cent of GDP a year over the past two decades.<sup>29</sup>

There is little reason to expect this pattern of non-super saving to change radically. Households hold a material portion of their wealth outside of super so that they have an option to use it before turning 60, and because they are nervous that government may change the superannuation rules before they retire.

### 2.3 Should we care about individuals' or households' living standards in retirement?

A key question is whether our retirement incomes system should assess individuals' means, or instead assess household-level income and wealth, when evaluating living standards in retirement. As noted in Chapter 1, most Australians approaching retirement are living with a spouse or partner, where the household pools their resources both during working life and their retirement years. That's why the Age Pension means test evaluates eligibility of household-level income and assets.<sup>30</sup>

<sup>28</sup> Connolly (2007). That is, there was only a small offsetting fall in other savings in response to the introduction of the compulsory Superannuation Guarantee.

<sup>29</sup> Gruen and Soding (2011).

<sup>30</sup> DHS (2016). When people live together there are opportunities for some items of expenditure to be shared and for economies of scale. For example, the 2009 Harmer Pension Review estimated the costs of a single-person household at roughly 60-to-70 per cent of the costs of a couple-household (Harmer (2009), p.45).

Others disagree that the retirement incomes system should assume that household resources are pooled.<sup>31</sup> They point out that unequal ownership and control of resources within households can still expose individuals (more often women) to the risk of poverty in retirement.<sup>32</sup> They therefore argue that individual income and wealth is the better measure to assess wellbeing.

Yet ignoring household pooling of assets and income would mean a much less targeted retirement income system, given that most households do pool resources.<sup>33</sup> To ensure that every *individual* had access to sufficient resources to have an adequate retirement income, irrespective of household means, our retirement income system would have to support many individuals from households that already have access to sufficient means for an adequate retirement by pooling resources with their spouse. Given limited resources, such an approach would result in a much less support to those most in need, and higher rates of poverty in retirement, for a given level of budgetary expenditure.

The remainder of this paper assumes household pooling of income and assets in assessing various retirement income system reforms.

<sup>31</sup> For example, see Austen and Sharp (2017); Stewart (2009).

<sup>32</sup> For example, Austen and Sharp (2017) (pp.313-314) notes that in most (61.5 per cent) Australian heterosexual couple households, the male partner's (non-housing) wealth exceeds the female partner's. And 46 per cent of married men aged 65 and over (but only 20 per cent of married women) perceived that they controlled most of their household's financial decisions.

<sup>33</sup> For example, see: Bruenig and McKibbin (2012); Bradbury (2004); Lancaster (2002).

### 3 Many reform proposals risk making these problems worse

A number of commentators have put forward proposals to close the gender gap in retirement incomes by expanding the role of superannuation.<sup>34</sup> Many commentators propose expanding compulsory superannuation savings by increasing the Superannuation Guarantee.<sup>35</sup> Others recommend further expansion of Australia's already generous tax breaks for superannuation savings.<sup>36</sup> Still others call for targeted 'top-ups' to the superannuation savings of low-income earners, and particularly for women.<sup>37</sup>

Measures to close the gender gap in retirement incomes must be balanced against their costs. Higher compulsory superannuation savings will come at the cost of working-age incomes. Introducing

even more generous tax breaks to boost superannuation savings would come at a cost to government revenue, requiring either higher taxes elsewhere, fewer services (including for retirees), or a further expansion in government debt that would have to be paid back by future generations.<sup>38</sup>

Therefore, a number of principles should apply to any reforms to close the gender gap in retirement incomes:

1. Measures that reduce absolute poverty levels in retirement should **not increase the relative gap in retirement incomes** between men and women.
2. Reforms should **help existing retirees** at high risk of poverty, not just future retirees still in the workforce.
3. Reforms should **not reduce living standards during working life** unless it's clear that doing so would better support lifetime consumption smoothing – maintaining a more consistent standard of living across people's lives – and without increasing the risk of absolute poverty for workers.
4. The **budgetary costs** of reforms should be minimised. That is, reforms should reduce absolute poverty among women at least cost, and can be tightly targeted at low-income earners in order to close the *relative* gender gap in retirement incomes. Reforms that *reduce* the budgetary costs of the retirement income system should get priority.
5. Reforms should be **administratively workable** and minimise the complexity faced by both individuals and government.

<sup>34</sup> For example, the Senate Economics Committee (2016) recommended that the Superannuation Guarantee be raised to 12 per cent "earlier than the current [legislated] timetable" and that the exemption from paying the guarantee in respect of employees whose salary or wages are less than \$450 in a calendar month be removed (p.xiii). The Australian Human Rights Commission, the Australian Institute of Trustees, and COTA Australia, among others, support including superannuation payments in Commonwealth Paid Parental Leave (ibid., p.63).

<sup>35</sup> AIST (2015), pp.6-7; Women in Super (2015), p.17.

<sup>36</sup> For example, ASFA (2015a) recommended lifting the annual cap on pre-tax contributions for people aged 50 or more to double the level available to people under 50, or replacing the annual cap with a lifetime cap on pre-tax contributions, in order to help people with broken work patterns to make "catch-up" contributions. BT Financial Group (2015), Commonwealth Bank of Australia (2015), and AIST (2015) also support more flexible superannuation contribution caps.

<sup>37</sup> For example, Industry Super Australia (2015a), pp.39-40, proposed a government-funded *Super Seed* contribution of \$5,000 to be paid automatically into the superannuation accounts of low-income workers aged 27 through to 36 and with incomes below \$37,000.

<sup>38</sup> Daley, *et al.* (2014).

Of course these principles do not always work in lockstep. Some reforms that help reduce the gender gap in retirement incomes without helping those at the bottom may be justified. But in general, reforms that reduce absolute levels of poverty in retirement are also likely to be the most cost effective in reducing the relative gap in retirement incomes. At the very least, reforms designed to boost the retirement incomes of low-income women at risk of poverty should avoid widening the relative gender gap in retirement incomes. However, many of the proposals put forward to address the gender gap in retirement incomes would do precisely that.

In the remainder of this chapter, I evaluate the most common proposals to close the gender gap in retirement incomes against these considerations, and summarised in Table 1.

**Table 1 – What retirement income system reforms would make the most difference?**

Reform	Impact on working incomes	Helps current retirees?	Future retirees		Budget impact	Administrative issues
			Reduces absolute poverty in retirement?	Reduces relative gender gap in retirement incomes?		
Boost Super Guarantee to 12%	Reduce workers' take-home pay	Lowers pensioners' incomes by suppressing wages, therefore reducing indexation of pension payments	Little impact at the <i>very bottom</i> , since they earn very little, and balances are eaten by super fees Increased super savings are offset by lower pension due to Age Pension taper rate	May modestly close gap in retirement savings since women have lower savings rates	Up to \$2b/yr	Builds on existing system
Increase super contribution caps	None	No	Low-income earners don't make voluntary super contributions	Larger caps help many rich men, few women	\$1b / yr +	Builds on existing system
More flexible contribution caps	None	No	Low-income earners don't make voluntary super contributions	Unlikely, and flexibility helps high-income households	\$250m / yr	Complex, but baked in
Super top-ups (i.e. LISTO)	None	No	Increased super savings are offset by lower pension due to Age Pension taper rate	Modestly reduces gender pay gap, but support leaks to rich households	~\$1b / yr	Complex, but baked in
Super Seed	None	No	Most targeted of all super top-ups but still ¼ of benefits go to top half of households	Closes gender retirement gap, but support leaks to rich households	~\$4b / yr	Adds more complexity
Further tighten super tax breaks	None	No, but budget savings can be used to fund a targeted boost to retirement incomes	No, but budget savings can be used to fund a targeted boost to retirement incomes	Significantly reduces gender retirement gap	Saves ~\$4bn / yr	Builds on existing system
Increase the Age Pension	None	Yes	Helps those in need (but also others) Built-in longevity insurance helps women who live longer	Modestly reduces gender retirement gap	\$1.2b / yr	Builds on existing system
Increase Rent Assistance	None	Yes	Helps those <i>most</i> in need Built in longevity insurance	Most targeted to low-income retirees	Each \$500 boost costs \$250m / yr	Builds on existing system

Source: Grattan analysis.

### 3.1 Increasing the Super Guarantee to 12 per cent will hurt many working women

The Superannuation Guarantee rate is scheduled to rise from 9.5 per cent of wages today to 12 per cent by July 2025, but there have been widespread calls to expedite the process. In particular, the 2016 Senate Inquiry Report, *A husband is not a retirement plan: achieving economic security for women in retirement*, recommended that the rise to 12 per cent be expedited to help women build adequate savings for retirement.<sup>39</sup>

Compulsory saving via the Superannuation Guarantee forces people to save while they are working, so they have more to spend in retirement. But there is no magic pudding when it comes to superannuation. Higher compulsory super contributions are ultimately funded by lower wages, which means lower living standards for workers today.<sup>40</sup> Therefore, increasing the Super Guarantee to 12 per cent will hurt the living standards of low-income earners, the bulk of whom are women.

Raising the Super Guarantee to 12 per cent will also hurt the retirement incomes of existing pensioners. Lifting the Super Guarantee will not increase the retirement savings of those who have already left the workforce. And by suppressing aggregate wages growth, increasing the Super Guarantee will reduce the pace of increases in the Age Pension, which is indexed to overall wages (Figure 4).<sup>41</sup> Further, increasing the Super Guarantee will

deliver relatively little in the way of higher retirement incomes to future generations of retirees, because any increase in super savings will be largely offset by lower Age Pension payments for most households. Therefore, increasing the Super Guarantee could reduce the living standards of existing pensioners, most of whom are women.

Increasing the Super Guarantee to 12 per cent is also unlikely to materially help close the *relative* gender gap in retirement incomes. Since Super Guarantee contributions are paid as a fixed proportion of workers' earnings, the boost to superannuation savings will be broadly in line with the lifetime earnings of men and women, leaving the gender gap in retirement savings unchanged. Lifting the Super Guarantee may help close the relative gender gap in retirement incomes since they currently save a smaller share of their income than men<sup>42</sup>, but those extra savings will be largely offset by lower Age Pension payments (Figure 4). Alternative proposals for a higher Super Guarantee rate paid solely for female employees could have the unintended consequence of reducing women's employment prospects.<sup>43</sup>

<sup>39</sup> Senate Economics Committee (2016), p.140.

<sup>40</sup> Potter (2016); Treasury (2010a).

<sup>41</sup> Base pensions are indexed twice a year, in March and September, to reflect changes in pensioners' cost of living and wages. The pension is increased to reflect growth in the Consumer Price Index and the Pensioner and Beneficiary Living Cost Index, whichever is higher. When wages grow more quickly than prices, the pension is increased to the wages benchmark. The wages

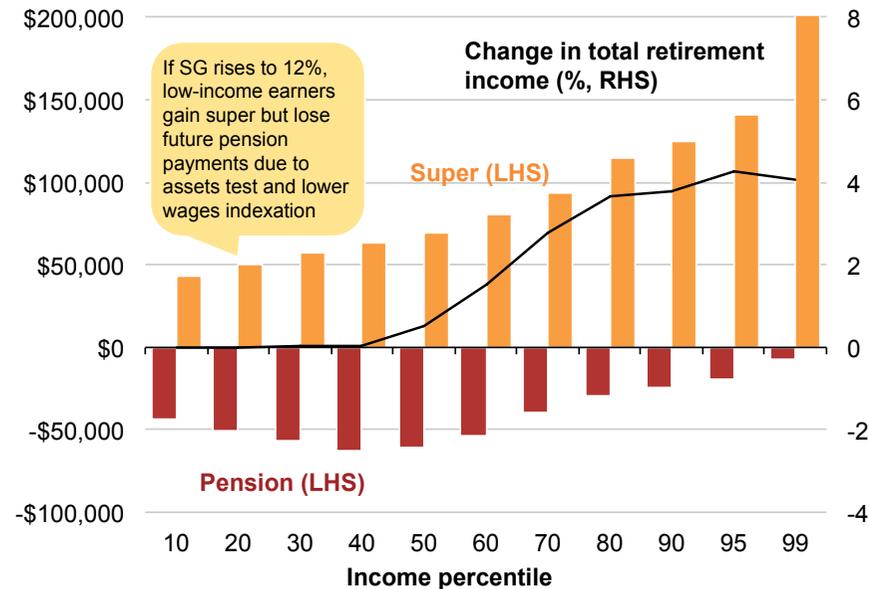
benchmark sets the combined couple rate of pension at 41.76 per cent of Male Total Average Weekly Earnings. The single rate of pension is two-thirds of the couple rate (DSS (2017)).

<sup>42</sup> Men of a given age save a larger share of their disposable income than women. Grattan analysis of ABS Household Expenditure Survey 2015-16.

<sup>43</sup> Senate Economics Committee (2016), pp.80-81.

**Figure 4: Pension income falls for low-income earners if the Superannuation Guarantee rises to 12 per cent**

Change in retirement income (\$2015-16, CPI deflated) if the SG increases to 12 per cent (base case) compared to staying at 9.5 per cent



Notes: Results from modelling the retirement income of a person born in 1985, who works uninterrupted from age 30 to 70, and dies at age 92. Non-super savings are imputed five years before retirement, with the maximum amount of savings transferred to a superannuation pension account at retirement (so there is no change in non-super savings). Super Guarantee to rise to 12 per cent by 2025-26 (as legislated). If the pension is indexed according to wage growth with the SG increasing to 12 per cent, then pension income loss is less for percentiles 10-to-50, with change in total retirement incomes closer to 0 per cent. Voluntary superannuation contributions partially offset the fall in compulsory contributions if the SG remains at 9.5 per cent. Draw down behaviour does not change if the SG remains at 9.5 per cent. Assumes wages growth falls by the exact amount of any SG increase.

Source: Grattan analysis.

More broadly, the case for raising the Superannuation Guarantee to 12 per cent is weak.

Current levels of compulsory super contributions and Age Pension are likely to provide a reasonable retirement – measured as a percentage of pre-retirement incomes – for most Australians.

If we project forward the retirement income for a median-income earner working for 40 years, and account for compulsory super contributions only – in other words, we ignore any voluntary super contributions and savings outside of super – we find that today's 9.5 per cent Superannuation Guarantee and the Age Pension would provide the average worker with a retirement income equal to 79 per cent of their pre-retirement wage, also known as a replacement rate (Figure 5). Retirement incomes, measured as a replacement rate relative to pre-retirement incomes, already exceed 100 per cent for many low-income earners.<sup>44</sup>

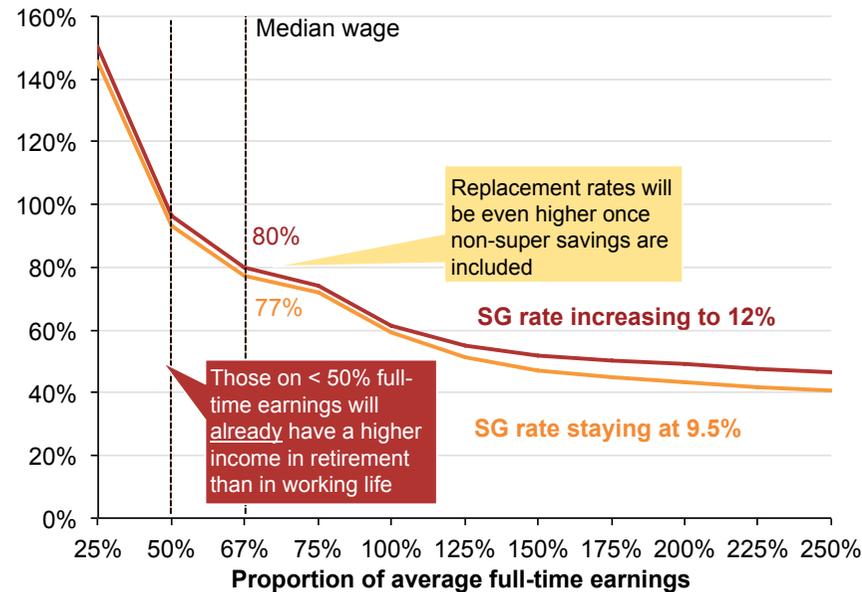
About two-thirds of income earners can expect a retirement income of at least 70 per cent of their pre-retirement income – the replacement rate for the median earner regarded as suitable by the Mercer Global Pension Index and endorsed by the OECD.<sup>45</sup>

<sup>44</sup> Treasury estimate that existing retirement-income policy settings are likely to deliver replacement rates in retirement of around 80 per cent of pre-retirement income for a median-income earner, and replacement rates of well over 100 per cent for low-income earners (Morrison (2015)). By comparison, the Mercer Global Pension Index suggests that a benchmark replacement rate of 70 per cent is a suitable rate of pre-retirement income for a median-income earner (Mercer (2015)).

<sup>45</sup> Mercer (2016).

**Figure 5: Under existing super policy, most people will largely replace their pre-retirement income**

Replacement rate of pre-retirement disposable income, based on a 30-year-old in 2016



Notes: Assumes a person who works from age 30 and until age 70, and retirement lasts until life expectancy at 92. Includes only compulsory savings under the Superannuation Guarantee and the Age Pension. Earnings are assumed to be 6.5 per cent while working and 5.5 per cent in retirement, with an effective tax rate of 8 per cent on earnings. In retirement, superannuation is drawn down consistent with a CPI-indexed pension, with no residual balance at death. Higher private savings under a 12 per cent SG are offset by lower Age Pension payments, especially under the new Age Pension assets test.

Sources: Grattan analysis of ABS (2015); HILDA (2015).

Once non-super savings are taken into account, many workers are likely to have a higher standard of living when they retire in 40 years' time than during their working life. This is before factoring in that many people have lower spending needs in retirement, particularly in the later stages of life when government covers much of their largest costs of health and age care.

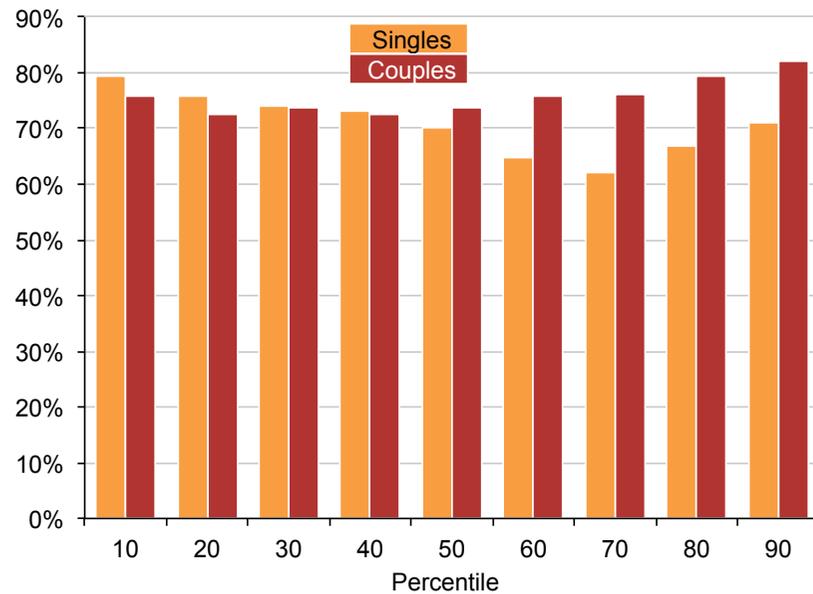
This modelling of the future shouldn't be a surprise. It matches what is already happening today. The non-housing expenditure of retirement-age households today, many of whom did not retire with any super, is typically more than 70 per cent of that of working-age households today (Figure 6).

Current levels of retirement spending appear to be sustainable. Most households in retirement draw down only very slowly on their superannuation and their broader savings. Consequently, most are likely to leave material bequests.

The policy implication is that there is no compelling case to require households to save 12 per cent of their income through the Super Guarantee, as currently legislated. This would effectively compel most people to save for a higher living standard in retirement than they have during their working lives, particularly for women, who are more likely to be on low incomes. And boosting the Super Guarantee is unlikely to close the relative gender gap in retirement incomes because the guarantee is paid as a fixed percentage of wages, so will simply reflect the current gender gap in lifetime incomes.

**Figure 6: Older household replacement expenditure is remarkably consistent**

Elderly household expenditure as proportion of working age expenditure (excluding housing)



Sources: Grattan analysis of data in *The Wealth of Generations*; ABS Household Expenditure Survey (2009-10 survey data).

Increasing the Superannuation Guarantee would also impose budgetary costs as the additional pre-tax super contributions attract extra super tax breaks. The 2010-11 Budget predicted that increasing the Super Guarantee by 0.5 percentage points would cost the budget \$240 million in 2013-14.<sup>46</sup> The 2014-15 Budget predicted that not increasing the Super Guarantee by the previous government's policy of 0.5 percentage points would save \$440 million in 2017-18.<sup>47</sup> These costings suggest that increasing the Super Guarantee by 2.5 percentage points could cost the budget up to \$2 billion a year in additional super tax breaks.

Nor is it clear that raising the Superannuation Guarantee will reduce the overall budgetary costs of the retirement income system in the long term. For example, Treasury analysis from 2013 estimated that the revenue foregone from superannuation tax breaks as a result of moving to a 12 per cent Super Guarantee, together with past increases in the Super Guarantee, exceed would exceed the budgetary savings from lower Age Pension spending by close to 0.5 per cent of GDP a year in the short term, with the net budget cost only falling to 0.2 per cent of GDP a year by 2050. Based on these figures, the cumulative increase in Commonwealth public debt from a 12 per cent Superannuation Guarantee would exceed 10 per cent of GDP by 2050.<sup>48</sup>

<sup>46</sup> Treasury (2010b), p.42.

<sup>47</sup> Treasury (2014).

<sup>48</sup> Cooper Review (2013), p.11. Recent changes to curb super tax breaks and the tightening of the Age Pension assets test will reduce the annual budgetary cost of support for retirement incomes by around 0.1 per cent of GDP.

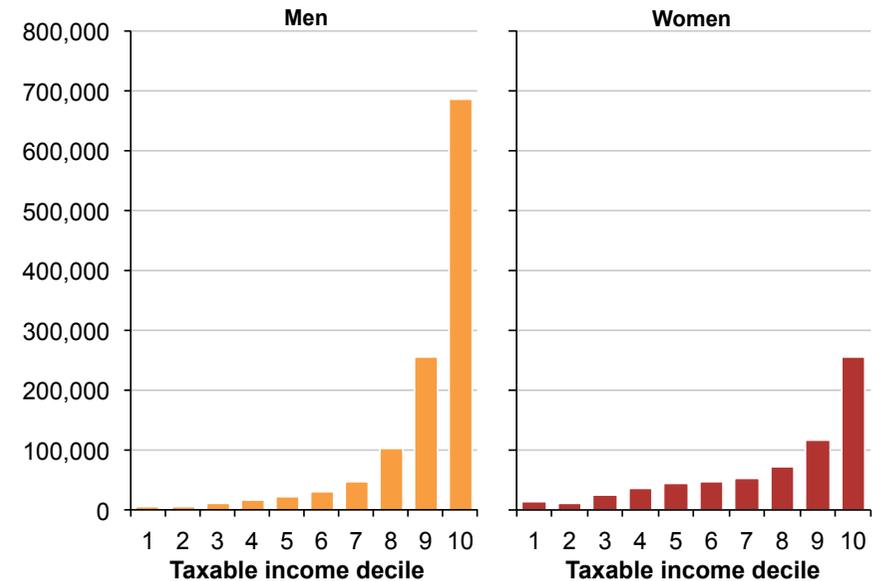
### 3.2 Increasing the generosity of super contribution caps would worsen the gender gap in retirement incomes

It is often suggested that more generous super tax concessions would improve the ability of women to make 'catch-up' super contributions once they return to work. Such proposals typically take the form of increasing the annual cap on pre-tax contributions from \$25,000, or replacing the annual cap with a lifetime cap.<sup>49</sup> Recent super reforms also allow taxpayers with a super balance of less than \$500,000 to draw on unused pre-tax caps from the previous five years to make 'catch-up' contributions. In theory, these provisions are supposed to help people with broken work histories, particularly women and carers.

However, as the Grattan Institute showed in our 2015 report, *Super tax targeting*, and illustrated in Figure 7, most women do not make any additional voluntary contributions to their super, let alone additional contributions sufficient to close the gender gap. All the evidence shows that very few middle-income earners, and even fewer women, make large catch-up contributions to their super funds. Less than 5 per cent of median-income earners make pre-tax contributions of more than \$10,000 a year. Instead, the current generous annual caps on pre-tax contributions are predominately used by older, high-income men to reduce their tax bills. About 69 per cent of men (and 61 per cent of women) in the top taxable income decile contribute more than \$10,000 a year.<sup>50</sup>

**Figure 7: Few people other than high-income earners – particularly men – contribute more than \$10,000 a year**

Number of individuals in each decile projected to make pre-tax contributions more than \$10,000 in 2017-18



Notes: Compulsory Super Guarantee contributions estimated from salary and wage income; includes reportable salary sacrifice contributions and contributions from post-tax income for which the taxpayer has claimed a tax deduction.

Sources: ATO (2016a); Grattan analysis.

<sup>49</sup> For example, ASFA (2015b), p.39, has suggested a lifetime cap on pre-tax contributions of \$1 million, along with a higher annual cap of \$45,000. Deloitte (2015), p.18, has proposed a lifetime cap on pre-tax contributions of \$580,000. ASFA (2015c), p.5, has also proposed a lifetime cap on post-tax contributions of \$1 million.

<sup>50</sup> Daley, *et al.* (2015), p.43.

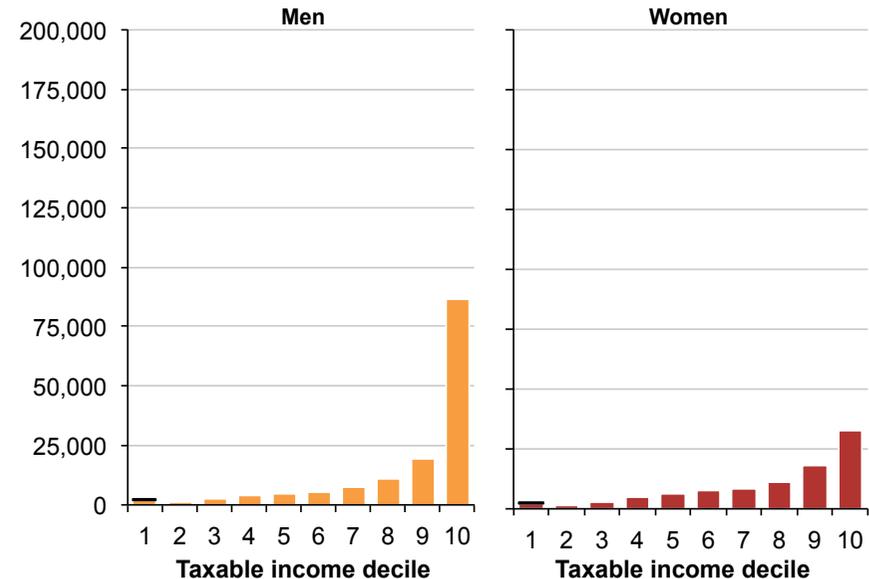
Only 234,000 women earning less than \$80,000 make pre-tax contributions of more than \$10,000. In contrast, almost 950,000 men earning more than \$80,000 contribute more than \$10,000 from pre-tax income.

Carry-forward provisions are unlikely to be any more effective. Restricting the catch-up allowance to those with a super balance of less than \$500,000 would exclude some people. But it does not materially improve the targeting: those likely to use the catch-up allowance will still mostly be men on higher incomes. Only 19 per cent of those who would benefit are women aged below 50. A mere 2 per cent of women with superannuation balances of less than \$500,000 – around 100,000 people – are expected to make pre-tax contributions of \$25,000 or more in 2017-18. Most of them are among the top 20 per cent of income earners (Figure 8).

Again, the primary beneficiaries of these 'catch up' provisions are likely to be younger high-income earners, overwhelmingly men. Typically, only high-income earners have enough disposable income to be able to afford to save more than the new \$25,000 cap on pre-tax super contributions. As incomes rise in the middle of a continuous career, high-income earners will be able to start saving more than \$25,000 a year. Provisions designed to help women and others with broken work histories would primarily help men with secure careers to get even further ahead.

**Figure 8: Allowing taxpayers to carry forward unused caps will mainly help wealthier men**

Number of individuals in each income decile with super balances of less than \$500,000 projected to make pre-tax contributions of at least \$25,000 in 2017-18



Sources: ATO (2016a); Grattan analysis.

If the carry-forward provisions nevertheless remain, they should be more tightly targeted to people with broken careers. For example, they might be limited to people who have taken career breaks or worked part-time in the previous five years, and

restricted to those with lower super balances, such as \$300,000 or less.<sup>51</sup>

And expanding superannuation tax breaks – such as via expanding contribution caps – has big budgetary costs. For example, recent reforms to lower the limit on pre-tax super contributions from \$30,000 (or \$35,000 for over-50s) to \$25,000 a year – along with an increase in contributions tax to 30 per cent rather than 15 per cent if a person earns more than \$250,000, rather than \$300,000 currently – is expected to save the budget \$1.2 billion a year by 2019-20.<sup>52</sup> The Government's new carry-forward provisions are expected to cost \$250 million in 2019-20.<sup>53</sup>

Therefore, providing greater flexibility in accessing generous superannuation tax breaks is a very expensive way to reduce the gender gap in retirement incomes. These tax breaks are poorly targeted and could in fact widen the relative gender gap in retirement incomes.

### 3.3 Super top-ups are not tightly targeted to people who need them

Other proposals to provide more top-ups to the superannuation savings of low-income earners, or particularly to women, are at least somewhat targeted at the problem.

Government provides two super top-ups for low-income earners:

**The Low Income Superannuation Tax Offset (LISTO)**, puts extra money in the accounts of low-income earners who make pre-tax super contributions. Under the LISTO, people earning less than \$37,000 receive a government co-contribution of 15 per cent of their pre-tax super contributions, up to a maximum of \$500 a year, at a cost to the budget of \$800 million a year.<sup>54</sup>

**The Super Co-contribution**, introduced by the Howard government in 2003, puts extra money in the accounts of low-income earners who make post-tax super contributions. It boosts voluntary super contributions made by low-income earners out of their post-tax income by up to \$500 a year, at a cost to the budget of \$160 million a year.<sup>55</sup>

However, it is unclear that topping up superannuation accounts is the best way to improve retirement incomes for low-income earners.

The LISC and the super co-contribution aim to top-up the super and thus the retirement incomes of people with low incomes.<sup>56</sup>

<sup>51</sup> Daley and Coates (2016c).

<sup>52</sup> Treasury (2016b), p.28.

<sup>53</sup> Daley, *et al.* (2016), Table 1.

<sup>54</sup> Commissioner of Taxation (2016).

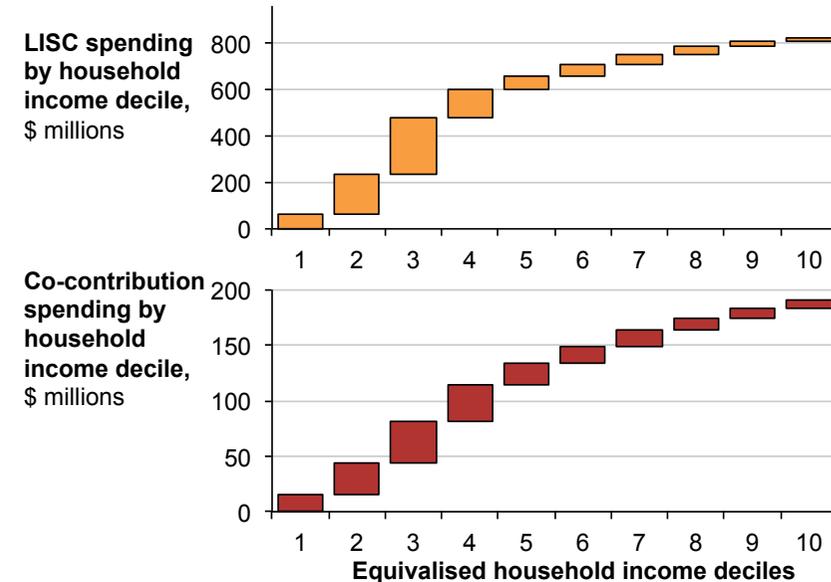
<sup>55</sup> *Ibid.*

<sup>56</sup> Of course, some top-up is fair for low-income earners since superannuation compels people to lock up some of their earnings as savings until retirement. High-income earners are compensated for this delayed access because their

Boosting individuals' superannuation balances, particularly women's, may improve their economic independence.<sup>57</sup> But Grattan Institute research shows about a quarter of the government's support leaks out to support the top half of households. Therefore the LISTO provides only a limited boost per budgetary dollar to the retirement incomes of low-income earners.

Whereas eligibility for the pension is based on the income and assets of the whole household, including those of a spouse, eligibility for superannuation top-ups depends only on the income of the individual making contributions. That means the top-ups also benefit low-income earners in high-income households. A far better way to help low-income earners is to increase income support payments such as the Age Pension.

**Figure 9: A material portion of super top-ups goes to well-off households**



Notes: Household income is constructed using the taxable income of the tax filer and that reported by the filer for their spouse. This household income for couples is equivalised by dividing total income by 1.5. Only includes entitlements for individuals who lodge tax returns.

Source: Grattan analysis of ATO (2016b).

contributions are only taxed at 15 per cent, rather than their marginal rate of personal income tax. Without the LISC, which reduces the tax rate on their compulsory super contributions to zero, people earning between \$20,542 and \$37,000 would receive little compensation for locking up their money in superannuation. And for people earning less than \$20,542, the absence of a LISC would mean they would go backwards when they made super contributions taxed at 15 per cent rather than keeping the money in their pocket tax-free. Reflecting these concerns, the LISC, reborn as the LISTO, is a fair mechanism: it ensures lower-income earners do not go backwards as a result of super.

<sup>57</sup> For example, see Senate Economics Committee (2016), pp.90-91.

Super top-ups provide some help to households in the second-to-fourth deciles of taxpayers. But they do very little for the bottom 10 per cent of those who file a tax return (Figure 9). These households, many of which earn little if any income, receive only about 7 per cent of the benefits of top-ups. A further set of households file no tax returns – typically because welfare benefits

provide most of their income. Very few of them receive any material super top-up.

Other proposals to use superannuation to boost the retirement savings of low-income earners – such as Industry Super Australia's proposed *Super Seed* contribution of \$5,000 to be paid automatically into the superannuation accounts of younger low-income earners – would do more to close the relative gender gap in retirement incomes, but at significant cost to the budget.<sup>58</sup>

For example, a worker entitled to the payment each year between the age of 27 and 36 would receive a total of \$50,000 from government, or more than two years of the maximum-rate Age Pension. While Industry Super Australia has not published a precise estimate of the annual cost of the scheme, or even the full details of how the scheme would function, a back-of-the-envelope estimate suggests it could cost the budget in the order of \$3.7 billion annually.<sup>59</sup>

The Super Seed contribution would also produce very high effective marginal tax rates, because workers would face a sudden cut in their effective wage – by losing access to the \$5,000 Super Seed contribution – should their income exceed the income cut-off. The alternative of having Super Seed contributions phase out over a range of incomes would increase the budgetary costs of the scheme, because benefits would extend further up the income scale. In fact, phasing out the Super Seed contribution

such that effective marginal tax rates did not rise by more than 10 per cent at any point during the phase-out would require the \$5,000 Super Seed contribution to be phased out over an income range of \$50,000, or a final income of \$87,000. Such a step would add substantially to the annual budgetary cost of the proposal.

And the Super Seed proposal suffers from the same problems as other super top-ups. By focusing on individual incomes, as opposed to the income of the whole household, one quarter of the benefits would still go to the wealthiest 50 per cent of households (Figure 10). And by providing large transfers early in life, at least some of the benefits would go to people with temporarily low incomes but high *lifetime* incomes.

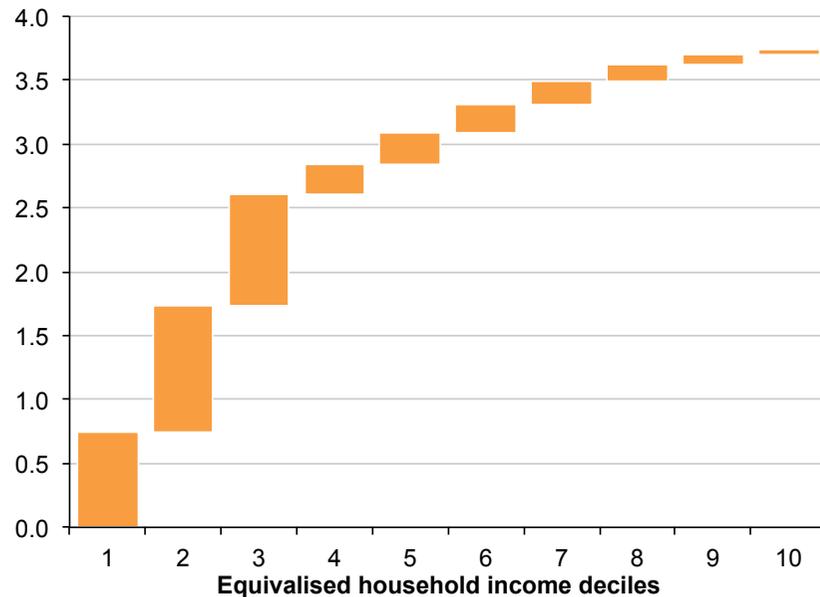
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<sup>58</sup> Industry Super Australia (2015a), pp.39-40, proposes a government-funded *Super Seed* contribution of \$5,000 to be paid automatically into the superannuation accounts of workers aged 27 to 36 and with incomes below \$37,000.

<sup>59</sup> Grattan analysis of ATO (2015). Given ages are only reported in five-year bands, the costing assumes Super Seed is instead available to working Australians aged 25 to 34 with incomes of up to \$37,000 in 2017-18.

**Figure 10: Despite better targeting, one quarter of Super Seed payments would still go to the wealthiest 50 per cent of households**

Estimated Super Seed payments by equivalised household income decile, 2017-18, \$ billions



Notes: Assumes Super Seed payments are provided to those aged 25-to-34 with a gross income of \$37,000 or less and earning at least some wage or salary income. Household income is constructed using the taxable income of the tax filer and that reported by the filer for their spouse. This household income for couples is equivalised by dividing total income by 1.5. Only includes entitlements for individuals who lodge tax returns.

Source: Grattan analysis of ATO (2015).

### 3.4 Super can't help low-income earners very much

The problems with super top-ups demonstrate that super is simply the wrong tool to provide material support for the retirement of low-income earners. Superannuation is a contributory system: you only get out what you put in. And low-income earners don't put much in. Their wages, and resulting Super Guarantee contributions, are small, and their means to make large voluntary contributions are even smaller. Their super nest egg will inevitably be small compared to Australia's relatively generous Age Pension, and some of it will be eaten up by superannuation administration costs.

For example, a person who works full time at the minimum wage for their entire working life and contributes 9.5 per cent of their income to super would accumulate super of about \$153,000 in today's money (wage deflated), making standard assumptions about returns and fees. If the balance were drawn down at the minimum rates, this would provide a retirement income of about \$6,500 a year in today's money. By contrast, an Age Pension provides a single person with \$22,800 a year.

For someone who worked part time at the minimum wage for some or all of their working life, super would be even less, but the Age Pension would be pretty much the same.

And beyond the cost of adding even more complexity to Australia's retirement income system, measures to boost the retirement incomes of low-income earners delivered through the tax and superannuation systems are inherently less well targeted than an increase in income support payments. This is because they are directed at individuals, not households, and only assess households income, and perhaps super assets, but not other wealth. And by providing large transfers early in life, at least some

of the benefits will be provided to people with temporarily low incomes but high *lifetime* incomes.

Low-income earners accumulate less super, and so fees can erode a larger portion of their contributions.<sup>60</sup> Our research at the Grattan Institute shows that super fees levied on most workers receiving the LISC erode between 20 and 25 per cent of the value of the extra funds at retirement.<sup>61</sup>

But super fees do not usually erode super top-ups as much as they erode contributions to super in general. Fees eat up a higher proportion of the super savings of people with low balances because most fees have a fixed component – it's the same whatever the account balance.<sup>62</sup>

However, for people with very low super savings and sporadic employment, fixed fees can erode the value of their super top-ups. That's because at some point in their lives, their super balances can drop close enough to zero and fixed administration fees eat into the value generated by the top-up.

Furthermore, proposals to boost superannuation savings of workers, either by expanding tax breaks, raising the Superannuation Guarantee, or providing targeted 'top-ups' to low-income earners, will do nothing to help women (and men) already suffering poverty in retirement.

<sup>60</sup> Rice Warner (2012) estimated that super fees for low-balance accounts can be much larger than the industry average. Account administration fees are typically charged at a flat rate irrespective of the super account balance, as are default insurance premiums provided by super funds (ASIC (2016); Canstar (2016)). Minifie, *et al.* (2014) (p.8) showed that small increases in fees can have a significant effect on final super account balances at retirement.

<sup>61</sup> Minifie, *et al.* (2015).

<sup>62</sup> Daley, *et al.* (2016).

Therefore, the superannuation system should not aim to fulfil every objective of the broader retirement income system.

### 3.5 There are better tools to provide adequate retirement incomes for low-income earners

One of the great strengths of Australia's multi-pillar retirement income system is that different pillars can be used to achieve the different objectives for the system. Policy makers have the flexibility to use the right combination of policy tools – superannuation, the Age Pension and others – to achieve these ends.

The Age Pension and Rent Assistance are better tools than superannuation to provide an adequate retirement for people on low incomes. Eligibility for the pension is based on the income and assets of the whole household, including those of a spouse. And by assessing eligibility at retirement, the Age Pension better targets retirement incomes support on the basis of lifetime working incomes. Therefore measures to boost the value of the Age Pension, especially for renters, will likely materially reduce the number of women suffering *absolute* poverty in retirement, including for *existing* retirees. And since women earn less than men over their lifetime, and therefore accrue less wealth at retirement, such measures will also help close the relative gender gap in retirement incomes. In fact, given that women live longer than men, any boost to the value of the Age Pension will be worth materially more to women than men.

## 4 Two reform priorities

Efforts to address the gender gap in retirement incomes, and reduce the risk of poverty for women already retired, should be focused on two areas.

### 4.1 Better target super tax breaks to those who need them

Tax breaks for superannuation contributions and earnings should be targeted more tightly at their policy purpose. The current system is expensive and unfair, while substantially worsening the gender gap in retirement incomes. More than half the benefits flow to the wealthiest 20 per cent of households who already have enough resources to fund their own retirement, and whose savings choices aren't affected much by tax rates.

Recent curbs to superannuation tax breaks announced in the 2016-17 Budget and subsequently passed with minor amendments are a big step in the right direction, because those affected by the changes are overwhelmingly high-income earners who are unlikely to ever qualify for the Age Pension in retirement. The reforms included: a new 15 per cent tax on super earnings in retirement for people with super account balances of more than \$1.6 million; a lower annual cap of \$25,000 on pre-tax contributions; a lower income threshold of \$250,000 at which tax on super contributions will rise from 15 to 30 per cent; and a lower \$100,000 annual cap on post-tax contributions.

Even after the reforms, super tax breaks will flow overwhelmingly to high-income earners who do not need them. People in the top

20 per cent of income earners will still receive about half of all super pre-tax contribution tax breaks.<sup>63</sup>

Treasury projections in the 2016 Budget show that the lifetime value of tax breaks to high-income earners remains much higher than the value of the Age Pension for low-income earners, even after the Government's budget changes (Figure 11). These projections are likely to be conservative since they ignore post-tax super contributions, which are largely made by high-income earners, boosting the super earnings tax breaks they receive.<sup>64</sup>

The Grattan Institute's 2015 report, *Super tax targeting*, recommended three reforms to better align tax breaks with the goals of superannuation.<sup>65</sup>

One, annual contributions from pre-tax income should be limited to \$11,000 a year. This would improve budget balances by \$1.7 billion a year.<sup>66</sup> There would be little increase in future Age Pension payments, since the reductions in tax breaks would mainly affect those unlikely to receive an Age Pension anyway.

<sup>63</sup> Daley, *et al.* (2016), p.28.

<sup>64</sup> Different assumptions about life expectancy and draw-down rates can also result in much higher estimates of the lifetime benefits to high-income earners. For example, Industry Super Australia (2015b) calculates that superannuation tax breaks for the top 5 per cent of income earners are worth more than \$2 million for men over their lifetime. In contrast, a lower discount rate than 5 per cent would boost the net present value of government support provided to low-income earners via the Age Pension, and the value of earnings tax breaks to high-income earners.

<sup>65</sup> Daley, *et al.* (2015), p.2.

<sup>66</sup> This estimate is updated from *ibid.* to reflect the recent passage of reforms to superannuation tax breaks.

Two, lifetime contributions from post-tax income should be limited to \$250,000, or an annual cap on post-tax contributions of \$50,000 a year. It won't save the budget much in the short term, but in the longer term it will plug a large hole in the personal income tax system.

Three, earnings in retirement – currently untaxed – should be taxed at 15 per cent, the same as superannuation earnings before retirement. A 15 per cent tax on all super earnings would improve budget balances by around \$2 billion a year today, and much more in future.

These reforms would substantially close the gender gap in retirement incomes by taking more than \$4 billion a year in superannuation tax breaks that unnecessarily inflate the retirement incomes of high-income men. Industry Super Australia estimates that 67 per cent of super tax breaks go to men and only 33 per cent to women. As a share of total tax breaks, men therefore obtain twice the support for retirement savings as women.<sup>67</sup>

As shown in Figure 7, only 169,000 women make pre-tax contributions of more than \$10,000. In contrast, some 1.18 million men make pre-tax contributions larger than that amount, including 950,000 men earning more than \$80,000 a year. Therefore reducing the cap on pre-tax super contributions to \$11,000 a year would close the *relative* gap in retirement incomes by reducing the value of tax breaks going to high-income men who don't need them.

For a small proportion of women with higher incomes later in life, the changes would reduce their catch-up contributions. Yet the changes would reduce the tax breaks far more for a lot of high-income earners, particularly men. Low-income earners, and especially women, would need to pay less in other taxes if super tax breaks for the wealthy were wound back.

Australia's high effective marginal tax rates for secondary-income earners is a big disincentive to women participating in the workforce. Australia's female participation rate is around four percentage points lower than that in New Zealand and Canada. If Australian women did as much paid work as Canadian women, Australia's GDP would be about \$25 billion higher.<sup>68</sup>

Smoothing effective marginal tax rates to reduce disincentives to work is a complex task, particularly in Australia's current constrained budget environment. However, given the economic and fiscal benefits of increased female labour force participation, it is a problem worth tackling. Reducing superannuation tax breaks for high-income earners could generate the fiscal space to achieve this.

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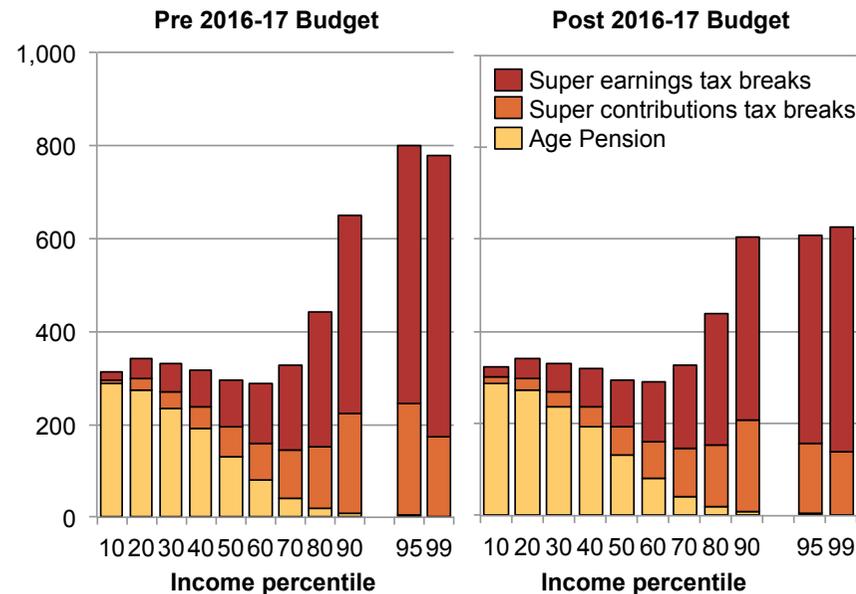
<sup>67</sup> Industry Super Australia (2015a), p.23

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<sup>68</sup> Daley and McGannon (2014), p.4

**Figure 11: Lifetime income support will remain unequally distributed even after the Government's changes**

Net present value of total government support over a lifetime through the Age Pension and super tax breaks, \$2016, thousands



Notes: Individuals are assumed to commence work in 2016 at age 30 and work until age 70, with a predicted life expectancy of 92. Accumulated superannuation benefits are invested in an account-based pension and individuals are assumed to draw down their assets at the current age-based minimum drawdown rates. The level of tax assistance and Age Pension entitlements are discounted by 5 per cent per annum to calculate a net present value in 2016 dollars. Annual incomes are calculated for each percentile based on the distribution of earners at each single year of age. Assumes no post-tax contributions. Sources: Treasury (2016a), p.4; Grattan analysis.

**4.2 Boost the Age Pension for retirees who don't own their own home**

A targeted boost to the Age Pension for retirees who do not own their own home would do the most to alleviate poverty for women already retired, and at the least budgetary cost. While the Age Pension provides a basic income to support a minimum living standard for retirees, it is proving insufficient for some, particularly for older women who live alone and do not own their own home. A \$500-a-year boost to the Age Pension for Australia's 2.4 million pensioners would cost roughly \$1.2 billion a year.<sup>69</sup>

Yet the Age Pension is also not as well targeted as it could be. The exemption of the family home from the Age Pension assets test means that half of all pension payments go to households with net wealth of more than \$500,000.<sup>70</sup> Almost 20 per cent of all pension payments go to households with net wealth of more than \$1 million.<sup>71</sup> Therefore, using the pension (as currently constituted) to boost the incomes of those most at risk of poverty in retirement would come at high budgetary cost because a significant portion of the benefits would flow to high-wealth households.

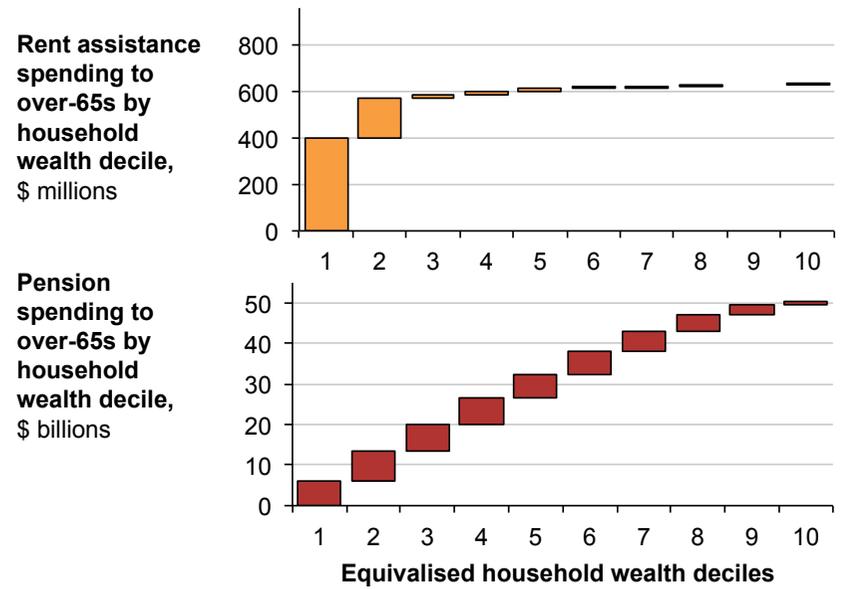
<sup>69</sup> Daley, *et al.* (2015), p.65.

<sup>70</sup> Under current pension rules only the first \$200,000 of home equity is counted in the Age Pension assets test and the remainder is ignored. Home-owning singles are allowed \$253,750 in assessable assets before their pension is reduced, compared to \$456,750 for singles without a home. Home-owning couples are allowed \$380,500 in wealth before their full pension is reduced, while a couple without a home can have \$583,500. DHS (2018).

<sup>71</sup> Coates (2017).

**Figure 12: Boosting Rent Assistance would better target support to low-income retirees than increasing the Age Pension**

Distribution of benefits from Rent Assistance and the Age Pension by equivalised household wealth decile of over-65s, 2015-16



Note: "Pension" includes both the Age Pension and other government pensions and allowances, such as disability, carer or family support payments received by younger people in a household with a household head aged 65 and over.

Source: Grattan analysis of ABS (2017).

In contrast, a boost to Commonwealth Rent Assistance for pensioners – which would specifically target support to retirees who don't own their own home – would provide a much larger boost per budgetary dollar to the retirement incomes of low-income earners, especially women. In fact, providing support to low-income renters is a very effective way of targeting those at risk of poverty in retirement (Figure 12).<sup>72</sup> And doing so would not worsen the relative gap in retirement incomes.

The costs to the budget would be comparatively modest. The Grattan Institute has previously recommended a targeted \$500-a-year boost to Rent Assistance for Age Pensioners as the most efficient way to alleviate the financial hardship among low-paid retirees. This would cost \$250 million a year.<sup>73</sup> Such a boost could be quarantined to Age Pension recipients only, or applied more broadly across other income support payments at a further cost of \$450 million a year.<sup>74</sup> Importantly, such a boost would help people already suffering poverty in old age – unlike boosting superannuation savings, which would help only those who are yet to retire.

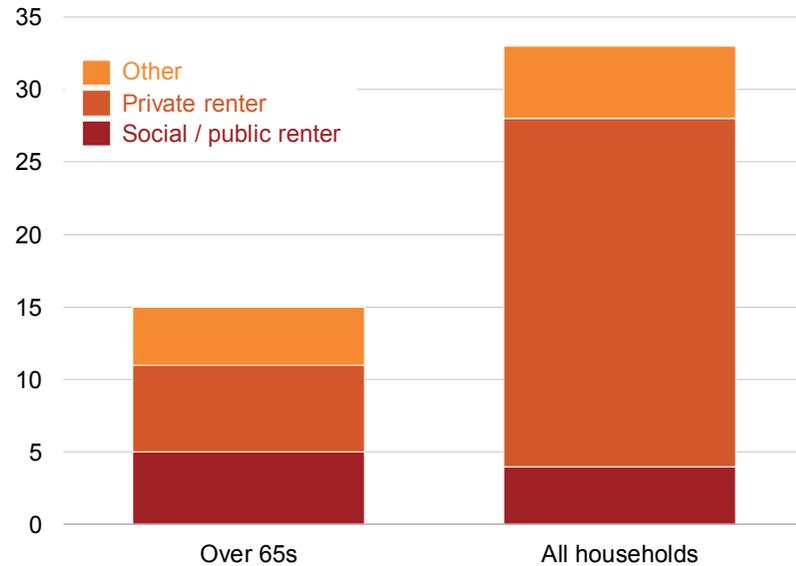
<sup>72</sup> Targeting is assessed on the basis of wealth, rather than income, because assistance is provided in retirement when wealth is a better proxy for lifetime income.

<sup>73</sup> Grattan analysis of DSS (2015).

<sup>74</sup> For example ACOSS (2015), p.5, notes that Commonwealth Rent Assistance is well below housing costs for the one-in-ten Age Pension recipients who rent privately.

**Figure 13: Future retirees are more likely to be living in private rental housing**

Renters as proportion of population



Source: Yates (2016).

The social housing stock has not kept pace with population growth. As a consequence, a growing number of low-income older Australians will live in private rental accommodation in retirement (Figure 13).<sup>75</sup> Previous Grattan Institute research has shown that those at the bottom end of the income spectrum are much less likely to own their own home than in the past, and are often spending more of their income on rent as housing has become less affordable.<sup>76</sup>

And boosting Rent Assistance would provide a proportionately larger boost to the lifetime retirement incomes of women, because they are likely to live longer. For example, a \$500-a-year boost to the maximum rate of Rent Assistance would be worth \$12,000 in net present value terms to the average women aged 65 today and who is expected to live until age 89, whereas the same boost would be worth only \$10,500 to the average man aged 65 today and who is expected to live only until age 86.<sup>77</sup>

<sup>75</sup> The stock of social housing – currently around 400,000 dwellings – has barely grown in 20 years, whereas Australia’s population has increased by 33 per cent over the same period (Productivity Commission (2017), Table G.1; Daley, *et al.* (2017a)).

<sup>76</sup> Daley, *et al.* (2017b).

<sup>77</sup> The boost to Rent Assistance is converted into a capital value using a discount rate equal to the Age Pension indexation rate of 4 per cent and an average life expectancy for those aged 65 now of 89 years for women and 86 years for men (Actuaries Institute (2012), p.6).

## 5 References

- ABS (2013) *Household Income and Income Distribution, Australia, 2011-12* Feature Article: Low Economic Resource Households, Australian Bureau of Statistics, accessed 5 October 2015, from <http://www.abs.gov.au/ausstats/abs@.nsf/featurearticle/bytitle/4CAD319AF704B5C7CA257BB80023DE80?OpenDocument>
- ABS (2015) *Microdata: Income and Housing 2013-14*, Australian Bureau of Statistics from <http://www.abs.gov.au/AUSSTATS/abs@.nsf/Lookup/6541.0.30.001Main+Features12013-14>
- ABS (2017) *Microdata: Household Expenditure, Income and Housing, 2015-16*, Australian Bureau of Statistics
- ACOSS (2015) *Three foundations for a secure retirement: submission to the Government's retirement incomes review*, Australian Council of Social Services, accessed 6 August 2015, from <http://bettertax.gov.au/files/2015/08/Australian-Council-of-Social-Service-Submission-4.pdf>
- Actuaries Institute (2012) *Australia's Longevity Tsunami: What should we do?*, accessed 29 October 2014, from <https://www.actuaries.asn.au/Library/Submissions/Opinion/2012/AI-WP-Longevity-WEB050912.pdf>
- Actuaries Institute (2015) *For richer, For Poorer, Retirement Incomes*, Institute of Actuaries of Australia,, accessed 29 October 2015, from <https://www.actuaries.asn.au/Library/Opinion/2015/ForRicherForPoorerRetirementIncomes2WEB.pdf>
- AIFS (2015) *Inquiry into Economic Security for Women in Retirement: Submission from the Australian Institute of Family Studies*, Australian Institute of Family Studies, accessed 20 December 2015, from [http://www.aph.gov.au/Parliamentary\\_Business/Committees/Senate/Economics/Economic\\_security\\_for\\_women\\_in\\_retirement/Submissions](http://www.aph.gov.au/Parliamentary_Business/Committees/Senate/Economics/Economic_security_for_women_in_retirement/Submissions)
- AIST (2015) *Senate Economics References Committee: Economic security for women in retirement*, The Australian Institute of Superannuation Trustees, accessed 19 December 2015, from [https://www.aist.asn.au/media/703134/20151030\\_submission\\_senate\\_economic\\_review.pdf](https://www.aist.asn.au/media/703134/20151030_submission_senate_economic_review.pdf)
- ASFA (2015a) *Submission to the Senate Standing Committees on Economics Inquiry into Economic Security for Women in Retirement*, Association of Superannuation Funds of Australia accessed 20 December 2015, from [http://www.aph.gov.au/Parliamentary\\_Business/Committees/Senate/Economics/Economic\\_security\\_for\\_women\\_in\\_retirement/Submissions](http://www.aph.gov.au/Parliamentary_Business/Committees/Senate/Economics/Economic_security_for_women_in_retirement/Submissions)
- ASFA (2015b) *Submission to the Treasury: Response to the tax discussion paper*, Association of Superannuation Funds of Australia accessed 24 June 2015, from <http://www.superannuation.asn.au/policy/submissions/>

- ASFA (2015c) *Supplementary submission in response to the Tax Discussion Paper*, The Association of Superannuation Funds of Australia accessed 6 August 2015, from <http://www.superannuation.asn.au/policy/submissions>
- ASIC (2016) *Super fees*, Australian Securities and Investments Commission, accessed 28 August 2016, from <https://www.moneysmart.gov.au/superannuation-and-retirement/how-super-works/super-fees>
- ATO (2016a) *2013-14 Individual sample file*, Australian Taxation Office
- ATO (2016b) *The 2013–14 individuals' sample file*, accessed 11 April 2016, from <https://data.gov.au/dataset/taxation-statistics-individual-sample-files/resource/39678fd4-26b3-41fc-8a61-b63c029fa93a>
- Attorney General's Department (2016) *SUPERANNUATION SPLITTING LAWS – FREQUENTLY ASKED QUESTIONS*, Attorney General's Department, Australian Government, accessed 28 August 2016, from [https://www.ag.gov.au/FamiliesAndMarriage/Families/SuperSplitting/Documents/Superannuation splitting frequently asked questions.pdf](https://www.ag.gov.au/FamiliesAndMarriage/Families/SuperSplitting/Documents/Superannuation%20splitting%20frequently%20asked%20questions.pdf)
- Austen, S. and Sharp, R. (2017) 'Budgeting for women's rights in retirement', in *Tax, Social Policy, and Gender*, ANU Press, p 293-324
- BT Financial Group (2015) *Submission to the Senate Standing Committees on Economics Inquiry into Economic Security for Women in Retirement*, BT Financial Group, accessed 20 December 2017, from <https://www.aph.gov.au/DocumentStore.ashx?id=fa7a7c11-61da-42e7-9672-61b9555f85d6&subId=405394>
- Canstar (2016) *A guide to understanding your superannuation fees*, accessed 28 August 2016, from <http://www.canstar.com.au/superannuation/fees-explained/>
- Cassells, R., Duncan, A. and Ong, R. (2015) *Submission to the Senate Standing Committees on Economics Inquiry into Economic Security for Women in Retirement*, Bankwest Curtin Economics Centre, Curtin Business School, Curtin University, accessed 20 December 2017, from <http://bcec.edu.au/assets/BCEC-Submission-Economic-Security-for-Women-Final.pdf>
- Clare, R. (2017) *Superannuation account balances by age and gender*, Association of Superannuation Funds of Australia accessed 20 January 2018, from [https://www.superannuation.asn.au/ArticleDocuments/359/1710\\_Superannuation\\_account\\_balances\\_by\\_age\\_and\\_gender.pdf.aspx?Embed=Y](https://www.superannuation.asn.au/ArticleDocuments/359/1710_Superannuation_account_balances_by_age_and_gender.pdf.aspx?Embed=Y)
- Coates, B. (2017) 'Tax reform alone wont solve the housing affordability crisis', National Housing Conference, Sydney, from <https://grattan.edu.au/news/tax-reform-alone-wont-solve-the-housing-affordability-crisis/>
- Commissioner of Taxation (2016) *Annual report 2015-17, volume 01*, Australian Taxation Office
- Commonwealth Bank of Australia (2015) *Submission to the Senate Standing Committees on Economics Inquiry into Economic Security for Women in Retirement*, Commonwealth Bank of Australia, accessed 20 December 2017, from <https://www.aph.gov.au/DocumentStore.ashx?id=1d602377-65a9-4769-bac4-12221b2bc31f&subId=405526>

- Connolly, E. (2007) *The Effect of the Australian Superannuation Guarantee on Household Savings Behaviour*, Reserve Bank of Australia from <http://www.rba.gov.au/publications/rdp/2007/2007-08.html>
- Cooper Review (2013) *A Super Charter: Fewer Changes, Better Outcomes*, Council of Superannuation Custodians, accessed 2 August 2015, from [http://www.treasury.gov.au/Policy-Topics/SuperannuationAndRetirement/supercharter/~media/Treasury/Policy-Topics/Superannuation/supercharter/Downloads/PDF/super\\_charter\\_report.ashx](http://www.treasury.gov.au/Policy-Topics/SuperannuationAndRetirement/supercharter/~media/Treasury/Policy-Topics/Superannuation/supercharter/Downloads/PDF/super_charter_report.ashx)
- Daley, J. and Coates, B. (2016a) *How households save for retirement: a reply to Industry Super Australia*, from <https://grattan.edu.au/news/how-households-save-for-retirement-a-reply-to-industry-super-australia/>
- Daley, J. and Coates, B. (2016b) 'How households save for retirement: a reply to Industry Super Australia', accessed 14 December 2016, from <https://grattan.edu.au/news/how-households-save-for-retirement-a-reply-to-industry-super-australia/>
- Daley, J. and Coates, B. (2016c) 'Super contribution cap changes could end up benefiting the rich', accessed 10 May 2016, from <https://theconversation.com/super-contribution-cap-changes-could-end-up-benefiting-the-rich-58982>
- Daley, J., Coates, B. and Parsonage, H. (2016) 'The superannuation myth: why it's a mistake to increase contributions to 12% of earnings', accessed 3 October 2016, from <https://theconversation.com/the-superannuation-myth-why-its-a-mistake-to-increase-contributions-to-12-of-earnings-66209>
- Daley, J., Coates, B. and Wiltshire, T. (2017a) *Making housing more affordable: Submission to the National Housing Finance and Investment Corporation consultation paper*, from <https://grattan.edu.au/news/making-housing-more-affordable-submission-to-the-national-housing-finance-and-investment-corporation-consultation-paper/>
- Daley, J., Coates, B. and Wiltshire, T. (2017b) 'Three charts on: poorer Australians bearing the brunt of rising housing costs', accessed 29 November 2017, from <https://theconversation.com/three-charts-on-poorer-australians-bearing-the-brunt-of-rising-housing-costs-87003>
- Daley, J., Coates, B., Wood, D. and Parsonage, H. (2015) *Super tax targeting* accessed 22 November 2015, from <http://grattan.edu.au/wp-content/uploads/2015/11/832-Super-tax-targeting.pdf>
- Daley, J., Coates, B. and Young, W. (2016) *The government shouldn't use super to help low-income savers*, accessed 24 June 2016, from <https://theconversation.com/the-government-shouldnt-use-super-to-help-low-income-savers-68746>
- Daley, J., Coates, B., Young, W. and Parsonage, H. (2016) 'A better super system: Assessing the 2016 tax reforms',

- Daley, J. and McGannon, C. (2014) *Submission to the Productivity Commission Inquiry on Childcare and Early Childhood Learning*, from [http://grattan.edu.au/wp-content/uploads/2014/05/228\\_daley\\_mcgannon\\_submission\\_pc\\_childcare.pdf](http://grattan.edu.au/wp-content/uploads/2014/05/228_daley_mcgannon_submission_pc_childcare.pdf)
- Daley, J., McGannon, C., Savage, J. and Hunter, A. (2013) *Balancing budgets: Tough choices we need*, Grattan Institute from [http://grattan.edu.au/wp-content/uploads/2014/03/801\\_Balancing\\_Budgets.pdf](http://grattan.edu.au/wp-content/uploads/2014/03/801_Balancing_Budgets.pdf)
- Daley, J., Wood, D., Weidmann, B. and Harrison, C. (2014) *The wealth of generations* Grattan Institute, accessed 13 February 2015, from <http://grattan.edu.au/report/the-wealth-of-generations/>
- Deloitte (2015) *Dynamics of the Australian Superannuation System: The next 20 years - 2015 - 2035*, accessed 20 November 2015, from [http://landing.deloitte.com.au/rs/761-IBL-328/images/Dynamics\\_of\\_the\\_Australian\\_Superannuation\\_System\\_PDF.pdf](http://landing.deloitte.com.au/rs/761-IBL-328/images/Dynamics_of_the_Australian_Superannuation_System_PDF.pdf)
- DHS (2016) 'Assets test limits for part pensions', accessed 30 August 2016, from <https://www.humanservices.gov.au/customer/enablers/assets>
- DHS (2018) 'Assets', accessed 20 January 2018, from <https://www.humanservices.gov.au/individuals/enablers/assets>
- DSS (2015) *DSS Payment Trends and Profile Reports*, accessed 5 June 2016, from <https://data.gov.au/dataset/dss-payment-trends-and-profile-reports>
- DSS (2017) *Guide to Social Security Law*, accessed 13 February 2017, from <http://guides.dss.gov.au/guide-social-security-law>
- Gruen, D. and Soding, L. (2011) 'Compulsory Superannuation and National Saving', in *Economic Roundup Issue 3, 2011*,
- Harmer, J. (2009) *Pension Review Report*, The Treasury, Australian Government, accessed 25 June 2015, from [https://www.dss.gov.au/sites/default/files/documents/05\\_2012/pensionreviewreport.pdf](https://www.dss.gov.au/sites/default/files/documents/05_2012/pensionreviewreport.pdf)
- HILDA (2015) *Survey of Household Income and Labour Dynamics Australia*, Melbourne Institute, accessed 23 March 2015, from <https://www.melbourneinstitute.com/hilda/>
- Industry Super Australia (2015a) *Inquiry into economic security for women in retirement: ISA submission*, accessed 6 December 2015, from <http://www.industrysuperaustralia.com/assets/Submission/Inquiry-into-economic-security-of-women-in-retirement-ISA-Submission.pdf>
- Industry Super Australia (2015b) *Off target: current tax and transfer settings do not achieve retirement security*, accessed 6 September 2015, from <http://bettertax.gov.au/files/2015/07/Industry-Super-Australia.pdf>
- Mercer (2015) *Melbourne Mercer Global Pension Index*, accessed 5 October 2015, from <http://www.globalpensionindex.com/wp-content/uploads/Melbourne-Mercer-Global-Pension-Index-2015-Report-Web.pdf>

- Mercer (2016) *Melbourne Mercer Global Pension Index 2016*, accessed 5 October 2015, from <http://www.globalpensionindex.com/wp-content/uploads/MMGPI2016-Report.pdf>
- Minifie, J., Savage, J. and Cameron, T. (2014) *Super sting: how to stop Australians paying too much for superannuation*, Grattan Institute, accessed 30 June 2015, from <https://grattan.edu.au/report/super-sting-how-to-stop-australians-paying-too-much-for-superannuation/>
- Minifie, J., Savage, J. and Cameron, T. (2015) *Super savings*, Grattan Institute, accessed 30 June 2015, from <http://grattan.edu.au/wp-content/uploads/2015/04/821-super-savings2.pdf>
- Morrison, S. (2015) *Address to the Association of Superannuation Funds Of Australia (ASFA) Conference, Brisbane*, accessed 10 December 2015, from <http://sjm.ministers.treasury.gov.au/speech/006-2015/>
- Potter, M. (2016) 'Dont increase the super guarantee', *Policy*, 32(3), p 27-36
- Productivity Commission (2015) *Superannuation Policy for Post-Retirement*, accessed 7 August 2015, from <http://www.pc.gov.au/research/completed/superannuation-post-retirement>
- Productivity Commission (2017) *Report on government services 2017 volume G: housing and homelessness*, Productivity Commission from <https://www.pc.gov.au/research/ongoing/report-on-government-services/2017/housing-and-homelessness/rogs-2017-volumeg.pdf>
- Rice Warner (2012) *Superannuation Fees Research*, Prepared for the Financial Services Council from [http://www.fsc.org.au/downloads/uploaded/Superannuation\\_Fees\\_Research\\_June\\_2012\\_2c36.pdf](http://www.fsc.org.au/downloads/uploaded/Superannuation_Fees_Research_June_2012_2c36.pdf)
- Senate Economics Committee (2016) *A husband is not a retirement plan: achieving economic security for women in retirement* accessed 10 August 2016, from [http://www.aph.gov.au/Parliamentary\\_Business/Committees/Senate/Economics/Economic\\_security\\_for\\_women\\_in\\_retirement/Report](http://www.aph.gov.au/Parliamentary_Business/Committees/Senate/Economics/Economic_security_for_women_in_retirement/Report)
- Sheehan, G., Banks, J. and Wakefield, M. (2008) 'Superannuation and Divorce in Australia: An Evaluation of Post-Reform Practice and Settlement Outcomes', *International Journal of Law, Policy and the Family*, 22(2), p 206-230
- Stewart, M. (2009) *Gender Equity in Australia's Tax System* University of Melbourne from [http://law.unimelb.edu.au/data/assets/pdf\\_file/0011/1550666/Stewart\\_Gender\\_Tax\\_Policy\\_20-11-091.pdf](http://law.unimelb.edu.au/data/assets/pdf_file/0011/1550666/Stewart_Gender_Tax_Policy_20-11-091.pdf)
- Treasury (2009) *Australia's future tax system - The retirement income system: Report on strategic issues*, The Treasury, Australian Government
- Treasury (2010a) *Australia's future tax system - Report to the Treasurer*, The Treasury, Australian Government, accessed October 2013, from [http://taxreview.treasury.gov.au/content/Content.aspx?doc=html/pubs\\_reports.htm](http://taxreview.treasury.gov.au/content/Content.aspx?doc=html/pubs_reports.htm)

- Treasury (2010b) *Commonwealth Budget 2010-11, Budget Paper No.2*, Canberra, The Treasury, Australian Government accessed 14 November 2014, from [http://budget.gov.au/2010-11/content/bp2/download/bp2\\_v2.pdf](http://budget.gov.au/2010-11/content/bp2/download/bp2_v2.pdf)
- Treasury (2014) *Commonwealth Budget papers 2014-15*, The Treasury, Australian Government, accessed 12 November 2014, from <http://www.budget.gov.au/2014-15/index.htm>
- Treasury (2016a) *Budget 2016-17: Superannuation fact sheets*, accessed 24 June 2016, from [http://www.budget.gov.au/2016-17/content/glossies/tax\\_super/downloads/FS-Super/SFS-Combined.pdf](http://www.budget.gov.au/2016-17/content/glossies/tax_super/downloads/FS-Super/SFS-Combined.pdf)
- Treasury (2016b) *Budget Papers 2016-17*, accessed 24 June 2016, from [http://budget.gov.au/2016-17/content/bp2/download/BP2\\_consolidated.pdf](http://budget.gov.au/2016-17/content/bp2/download/BP2_consolidated.pdf)
- Treasury (2018) 'Tax Expenditures Statement 2017',
- Women in Super (2015) *Senate Economics References Committee: Economic security of women in retirement*, Women in Super,, accessed 19 December 2015, from [http://www.aph.gov.au/Parliamentary\\_Business/Committees/Senate/Economics/Economic\\_security\\_for\\_women\\_in\\_retirement/Submissions](http://www.aph.gov.au/Parliamentary_Business/Committees/Senate/Economics/Economic_security_for_women_in_retirement/Submissions)
- Yates, J. (2015) 'Living income- and asset-poor in retirement', in *The super challenge of retirement income policy*, Committee for Economic Development of Australia, Ed. CEDA, p 65-81