Gender Inequality in Retirement Savings

Actuaries Institute

29 April 2021

Authors

Dr David Knox, Michael Rice and Richard Dunn

1. Background

Over the last twenty years, there has been increasing interest in the reasons for the gap between the average male and female retirement balances. This gap, known as *the gender pension gap*[1], is characterised by the fact that, on average, women tend to live on a lower income in retirement than men. It is usually measured by combining all sources of retirement income, whether public or private, pay-as-you-go or funded.

In this paper we consider the gender pension gap in the context of the debate on the inequality between genders and an increasing awareness of the need to improve the economic security of women. Our review is conducted with consideration given to the global context as the gap is an issue which transcends geographical boundaries, though it does vary between countries.

This paper is broken into the following sections:

- **A global perspective**, in which we analyse the gender pension gap from an international perspective, with a mind to assessing Australia's relative status and identifying local areas of strength and weakness.
- **Causes of the gender pension gap**, in which we provide a summary of the drivers of inequality, both in Australia and overseas.
- **Rising voices in Australia**, which canvases past work done in Australia on the gender pension gap.
- **Status of inequality in Australia,** in which we investigate the status-quo of inequality in Australia and current trends in the level of inequality.
- **Conclusions and Recommendations**, in which we bring together our results and make several suggestions to improve the level of equality in the Australian retirement savings system.

[1] In Australia, it is also called the retirement savings gap.

2. A global perspective

The gender pension gap exists in most retirement income systems around the world. The gap is defined as the difference between the average men's pension and the average women's pension, expressed as a percentage of the average men's pension. That is, it is based on pension beneficiaries who are currently receiving a pension rather than looking at people still working. Hence, if there is no difference in current pensions, the gap is zero whereas if the average men's pension is double that of the average women's pension, the gap is 50%.

2.1 Organisation for Economic Co-operation and Development (OECD) rankings

Graph 1 shows the gender pension gap for most OECD countries and was published by the OECD to coincide with International Women's Day in March 2021. It shows that the range is very broad with Japan having an almost 50% gap whereas Estonia's gap is less than 5%. Australia is relatively well placed with a 7th placing out of the 34 OECD nations that were covered in this research.

Given this range, an important question is the effects that employment and/or the design of the overall pension system (for example, private or public, pay-as-you go or funded) may have on these results.

Graph 1. Gender gap in pensions in selected OECD countries, latest year available[2]

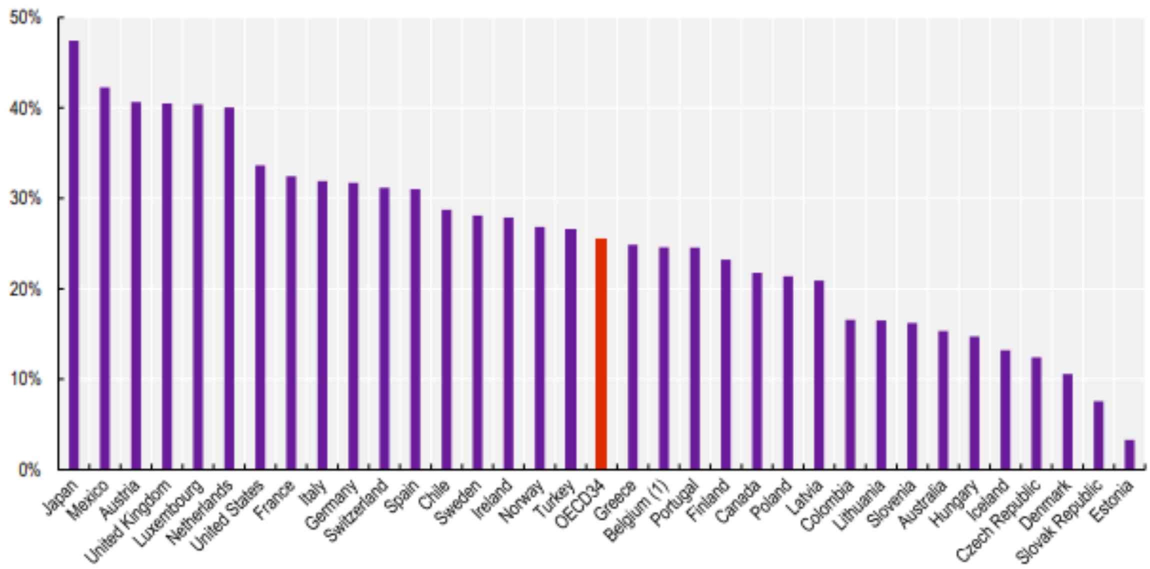


Table 1 highlights some of these characteristics for the four countries at the top and bottom of the chart as well as Australia. Not surprisingly, the proportion of older women in poverty is higher than the proportion of older men in each of these countries. Some other observations are:

- The historical gender wage gap is often a contributing and correlated factor (for example, in Japan) but, surprisingly, it is clearly not universally a dominant factor as countries with similar historical wage gaps are at either end of the gender pension gap chart.

[2] Relative differences between men and women aged 65 and above (among pension beneficiaries). Information on the calculations underlying this work can be found in the OECD's report *Toward Improved Retirement Outcomes for Women* (2021, OECD Publishing).

- Differences in the historical employment rates have had an impact (for example, in Mexico and Japan) but countries with similar employment rates for men and women (for example, Australia and the UK) have quite different gender pension gaps.
- It could be suggested that different types of pension systems have an impact. Yet, Austria and the Slovak Republic, both of which rely very heavily on their public pension systems have very different results. Clearly the benefit design within such systems influences the gender pension gap.

Table 1. Comparison of employment history, pension systems and gender gap, various countries[3]

System	Gender Pension Gap	Income Poverty Rates for those aged over 65		Gender Wage Gap in 2000	Employment rates in 2000		Proportion of first-year retirement income that is publicly funded
		Men	Women		Men	Women	Total
Estonia	3.3%	21.4%	42.8%	25.0%	59.4%	50.6%	41.2%
Slovak Republic	7.6%	2.6%	5.5%	20.4%	55.3%	42.8%	100.0%
Denmark	10.6%	2.1%	3.7%	10.8%	68.4%	57.0%	31.9%
Czech Republic	12.4%	1.4%	6.9%	16.9%	64.7%	46.2%	100.0%
Australia	15.3%	21.2%	24.8%	17.2%	67.4%	51.2%	0.0%[4]
United Kingdom	40.5%	12.5%	17.7%	26.3%	66.9%	52.4%	42.6%
Austria	40.6%	5.9%	11.0%	23.1%	66.6%	47.1%	100.0%
Mexico	42.3%	23.3%	25.9%	16.7%	80.0%	37.6%	7.4%
Japan	47.4%	16.2%	22.3%	33.9%	72.6%	47.1%	57.3%

This brief global review highlights that there is no single cause of the gender pension gap. It is much more complicated and is the result of a broad range of influences, from both within and beyond each pension system.

2.2 A case study of two pension systems

Interestingly, the top two ranking countries in the 2020 Mercer CFA Institute Global Pension Index, namely the Netherlands and Denmark, are placed 29th and 3rd respectively in Graph 1. Before exploring this difference, it is worth noting that both countries have very low levels of poverty amongst older age groups. In fact, they have the 2nd and 3rd lowest rates amongst OECD countries, only beaten by Iceland as shown in OECD (2019). However, the significant difference in the gender pension gap between these two systems requires further analysis to understand the causes of this outcome.

One of the reasons for the disparity is that the Netherlands have a very high level of part-time employment. In fact, 37% of their employment is part-time compared to 25.5% in Australia and 19.2% in Denmark.[5] Not surprisingly, this affects women more than men as 58% of employed women in the Netherlands work part-time compared to the OECD average of 25%[6]. This means that the average working hours in 2019 for men is 33 hours compared to 25 hours for women resulting in lower earnings and hence lower pensions.

---

[3] Sourced from various OECD reports (2019, 2020 and 2021).
[4] The public pension for Australia is shown as 0.0% in the first year of retirement due to the means tests. This is a consequence of the methodology used by the OECD to compare systems.
[5] Source: https://data.oecd.org/emp/part-time-employment-rate.htm#indicator-chart
[6] Source: http://www.oecd.org/netherlands/PAG2019-NLD.pdf

However, the pension gender gap does not reflect current employment arrangements. The current pensions in payment in the Netherlands, as well as in most other countries, reflect salary differences of 20 or 30 years ago. For example, in the Netherlands in 2000, 57% of women worked part-time compared to just 13% of men[7]. This was the largest difference for OECD countries and represented an outlier, even in 2000. It takes decades to remove the impact of salary inequalities on pensions on payment.

The gender pay gap has also been an important cause. In 2000 the gap was 16.1% in the Netherlands and 10.8% in Denmark. By 2018, these figures had reduced to 14.1% and 4.9% respectively. The corresponding Australian numbers were 17.2% and 11.7%[8] respectively.

There are three other reasons that have also influenced these contrasting results:

1. While both countries have a universal base pension, Denmark has an income-tested supplementary pension worth up to 17% of the average wage which helps reduce the gender pension gap due to its income testing.

2. In contrast to the Danish system, which is defined contribution, the Netherlands currently has a defined benefits system where the pension benefit design includes a benefit offset to allow for the universal pension. This carve-out means the positive effect that a universal pension could have to reduce the gender pension gap does not exist.

3. In Denmark, women have a slightly higher average pension contribution, when expressed as a percentage of the salary, (11.2% compared to 10.8%) according to Fuglsbjerg et al (2020).

Although this discussion has highlighted some of the reasons for the different gender pension gap in these two countries, it is appropriate to broaden the discussion and ask: what are the major causes of the gap around the world?

[7] OECD (2021)
[8] OECD (2021)

3. Causes of the gender pension gap

There are a variety of causes, which can be broadly grouped into the impacts of employment, pension design and broader societal issues.

3.1 Employment issues

There is a direct relationship between the pensions arising from occupational pension schemes and employment patterns. Hence, on average, women's pensions are lower for the following reasons:

- A shorter career resulting from, on average, a slightly later start in the labour force and earlier retirement, primarily due to having an older partner and/or taking time off to care for elderly parents or parents-in-law.
- More part-time work, as highlighted by the Netherlands' example in Section 2.2 (A case study of two pension systems).
- Periods out of the workforce that are entirely for caring responsibilities. For example, in the early 2000s, an average of 48% of women aged 15-64 were working in OECD countries compared to 69% of men[9].
- Lower average salaries for full time workers. For example, this gender wage gap in the OECD was 18% in 2000. In the future, we expect that females will benefit from a smaller gap, noting that the OECD gap had closed to 13% by 2018[10].
- Instances in which women get paid less than men for doing the same job. This is typically known as the 'unaccountable' pay gap.
- The average wage in female dominated industries, such as as hospitality, health and education being lower than in male dominated industries[11].
- The long-term effects that limited employment for a number of years have on the promotion opportunities and hence lifetime earnings for some women. For instance, many people receive promotions between age 25 and 40 overlapping with the period in which individuals typically have and raise their children.
- The compounding effects of the multiple employment issues listed above.

Given these historic and current differences in employment, it is not surprising that, on average, men's pensions from employment-based pension arrangements are much higher than women's pensions.

3.2 Pension design issues

Although the major cause of the gender pension gap is employment-related, there are also several design features in pension systems around the world which aggravate the issue. These include:

- Eligibility restrictions which require a minimum income (such as $450 per month in Australia) or a minimum number of hours worked. It is interesting to note that 23% of employed women and 13% of employed men in the UK do not meet their minimum income requirement to join a pension plan[12].

---

[9] OECD (2021)
[10] OECD Data, Gender wage gap, accessed April 2021
[11] Australian Government, Workplace Gender Equality Agency
[12] OECD (2021).

- Contributions or the accrual of pension benefits may not be received during periods of paid maternity or parental leave. For example, in Australia the payment of the Superannuation Guarantee (SG) is voluntary during these periods. Where contributions are paid during these periods of leave, the earnings base on which these contributions are paid may also be restricted.
- The absence of survivor's benefits when pensions are paid, the lack of which are comparatively more likely to impact women than men due to their longer life expectancy.
- The lack of indexation of retirement income benefits which have a more significant impact on women due to their longer life expectancy.
- The gradual replacement of defined benefit pension schemes, where the same pension was payable for life for men and women. In the case of defined contribution arrangements, the same accumulated benefit may generate a smaller lifetime income for women than men.
- The retirement payout options may be more limited for some women if they require a minimum accumulation or a minimum eligibility period.
- A programmed withdrawal arrangement means that the income is more likely to run out for women due to their longer life expectancy.
- The use of gender-specific mortality tables will lead to smaller annuities or pensions for women due to their lower mortality rates.
- Compounding investment returns which tend to widen the gap when expressed in dollars.

3.3 Broader societal issues

In addition to employment-related and pension design issues that generate the pension gender gap, there are several features or characteristics within many societies which restrict the opportunity to reduce the gap. These include:

- The absence of affordable and appropriate quality childcare which restricts the work opportunities for women, including the lack of government-supported childcare.
- The impact of childcare costs on voluntary pension contributions as these costs are often paid directly by women and thereby reduce the amount of disposable income available.
- The approach to investment strategy by women within the pension phase of defined contribution arrangements is often more risk averse, leading to lower returns over the longer term.
- Lower levels of financial literacy amongst some women may also affect their financial decisions[13].
- Communication and other campaigns from pension funds often ignore needs that are specific to women.
- Pension rights accrued during a marriage or partnership may not be evenly split on divorce or separation.
- Higher poverty rates exist amongst older single females, which may arise from life's circumstances or the lack of a partner to share both financial assets and costs.
- Women may prioritise current spending for themselves or others and the family home over longer term saving for retirement.
- Gender stereotyping can lead to educational differences (for example, in maths and sciences) and an expectation that women do more unpaid family work.

[13] OECD (2021)

3.4 Summary

In summary, the causes of the gender pension gap are mixed and varied. No two countries are the same, yet, in every country there are a range of employment-related, pension design and broader societal issues which mean there is a significant difference between the average level of retirement income received by men and women.

It is important to note that as the gender pension gap looks at current pensioners, analysis of raw statistics do not show improvements which are being made for those still working. These changes will not show up immediately, but they can reduce the gap for future retirees.

Given this variety of causes, there is not a single solution. Rather, the issue needs to be tackled from several perspectives including employment differences, pension design and cultural issues that are present in most societies.

For the purpose of this Paper we concentrate on finding solutions within the Australian retirement income system, which includes the Age Pension and superannuation. That is not say other issues should not be tackled; they should be, but this paper has a more restricted scope.

4. Rising voices in Australia

4.1 Previous bodies of work

In this section, we comment on work completed in respect of gender inequality in Australia. We also consider why there has been little public action taken to remedy the identified problems.

The issue of the *gender pension gap* has been discussed in Australia for many years. For instance, the Women in Super network[14] was founded in 1994 and has been active in promoting improved superannuation for women. This work has been supported by the industry which has played a prominent role in analysing the gender gap, including research undertaken for both the Financial Services Council and Women in Super, and in many submissions to government inquiries.

Since the introduction of mandatory superannuation, significant analysis has been conducted on the outcomes produced by the system. Material bodies of work in respect of gender outcomes have included:

- Retirement Savings Gap reports by Rice Warner for the FSC and its predecessor IFSA (2003-2014).
- Valuing Females and Rewarding them in Retirement (Rice Warner, November 2012).
- Ready Reckoner: Gender Gap Analysis by Rice Warner for Women in Super (2019).
- Senate Economics Reference Committee report, *Economic Security for Women in Retirement (2016)*.
- Retirement Income Review[15] (2020).

4.2 A multi-pronged problem

In its submission to the Senate inquiry on Economic Security for Women in Retirement, Rice Warner concluded that the solution required multiple actions from a range of parties:

- Government - through sensible tax and transfer policies, and social programmes.
- Superannuation funds - through education and advice as well as sound investment strategies.
- Employers - through flexible workplace practices and support for female staff.
- Individuals - who must take responsibility for their own future.
- Society - particularly in areas such as compensating financially for caring and sharing, which is currently unpaid work.

Overall, it would be important to target solutions to address the problems, so they have the most effective financial outcomes.

It is worth noting that the majority of women are married at the time they retire. For example, in Australia, about 62% of women are married at the date of retirement[16]. On average, couples have better living standards than singles, particularly in retirement.

[14] https://www.womeninsuper.com.au/
[15] https://treasury.gov.au/publication/p2020-100554
[16] Retirement Income Review Report p280

In Australia, the fastest growing segment of people in poverty is single retired women who rent private accommodation[17]. Consequently, we can state that marital status is an important factor, and one often overlooked in setting public policy.

4.3 Valuing Females

Rice Warner decided to support its own female staff. In 2012, it developed a comprehensive package of subsidised employee benefits including the novel idea of paying additional superannuation contributions for female staff.

Before paying the additional contributions of 2% of salaries, it first needed to ensure it was not breaching anti-discrimination laws. Consequently, it approached the Human Rights Commission for a ruling. The Commission ruled the action was a Special Measure designed to achieve substantial equity between men and women.

The package began in July 2013 and ran to April 2021 when Rice Warner's business was absorbed by Deloitte. The objective of this package was to create an environment and culture that encouraged female employees who choose to have children to return to the workforce. Increased workforce participation would benefit the individual's career and Rice Warner in terms of diversity and retention of experienced female staff. The package also partly compensates for the impact of lower retirement savings for females. These measures were an additional staff benefit for female employees and were not considered in setting each female employee's remuneration package.

The package has been successful in raising awareness and about one-third of female staff took out additional insurance cover or made additional contributions to superannuation. Following Rice Warner's initiative, two other organisations developed female-friendly retirement policies:

- Unions NSW provides an extra 2% contribution for its female staff.
- ANZ Bank provides an extra $500 a year superannuation contribution for its female staff.

4.4 A husband is not a retirement plan!

Five years ago, the Senate Economics Reference Committee released a comprehensive report on achieving economic security for women in retirement.

The report looked at the reasons for the gender retirement gap and found that the driving factor was that men and women experience work differently. Women are more likely to work in lower paid roles and industries, to have periods out of the workforce to provide unpaid care for family members (children and aged parents) and have periods of part-time or casual work. In addition, there is a structural issue in that some women are paid less than men for similar work.

The overview of the Report noted:

> "Many Australian women face an insecure retirement.
>
> Men's superannuation balances at retirement are on average twice as large as women's.
>
> In practice, this means that women, particularly single women, are at greater risk of experiencing poverty, housing stress and homelessness in retirement.

[17] There are several sources for this including the COTA submission (p12) to the 2016 Senate Economics Committee Inquiry.

> This is a problem born of many interrelated factors. At its heart, however, is the fact that women and men experience work very differently. Women are more likely to work in lower paid roles and lower paid fields, are more likely to work part-time or casually, and are more likely to take breaks from paid employment to provide unpaid care for others.
>
> Over their lifetimes, as a consequence, they will earn significantly less than men. Australia's retirement income system does not adequately accommodate this difference. It structurally favours higher income earners who work full-time, without breaks, for the entirety of their working life. The women (and men) who do not fit this pattern of work face a significant handicap when saving for their retirement. The causes of gender inequality in retirement are complex, and a solution is correspondingly complex.
>
> While there are no simple answers, the committee is of the view that Australia needs to redouble its efforts to achieve equality at work—paying women equally, offering access to career development and leadership opportunities, and accommodating rather than penalising those who care for others. Government, business, and individuals have a role to play in achieving women's full participation in our workplaces”.

The report made 19 recommendations to alleviate some of these problems, most of which have been ignored by government.

4.4.1 *Workplace changes*

Given the strong link between higher pay and better retirement outcomes, the first four recommendations relate to working conditions, namely that the Australian Government:

- Reviews the Fair Work Act 2009 to determine the effectiveness of Equal Remuneration Orders in addressing gender pay equity, and consequently in closing the gender pay gap. The review should consider alternative mechanisms to allow for a less adversarial consideration of the undervaluing of women's work.
- Continues to support the work of the Workplace Gender Equality Agency and ensure that it is adequately resourced.
- Considers carefully the recommendation from the Australian Human Rights Commission's Supporting Working Parents (*Pregnancy and Return to Work National Review)* to amend the Sex Discrimination Act 1984 to:
  - extend the discrimination ground of 'family responsibilities' under the Sex Discrimination Act to include indirect discrimination; and
  - include a positive duty on employers to reasonably accommodate the needs of workers who are pregnant and/or have family responsibilities.
- Consult with stakeholders on practical options to implement the relevant findings from the Australian Human Rights Commission's Supporting Working Parents: Pregnancy and Return to Work National Review, which recommends strengthening the 'right to request' provisions under s 65 of the Fair Work Act 2009 by:
  - removing the qualification requirements in section 65(2)(a) of the Fair Work Act (that is, the requirements for 12 months continuous service);
  - introducing a positive duty on employers to reasonably accommodate a request for flexible working arrangements; and

- establishing a procedural appeals process through the Fair Work Commission for decisions related to the right to request flexible working arrangements to ensure processes set out in the Fair Work Act have been complied with.

On this last point, the increased flexibility of working from home following the COVID-19 lock-downs has been a major benefit for women with dependent children. The changes are likely to be permanent with many businesses already allowing staff to work two to three days a week from home.

4.4.2 Tax and transfer changes

Several recommendations were based on providing tax incentives or changes to government benefits, for instance, that the:

- Australian Government refer the question of effective marginal tax rates for second-earners to the Productivity Commission for review, noting the significance of women's workforce participation.
- Commonwealth Paid Parental Leave Scheme continue to be improved over time to allow for 26 weeks paid parental leave through the combination of government and employer funding.
- Superannuation Guarantee should be paid on the Commonwealth Paid Parental Leave Scheme. Further, the committee recommended that mechanisms for improving the retirement incomes of carers be examined.

4.4.3 Retirement changes

The Committee recommended changes to the retirement income system:

- The Australian Government ensure that any changes to the retirement income system are measured against the guiding principle of dignity in retirement and should:
  - deliver a decent standard of living for both men and women in retirement;
  - take into consideration the interrelationship between the three pillars of the retirement income system:
    - Age Pension (including income and assets tests);
    - Superannuation system (with particular reference to tax concessions);
    - Private savings; and
    - Mature age workforce participation, housing, health and aged care
  - recognise the diversity of experience and outcomes in retirement incomes for different groups in society, particularly but not restricted to women;
  - adequately assess and mitigate the risks placed on the individual;
  - determine mechanisms for developing benchmarks for the adequacy of retirement incomes to inform future policy; and
  - introduce mechanisms to measure and assess reforms to ensure they are meeting objectives.
- The Australian Government set an objective for superannuation that supports the continuation of a strong three pillar retirement income system. In drafting this objective for the superannuation system, the Australian Government should include specific reference to women's retirement incomes, to ensure gender equity is a continuing focus for policy makers.
- Superannuation tax concessions be re-targeted to ensure that they are more equitably distributed and assist people with lower superannuation balances to achieve a more comfortable retirement.

- Concessional superannuation contributions of lower income earners are not taxed at a higher rate than their ordinary income, and that the Australian Government commit to retaining the Low Income Superannuation Contribution (LISC) beyond 30 June 2017[18].
- The Australian Government revise the current schedule for the increase in the SG rate to 12% and ensure the gradual increase in the SG rate is implemented earlier than the current timetable.
- The Australian Government amend the Superannuation Guarantee (Administration) Act 1992 to remove the exemption from paying the superannuation guarantee in respect of employees whose salary or wages are less than $450 in a calendar month.
- All government policy analysis in relation to retirement incomes include specific analysis comparing the impact of each proposal on men and women.

4.4.4 Age Pension

Some specific recommendations were made in respect of the Age Pension, which is a major source of retirement income for most Australians. For instance it recommended that:

- The Australian Government investigate further the interaction between means testing of the Age Pension and mature age workforce participation.
- In order to provide certainty and security for the majority of Australians who will receive the Age Pension in retirement, the government:
  - abandon its proposal to increase the Age Pension retirement eligibility age to 70; and
  - commit to maintaining the current method of indexation and benchmarking for the Age Pension.

4.4.5 Employers

Following the introduction of Rice Warner's *Valuing Females* package, the Committee recognised that employers might want to support their female staff but were subject to receiving a ruling from the Human Rights Commission. Consequently, the Committee recommended the Australian Government amend the Sex Discrimination Act 1984 to ensure that:

Companies can make higher superannuation payments for their female employees when they wish to do so. As part of this process, the Australian Human Rights Commission should explore options and advise the Australian Government on appropriate legislative changes. Following any amendments to the legislation, the Australian Human Rights Commission should develop guidelines and advice for any organisation contemplating providing additional superannuation payments for women.

4.4.6 Housing

In light of the growing number of older people, particularly women, who are relying on private rental accommodation in retirement, the Committee recommended that the Australian Government urgently review the adequacy of Commonwealth Rent Assistance.

The Committee also reiterated recommendation 26 of its 2015 report, *Out of Reach?: The Australian housing affordability challenge*[19]: In light of the anticipated rise in the number of older Australians in the private rental market, and the insecure tenancy confronting many older renters, the Committee recommends that the Australian Government look closely at its aged care policy so that it takes account

[18] LISC was subsequently replaced by LISTO
[19] *Out of reach? The Australian housing affordability challenge,* Economic References Committee, 2015

of the particular difficulties confronting older Australians in the rental market. The aim would be to determine how policies designed to assist older Australians to remain in their home could take better account of, and accommodate, the added difficulties for older people accessing safe and secure housing and in conducting modifications to rental dwellings, and more broadly in renting in the private rental market.

4.5 Retirement Income Review

The Retirement Income Review looked at the issue of inequality and summarised its findings in the Equity section of its report (section 3B – Gender and partnered status). It made the following observations:

- Differences in retirement savings between men and women reflect the accumulated economic disadvantages faced by women in working life.
- The working-life earnings gap between men and women, rather than retirement income system settings, is the main driver of the gender gap in superannuation balances at retirement.
- Women retire earlier and live longer than men, meaning their savings have to last longer.
- In future, the gap between men and women's balances and coverage is expected to narrow substantially, but not close.
- Women make more voluntary contributions than men – both in number and in value. (However, these are generally made by wealthier women).
- Income inequality between men and women is lower in retirement than in working life, particularly for lower- and middle-income earners.
- Most people enter retirement as a couple, although this trend is falling.
- Couples are significantly better off in retirement than single men and women.

It confirmed that the largest contributor to the retirement gap was total earnings during a working life. Currently the gap in male and female superannuation balances at retirement is about 17% for full-time workers but increases to 33% if you count all part-time and casual workers.

Fortunately, the Age Pension is a great equaliser. Through its targeted provision of social security, it reduces the annual average gap between genders for income in retirement to less than 10%[20], though this is more about alleviating poverty than moving people to a comfortable retirement.

There are clear patterns of wealth differentiation by demographic group. Single women who have been separated or divorced and those who rent in retirement have much worse retirement outcomes than other Australians. As people age, more females survive, and those who are renters are at risk of poverty.

The Review looked at different ways of closing the retirement gender gap. One method would be to increase both the Age Pension and rental assistance[21], but that is very expensive, so we need to look at a range of beneficial changes. For example, paying the SG to full-time carers (perhaps using the minimum or median wage as a proxy) would be helpful for many and would provide engagement with superannuation for those out of work.

[20] Retirement Income Review, Table 3B-1
[21] See Retirement Income Review Report p285

5. Status of inequality in Australia

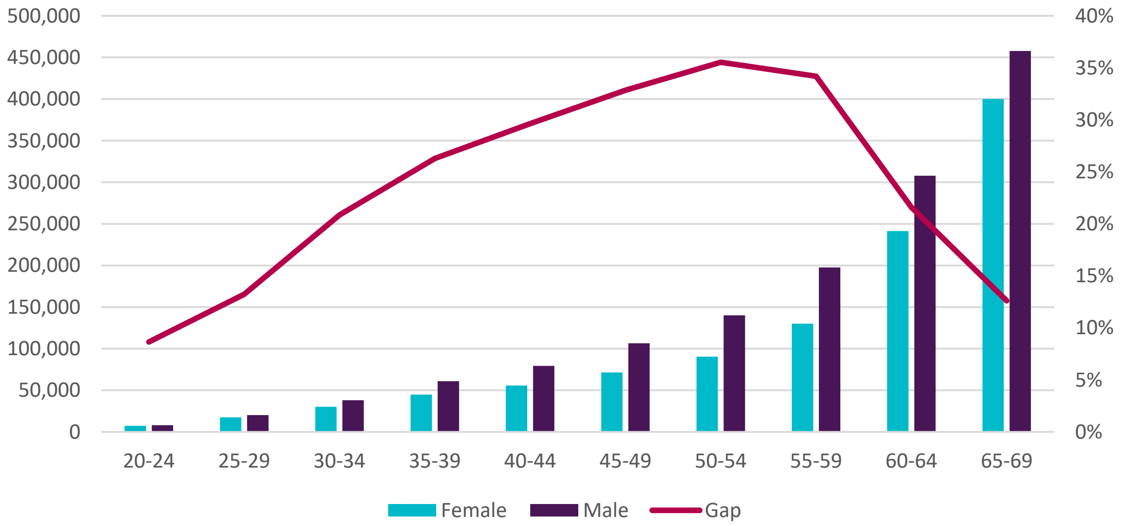
In this section we analyse the current gender pension gap in Australia through the lens of the account balances of Australians and the way this translates to retirement incomes.

5.1 Analysis of account balances

Graph 2 shows the average account balance of superannuation members and the corresponding gender gap between men and women as of 30 June 2020 between age 20 and age 70. It reflects that the gender gap is present from the start of a woman's career and increases throughout her career to a peak in her early 50s. From this point the gap begins to close reflecting the:

- earlier rates at which men commence drawing down on their superannuation balances[22]; and
- higher rates of contribution made by women in the later stages of their working lives[23].

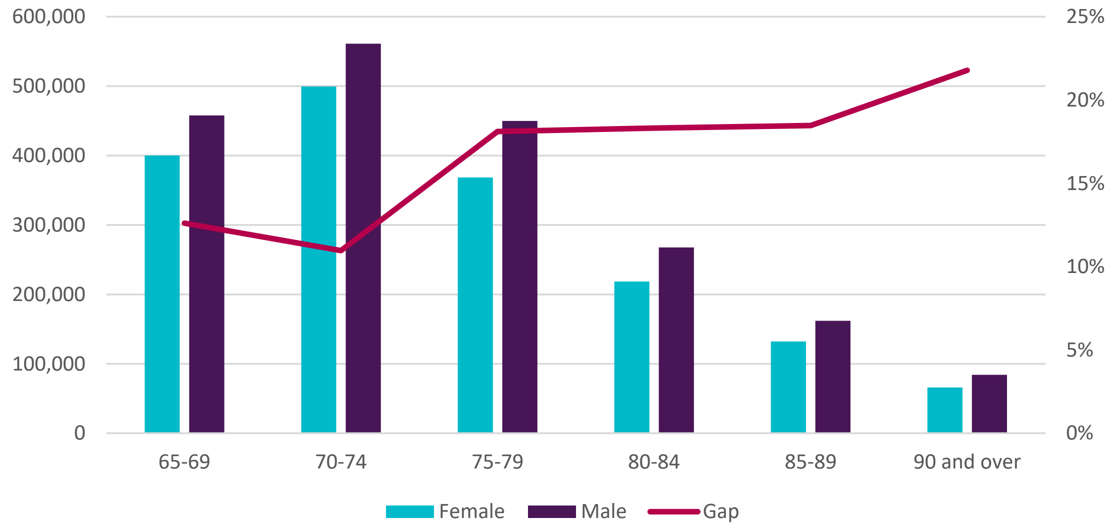
Graph 2. Average account balances by age, male and female (age 20 – 70)[24]



Over the age of 65, the gap between male and female balances begins to widen. This is shown in Graph 3 which charts the average industry account balance for males and females in five-year age bands from age 65. We expect that this increase in the gender gap is reflective of the higher withdrawal rates that women have historically had in Account-based Pensions and the higher rates at which women select conservative investment options in retirement[25].

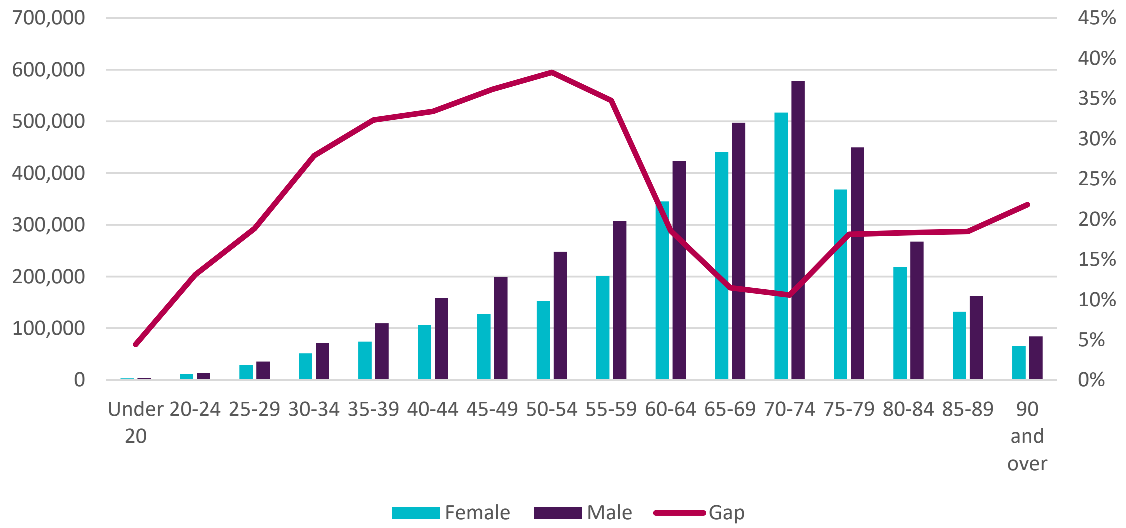
[22] Rice Warner Super Insights (2019) indicates that 19.7% of male Account-based Pensions are commenced at ages 60 or below while only 18.8% of female accounts were created before the age of 60.
[23] Rice Warner Super Insights (2019).
[24] Rice Warner, Superannuation Projections 2020
[25] Rice Warner, Super Insights (2019).

Graph 3. **Average account balances by age, male and female (age 65 – over 90)** [26]



Graph 4 provides an alternate perspective on this information in which accounts are aggregated to the member level, thereby showing the total balance. It demonstrates that while the aggregation of additional and unneeded accounts does act to reduce the gender gap in some age cohorts, this aggregation does not structurally alter the shape of the shortfall.

Graph 4. **Average aggregate member balances by age**[27]



5.2 Inequality translating to retirement incomes

In retirement, Australians draw on a combination of their accumulated superannuation balance and personal savings to supplement the income (if any) that is provided through the means-tested Age Pension. Through this process, the means-tested Age Pension acts as an equaliser between advantaged

[26] Rice Warner, Superannuation Projections 2020
[27] Rice Warner, Superannuation Projections 2020

and disadvantaged groups by providing a reduced payment to those who have high levels of accumulated wealth or income.

Due to the typically lower balances of women, the means testing translates to women being paid higher average rates of Age Pension to compensate for their lack of accumulated wealth. This is reflected in Table 2 which depicts the estimated difference in retirement balances and retirement income between men and women. It reflects that while the gap in retirement incomes is large, it is less than the gap in balances at the point of retirement.

Table 2. Estimated gender gap in retirement incomes[28]

Component of the population	Superannuation balance at retirement gap	Average annual retirement income gap
Full-time workers	17.4%	8.4%
All workers	32.6%	9.6%

5.3 Inequality within the population

Despite this analysis it is important to concede that the average does not appropriately reflect all consumers. To capture the position of alternate perspectives, Table 3 reflects the proportion of men and women of various wealth levels who are not entitled to an Age Pension because of their accumulated wealth. It reflects that for a given wealth level, women are less frequently self-funded in retirement than their male counterparts.

Table 3. Proportion of the population who are self-funded in retirement[29]

Category	Men	Women	Difference
20th Decile	14.0%	12.7%	1.3%
All population	37.9%	26.2%	11.6%
80th Decile	84.2%	60.7%	23.5%

5.4 Influences on inequality

Section 3 (Causes of the gender pension gap) set out the global causes for inequality in the retirement income system. In Australia, we consider the drivers of inequality in retirement outcomes to include:

- **Unequal earnings throughout an individual's working lifetime.**

  Research has provided a clear fact base to support that on average women receive lower salaries (the wage gap) and spend less time in the workforce before retirement (due to career breaks). This translates to reduced savings as this earnings capacity is transferred directly through application of the mandatory Superannuation Guarantee. For instance, the Retirement Income Review identified that 93% of the gender gap in retirement balances was the result of differences in earnings through the individual's life[30]. This is reflective of inequality in both employment experience and societal trends.

- **Female longevity and the limited development of retirement income products**

[28] Retirement Income Review (2020)
[29] Rice Warner estimates based on DSS and DVA data based on data as 2019.
[30] Retirement Income Review (2020) chart 3B-14.

Women are expected to live approximately four years longer than their male counterparts[31]. All else being equal, the result is that females are faced with a longer period over which they are required to draw down an income stream from their capital. In addressing this issue, while retirement income products are unlikely to be gender specific, access to improved products which help manage longevity risk may go a long way to reduce the impact of the risk of increased longevity. System level changes and legislation (such as the retirement income covenant) would help encourage this necessary development.

Conversely, several system parameters act to counteract the inequality faced by women. This includes:

- **Means-testing of government support, including the Age Pension**

  Analysis conducted by the Retirement Income Review indicated that application of the means-tested Age Pension was responsible for close to 100% of the difference in the gap in between retirement balances and retirement incomes.

- **High rates (and amounts) of voluntary contribution by older women**

  In the lead up to retirement many women take active steps toward closing the gender gap. Research has demonstrated that 24% of women aged between 60 and 64 make voluntary contributions between the lead up to retirement (relative to 22% for their male counterparts)[32]. This greater frequency of payment is supplemented with voluntary contributions by women roughly equal to those made by their male counterparts.

- **Application of low-balance centric parameters in the superannuation system.**

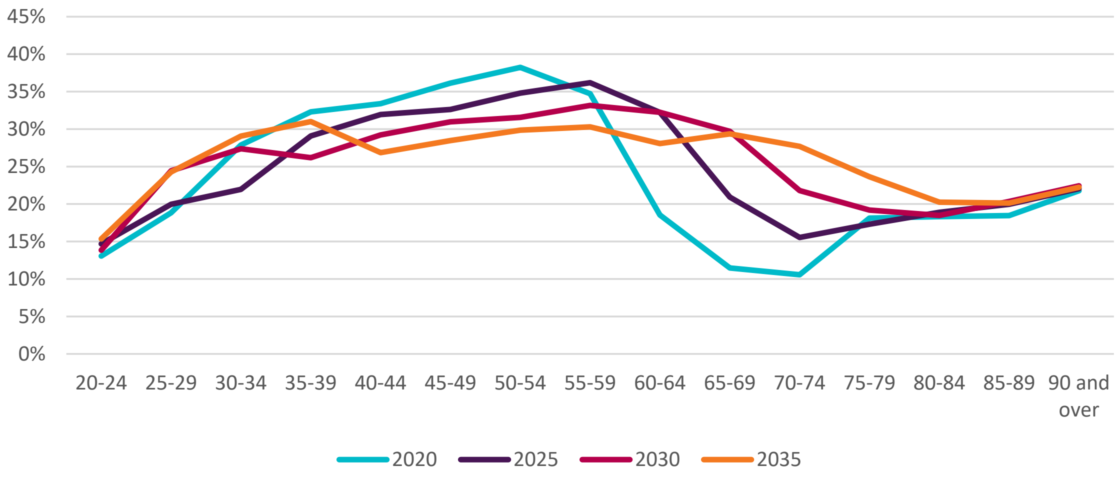
  By virtue of their lower balances, women are more frequently subject to the components of the system which target low-income groups. While in many cases this is an advantage (for instance, through the higher payments of the Age Pension, LISTO and government co-contributions) there are features of the system which disadvantage the poor. This includes application of the $450 minimum threshold of salaries on which superannuation must be paid.

5.5 Projected inequality

Graph 5 provides a forecast of the gender pension gap in five-year intervals from 2020 to 2035 based on current system settings. It reflects that as the system matures, the gender gap will become increasingly consistent between women of different ages leading to a reduction in the extent of the disparity experienced by women shortly before retirement.

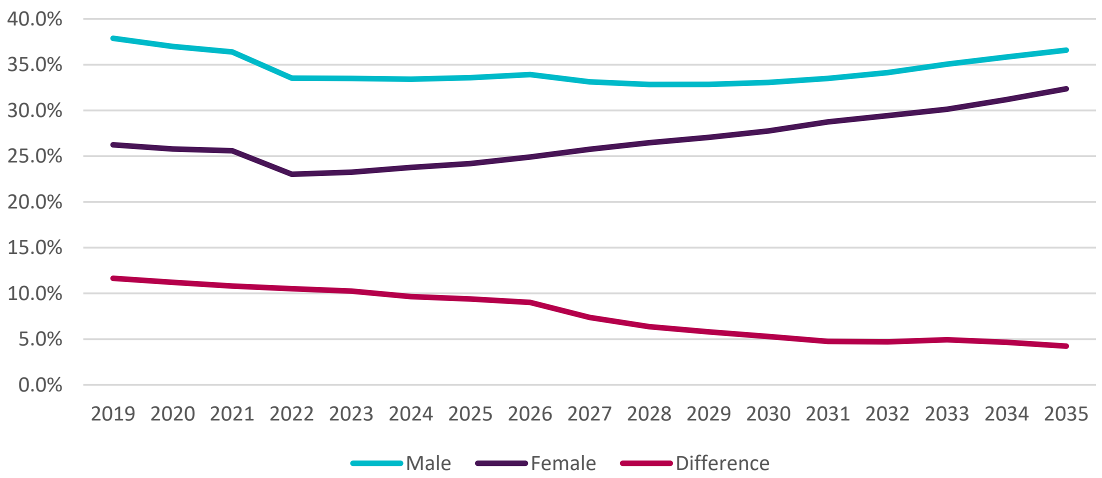
[31] Australian Institute of Housing and Welfare, individual born between 2016 and 2018.
[32] Rice Warner Super Insights (2019)

Graph 5. Projected gender (member) balance gap, 2020 through to 2035[33]



Graph 6 charts a projection of the proportion of men and women who will be self-funded in retirement between 2020 and 2035. It reflects that the proportion of men and women who are self-funded is expected to increase, with the rate of increase being slightly higher for women relative to men. This leads to a modest reduction in the gap between the proportion of each cohort who is self-funded, reflecting an improvement of outcomes for those who occupy higher wealth deciles.

Graph 6. Proportion of men and women who will be self-funded, by year, 2020 to 2035[34]



[33] Rice Warner, Super Projections 2020
[34] Rice Warner, Super Projections 2020

6. Conclusions

6.1 A fact base – recognition and causes

Our analysis confirms that there is a fundamental gender pension gap in most retirement income systems, including Australia's. This gender pension gap impacts women of all ages and wealth cohorts and is not projected to materially close under current system settings.

From our analysis the key information is that:

- Inequality in retirement incomes is a global issue. It is an issue in most, if not all, developed economies and is largely a consequence of societal differences and inequality in the experience of men and women in the workforce. This inequality impairs the ability to women to earn and accumulate wealth.
- Australia is well placed on the global stage with a gender pension gap in the lowest quartile of OECD countries (ranked 7th out of 34) due to the mitigating effect of the means-tested Age Pension despite the gender pension gap in Australia being between 25% and 35% at the point of retirement.
- Flaws in the design of the system exacerbate the extent of the pension gap in Australia.

In responding to these issues, we note that voluntary measures by employers are unlikely to have a meaningful impact on the gender pension gap. Take-up of these measures, even if beneficial to the end consumer, is likely to be low. One reason for this is the high base level of mandatory contributions – the higher these become, the less likely employers will top up staff benefits.

6.2 Practical recommendations to reduce the gap

We consider it necessary to:

- Reduce the extent to which women are subject to lower earnings rates throughout their working life. This includes reducing differences in the salaries paid between men and women and encouraging meaningful societal change to support greater equality in earnings and working patterns (for instance, improving the division of caring duties).
- Strengthen areas of the retirement system which support women and other disadvantaged groups.
- Remove or amend parameters of the retirement income system which disadvantage women, including parameters which target low income and low-wealth individuals.

We note that it is unlikely that a single 'quick fix' will alleviate the gender pension gap. However, it is apparent that some countries have a lower gap than Australia, particularly when it relates to superannuation.

6.2.1 System parameter changes

We recommend the following policy changes to reduce the gender superannuation gap with Australia:

- **Remove the $450 monthly threshold that applies to the Superannuation Guarantee.**

  Application of this eligibility requirement for the SG is unfair and is no longer appropriate in the digital era. While implementation of this change will have a minor impact on aggregate inequality (as only 3% of the population are subject to this threshold with 63% of these being women), removal will have a material impact on those who are most affected.

Modelling indicates if this threshold was removed, an individual who works multiple jobs part-time for their entire career with one job that does not pay the SG due to the $450-a-month threshold for half (20 years) of their working life would gain a 4% uplift in their balance at retirement. The position would be further improved if a greater proportion of their income were derived from employment that attracted a salary below $450 per month. This change will have no material implications for the government's fiscal position.

- **Require the SG contribution to be paid on all paid parental leave.**

  The SG can be considered to be deferred wages. We therefore recommend that when wages are paid on approved parental leave, the SG should also be paid. This would be consistent with the SG being paid on annual and long service leave.

  Modelling suggests that payment of the SG during this period would give rise to an uplift in balances at the point of retirement by approximately 2.4%. This would have no impact on the government's fiscal position.

- **Provide superannuation contributions or pension credits for all carers.**

  Caring activities are the major reason for lower employment rates among women. The concept of pension credits for carers is not a new idea as in Europe, most countries provide some form of pension entitlement within their national pension system during these periods. Another example is in Canada where participation in employer-sponsored benefits continues during periods of maternity leave and parental leave subject to payment of employee contributions, for a period of up to 80 weeks.

- **Lengthen the term permitted under "catch-up" provisions for superannuation contributions.**

  Many women return to the workforce in a part-time role and are therefore unable to take advantage of this provision. A longer time period would enable more women to "catch up".

  While hard to quantify as implementation of this provision is contingent on member behaviour, we expect that currently strong rates of female voluntary contribution support this proposition. Fiscal costs of implementation are likely to minor and realised predominantly through foregone tax.

Appendix C (Analysis of policy suggestions) provides a brief analysis of the first two suggestions. Whilst the impact of each individual recommendation may be limited, there is a strong equity argument to make these changes. Furthermore, in combination they will materially reduce the gender inequality in retirement savings.

6.2.2 Societal changes

Beyond these proposed policy changes, we recommend an increased focus on:

- Providing an increased focus on financial education for women highlighting the financial difficulties that many women face during their life.
- Using the example set by COVID-19, to permanently allow staff (where practical) to work from home two to three days a week. This flexibility will save commuting time and allow parents more options for childcare.
- Review the level of income paid within industries dominated by female workers.
- Require lifetime annuities to be provided on a unisex basis. It is worth noting that defined benefit pensions are the same level for the same period of service for both genders. This practice should continue with the provision of annuities and other income products during retirement.
- Require all retirement income streams to be indexed, at least to some extent, thereby reducing the shortfall in the real value of income in the later years.

- Permit the subsidy of smaller account balances by larger account balances which happens in the provision of all financial services.
- Require the development of joint life income stream products thereby ensuring the provision of benefits to the survivor in a couple, who are normally women.

Appendix A References

COTA (2016) Submission to the Senate inquiry on Economic Security for Women in Retirement

Fuglsbjerg, Hansen and Nielsen (2020), Women's and men's pension savings, Analysis Report, translated from Danish

OECD (2019), Pensions at a Glance, 2019: OECD and G20 Indicators, OECD Publishing

OECD (2020), Pension Markets in Focus 2020

OECD (2021), Towards Improved Retirement Outcomes for Women, OECD Publishing

Retirement Income Review (2020)

Retirement Income Review Final Report (July 2020) released November 2020

Rice Warner (2016) Submission to the Senate inquiry on Economic Security for Women in Retirement

Rice Warner, Super Insights Report (2019)*

Rice Warner, Superannuation Projections Report (2020)*

Rice Warner, Valuing Females in Retirement (2012)

Senate Economic References Committee (2016), A husband is not a retirement plan – Achieving Economic Security for Women in Retirement

* Denotes research that is not publicly available

Appendix B SPROUT Model

B.1 About the SPROUT model

The Rice Warner-ISA Superannuation Pensions and other Retirement Outcomes Model (SPROUT) model is a comprehensive group model of the Australian population which projects superannuation, private wealth, and housing as well as Age Pension and tax expenditures forward for 80 years. Results from this model can be split by age, income-wealth deciles, gender, industry sector, and workforce status with separate projections of accounts for each member.

The Rice Warner/ISA SPROUT model is a group based actuarial increment and decrement model akin to the Treasury's RIMGROUP model. SPROUT models change in superannuation and personal savings at the gender, age and income-wealth decile level each year. The movements of population and policy from year to year give rise to changes in personal tax, superannuation contributions and earnings taxes, and expenditure on age and service pensions. The GROUP structure of SPROUT and RIMGROUP can be contrasted with the lifecycle modelling of individuals in the Treasury's dynamic microsimulation model MARIA.

B.2 Data sources used in the SPROUT model

Rice Warner's SPROUT model has been calibrated using a wide range of data sources, including:

- APRA Fund Level Statistics, June 2019
- Quarterly Superannuation Performance, June 2020
- ABS Population Projections, 2017-2066, ABS Cat 3222.0
- Survey of Income and Housing, 2013-2016.

Rice Warner's Superannuation and Personal Investment Market Projections Report - Assumptions and Methodology 2020 report provides an exhaustive list of these input sources.

B.3 Reconciliation of findings to publicly available data sources

Publicly available data on the quantum of the gender pension gap ranges widely. This is the effect of several factors including the use of different time periods and fundamental differences in the figures which are commonly quoted (for instance, the life stage of the individuals in question).

Table 4 reconciles figures produced by Rice Warner and the Retirement Income Review. It highlights that while the exact quantum of the gap is unclear, all data sources indicate the existence of a material gap, often in the range of 25% to 35%.

Table 4. Gender gap comparisons

Source	Gap	Comment
Rice Warner, SPROUT model	24.2%	Account's basis, all ages, 2020
Rice Warner SPROUT model	27.6%	Membership basis, all ages, 2020
Rice Warner SPROUT model	26.4%	Membership basis, weighted average, ages 50-69, 2020
Retirement Income Review	17.4%	Membership basis, full time workers, point of retirement,2020
Retirement Income Review	32.6%	Membership basis, all workers, point of retirement, 2020

Appendix C Analysis of policy suggestions

In this section we present an analysis of the various policy suggestions proposed in Section 5 (Status of inequality in Australia), covering:

- Removal of the $450 monthly threshold that applies to the Superannuation Guarantee.
- Application of the SG contributions on all paid maternity and parental leave.

C.1 Analysis of removal of the $450 monthly threshold on the SG[35]

Single Touch Payroll data for the month of July 2019 shows about 3% of employees were affected by the $450-a-month threshold with a large proportion (63%) of these affected employees being women. Through these individuals the Retirement Income Review estimated the SG forgone accounted for approximately $90 million per year (or an average of $300 per person per year).

In assessing the impact of the $450 monthly threshold we have considered a set of two member cameos:

- **Scenario 1: Short term application**

  A student who earns $9,000 per year and works casually, depending on their availability, resulting in the $450-a-month threshold applying to their wage for six months of the year. They work in this manner for five years before taking up full-time work at a median salary. The threshold has a small impact on their superannuation balance at retirement and on their retirement income. The overall time spent with earnings under $450 per month is intermittent and only makes up a small part of their total working-life earnings.

  For this individual, application of $450 a month threshold acts to reduce their balance at the point of retirement by $2,700 (or 0.7% of their overall balance). This reflects that the $450 threshold does not have a material impact on individuals who are impacted over short timeframes (either for partial years or for small proportions of their working life).

- **Scenario 2: Long term application**

  A person who works multiple jobs part-time for their entire career, earning income at the 30th percentile. They have one job that does not pay the SG due to the $450-a-month threshold for half (20 years) of their working life.

  For this individual, application of $450 a month threshold acts to reduce their balance at the point of retirement by $12,000 (or 4.0% of their overall balance). This reflects that the $450 threshold does have a material impact on individuals who engage in long-term employment with jobs that pay under $450 per month.

C.2 Analysis of SG being paid on maternity and paternity leave

In analysing the impact of SG being paid on parental leave we have considered two member scenarios to capture the experience of a hypothetical member. We have assumed that for each member:

- Earns a salary throughout their career at minimum-wage levels and effective over a 37.5-hour week.
- Receives salary increases at the rate of Consumer Price Inflation and retires at age 67.
- Adopts a 12-month career break at age 30 to care for a child, with the member in:
  - Scenario 1 receiving no SG payments throughout this period.

[35] Analysis based on modelling conducted by the Retirement Income Review.

- Scenario 2 receiving SG payments at the minimum-wage level throughout this period.

▪ Investment returns are consistent with investment with the median performance of a balanced fund.

Table 5 summarises the results of our analysis. It reflects that application of this policy change is expected to give rise to a 2.4% increase in balances at the point of retirement.

Table 5. Scenario results, implication of payment of SG on parental leave

Scenario	Balance at retirement
Scenario 1 – No SG payments on parental leave	$131,900
Scenario 2 - SG payments on parental leave	$135,000
Percentage difference	2.4%