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Women and Retirement in a post COVID-19 world

M.Claire Dale and Susan St John¹

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¹ Paper prepared by Dr M.Claire Dale, Research Fellow, and Associate Professor Susan St John, Director, Retirement Policy and Research Centre (RPRC), for TOR Financial Consulting Ltd. The RPRC acknowledges the support of David Harris, Managing Director of TOR Financial Consulting Ltd and RPRC Research Associate.

Table of contents

Executive Summary	4
1. Introduction	6
2. The international context of COVID-19	8
Gender and Poverty for older citizens.....	11
3. Defining the 'gender gap'	12
The gender pay gap	12
The gender pensions gap	14
Divorce and separation: 'Silver splitting'	15
4. Drivers of New Zealand's gender gap in preparation for retirement	16
Gender pay gap in New Zealand.....	16
Labour force participation	18
Housing and home ownership	19
Childcare costs.....	21
Unpaid caregiving and volunteering	22
Women in their 50s and early 60s.....	22
Women and long-term care.....	24
5. New Zealand's retirement income system: a gender lens	26
New Zealand Superannuation	26
KiwiSaver	28
Retirement savings	30
Outcomes in retirement.....	31
6. Closing the retirement saving policies gender gap in New Zealand.	33
New Zealand Superannuation - NZS.....	33
KiwiSaver	33
7. Women in the Australian retirement system	35
Overview	35
Income and Assets after age 65.....	37
Poverty and hardship outcomes	37
Australian Age Pension	38
Age Pension Income and Asset Tests	39
Superannuation Guarantee.....	40
COVID-19 in 2020	42
Possible ways forward	43
8. Women in the Irish retirement system	46
Overview	46
Pension poverty outcomes	46
The State Pension (contributory).....	47

The State Pension (Non-contributory)	48
The two Irish state pensions discussion	49
Occupational pensions	50
The Irish Auto-Enrolment reform debate.....	51
Final comments.....	54
9. Conclusions: three country comparisons.....	56
10. Appendices	60
Appendix 1. OECD Poverty rates for women and men.....	60
Appendix 2. New Zealand’s 2019 Review of Retirement Income Policies Recommendations.....	61
11. References	62

Executive Summary

Arguments for gender equality include natural justice, higher economic productivity, more diversity and economic and political stability, better mental health, more stable and happier families and less female poverty. The surprise is that we are still having to make the case today.

Women on average live longer than men and are more likely to live alone or be widowed. In spite of their greater needs they are more likely to arrive at retirement without secure housing, to have saved less because of caring duties and lower wages, and thus to experience greatly restricted lifestyles in retirement. They are more likely to require expensive end of life care for longer than men on average and endure a lower quality of life.

The variation in the definition and basis for calculations of the gender pay gap compromises comparisons of the size of the gender pay gap between countries. The true gender gap that affects retirement preparation is primarily the combination of lower pay rates, for fewer hours, for fewer years of the working age lifespan. Other factors are conscious and unconscious bias, silver splitting (later age divorce), and, critically, the design of pension policy.

New Zealand women are more fortunate in the design of the state pension compared to women in Australia or Ireland. The individual, inclusive, non-contributory features of New Zealand Superannuation (NZS) are hugely supported by women such that taking them away would be firmly resisted. The design of the auto-enrolment second tier KiwiSaver can be improved but has also some attractive features for women.

Post COVID-19, women will continue to be more likely than men to be reliant on NZS alone, and less likely to own their own homes. They are more likely to be affected by lower employment opportunities. Older female poverty can be expected to re-emerge and, without adequate policy responses to the COVID-19 recession, is likely to become much worse in the next decade.

In Australia, older women are the fastest growing group in poverty, the gender pay gap is 19%, the Superannuation Guarantee (SG) savings gender gap is 46%, and one in three women currently have no SG savings. A recent European Commission study confirms that gender gaps in retirement income savings are many times as wide as pay gaps, and suggests that the hope that improvements in pay gaps will percolate through to lower gender pension gaps is unfounded.

More Australian pensioners, especially women and divorcees, need to work part-time just to get by: pensioners who are working were three times more likely to have been divorced than aged pensioners or other self-funded retirees. Nearly 5% of people on the age pension are now in paid work, and the majority of working women pensioners wanted to work less.

Critically, also, many Australian women do not earn the minimum required to access their employer's contribution. For low income women who are in the SG the government's low-income tax-offset of up to A\$500 compensates them for the 15% tax on their employer contributions. While the tax offset means they are not penalised, neither do they benefit from the concessional tax treatment that higher earners enjoy.

An estimated 43% of women work part-time, and have more than one employer, meaning around 220,000 women miss out on \$125 million of employers' SG

contributions as they do not meet the requirement to earn \$450 per month (before tax) from one employer.

The Irish state pension relies on a contributory basis and a means-tested top-up, putting women at a disadvantage in retirement. Credits for time out of the workforce do not cover all the caregiving situations women experience and paid work contributions are still required. The complexity is daunting, making it very difficult for many women to understand what their actual entitlement on retirement might be.

Occupational schemes in Ireland are fragmented and coverage is low. The average membership of occupational pensions in Ireland is just 24 people per scheme (excluding single member schemes) and is in sharp contrast to international practice where schemes routinely achieve economies of scale with hundreds of thousands, and even millions, of members. Reform is slow as is the implementation of a new auto-enrolment (AE) scheme.

This new AE scheme raises issues such as the 'clearing house' design, age of access, minimum earnings to qualify and design of tax incentives that are paramount for women. The age band of 23-65 years does not reflect a gender lens and the proposed threshold income of €20,000 is extraordinarily high. For women whose income is variable it is likely to be very complicated. In contrast, there is no effective threshold for New Zealand's AE scheme, and the threshold for Australia is much lower at an annual A\$5,400.

In all countries, recent developments in the labour market, exacerbated by the legacy impacts of COVID-19, will affect both genders but will be more pronounced for women and younger workers. Attention to pension policy design in all countries is critical. Suggested reforms of a general kind that will improve outcomes for women are set out in the conclusions of this paper.

1. Introduction

The COVID-19 pandemic of 2020 and the resulting economic fallout of widespread unemployment and rapid dislocation of global markets requires a comprehensive reset of social protection measures, including what is valued and rewarded, and the nature of what counts as work itself. It seems clear that women, ethnic minorities and the young have been adversely and disproportionately affected, including their retirement preparedness. This disadvantage will continue to compound unless there is effective counter-action.

The COVID-19 crisis offers the opportunity to rethink all elements of retirement income policy to ensure that the pain of the pandemic is shared equitably and that the settings of policy are improved to reduce the impact on those most at risk. This paper focuses in particular on women and their retirement prospects. We explore the enduring unresolved issues, especially in retirement income policy design, that reinforce inequalities and inadequacy of coverage.

In the past 30 years there have been significant reforms of workplace pensions systems in most countries. For example, there has been a marked transformation from a reliance on Defined Benefit (DB)² schemes to more broadly inclusive Defined Contribution (DC)³ systems, enhanced in some cases by auto-enrolment. DB schemes had the effect of minimising or negating the investment risk by the payment of a pension for life, while DC schemes shift the risk to the individual. Nevertheless, on average, women were poorly served by the traditional DB schemes have, at least until the COVID-19 crisis, benefited from this shift and their average savings scheme balances on retirement have been improving. Nevertheless, concerning gender differentials remain and have been intensified by COVID-19.

Policies made without a gender lens, as are most social insurance and work-based savings schemes, simply absorb women into a male model of workplace participation. But women's paid working lives are typically very different from those of men: often part-time, low paid and with career breaks for child rearing and other caregiving duties such as for older husbands or ageing parents. Pension contributions from the women themselves, their employers and state-funded tax concessions are correspondingly limited. As well, widowhood, the current trend for divorce later in life, and lack of access to affordable housing, leave many women even more disadvantaged and vulnerable.

Many policies of the last century that may have seemed enlightened at the time can seem unsatisfactory in the 21st century. Unconscious gender bias is still endemic in many policies and practices with the result that many women are seriously disadvantaged not only during but also prior to retirement.

Issues of systemic undervaluation of the work that women do, whether it be in female dominated occupations, or in unpaid caregiving roles, requires attention in the broader economic policy environment. In this paper is argued that retirement policy design of state pensions and of auto-enrolment retirement saving schemes can provide some amelioration and offer valuable leadership for these necessary broader policy changes.

² In a defined benefit (DB) pension scheme, an employer/sponsor promises a pension payment or lump -sum on retirement predetermined by a formula based on the employee's earnings history, tenure of service and age, rather than depending directly on individual investment returns.

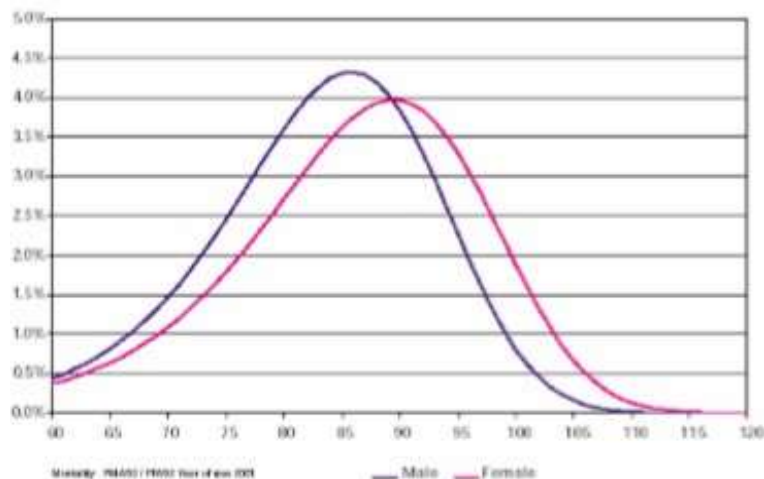
³ In a defined contribution (DC) scheme, the employer, employee or both make contributions on a regular basis. Future benefits fluctuate on the basis of investment earnings, and no pension income is guaranteed.

Fortunately, public understanding of gender issues has improved over time. Countries like New Zealand, Australia and Ireland demonstrate a wide acceptance of the need for gender equality to be better reflected in institutions, workplaces, health systems, and welfare and retirement income policies.

Arguments for gender equality include natural justice, higher economic productivity, more diversity and economic and political stability, better mental health, more stable and happier families and less female poverty.

However, not everyone accepts there is a problem, or is convinced there is any need for action. At the outset, we acknowledge that not all women are disadvantaged and not all men are advantaged. For every social dimension, there is a spread of experience. For example, it is often stated, usually without teasing out the issues, that women live longer than men. Annuity and other actuarial calculations are based on these average assumptions when in fact, as the stylised Figure 1 below shows, there is a huge overlap in mortality experience.

Figure 1. Mortality spreads: percentage of a cohort aged 60 dying at different ages by gender (Wadsworth, Findlater, & Boardman, 2001, Figure 8)



Roughly 80% of the older population have experiences of mortality that are indistinguishable by gender. Yet traditionally, private annuities have disadvantaged women because actuarially-based pensions reflect their higher average longevity. We distinguish by gender because we can: if we had the data, a better way to divide the population would be into those who are likely to be long-lived and those more likely to be short-lived. Likewise, there is a vast range of experience of social disadvantage within gender, such as hardship, homelessness and illness.⁴ Gender-based policies that treat men and women differently, as for example some countries granting women a younger age of access to a state pension, can therefore be a blunt tool for achieving equity either between, or within the sexes.

Headline grabbing attention, such as slogans around the gender pay gap, can be unhelpful in the absence of understanding difficult measurement issues and basic causation. Women may be portrayed as victims, while the wider social context and offsetting factors are ignored. For example, on average, women are less wealthy than men at retirement and live longer, poorer lives. But a longer life is generally preferable to a shorter one. But how do you weigh longer life against less wealth? David Harris

⁴Indeed, enhanced annuity values may be paid by "impaired annuity products".

(2019) has suggested “Increasingly, women may be more worried about living too long than dying too soon.”⁵

With these subtleties in mind, this paper is written in the belief that if retirement policies are improved for women, with most women’s different life experiences in mind, then they will be good for many men also. We all will then reap the rewards of a more equal society.

This paper seeks to go beyond mere enumeration and recounting the dimensions of the gender pension gap. We analyse the underlying drivers of female disadvantage and discuss, specifically, policy changes to retirement incomes policies that would make a difference. Section 2 discusses the international context in the age of COVID-19 and implications for women globally.

Using the New Zealand case, Section 3 outlines measurement issues around the “gender pay gap” while Section 4 highlights the key drivers of this gap and the subsequent “gender pensions gap”.

Section 5 sets out the New Zealand retirement policy framework using a gender lens. In contrast to other countries, New Zealand’s policies on the surface seem outstandingly inclusive and gender neutral. Outcomes however tell a more nuanced story. The knowledge of the drivers of the pensions gap allows an in-depth examination in Section 6 of the possible policy changes New Zealand might make to improve outcomes in retirement for women.

In Sections 7 and 8 we apply this gender lens to retirement policies in Australia and Ireland. Some tentative conclusions that may be of general global application are drawn in Section 9.

2. The international context of COVID-19.

Retirees in OECD countries, on the whole, have managed relatively well financially, with their state and private pensions and saving largely intact. However, in many countries, older people have borne the health consequences of the pandemic with deaths disproportionately affecting those over 65. As the immediate pandemic crisis begins to resolve, attention is turning to the implications of the recovery period for pensions and for the income adequacy of future retirees. This recovery is looking less robust as 2020 draws to a close and the pandemic is far from resolved in many countries.

Ebbinghaus (2020) identifies in the European context:

- *Every fourth person in Europe receives an old age, survivor or disability pension benefit, an automatic stabilizer during this crisis*
- *Public pay-as-you go pension will soon come under severe pressure due to fiscal pressures accelerated during this pandemic*
- *Private funded pensions with their additional risks, were hit hard after the 2008 crash and will again increase inequalities in old age in coming years*
- *Older people transitioning from work to retirement will face immediate difficulties that need to be addressed.*

In the past, recessions often tended to reduce gender inequality. As the Economist (2020) reports:

⁵ April 2019’s speech commentary at the RPRC’s forum held on 26 April at the University of Auckland. See David Harris’s presentation at <https://cdn.auckland.ac.nz/assets/business/about/our-research/research-institutes-and-centres/RPRC/OtherPapers/Session%203%20International%20overview.pdf>.

... three-quarters of all cyclical employment fluctuations in 1989-2014 were owing to men losing and gaining jobs. Women, by contrast, have acted as stabilisers. Employment in services, which is female-dominated, tends to be less volatile. And wives take up work or increase their hours when husbands lose jobs.

Pandemics, on the other hand, historically have worsened inequality, and the COVID-19 caused recession is proving to be the same. Women have been affected more than men because of their predominance in people-facing occupations and their greater role in child-care during lockdowns whether they are working from home or not.

This time, though, industries involving face-to-face interaction, such as hospitality, have suffered most. In America health care and education have not been spared, with five times as many women losing their jobs as men. Firms run by women are also concentrated in customer-facing areas, which is why female small-business founders are much more likely than men to expect a drop in sales owing to COVID-19. (The Economist, 2020)

In New Zealand, the COVID-19 pandemic has clearly affected women's employment more severely than that of men. Even without the pandemic, women have had higher rates of unemployment than men, and these persisted much longer following the Global Financial Crisis (GFC) recession as shown in Figure 2. Women also have higher rates of underutilisation, a broad measure of spare capacity in the labour market. Tellingly, as the impact of lockdown begins to be felt, June 2020 quarterly data shows that of a total rise (45,000) in underutilised workers, 29,000 were women. Overall, the underutilization rate as at June 2020 for women is 14.9% compared to 9.4% for men.⁶

Figure 2. Unemployment rate by sex, seasonally adjusted June 2008-2020 quarters (Stats NZ)⁷



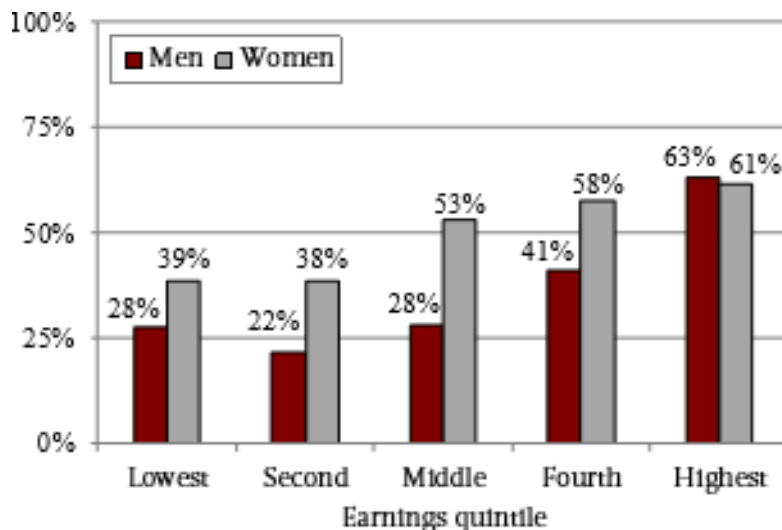
Recent research from the Center for Retirement Research at Boston College (Chen & Munnell, 2020) found that as the economy reopens, "many of the most vulnerable older workers will face either the health risk of returning to work too early or the economic risk of running out of money." It is likely women will be disproportionately affected both by this pressure to return early, given their dominant role in caregiving and nursing, and through sheer economic necessity.

⁶The seasonally adjusted underutilisation rate rose to 12.0% this quarter, up from 10.4% last quarter. This was the largest quarterly rise recorded since the series began in 2004. <https://www.stats.govt.nz/information-releases/labour-market-statistics-june-2020-quarter>.

⁷ See <https://www.stats.govt.nz/topics/labour-market>.

A gender analysis shows that the share in occupations that can be done remotely is much higher for women than men (see Figure 3). Because women are more likely to opt to work in jobs with more flexibility, such part-time, 'flexible' contractors and freelancers, they are also likely to be the first to get laid off.⁸

Figure 3. Percentage of Workers Ages 25+ with jobs that can be performed remotely, by earnings and gender, 2018 (Chen & Munnell, 2020, Figure 5)



In the recovery, women can also miss out when construction, 'shovel-ready' infrastructural projects are prioritised:

New Zealand doesn't yet have a gender-responsive budgeting process, whereby agencies would be required to explicitly and systematically ask "who" is benefiting from the infrastructure investment being proposed, and how it would address gender, intersectional and other structural inequalities that already exist in economic and social wellbeing. The Ministry for Women's [Bringing Gender In](#) online tool can assist with this work. And such an approach would help grow the economy, because it brings in more resources, expands the number and range of people in paid work, while advancing gender equality at the same time. It's not an either-or; it's a win-win. (Curtin, Morrison, & Bickerton, 2020)

In 'Women Approaching and In Retirement – Global Review of the Challenges for Pension Reform and Generating Social Fairness – a Primer' (TOR Financial Consulting Ltd, 2020), many of the key issues further discussed in this report are outlined:

There have been three main approaches to pension saving over the last 15 years considered by countries such as Ireland. None of these pension policy options have effectively addressed the retirement disparity confronted by women:

- Compulsory pension contributions – Australia, Chile and Switzerland favoured by the OECD's Pension Review of the Irish system in 2013
- Soft compulsion or auto enrolment using 'nudge theory' – New Zealand, part of the Swedish first pillar and the United Kingdom (OECD second option 2013) that has been embraced by the Irish Government
- Tax incentivised solutions harnessing auto enrolment and escalation – The United States.

The TOR paper highlights how countries that place a high emphasis on the second tier of contributory pensions disadvantage women and how that disadvantage has been intensified by COVID-19. COVID-19 offers the opportunity to address the unconscious

⁸ See <https://crr.bc.edu/briefs/can-older-workers-work-from-home/>.

bias in the design of these second- tier schemes that fails to appreciate the reality of women's lives in the 21st century.

Gender and Poverty for older citizens

The OECD's 2014 figures on poverty rates by age and gender, given in Appendix 1, show that poverty rates have been typically higher for those aged over 75 than 65-74. Prior to COVID-19, the international picture showed that women were already much more likely to experience poverty than men. The New Zealand poverty rate for women over 65 was 14% and 6.6% for men. Australian figures were 24.8% and 21.2% respectively while Ireland rates were 5.8% and 6.1%.

Choice of the measure of poverty can influence comparisons and there is no one perfect measure. Defining poverty as an income less than 50% of median household disposable income, the OECD reported that:

Older women are at greater risk of poverty than older men in all countries except Chile where risks are nearly equal. The average old-age poverty rates for women and men in the OECD equal 15.7% and 10.3%, respectively. Lower earnings-related pension income and longer life expectancy are among the main drivers of higher poverty incidence among women than among men. (OECD 2019, p. 186)

The OECD notes that (prior to COVID), there had been a trend to better outcomes for older people and a shift of poverty to younger groups:

Poverty rates are higher for older people [13.5%] than for the population as a whole, which averages 11.8%. However, this result is driven by a handful of countries. In 20 out of 36 OECD countries, the old-age income poverty rate is lower than for the population as a whole. It tends to rise with age during retirement and is higher for women. In recent decades, poverty has tended to shift from people aged over 65 to people aged 18 to 25. (OECD, 2019, p. 1986)

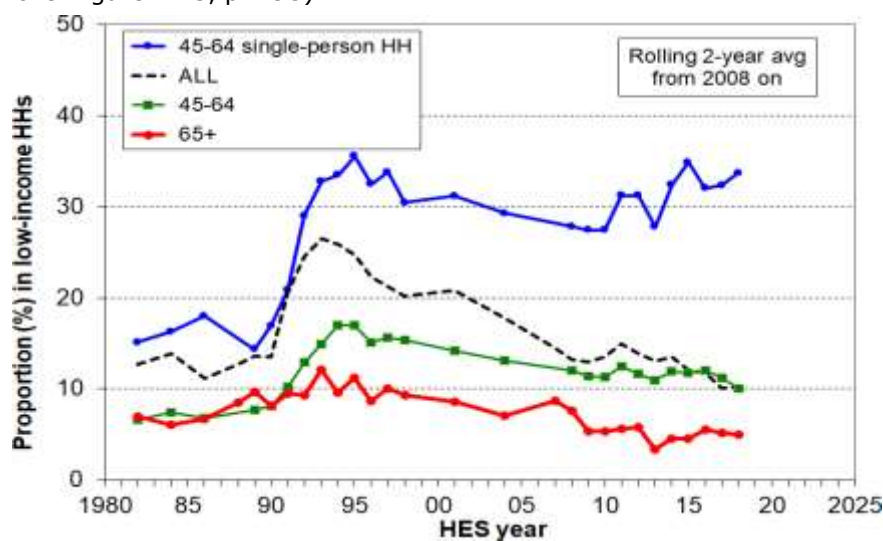
Marital status is a clear factor in poverty among older women. For example, as reported in Barr (2019, p. 29), in the United States the poverty rate was 4.9% for married women over 65, but 16.3% for widows and 18.4% for divorced women.

In New Zealand, more credibility is given to after-housing costs (AHC) poverty lines than those before housing costs measures used internationally. As home ownership has been high amongst older ages groups, the average AHC rates have been much lower than the before-housing costs OECD measures. Perry (2019) notes the importance of choice of poverty lines for pensioner poverty. The AHC figures "more realistically reflect changes in the relative material wellbeing of older New Zealanders" (Perry, 2019, p. 179).

Figure 4 shows the low-income trends for the aged 45+ population and selected groups, using the 50% AHC CV-07 fixed line measure. For the population as a whole and for those aged 45-64 and 65+ there was a steady decline in this low-income rate since the mid-1990s. Perry (2019, p. 184) claims "There is very little difference in poverty rates (ie low-income AHC rates) for females and males."

But the rate of poverty for 45-64 year olds living on their own is high at round 33% and has returned to what it was in the mid-1990s. This suggests New Zealand was on a trajectory even before COVID of increased poverty among newly retired cohorts, especially increased female poverty.

Figure 4. Proportion of population in low-income households (AHC) (fixed line) (Perry 2019 Figure 1.15, p. 193)



Post-COVID we can expect that poverty rates for the whole population will grow. Internationally, the OECD (2020)⁹ see the current economic and health crisis as the worst since the Great Depression:

... projections suggest that in the OECD area the unemployment rate will be much higher than at the peak of the global financial crisis. But the extent of the shock on the labour market is much larger: despite a massive shift towards telework, in all countries the number of those effectively working collapsed as companies have frozen hiring and put part of their workforce on hold through subsidised job-retention schemes. Available evidence also suggests that vulnerable groups – the low skilled, youth and migrants – as well as women are paying the heaviest toll of the crisis. (OECD 2020, p. 21)

In the foreword to that report, the OECD secretary general Angel Gurría¹⁰ highlights the challenge in the recovery period and the opportunity it provides:

...with a broad and coordinated policy response, countries can promote a recovery that ensures more inclusive growth. We need strengthened education and the potential of long-distance learning, more resilient and people-centred health care, housing support and specific interventions to enhance personal safety of women and children, as well as support for communities and regions left behind. COVID-19 has exposed weaknesses in our economies and societies that will hold people back unless they are addressed. In times of crisis, 'normality' sounds very appealing. However, our normal was not good enough for the many people with no or precarious jobs, bad working conditions, income insecurity, and limits on their ambitions. We need to capitalise on the momentum created by the strong initial national responses to the crisis, and build better policies for better lives in the post-COVID world. (OECD, 2020)

3. Defining the 'gender gap'

The gender pay gap

It is commonly reported that women earn less than men, and the "gender pay gap" implies that males and females receive different amounts of money for doing the same or comparable work. It is common for example to compare average annual earnings for male and female as was done recently to show that male media presenters in New

⁹ OECD (2020), *OECD Employment Outlook 2020: Worker Security and the COVID-19 Crisis*, OECD Publishing, Paris, <https://doi.org/10.1787/1686c758-en>.

¹⁰ Ibid.

Zealand were paid more than their female counterparts.¹¹ Such populist measures, while inspiring outrage, can distract attention from the deeply systemic issues that affect women and their ability to prepare for retirement, especially low income women, women of colour and disabled women.

While the concept of the **gender pay gap** seems straightforward, Statistics NZ notes internationally there is no agreement on a standard way of measuring it, although there appears to be a strong preference for comparing median or average hourly pay.

Hourly earnings are considered the best measure because they compare payment for a fixed quantity of work. This overcomes the problems of weekly or annual pay that depend not just on the rate, but the hours, or weeks worked. The median hourly rate may be a better measure than the average because outliers can bias results and the median is more likely to reflect the typical worker (Stats NZ 2016).

Nevertheless, there is room for disagreement. The NZCTU (New Zealand Council of Trade Unions) prefers to use average hourly rates believing that the extent of the disparity is better reflected (Rosenberg, 2017). The gender pay gap (or the gender wage gap) is one way to illustrate the differences in pay for males and females, using income received from jobs, rather than the total income available to males and females. Based on median hourly earnings of men and women including both full and part-time work, StatsNZ (2019) found that the overall gender pay gap for New Zealand was 9.3% in 2019.¹² It had reduced from 16.3% in 1998, but stalled in the last decade. The gap implies that *"a typical female earned about 9% less for an hour's work than a typical male"* (Statistics New Zealand, 2019).

The formula is found by subtracting female median from male median, and dividing the result by male median, expressed as a percentage. This measure in turn shows an implicit bias. Suppose males received twice as much as females, the gender pay gap would be 50% ie women earn 50% less than males, but could equally be expressed as males earn 100% more than women.

One in three employed females work part-time, compared with just over one in ten employed males, influencing the gender pay gap because part-time jobs are generally lower paid than full-time jobs. Relatively lower-paying industries, including retail, caregiving and hospitality and food services, are characterised by large numbers of part-time workers and are dominated by female employment.

But median hourly rates only tell us what the worker at the 50% percentile earned. For women the issue is also about the distribution of earnings below the median. There may be a vast spread reflecting bias, prejudice and exploitation. Measures like a meaningful and enforced minimum wage rate may reduce but not eliminate this problem.

The deeper issue here is that women who work part-time time are doing so because they have family and caring responsibilities which they cannot outsource: there is little evidence that men want to carry their share of that work. Whatever the reason, evidence from a small sample survey in 2006 shows only 4% of fathers took up the paternity leave available under New Zealand's paid parental leave provisions (Evans, 2018). If the hours of work that women perform in unpaid procreative and caring

¹¹ See NZ Herald's *The \$44,000 gender pay gap TVNZ tried to keep secret* (Nippert, 2020), and Newsroom's *NZ's \$400,000 gender pay gap* (Hancock, 2020)

¹² [New Zealand Income Survey information releases](#) (table 10) provide estimates of male and female median hourly earnings each June quarter and release them in early October. The NZIS is used calculate median pay because it collects pay information from individual workers rather than households.

activities¹³ at zero rate of pay (even though it is valuable work) were to be included (in some utopian accounting system!) the gender wage gap would be vast.

Other countries may measure the gender pay gap differently to New Zealand. Thus, Australia uses the difference between women's and men's average weekly full-time equivalent earnings, expressed as a percentage of men's earnings, finding a gap of 13.9% (Workplace Gender Equality Agency, 2020). In the UK, the median monthly earning is the favoured basis for gender income comparison (Topping, Barr, & Duncan, 2018), while Ireland is currently using average monthly earnings as the basis for comparison. However, legislation is underway in Ireland that will require the use of median as well as mean, and also make it compulsory for organisations to give some background context about their gender gap, rather than simply reporting statistics (Demolder, 2020).

The gender pay gap is damaging on a daily basis and compounds the costs of taking time out of the workforce for unpaid care-giving to children and/or ageing parents. The gender pay gap, often cited as the main culprit in the *gender pensions gap* discussed below, reflects deep, underlying issues. Countries with higher gender pay gaps than New Zealand attribute most of the gap to factors such as age, education, occupation, industry affiliation, part-time or temporary employment, job tenure, firm size, or employment in private versus public sector (European Commission, 2018, p. 18).

European studies suggest that the 'unexplained' gender pay gap is likely to include discrimination in hiring, career progression and opportunities in the labour market. A recent survey conducted in Ireland demonstrated that women are almost twice as likely as men to experience discrimination at work, in terms of pay and promotion (McGinnity, Grotti, Kenny, & Russell, 2017). Research by the European Institute for Gender Equality (EIGE, 2017) suggests that women tend to obtain less challenging positions, to be offered fewer opportunities for career progression, and the gender gap in bonuses is the greatest gap across different remuneration sources, in terms of the share of women and men receiving them, and the generosity of bonuses.

Another contribution to the gender gap in market outcomes, suggested by the USA's National Bureau of Economic Research, is that women consistently rate their performance less favourably than equally performing men. This self-promotion gap may contribute to the persistent gender gaps in education and labour market outcomes, where self-promotion opportunities are prevalent (Exley & Kessler, 2019).

The issue is not as simple as saying men are paid more for doing the same work, although sadly that discrimination does still occur. Variation in the definition and basis for calculations compromises comparisons of the size of the gender pay gap between countries. While an hours-based measure is probably best for a snapshot comparison, the true gender gap that affects retirement preparation is primarily the combination of lower pay rates, for fewer hours, for fewer years of the working age lifespan.

The gender pensions gap

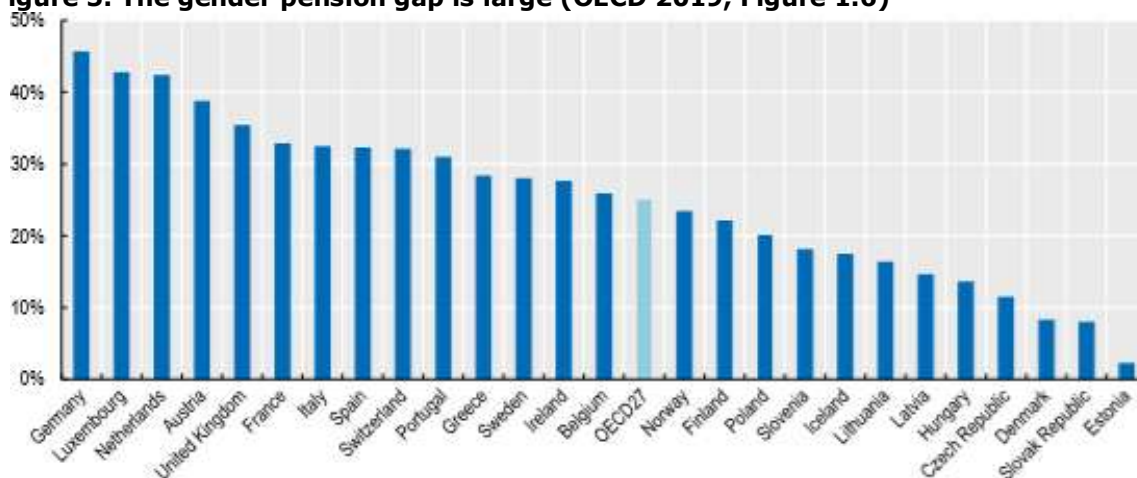
For purposes of this paper, we are interested in the *gender pensions gap*, and here, as for the gender pay gap, a variety of measures are used. Rather than measure access to total resources available to men and women for their retirement, the gender pensions

¹³ As Marilyn Waring (1988) argued: conventional measures of GDP fail to count the value of unpaid work primarily done by women.

gap usually points to the median or average balances accumulated in retirement savings schemes. It is here that a stark picture becomes apparent. For example, research in the UK shows that women enter retirement with pension pots 39% lower than their male counterpart: the national average female pension pot was £24,444, compared with a male average of £40,084 (Ferris, 2020).¹⁴ The disparity is more than double the UK gender pay gap of 17.3%.¹⁵

The OECD (2019) *Pensions at a glance* shows in Figure 5 the very large pension gaps across the OECD (measured as female pension minus male/male average). Clearly most OECD countries have a gender pensions gap, some very large. Even in Sweden, often held up as an example of equality, concern has been expressed (TOR 2020). In Australia and New Zealand (not shown in Figure 5) the gap is pronounced.

Figure 5. The gender pension gap is large (OECD 2019, Figure 1.6)



In New Zealand, the KiwiSaver scheme, discussed in section 4, is not yet mature, but median KiwiSaver balances are already showing a substantial gender pensions gap. Australia’s Superannuation scheme is more mature than KiwiSaver, and over the 2018 – 2019 year, although the gender pension gap had narrowed, the average superannuation balance for those aged 15 years and over was \$121,300 for women and \$168,500 for men, or a 28% gap (Hartge-Hazelman, 2019, p. 8). The median balances for those aged between 60-64 years nearing retirement of \$122,848 for women and \$154,453 for men is considered far less than necessary for a comfortable retirement. Moreover these figures are for only those with superannuation saving: around 25% of women and 13% of men are retiring with no superannuation at all (Hartge-Hazelman, 2019, p. 33).

Divorce and separation: ‘Silver splitting’

The idea of parents or grandparents divorcing after decades of marriage may seem shocking, but worldwide the number of "silver splitters" is increasing. In the UK, the number of over-60s divorcing has increased by more than one-third in 10 years, and in the US, almost a quarter of those divorcing are over 50. In 1996, the median age at divorce in New Zealand for women given in Table 1 was 37.8 years, but by 2019, it had risen to 44.4 years, and for men, the median age is now 47, compared to 40.6 in 1996.¹⁶

¹⁴ Expressing the gap as ‘how much more males have’, the gap is 65%.

¹⁵ Calculated as the discrepancy between the average salaries of men and women.

¹⁶ See <https://www.stuff.co.nz/business/112439475/latelife-divorces-a-financial-hurdle-for-new-zealanders>.

Table 1. Median duration of marriage & age (Men, Women) for divorce (StatsNZ 2019)¹⁷

Year	Median Duration (years)	Median Age Men	Median Age Women
1997	12.6	40.6	37.9
2019	13.5	47.0	44.4

It is often much harder for women to recover financially from divorce at older ages. "Grey divorce" involves loss of dreams and memories along with the sale of the family home and a move to a lower standard of housing. Property division is often fraught, and usually expensive. Splitting assets accumulated over decades can be particularly legally complex.

In the typical scenario, the husband has had a career while the wife has been out of the workforce for many years. The husband may be liable for spousal maintenance, requiring them to meet the homemaker's "reasonable" needs as a temporary measure with the expectation in New Zealand that she should quickly meet these needs herself. There can be contests about the worth of accumulated superannuation or any inheritances. If this money is protected by trusts or prenuptial agreements, it may fall outside the relationship pool for division, and may end up benefitting future spouses.

Divorce later in life can mean losing more in terms of money and property, with less time and resources to rebuild wealth.¹⁸ Some female silver splitters have to try to find employment for the first time in many years after being full-time homemakers. At the same time they may have to take on more caring roles as grandmothers.

To summarise: The gender pensions gap reflects the compounding effect of the gender pay gap, the fewer hours worked per week, the lower hourly rate paid, the fewer weeks worked per year, conscious and unconscious bias, silver splitting, and as is the focus here, the particular pension policy design. But first we tease out *why* the gender pay gap arises using the New Zealand example.

4. Drivers of New Zealand's gender gap in preparation for retirement

This section discusses the wide range of factors that contribute to the *gender pensions gap (GPG)*, that is, the ability of women to enter retirement with sufficient savings to last throughout their final years. While as noted above, the GPG generally refers to the different average or median balances in saving schemes, here the GPG is broadened to encompass the total preparedness for retirement.

Gender pay gap in New Zealand

As discussed above the New Zealand gender pay gap appears low by international standards. One explanation is that there has been a variety of legislation to protect citizens from discrimination on the basis of sex, for example the Equal Pay Act 1972, the State Sector Act 1988, the Human Rights Act 1993, and the New Zealand Bill of Rights Act 1990. New Zealand's gender pay gap is also likely to have been influenced by specific campaigns such as the Christine Bartlett case which led to the Care and Support Workers (Pay Equity) Settlement Act 2017. This law meant 55,000 mainly women care and support workers received a long overdue and substantial wage rise to recognise they had been disadvantaged because they were in a predominantly female occupation (Rosenberg, 2017). Then in 2019, consultation was co-ordinated through MBIE on Fair

¹⁷ See <https://www.stats.govt.nz/information-releases/marriages-civil-unions-and-divorces-year-ended-december-2019>.

¹⁸ See NZHerald, 7 June 2015, [here](#).

Pay Agreements,¹⁹ toward development of the Equal Pay Amendment Bill.²⁰ Annual on-going increases the Minimum Wage are likely to also have an impact.²¹

While the consequences of the gender pay gap in New Zealand are not disputed, the role of discrimination is. Research by Gibb, Fergusson, Horwood, & Boden (2014, p. 24) found:

[T]he strength of the associations between parenthood and employment outcomes in the present study, and in particular the findings that approximately 90% of the gender gap in income can be attributed to gender differences in workforce participation resulting from parenthood, would suggest that discrimination against women in the workforce and related factors play a much smaller role in determining employment outcomes than parenthood.

In contrast, research from the Ministry for Women (2020) suggests that while factors important in other countries, including differences in education, the occupations and industries that men and women work in, and the fact that women are more likely to work part-time, only explain around 20% of the current gender pay gap.

The majority (80%) of the gender pay gap is now driven by what the research calls "unexplained" factors. These are the harder to measure factors, like conscious and unconscious bias – impacting negatively on women's recruitment and pay advancement – and differences in men's and women's choices and behaviours. (Ministry for Women, 2020)

The gender pay gap can be calculated for the country as a whole, or by industry or by occupational grouping. For example: a recent study by Motu Economic and Public Policy Research of New Zealand's district health boards (DHBs) found that among doctors in senior positions, of the same age, in the same specialty, who work the same number of hours each week, women on average earn 12.5% less than men, and for women specialists with children, the wage gap rises to 14% for one child and up to 17% for women with two or more children (Molyneux, 2019).

Across the New Zealand financial services industry, which includes insurers, the gender pay gap is 23.7%, compared to the StatsNZ overall figure of 9.3%. Westpac bank's CEO David McLean reported the bank's gap of over 30%, saying the biggest drivers of the gap included: not enough women in its middle to senior management; gender segregation when it came to roles with women dominating lower-paid customer service positions; more men working in higher-paid areas such as IT, finance and corporate banking; and societal pre-conditioning in terms of what jobs men and women choose to go into (Parker, 2019).

Brower's and James' 2019 analysis of data from 6,000 academics in New Zealand universities found two types of gender disparities: a gender pay gap, and a gender 'performance pay' gap (Wynn, 2020). Depending on the field, the average male researcher would be paid \$400,000 more in a lifetime than the average female researcher, with research score and age accounting for 40-70% of the pay gap; and the gender 'performance pay' gap averaged about \$250,000 over a career (Wynn, 2020).

¹⁹ A *Fair Pay Agreement* is a set of occupation and sector-specific minimum employment standards, such as wages, redundancy, or overtime. These would be agreed through bargaining between affected workers and employers, and would then become legal requirements in that sector. See <https://www.mbie.govt.nz/have-your-say/designing-a-fair-pay-agreements-system-discussion-paper/>.

²⁰ The Bill was passed unanimously by Parliament on 23 July 2020. See <https://www.beehive.govt.nz/release/equal-pay-amendment-bill-passes-unanimous-support>.

²¹ Current minimum wage for those aged 16 years and over is \$18.90 per hour. See <https://www.govt.nz/browse/work/workers-rights/minimum-wage/>.

Labour force participation

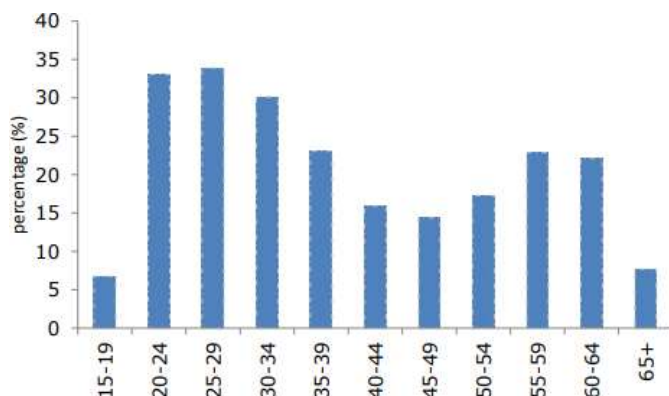
A key factor in the gender pension gap is the different labour force participation rate (LFPR) experiences of men and women over their life cycle. There have been dramatic changes over the last 30 years in LFPR. Hyslop, Rice, & Skilling (2019, pp. 2-3) found the LFPR of workers aged 55 and over more than doubled (from 22% to 50%) between 1993 and 2015, while there was a more than 10 percentage points decline for teenagers and young adults.

The increasing debt-servicing costs for home-owners provided an impetus for a secondary income to be generated, usually by women. Other factors associated with long term increases in female LFPRs include: strong growth in service-industry employment; increased flexible working arrangements; lower fertility, higher educational attainment, and improvements to paid maternity leave and child care (Hyslop et al., 2019, p. 5).

In New Zealand, women are also much more likely to be working part-time, comprising 71.7% of the part-time workforce and 48% of the full-time workforce.²² The higher participation rate in part-time work is explained primarily by parenting. Research by Gibb, Fergusson, Horwood and Boden (2014) drawing on the Christchurch Health and Development Study, found that for women, parenthood was associated with decreasing participation in paid employment and fewer hours worked, while for men the decrease did not occur and parenthood was sometimes associated with increased working hours.

An analysis of historic LFPR data show both a gender effect and a qualification effect (Callister, 2014). There are clear overall differences by qualification with the highest participation rates for those with 'degree' qualification and the lowest for 'unqualified at school level'.²³ The "gender effect" in this study is the average annual difference (over the 21 years from 1992 to 2012) between LFPRs for males and females for each age-qualification combination.

Figure 6. Gender gap for males over females, of LFPR by age for unqualified (Ministry of Business Innovation and Employment, 2013, Figure 9, p. 17)



Callister's (2014) analysis shows a large gender effect as on average, males showed higher LFPRs for all age groups and qualifications compared to females (1992 to 2012) with the highest difference for "no quals". The effect is strongest in the 25-39 age range (covering those of childbearing age) as shown by Figure 6 for the 'no qualifications' case. Women are doubly disadvantaged for future employment possibilities by a lack of qualifications and being the primary care-giver.

²² See <https://www.stats.govt.nz/news/women-in-paid-work>.

²³ Over the 21 years to 2012, these were typically: 85% for "degree" qualified, 77% for "level 4-7" qualified, 67% for "school and level 1-3" qualified, 49% for unqualified.

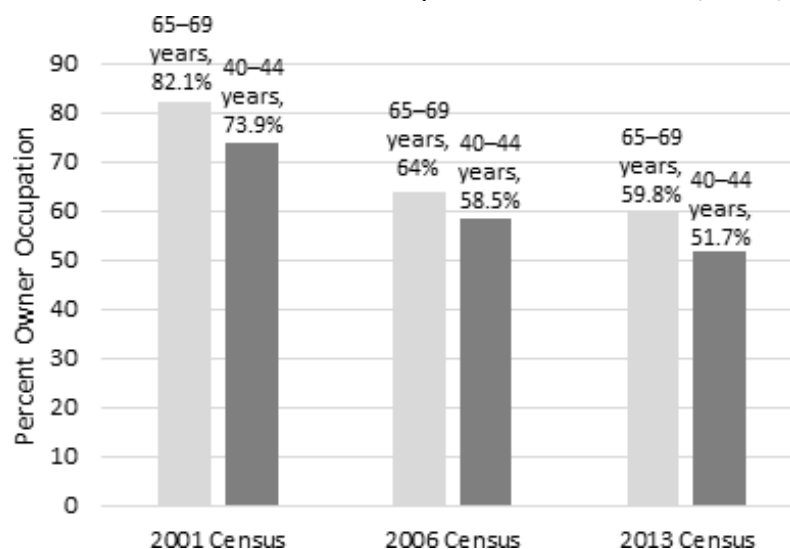
Housing and home ownership

The broad GPG picture should also include the relative housing disadvantages of women. While older Kiwis are the wealthiest age group, with high rates of home ownership, low rates of income poverty, and access from age 65 to the universal New Zealand Superannuation (NZS), the great majority of older New Zealanders are very dependent on NZS and other government transfers for their income: 40% have less than \$100 pw from other sources (McKenzie, 2019). Traditionally home ownership was necessary for these low incomes to provide an adequate lifestyle.

Declining rates of home ownership mean increasing numbers of renters, decreasing security and increasing vulnerability to rent increases and lack of financial control over housing. While rates of home ownership are declining across all ages, as shown in Figure 7, there is evidence that there is also a gender factor with housing more precarious for low income older women, especially Maori and Pacifica women, as Pledger, MacDonald, Dunn et al. found in their 2018 research:

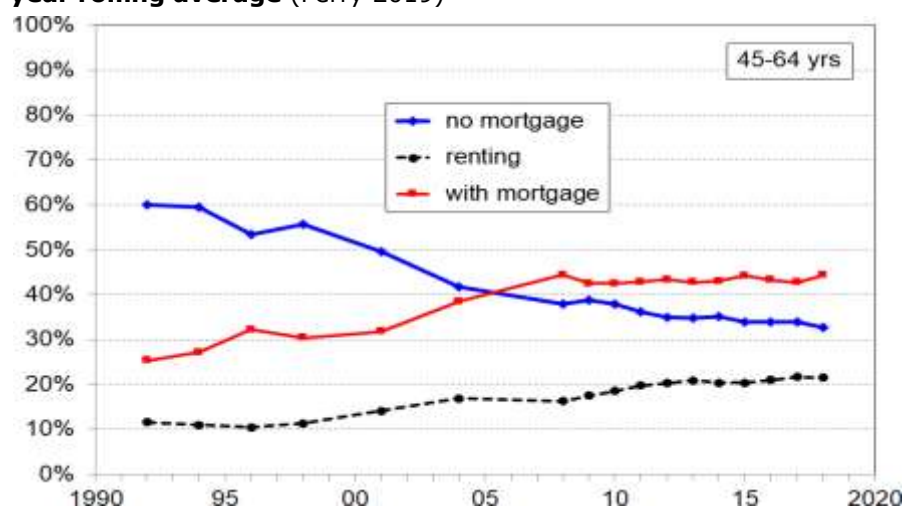
Renters were more likely to be living alone, on lower annual incomes. Overall measures of physical and mental health showed a health gradient, with public renters in the poorest health and owner-occupiers in the best health. Higher rates of renting among Māori and Pacific people and older females means that these groups are particularly vulnerable to any negative impact of renting on health. (Pledger, McDonald, Dunn, Cumming, & Saville-Smith, 2019, p. 1)

Figure 7. Percent of population in Owner Occupation for Selected Ages 2001, 2006 and 2013 Censuses in New Zealand (Saville-Smith & James, 2019, Figure 1)



Tenure for 45-64 year olds based on the Household Economic Survey is shown in Figure 8 and confirms a fall in home ownership that sees renting doubled from around 10% in the 1990s to just over 20% in 2018, Of the 77% who are home owners, those who are mortgage-free falls from 60% in the early 1990s to 33% in 2018.

Figure 8. Tenure for individuals aged 45-64+, based on HES data, 1992 to 2018, two year rolling average (Perry 2019)



Private rental accommodation tends to consume a much higher proportion of disposable household income than owner-occupied dwellings or social housing. *“One response to these costs is household crowding, which adds to the serious risks of infectious diseases and hospitalisation, and another is increased rates of homelessness”* (Johnson, Howden-Chapman, & Eaquad, 2018, p. 5).

Older women struggling to pay the rent or mortgage may try to lift their income by working part-time, but may risk losing their Accommodation Supplement. For example, regular cash or food parcel support from family whether on a benefit in later life or on NZS from age 65 can be treated as income by Work and Income.²⁴ While board payments from the first two boarders is not counted as income, after the third, all three count.²⁵ And while it may seem sensible for recipients of welfare or NZS to buddy up with another retiree to live together, that can reduce the rate of benefit or NZS they receive.²⁶

All current recipients of ‘social housing’ funded by Housing New Zealand Kāinga Ora²⁷ were surveyed in 2017 by the Social Investment Unit.²⁸ Male applicants allocated social housing numbered 3,387 compared to 7,245 female applicants (respectively, 3,498 and 7,698 applications failed). Most female applicants were sole parents, and as continued access to social housing is not guaranteed, probability of secure retirement is slender.

There are also increasing numbers of older women residing in boarding houses. For example, in 2017, a Wellington boarding house for women published their concern about the significant rise in older women using their service: more than a quarter of the residents who had accessed its 16-bedroom temporary housing service in the last 6

²⁴ See <https://www.govt.nz/browse/tax-benefits-and-finance/benefits/what-counts-as-income-for-benefits/>.

²⁵ See <https://www.workandincome.govt.nz/on-a-benefit/tell-us/income/other-regular-income/income-from-boarders.html>.

²⁶ See <https://www.workandincome.govt.nz/products/benefit-rates/benefit-rates-april-2020.html#null>.

²⁷ There are currently 70,886 ‘public’ houses. Of these, 63,402 state houses are provided by Kāinga Ora, and 7,484 community houses are provided by 37 registered Community Housing Providers across New Zealand. See <https://www.hud.govt.nz/assets/Community-and-Public-Housing/Follow-our-progress/Quarterly-Reports-2020/1c17940406/Public-Housing-Quarterly-Report-March-2020.pdf>.

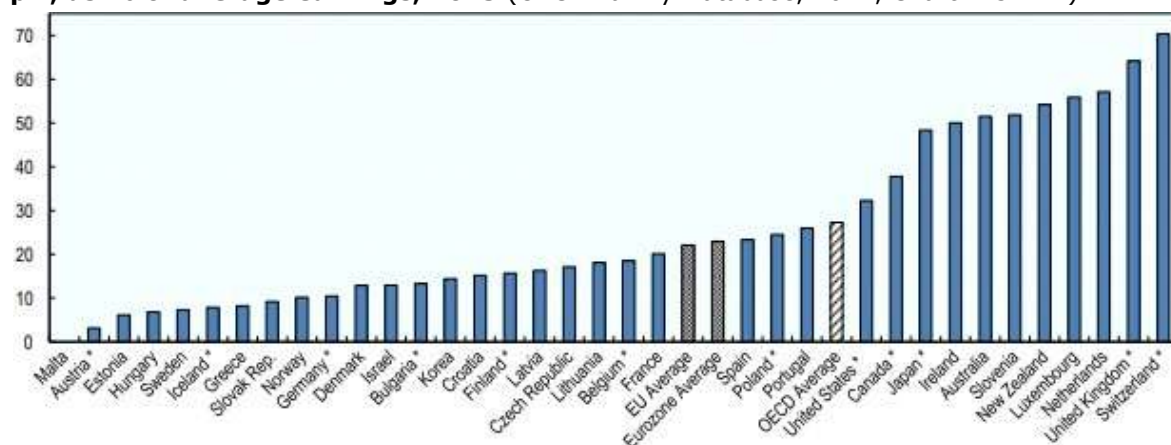
²⁸ Social Investment Unit (2017). Measuring the fiscal impact of social housing services – Technical report, Wellington, New Zealand, p. 20. See <https://swa.govt.nz/assets/Uploads/sh-technical-report.pdf>.

months were over 56 years old.²⁹ Older women are unlikely to be chosen as flatmates, as they are also unlikely to be selected as employees. Their options are severely limited.

Childcare costs

Expensive childcare makes it harder for women to return to work and reduces the return from such work.³⁰ As shown in Figure 9, New Zealand has the fifth highest costs for early childhood care and education (ECE) in the OECD (as a percentage of average earnings). The high cost of ECE continues until the youngest child reaches school age, contributing to women's smaller accumulations of retirement savings. Even once children are at school there may be expensive after school care and holiday programmes to pay for.

Figure 9. Gross fees for 2 children (age 2 & 3) attending typical childcare centre 40hrs pw, as % of average earnings, 2015 (OECD Family Database, 2017, Chart PF3.4.A.)



Unfortunately, although ECE in New Zealand enjoys a government subsidy for up to 20 hours per week for children aged 3 and 4, recent research by Child Poverty Action Group found profit was often a stronger motivation for ECE centres than delivery of care and education:

... in spite of unequivocal evidence of the importance of quality ECE, Increasing privatisation has meant that many centres prioritise profit margins over the needs of children and families ... Market-based provision increases inequities in access and quality according to socioeconomic status, and thus we should be incentivising the growth of not-for-profit centres while reducing government subsidies for corporates. (Neuwelt-Kearns & Ritchie, 2020, pp. 5-6)

The outsourcing of caregivers' unpaid childcare work (unless to another unpaid woman such as a grandmother where the costs are hidden) is expensive and crystallises the true value of the work. Childcare costs are particularly punitive for sole parents who are primarily women: in 2018, 53,672 women compared to 4,886 men were receiving the Sole Parent Support (Ministry of Social Development, 2019). Due to these care roles, women then find it harder to return to paid work relative to men, and also find it harder to source employment opportunities, or opportunities for career advancement (Huang & Curtin, 2019). The high costs and low incomes during their offspring's' childhood and adolescent years impacts on these parents' future wellbeing.

²⁹ See <http://www.stuff.co.nz/dominion-post/news/92009470/more-than-a-quarter-of-women-accessing-wellington-boarding-house-over-56>.

³⁰ For example, recent research in the UK using the Household Longitudinal Study showed that 67% of women were in some form of employment before having a child (37% employed full-time, 17% part-time, 13% self-employed) and 33% were not in the labour force. Three years after having a child, 55% were still in employment, 20% full-time, 28% part-time, 7% self-employed and 45% not in paid employment (Borkowska & Pelikh, 2019).

Unpaid caregiving and volunteering

Women in the years of maximum potential for saving for retirement often contribute valuable unpaid work in the form not just of child rearing and parenting, but also looking after older parents and older husbands. Women volunteer assistance to and serve on the boards of schools, daycare centres, community organisations and other not-for-profits, doing the work that holds communities together and ensures their survival.

In one study conducted by Women In Leadership Aotearoa, it was found that in the community and voluntary sector that the majority of volunteers are female. "In 50% of organisations, women make up 75-100% of volunteers." (Kitney, 2018)

Women in their 50s and early 60s

In New Zealand, older working age people (45-64 years) who are living alone have the second highest rate of income poverty after sole parents: doubled from 10% in 1988 to 23% in the early 2000s, and currently at 29% (McKenzie, 2019). Evidence suggests while the depth of poverty is largest among beneficiaries and their children, (Perry, 2019 forthcoming, p. 64),³¹ there is significant poverty and hardship among the older low-income working age population.

Of those aged 50-64 years, while 714,400 are employed in paid work (NZ Stats 2019), around 120,600 receive a welfare benefit with more than half of these on the benefit for over 5 years, and with two thirds of this group on a benefit for reasons of health disability (McKenzie, 2019). A further number had an Accident Compensation Corporation (ACC) payment including 14,440 on earnings related compensation for an average of 117 days,³² and 14,130 people aged 50 to 64, not receiving a main social security benefit (ie low income workers) were receiving one or more weekly supplementary benefits (McKenzie, 2019).

These figures provide a snapshot at a point in time, but the probability of a person needing a benefit, ACC or supplementary assistance between the ages of 50 and 65 is much higher. In later working age, periods of unemployment, redundancy, ill health or caregiving duties may impact severely on the ability to prepare financially for retirement. In 2020, the COVID-caused recession can be expected to impact severely on older people, especially women.

Older women are disproportionately dependent on welfare benefits pre-retirement. The problem here is that the benefits themselves in New Zealand are below a minimal level of adequacy forcing many to have to apply for supplementary second tier assistance (Accommodation Supplement and Disability) and third tier hardship and food grants.

The use of conventional welfare benefits with stringent income tests are particularly harsh for those over 50 who spend sustained times unemployed, care-giving or incapacitated. They are likely to exhaust their private retirement resources before reaching the age of eligibility for NZS.

As shown in Table 4, the annual net Supported Living Payment (SLP) for a married person is \$11,860 compared to \$16,446 for NZS. There is over \$9,000 annual difference for a couple. A couple on the Jobseeker benefit has a joint income of only \$18,976 per

³¹ Sole-parent households with dependent children have the highest low-income rates of all household types of around 45%, compared with a population rate of 15%. Using the 60% AHC REL measure, the rates are around 60% compared with 21% respectively. (Perry, 2019 forthcoming, p. 142)

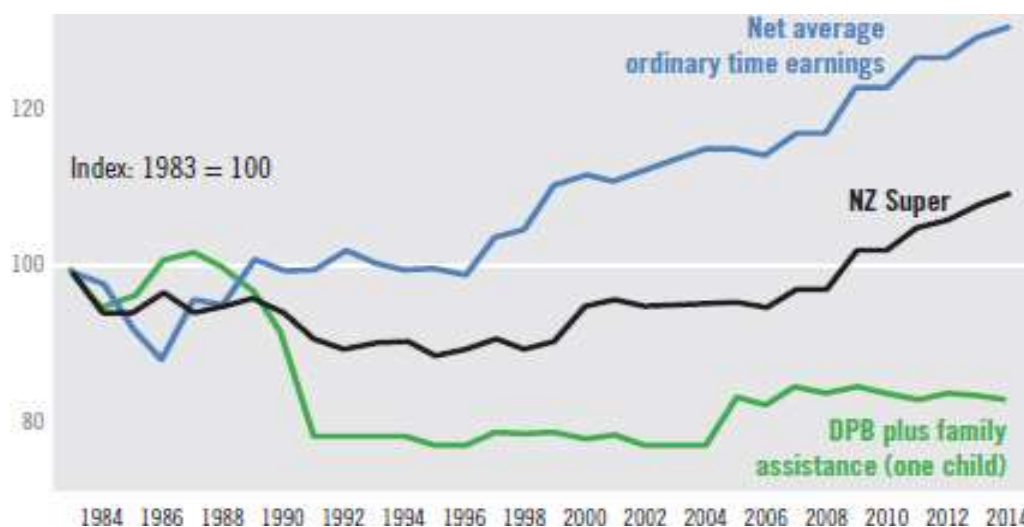
³² In 2016, 216,000 people aged 50+ had one or more ACC claims for a fall-related injury accepted. Data are not presented on the type of injury resulting from the fall, which may range from a simple bruise through to a head injury. See <https://www.hqsc.govt.nz/our-programmes/health-quality-evaluation/projects/atlas-of-healthcare-variation/falls/>. Earnings related compensation data is from 2019 OIA.

annum, a difference of nearly \$14,000 per annum compared to a couple on NZS, and they can earn only \$90 between them before harsh abatement occurs to make any extra not worthwhile. Raising the qualifying age for NZS, under current welfare policies, would have a severe impact on those who cannot support themselves (St John and Dale 2019).

Welfare benefits are widely perceived as inadequate as outlined in the Welfare Expert Advisory Group report *Whakamana Tangata* (2019) and supplementary means-tested assistance is normally needed. The net single 25+ Jobseeker rate is barely over 50% of NZS for a single recipient taxed at the primary rate living alone (Table 1). Even if NZS is taxed at the top tax rate, perhaps because the superannuitant works full-time, the net NZS is still 45% more than the net Jobseeker Support benefit rate paid to an unemployed adult.

Using the DPB, sole parent benefit (now called Sole Parent Support) to illustrate the general case for benefits, Figure 10 shows the gap between welfare benefits and NZS has grown despite the occasional one-off boosts to welfare. NZS has been linked to average wages, which have risen markedly, while benefits are linked to CPI prices only. While the indexation for benefits changed to wage indexation from April 2020 and will prevent the gap from widening further, it will not close that gap. Those on benefits also face a stringent income test whose parameters have not significantly changed since the 1980s. Earned amounts over \$90-\$115 per week are treated punitively. In contrast, there is no disincentive for those aged 65+ to earn over and above NZS.

Figure 10. Comparisons between average wages, NZ Super and benefit levels³³



The inadequacy of benefits and other assistance³⁴ means that many people on benefits accumulate private debt, and/or have debts to public agencies. For example, as at June 2018, the Ministry of Social Development (MSD) was owed \$557.8 million as recoverable hardship assistance, and a further \$768.7 million by clients who had received money from MSD to which they were not entitled (Welfare Expert Advisory Group, 2019, p. 85). Of such debts, at the end of December 2018, over 56,000 current beneficiaries aged 50 to 64 years owed the MSD a total of \$182 million (McKenzie, 2019).

The COVID-19 Wage Subsidy was introduced in April 2020 to assist businesses to pay their staff:

³³ Adapted from Perry (2014) Ministry of Social Development, page 82, Figure C.8A.

³⁴ As detailed in the WEAG report, pp. 96 – 98.

allowing businesses to claim \$585.80 per week per full time employee (\$350 per part time employee) for up to 12 weeks (and a further 8 weeks with the Extended Wage Subsidy). If a business claimed the subsidy for an employee, they were required to protect that job whilst the subsidy was in effect. As at 28 June, the Wage Subsidy and Extended Wage Subsidy has covered 1.7 million jobs (including 230,000 sole traders).³⁵

In recognition that the wage subsidy was not meeting the needs of those whose employment had actually ceased, a new payment for 12 weeks called the COVID Income Relief Payment (CIRP) was introduced from 8th June for those who had lost work due to COVID-19 between 1st March and 31st October. The CIRP was set at a much higher level than an ordinary welfare benefit, although the advantage was far less for sole parents. Nevertheless, CIRP has some features that are women-friendly. The most important of these is that CIRP can be paid to an individual without reduction for a spouse's income unless the partner earns over \$2000 a week.³⁶ An unfriendly, but possibly unenforceable feature is that a recipient is unable to have any income at all while receiving the CIRP from paid work.

The CIRP highlights that welfare payments are inadequate and inequitable, but the CIRP is a time limited payment and by January 2021 will come to a complete end. The solution that is in the best interests of women lies not in the extension of CIRP but reform of the welfare system. This requires at minimum, individualisation of welfare benefits and a dramatic rise in their value as the taskforce on welfare reform recommended (Welfare Expert Advisory Group, 2019).

The CIRP design was based on the implausible assumption that COVID unemployment will be short lived and the economy would bounce back quickly in a V-shaped recovery. As the crisis lingers on both in New Zealand and internationally it may be time to take a more realistic view of the longer-term implications of COVID-19. Already, despite the Government's wage subsidies and employer assistance, COVID-19 has dramatically increased the numbers of people on welfare benefits.³⁷ Numbers on all main benefits increased 20% from 294,335 in July 2019 to 355,648 in July 2020. In September 2020, nationally food banks and social services are experiencing unprecedented demand, homelessness and overcrowding is growing, along with the possibility of further outbreaks of COVID-19 in poorer communities.

Loss of employment and the associated extended periods on poverty-level benefits will impact badly on retirement saving, reinforcing the disadvantages women already face.

Women and long-term care

The pensions gap matters even more when the needs of women are compared to men over the life-course. The expense of old age care particularly affects women. At older age brackets, the dominance of female numbers over male numbers in the population becomes increasingly pronounced. Moreover, male partners are more likely to be looked after by their wives when care is required. When women themselves need care, residential aged care (RAC) is more likely to be necessary (St John & Dale, 2019a) pages 16 – 19). Research in New Zealand (Broad et al., 2015, Table 1) found around 45% of females die in RAC compared to around 31% of males and that lifetime use of RAC is much higher at each age group for women than men.

³⁵ See <https://www.mbie.govt.nz/dmsdocument/11556-monthly-labour-market-fact-sheet-july-2020>.

³⁶ See <https://www.workandincome.govt.nz/covid-19/income-relief-payment/>

³⁷ See <https://www.msd.govt.nz/documents/about-msd-and-our-work/publications-resources/statistics/benefit/2020/monthly-public-update/monthly-benefits-update-july-2020.pdf>.

Table 2. Deaths and lifetime use of residential aged care (RAC), New Zealand 2006-2010
(Broad et al., 2015, Table 1)

	Annual deaths per period			Estimation	
	Annual average No	Died in acute hospital %	Died in RAC %	Hospital deaths in RAC %	Lifetime use of RAC %
Men					
65-74	2770	36.9	15.3	4	19.3
75-84	4522	37.9	29.7	7.2	36.9
85+	3273	34.1	46.7	10.9	57.6
65+	10565	36.5	31.2	7.5	38.7
Women					
65-74	1988	38.9	18.7	4.8	23.5
75-84	3903	37.6	36.7	9	45.7
85+	5979	26.8	58.5	11.8	70.3
65+	11870	32.4	44.7	9.7	54.4

The public health system provides free care for ordinary health emergencies such as a broken hip or heart attack, and GP visits are subsidised although specialists in the private sector may be expensive. On the other hand, the residential costs of LTC are covered at only a very basic level subject to a very severe asset test (see Table 3).

Table 3. Residential Care Asset Tests (New Zealand), 2019³⁸

Years	Single person	Married couple with one in care	Married couple, both in care
2019 CPI adjusted	\$ 230,495	\$ 126,224, + house +car Or \$ 230,495 total	\$ 230,495

For RAC, first, costs must be met from a person's assets until they are exhausted to a low limit as shown in Table 3. After assets are reduced and the asset test for a subsidy is met, any income including almost all of NZS must be used to pay the cost up to a cap that varies by region, from \$60,020 in Auckland to \$55,357 per annum in a small South Island town in 2019.³⁹ Self-funding high-needs people receive a top-up subsidy but do not pay more than the cap.

The income test excludes the earned income of the spouse not in care, however any investment income over \$1,005 a year for a single person, \$2,009 a year for a couple when both need care, or \$3,013 a year for a couple where one partner needs care, is counted in the income test. A woman whose spouse enters care may find their joint financial assets quickly eroded.

While low-resourced women will be fully subsidised into basic long-term RAC and can retain a small amount of spending money from their NZS, they are likely to experience a large drop in their living standards for longer periods on average than low resourced men. The retention of a small amount of NZS will not pay for dental care, glasses, hearing aids or better amenities in the aged-care facility (Jones, 2019).

In summary: Women on average live longer than men and are more likely to live alone or be widowed. In spite of their greater needs they are more likely to arrive at retirement without secure housing, to have saved less because of

³⁸ See <https://www.health.govt.nz/our-work/life-stages/health-older-people/long-term-residential-care/income-and-asset-testing>.

³⁹ See <https://www.health.govt.nz/our-work/life-stages/health-older-people/long-term-residential-care/maximum-contribution>.

caring duties and lower wages, and thus to experience greatly restricted lifestyles in retirement. They are more likely to require expensive end of life care for longer than men on average and endure a lower quality of life.

5. New Zealand's retirement income system: a gender lens

The New Zealand age pension system in 2020 is one of the simplest if not the simplest in the Western world. There are two main elements, the first tier is the state pension, New Zealand Superannuation (NZS), with supplementary provision via the auto-enrolment (AE) opt-out KiwiSaver savings scheme. These two major complementary programmes have evolved over time, and their current operation is described below. Home ownership and other voluntary savings also assist preparation for retirement.

New Zealand Superannuation⁴⁰

New Zealand Superannuation (NZS) is a universal, taxable, basic income paid out of current taxation (with some limited pre-funding in the New Zealand Superannuation Fund). It is provided on residency grounds (10 years after age 20, 5 of these after age 50) with no requirement for contributions or work periods.

The residency requirements can be met through "totalisation", where residence in countries with which New Zealand has a reciprocal Social Security Agreement such as Australia counts as residence in New Zealand (Dale & St John, 2016). NZS is neither income- nor asset-tested. Human Rights legislation in 1993 and 1999 combine to make it unlawful for an employer to require retirement on the basis of age (Hurnard, 2005). As eligibility does not require retirement from work and NZS is not income tested, NZS does not discourage either saving or working.

NZS is indexed in a way that ensures its rate does not fall below 66% of the net average wage for a married couple. Other rates: single sharing and single living alone, are derived with reference to the couple rate and are shown in Table 4. While the marital status basis of different NZS rates may lack sound justification, NZS has always been an individual payment, ie. takes no account of a partner's income (see St John & Dale, 2019b).

NZS is taxed so that higher income recipients get less net pension. Table 4 shows that someone on the top tax rate effectively gets just over threequarters of the amount of NZS received by the lowest income superannuitant. Importantly, for women, taxes are levied on their individual income including NZS without reference to their partner's income.

Table 4 also shows the relative generosity of NZS by comparing typical social welfare benefits that are paid at a much lower rate and consequently are a much lower percentage of the net average wage. Furthermore, welfare benefits are paid on a stringently income-tested basis that includes the income of a partner.

⁴⁰ More background on issues in this section can be found in St John and Dale (2019b).

Table 4. Rates of New Zealand Superannuation (NZS) and welfare benefits \$NZ 2020⁴¹

Category	% Net average wage	Annual Rate Gross	Annual Net Primary Tax	Annual Net 33% Tax
NZS Single, living alone	43%	\$25,587	\$22,098	\$17,143
NZS Single, sharing	40%	\$23,530	\$20,398	\$15,765
NZS Married person or partner in civil union or de facto relationship (each)	33%	\$19,410	\$16,998	\$13,005
Jobseeker Single, 25+ years	25%	\$14,656	\$13,074	
Jobseeker Married, civil union or de facto couple (without children, each)	23%	\$10,459	\$11,686	
Supported living payment single 18+	31%	\$18,220	\$16,014	
Supported living payment (married couple each)	25%	\$14,458	\$12,910	

Many aspects to the design of New Zealand’s pension policies are good for women. Many other countries have an emphasis on contributions records (traditional social insurance programmes in the USA and Europe), whereas all women and men in New Zealand receive the same gross state pension. This reflects an implicit understanding that many women have contributed in ways other than formal paid work and no one form of work is more worthy. Even when a mild income test applied to NZS, it was a surcharge that applied solely to the individual’s income so apart from the lower level of the married person rate (compared to the single sharing rate) there is no presumption of dependence of women on men.

The age of eligibility has always been the same for men and women, however there has been a non-qualified spouse rate that effectively allowed under-age spouses, usually women married to older men, to be included in an income-tested NZS couple rate. In the interests of ‘modernisation’ this policy is to be abandoned from 9th November 2020, so that an under-age spouse, usually a woman, would have to apply for a social welfare benefit instead (and may not qualify).

The importance to women of an individual pension rather than an add-on to their husband’s pension cannot be over-emphasised. An attempt in 1991 to legislate NZS as a welfare benefit, jointly income-tested, was viewed as a very backward step for women and eventually reversed before it came into effect (see St John, 1999). Another adverse feature known as the ‘spousal provision’ has affected more women than men. Under this policy, her partner’s overseas state pension could mean that she received less NZS or even no NZS. The policy was bitterly fought for many years (Dale & St John, 2016), and is to be finally abandoned on November 9th 2020 (St John & Dale, 2019c).

There are other features of retirement income policy that are inclusive and thus good for women and are highly valued. For example, universal access to the SuperGold Card provides discounts and largely free public transport, and the Winter Energy Payment (WEP) is an untaxed addition to NZS over the winter months. In the COVID-19 lockdown, the WEP was doubled. For a single superannuitant even if sharing accommodation this became an additional untaxable total annual amount of \$900 and a married couple \$1,400 or \$700 each.⁴²

⁴¹ See <https://www.workandincome.govt.nz/products/benefit-rates/benefit-rates-at-1-april-2019.html#null>.

⁴² The design of the WEP may be criticised as embodying old-fashioned ideas about relationships however.

Recent decisions not to raise the age of eligibility for NZS are also beneficial for women. The case for raising the age of eligibility from 65-67 was most recently examined in the Retirement Commissioner's 2019 three-yearly report and no recommendation was made to raise the age (Retirement Commissioner, 2019). Women married to older men who need care, and those unable to support themselves with paid work would be adversely affected by a rise in the age. Not raising the age also implicitly values the unpaid work that many women contribute in early retirement to enable the 'productive' paid work effort of others, for example, caring for grandchildren so the parents can work. Most women over 65 who are in paid work, work only part-time. The structure of NZS enables women (and men if they chose) to combine part-time paid work with other unpaid work.

While many New Zealand women do not understand how fortunate they are compared to, for example, women in Australia or Ireland, it is fair to say that the individual, inclusive, non-contributory features of NZS are hugely supported by women, and taking them away would be firmly resisted.

KiwiSaver

The traditional tax-subsidised employment-based pension schemes in New Zealand were designed to meet the needs of highly-paid, career men who stayed with the same firm for 40 years. Some wives in traditional marriages have been beneficiaries on the death of their partner of the continuance of a spousal pension under joint pension options.

When tax concessions for retirement savings were removed in New Zealand thirty years ago, many employment-based retirement schemes were closed, and many defined benefit pension (DB) schemes were replaced by defined contribution (DC) schemes. Public-sector DB pension schemes were closed to new members in 1992 (for history see St John & Ashton, 1993).

By the mid-2000s, coverage of the workforce in employment-based retirement schemes had fallen to only around 14% (Savings Product Working Group, 2004, p. 5). Coverage of women outside of the public sector was very low (St John, 2007a, 2007b). On 1 July 2007, New Zealand's KiwiSaver: the world's first auto-enrolment, opt-out, national saving scheme⁴³ was introduced and has grown to be an important part of New Zealand's very simple retirement income framework.

KiwiSaver has been through many iterations since 2007 (St John, Littlewood, & Dale, 2014). Today, in 2020, employees must contribute the default rate of 3% of their wages, or choose a rate from 4%, 6%, 8% or 10%. The employer must contribute a further 3% of the member's gross pay.⁴⁴ One of the attractive design features of KiwiSaver is that the Inland Revenue Department (IRD) acts as the clearing house, the employer contribution is taxed at a proxy for the marginal tax rate of the member and the IRD sends the net contributions to the employee's chosen private provider. This enables full portability and obviates the possibility of lost accounts.

On KiwiSaver's introduction, a range of 'sweeteners' were available, designed so as not to embody the regressive quality of the traditional tax incentives (St John, 2016). They were effective in encouraging a rapid take up of KiwiSaver accounts and the gradual supplanting of other employment-based superannuation. Over time, these sweeteners have been gradually watered down so that in 2020, a Government Contribution

⁴³ The 'soft compulsion' automatic enrolment feature continues to be an influence in the design of opt-out schemes in other countries such as the UK and Ireland.

⁴⁴ See <https://www.kiwisaver.govt.nz/new/situation/>.

(previously called the 'Member Tax Credit') of 50c per member's dollar up to a maximum of \$521.43 is all that remains.⁴⁵ A hidden, but real form of subsidisation remains for higher paid KiwiSavers: under the Portfolio Investment Entity (PIE) tax regime, the highest PIE rate on fund earnings is 28% while the top tax rate is 33%.⁴⁶

Originally there was a lumpsum 'KickStart' of \$1,000 for new members. The loss of this subsidy has been particularly adverse for women, especially those who join KiwiSaver later in life. Its loss affects all low-income enrollees and removes a useful cushion for the initial periods of low balances.

While KiwiSaver was designed to offer wide access to work-based saving, membership is not confined to those in paid work. Anyone who is a New Zealand citizen, or entitled to live in New Zealand indefinitely, and is living or normally living in New Zealand can join. Also, people can join KiwiSaver while already saving in another superannuation scheme (but the employer contributes to only one scheme). Those under 16 years old wanting to join KiwiSaver can enrol with the consent of all their legal guardians. For those aged 16 to 17, one of their legal guardians must co-sign the application form.

Those who are not employed or are self-employed, by definition, do not have employer contributions. The self-employed can agree on their contribution level with the KiwiSaver provider: some providers have minimum contribution requirements. Anyone, whether working or not, can choose to make occasional lump sum payments, or set up regular payments.

In most cases once a person is enrolled, whether automatically when they start to work for a new employer, or voluntarily as self-employed or a citizen, they can't opt out. They can however choose to suspend contributions for a year, known as a 'savings suspension' (rather than as initially a 'contributions holiday').

To opt out, a person must inform the employer or Inland Revenue between the end of the second and eighth week of starting the new job. If they choose to stay in KiwiSaver, their contributions taken out of their after-tax income, will automatically start at 3% of their before-tax pay (unless they have chosen to contribute at higher rates) and the employer must also contribute 3% of gross pay (taxed at a proxy rate). From the date of their first contribution, the employee has 3 months to select another KiwiSaver scheme, or stay with the provisionally allocated scheme. During this time IRD holds their contributions and pays interest on them.

A person starting a new job who is not already a KiwiSaver member will be automatically enrolled in the employer's chosen scheme (if they have one), otherwise they will be allocated to one of the 9 default KiwiSaver schemes. To be auto-enrolled, the new employee must be between 18 and 64 years, and the job must be either full-time, permanent part-time, or a temporary contract for more than 28 days. They can still join a scheme but will not be auto-enrolled if, among other conditions, they:

- are under 18 years old or over 65, but those over 65 can now opt in.
- on a work permit or visa
- are a casual agricultural worker unless more than 3 months
- are an election day worker.⁴⁷

⁴⁵ See <https://www.kiwisaver.govt.nz/new/benefits/government-contribution/>.

⁴⁶ PIEs were created in October 2007, after the introduction of KiwiSaver. Under the PIE rules, investors pay tax at their own tax rate (the Prescribed Investor Rate or PIR). The maximum PIR is 28%. See <https://www.ird.govt.nz/income-tax/income-tax-for-individuals/types-of-individual-income>.

⁴⁷ See <https://www.kiwisaver.govt.nz/new/join/how-to/auto-enrol/>.

It is currently not compulsory for employers to pay the 3% KiwiSaver contribution to employees under 18. Neither is it compulsory for employers to contribute for those over 65 except if the member has not had a full five years in the scheme before 65. While neither of these two features appear to have gender implications at first sight, women who have a long time out of the paid workforce while child rearing may have fewer years to benefit from the employer subsidy as discussed later. They also have fewer years to benefit from the Government Contribution, described above.

By the end of March 2019, there was \$57 billion in funds under management in KiwiSaver schemes, and over 2.93 million members (Financial Markets Authority, 2019), covering 74% of the working-age population. There is no material gender difference in KiwiSaver membership.⁴⁸

While KiwiSaver is mainly about retirement saving, there are two benefits for first home buyers. Once a person has been a KiwiSaver member for at least 3 years, they may be able to withdraw some of their savings to put towards purchasing or building their first home. They must leave a minimum balance of \$1,000 in their account, but can withdraw their contributions, the employer contributions, any returns on investments and government contributions. They may also qualify for a one-off Government grant.⁴⁹ If they have owned a home before, they may still be eligible for these benefits if they are in the same financial situation as a first home buyer.

The First Home grants⁵⁰ are, firstly, for purchasing an existing home, between \$3,000 and \$5,000 based on \$1,000 for each year of KiwiSaver membership. Secondly, for building or purchasing a new home, or for purchasing land to build a new home on, the grant is doubled to \$2,000 per year of membership in the scheme, up to a maximum of \$10,000 for five years for each member.⁵¹

This support for home purchase is in recognition of the contribution home ownership makes to a secure retirement. Although many women would benefit from the First Home grant, they may find it difficult to restore their KiwiSaver balances if they are run down to provide a deposit. For a couple, the woman's balances may be viewed as the more expendable. More research is needed on these issues.

Retirement savings

Improved financial capability and decision-making is important for women who have on average less financial literacy than men. Women's smaller retirement savings make them reluctant to seek costly financial advice. Financial capability could be included in the school curriculum, promoted by the state and industry endeavours, and be part of the requirements for retirement saving scheme providers. Development of a free 'dashboard', perhaps as an expansion of New Zealand's *Sorted* website,⁵² would enable people to calculate their total retirement assets and estimate retirement income streams, thus helping them determine and revise their preparedness. The three countries examined in this paper might benefit from looking closely at the way dashboards are being developed in countries like Sweden and Denmark. In Sweden in

⁴⁸ Women comprise slightly more than half of KiwiSaver members at 1.48 million, compared to 1.42 million men (Financial Markets Authority, 2019).

⁴⁹ See <https://kaingaora.govt.nz/home-ownership/first-home-grant/check-you-are-eligible-for-first-home-grant/>.

⁵⁰ Grants are non-repayable. See <https://www.ird.govt.nz/kiwisaver/kiwisaver-individuals/getting-my-kiwisaver-funds-early/getting-my-kiwisaver-for-my-first-home>.

⁵¹ Regardless of the number of eligible purchasers, the maximum grants payable for the purchase of a single dwelling are \$10,000 for an older/existing property, and \$20,000 for a new property.

⁵² See <https://sorted.org.nz/>.

particular, women are heavy users of the dashboard throughout the accumulation period to better understand how their eventual retirement benefits will be generated.⁵³

While women are just as likely as men to be in a KiwiSaver scheme, they have smaller median KiwiSaver balances than men. For the year ended June 2018, the median KiwiSaver values for those aged 55–64 years were \$30,000 for men but only \$23,000 for women. Other retirement savings schemes have an even larger gender gap in that same age bracket with median balances of \$105,000 for men and \$71,000 for women (Statistics New Zealand, 2019b).

An inevitable consequence of decreased participation in paid employment and fewer hours worked is lower earnings and smaller accumulations of retirement savings as noted in section 4. This reality is reflected in a 2018 Westpac NZ survey of more than a thousand KiwiSaver members which found a higher proportion of women weren't contributing at all, and nearly a third of women surveyed had less than \$5,000 in their KiwiSaver accounts compared with 19% of men, and only 4% had more than \$50,000 compared with 13% of men (Business/Personal Finance, 2018).

Outcomes in retirement

While most features of retirement incomes policies appear to be gender neutral and have a positive effects on women's incomes on retirement, outcomes for women are very diverse. As discussed in the previous section many women come into retirement with depleted resources and may have spent time out of work on an inadequate welfare benefit. Women are more likely than men to be reliant on NZS alone, and less likely to own their own homes. This relative lack means that more women end-up having to manoeuvre through a complex welfare system of supplementary benefits such as the Accommodation Supplement and hardship measures such as food grants.

In 2020, approximately 6% of superannuitants, or around 45,000, are in receipt of the income and asset tested Accommodation Supplement, 128,000 receive an income-tested Disability Allowance (maximum \$65 pw), and nearly 9,000 receive a means-tested Temporary Additional Support.⁵⁴

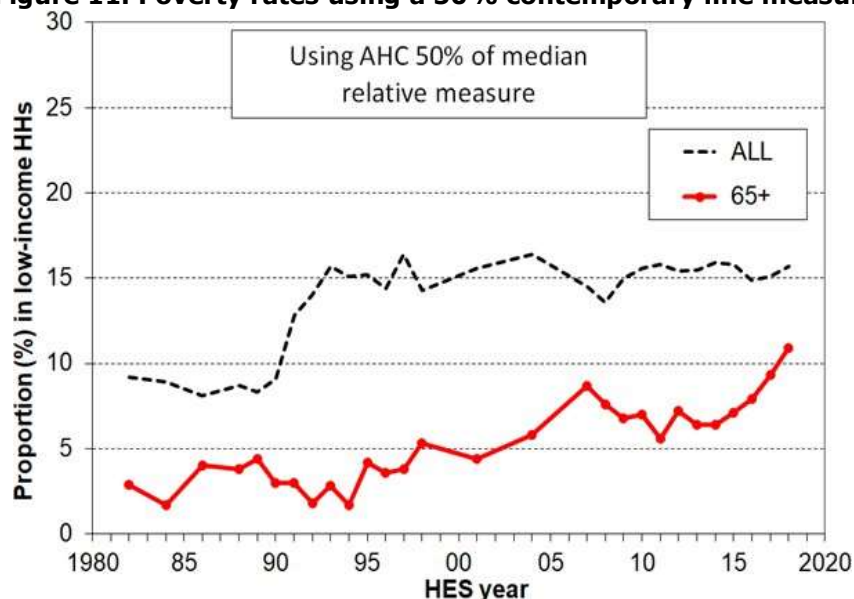
An increasing number and proportion of people aged 65+ are remaining in paid work, encouraged by the taxation of earned income as part of total income, unlike the welfare system where earned income reduces a welfare benefit directly. This is particularly helpful for women who need to keep working to make up for time spent out of the paid workforce. For people aged 65+ the labour force participation rate has increased from around 6% in 1991 to just under 24% in 2019 and has been increasing faster for women than men (McKenzie, 2019).

Looking at current retirees pre COVID-19, NZS appears to have been outstandingly successful to date in preventing poverty among most of those over 65. Compared to the rest of the population, their fixed line, average income-based, AHC poverty rates have been low (see Figure 4). But as shown in Figure 11, relative poverty has been edging up in a trend that can be expected to continue.

⁵³ See <https://www.cambridge.org/core/journals/british-actuarial-journal/article/why-the-pension-dashboard-is-more-than-a-data-collection-exercise-abstract-of-the-edinburgh-discussion/906F20EA39D2241D844B4B84CC40B717/core-reader>.

⁵⁴ Update of data in McKenzie (2019).

Figure 11. Poverty rates using a 50% contemporary line measure (Perry 2019)



As less well-prepared cohorts enter retirement and fewer people reach 65 with a mortgage-free home and many more face high weekly rental costs it can be expected that the numbers under the relative poverty line will continue to increase.

The alarm bells sounded pre-COVID are even more relevant in the post-COVID world and have particular resonance for women:

Rising numbers of older renters, who are often living alone, on low incomes and in poorer health than owner-occupiers, will have important implications for future health and housing policy. Much of this policy is currently premised on high rates of home ownership and changing patterns of tenure will need to be considered and adapted to. There are also implications for services in terms of the future demand for care, in helping deliver policies that support people to remain healthy and in their homes for longer, and in ensuring that the diverse health, care and support needs of older people living in their homes are met. (Pledger et al., 2019, p. 188)

Prior to COVID-19 signs of financial stress were already emerging among some of the 65+ group and the cohort aged 50-65 as they approach retirement.⁵⁵

The poorer life experience of many in cohorts entering retirement in the next 15 years may see more new retirees at 65 less well prepared financially, less healthy, and with less security of housing tenure. As well, the changing nature of work, digitalising and automation will have a profound impact on the ongoing employment of older workers who may find themselves without skills needed in the new 21st Century economy and face frequent redundancy. Older people may be in competition for the limited resources available for retraining and education with similarly affected young workers. (St John & Dale, 2019b, p. 22)

Post COVID-19, women will continue to be more likely than men to be reliant on NZS alone, and less likely to own their own homes. They are more likely to be affected by lower employment opportunities. Older female poverty can be expected to re-emerge and, without adequate policy responses to the COVID-19 recession, is likely to become much worse in the next decade.

⁵⁵ It also reflects the requirement of Retirement Income Policy Review Terms of Reference No. 1.

6. Closing the retirement saving policies gender gap in New Zealand

New Zealand Superannuation - NZS

Most of the features of NZS are already very women friendly. The most women positive policy change that could be made to NZS is to increase its level to help better support women who have little or no savings. Such an increase would reduce the need for women (especially when they live alone) to seek additional assistance from the welfare system.

In a universal scheme such as NZS, an increase in the base pension is expensive especially as there is limited clawback through the current tax system with a top tax rate of only 33%. COVID-19 makes it even more imperative that increases are cost-effective. A lift in the lowest base benefit for a married person might be done in a process that achieves alignment of the net single sharing rate with the net married rate as suggested in St John and Dale (2019), coupled with the use of a separate more progressive tax scale for those on NZS. As poverty is likely to be strongly accommodation-related, an improved Accommodation Supplement may also assist or perhaps an expanded programme of state housing for older people.

If there is an increase in the basic pension there should be a rethink of the Winter Energy Payment which is badly targeted and would be better either incorporated as part of the base weekly benefit, or as an opt-in scheme (St John 2020).⁵⁶

KiwiSaver

KiwiSaver is supposed to encourage people to save to have, in addition to NZS, supplementary income in retirement. This is more necessary for those in cities. For example, Massey University's '2019 Retirement Expenditure Guidelines' reported that a one-person household living in a city on NZS would need an extra \$200 per week for a no-frills lifestyle, or another 50% of the net NZS payment. More would be required for a 'choices lifestyle' (Matthews, 2019).

The critical gap in KiwiSaver policies is a decumulation mechanism that would allow for the KiwiSaver lumpsum at age 65 to help provide an ongoing supplementary income (St John & Dale, 2019a). Given that many women in retirement are on their own and given the prevalence of dementia, an annuity option may improve simplicity and certainty. But for there to be such an annuity, state intervention in the decumulation phase will be required. Protection for long-term care expenses may also be desirable and might be incorporated in an annuity option (St John and Dale 2019a).

There are changes to KiwiSaver that could protect and help women. The Retirement Commissioner's 2019 Review of Retirement Income Policies (RRIP) includes the recommendation:

Consider the introduction of care credits for New Zealanders otherwise having to stop or minimise their contributions to KiwiSaver due to caring responsibilities requiring them to leave or suspend employment. (Retirement Commissioner, 2019, p. 17)

While the concept of care credits is exploratory, the clear sentiment is that there would be long-term individual and community advantage in providing some assistance for those

⁵⁶ See <https://www.auckland.ac.nz/en/news/2020/04/23/not-too-late-change-aborrently-wasteful-policy.html>.

who are unable, for whatever reason, to continue to contribute to KiwiSaver (Dale & St John, 2020).

Other recommendations from the 2019 RRIP (provided in Appendix 2) may also help women. For example, in recognition of the time that women take out of the workforce to have children could be reflected in allowing them to benefit from the Government Contribution and employer contribution.

As it stands, those who can't afford KiwiSaver miss out on employer and Government contributions. They also miss the compounding benefit of saving even a small amount of money in KiwiSaver. This exacerbates the wealth gap over time. (Dale & St John, 2020, p. 1).

The loss of the KickStart subsidy of \$1,000 was a retrograde step for new low-income members and for women who join later in life. This initial sweetener on joining KiwiSaver had been paid to children as well and was removed for new members from 2015 to save costs. While there was little benefit from including children, the KickStart performed a useful role as a cushion for small balances, protecting against those times when savings were small and could be eaten up in fees for low income members. Bringing back this payment for those over 18 and reinstating it for those who have missed out since 2010 would be gender-friendly policy helping not only women but also younger people.

Tax advantages remain for high income earners from the concessional rate they pay on fund earnings through a PIE rate of 28% instead of 33%. This concession is of limited value to women and could be replaced with something more focused on low balances.

But of most concern in the immediate COVID era is the clamour for easy access to KiwiSaver funds, "hardship withdrawal", to help members out in the COVID recession.⁵⁷ Women are likely to be the ones in a household whose KiwiSaver balances are drawn down first, leaving them disadvantaged for the future. According to the Inland Revenue Department (IRD) KiwiSaver statistics, almost 2,000 members collected a total of \$12.7 million of hardship withdrawals in March 2020, a massive increase on the \$8.4 million and 1,500 members in February.⁵⁸ The number of KiwiSaver members not contributing increased by 5,500 from February to March, to 138,441.

Removal of the minimal Government Contribution that remains in KiwiSaver is another suggestion that must be resisted. This suggestion is made out of arguably misplaced concern for the future debt burden of the costs of COVID-19 recovery.⁵⁹ Removal of the Government Contribution and allowing full access to funds before age of 65 would damage KiwiSaver and therefore damage the mechanism that could help women close the gender pensions gap.

⁵⁷ See https://www.newsroom.co.nz/pro/keep-hands-out-of-kiwisaver-if-you-can?utm_source=Friends+of+the+Newsroom&utm_campaign=57e4c623cd-Daily+Briefing+31.08.20&utm_medium=email&utm_term=0_71de5c4b35-57e4c623cd-97831651.

⁵⁸ See <https://investmentnews.co.nz/investment-news/hardship-hard-times-and-house-hunters-drain-kiwisaver/>.

⁵⁹ See https://www.nzherald.co.nz/personal-finance/news/article.cfm?c_id=12&objectid=12304458.

7. Women in the Australian retirement system

Overview

The gender pay gap in Australia in 2020 is 14%, with men, on average, paid \$83,050 a year and women paid \$68,220.⁶⁰ Data from the [Household, Income and Labour Dynamics in Australia Survey \(HILDA\)](#) shows at age 28 female incomes flatline at around \$1,000 - \$1,250 a week (on average), while male earnings steadily increase to over \$2,000 a week before age 40. At 18-29 years-old male members of a super fund have an average balance of \$10,166, while females have just \$8,408.⁶¹ However:

Australian women broke a number of key records in 2019, including record female workforce participation, record lows in the gender pay gap and superannuation gaps, a record low in the unpaid work gender gap and a key target finally being surpassed for female board representation on the ASX 200. (Hartge-Hazelman, 2019, p. 4)

The *Financy Women's Index* (2019, pp. 7 - 8) reports that women continued to outnumber men in tertiary education, but men disproportionately outnumbered women in fields linked to higher pay outcomes (Hartge-Hazelman, 2019, p. 8). Low superannuation balances, high cost of living and low interest rates add pressure on women to keep working: since 2014, full-time employment participation among women aged 55+ increased by 34% to 558,000 (Hartge-Hazelman, 2019, p. 18).

Pressures on women are compounded by 'flexible' insecure and low-paid work. For example, in Australia, aged-care workers (90% women) don't have paid sick leave: *... hundreds of thousands of essential workers in high-risk industries are poorly paid and lack job security, guaranteed hours or sick-leave entitlements... It might be noted it also makes it problematic for them to turn down shifts, to stay home if they feel unwell, or to seek out a coronavirus test lest a positive result forces them to self-quarantine.*⁶²

Time out of the workforce and returning part-time has a big impact on superannuation savings, and can also slow career progression and future earning potential. It's known as the superannuation 'double penalty effect'.⁶³

As in New Zealand, the high cost of child care has a big impact on workforce participation, particularly for women who are more likely to be a family's "second earner", reducing their paid work hours to accommodate caring responsibilities and to avoid the "workforce disincentive rate" – the proportion of income from an extra day's work lost through higher taxes, and reduced family payments and child-care costs (Women's Agenda, 2020).

Currently, it costs about A\$9,000 a year to have two children in full-time care for a family getting the maximum subsidy of 85% for households with income less than A\$68,000, while for a family where each parent earns A\$80,000, the cost is about A\$26,000 a year.⁶⁴

⁶⁰ Workplace Gender Equality Agency, 2020, see <https://www.wgea.gov.au/data/fact-sheets/australias-gender-pay-gap-statistics-2020#:~:text=The%20National%20Gender%20Pay%20Gap,-The%20national%20gender&text=Currently%2C%20Australia's%20national%20gender%20pay,full%2Dtime%20earnings%20of%20%241%2C812.00>.

⁶¹ See <https://www.australiansuper.com/superannuation/superannuation-articles/2020/02/gender-equality-and-your-super>.

⁶² See <https://theconversation.com/workplace-transmissions-a-predictable-result-of-the-class-divide-in-worker-rights-143896>.

⁶³ Ibid.

⁶⁴ See <https://www.servicesaustralia.gov.au/individuals/services/centrelink/child-care-subsidy/how-much-you-can-get/your-income-can-affect-it>.

The “workforce disincentive rate” is described by Grattan Institute, using the example of a household with two young children where both parents would earn A\$60,000 a year working full-time, the male works full-time and female three days a week. An increase to 4 days means for the additional day she loses more than 90% of the income in child-care costs, tax and reduced family payments. That leaves her working for about A\$2 an hour on her fourth day; and for nothing for a fifth day. For comparison, someone earning more than A\$180,000 and paying the top marginal tax rate only loses about 47% of additional income (D. Wood, Griffiths, & Emslie, 2020).

In Australia the average full-time net child-care costs is about 25% of household income for an average-earning couple with two young children, while the OECD average is 11%.⁶⁵ Yet in the 2019 financial year the Australian Commonwealth Child Care Subsidy cost the federal government A\$8 billion.⁶⁶ That cost would at least triple if child care was free, since free child care would trigger a jump in demand from all families, not just those in paid work. A cheaper alternative would be raising and simplifying the Child Care Subsidy to reduce the disincentives to work (D. Wood et al., 2020).

The other solution to the childcare problem is to have grandmothers provide childcare so mothers can work. As in New Zealand, Australian families rely heavily on grandparents for childcare. In Australia in 2017, approximately 864,000 children were cared for by a grandparent in a typical week.⁶⁷ More parents rely on grandparents than any other form of childcare for both pre-school and school-aged children, as well as in school holidays (Hamilton & Newman, 2020). There is no free lunch, however. While grandparents report that their lives are enriched by spending time with their grandchildren, excessive care responsibilities can place them under unreasonable pressure and compromise their own earning capacity.

This unpaid, often invisible care that underpins the financial security of many Australian families has a clear gender bias:

We know from Australian research that grandparents are particularly important in supporting mothers to participate in paid work. We also know that most grandparent childcare is performed by grandmothers. In many circumstances, it is mothers and grandmothers arranging the care of grandchildren. [When] a child is sick, for example, it can be mothers and grandmothers who negotiate who will take time out of work to care for that child. (Hamilton & Newman, 2020)

In the COVID-19 pandemic, schools and childcare centres were closed or partially closed. At the same time older people were being urged to self-isolate to protect themselves from the potentially deadly virus and many parents couldn't keep working without grandparents looking after their children. A recent study found that 96% of childcaring grandparents would provide care in a crisis or emergency so their children can keep working and keep their jobs (Hamilton & Newman, 2020). So many grandparents are likely to assist, despite the risk to themselves.

In response to the pandemic, on 2 April 2020, the Government announced that it would fund childcare for 6 months, making the service free for families. It was part of a rescue

⁶⁵ See <https://data.oecd.org/benwage/net-childcare-costs.htm>.

⁶⁶ See <https://budget.gov.au/2019-20/content/bp1/download/bp1.pdf>.

⁶⁷ See

<https://www.abs.gov.au/ausstats/abs@.nsf/Latestproducts/4402.0Main%20Features2June%202017?opendocument&tabname=Summary&prodno=4402.0&issue=June%202017&num=&view>.

package following mass withdrawals from daycare by families who had been thrown into financial uncertainty and needed to cut costs, or who were concerned about safety.⁶⁸

Income and Assets after age 65

More Australian pensioners than ever before are having to work part-time just to get by, especially women and divorcees: pensioners who are working were three times more likely to have been divorced than aged pensioners or other self-funded retirees. Nearly 5% of people on the age pension are now in paid work, and the majority of working women pensioners wanted to work less (Clarke, 2020).

High rates of home ownership among older Australians has provided a key financial asset on retirement. Surprisingly, despite the pay gap and expensive housing market, Australian women are more likely to own their home than men. According to the Australian Bureau of Statistics (ABS), overall, 60% of women own their home either with a mortgage or debt-free, compared with 56% of men. However, the figures also show that while nearly half of single fathers own a home, only 40% of single mothers are homeowners (Fitzsimmons, 2019).

As in New Zealand, home ownership rates among people aged 65 and over have decreased in recent years, with a higher proportion of older people renting or paying off a mortgage. In 2003–04, 79% older people owned their homes without a mortgage; this had declined to 76% in 2015–16 (Australian Institute of Health and Welfare, 2018).

ABS data showed the huge difference in wealth of older Australians in owner-occupied households compared to those that rent: in 2017–18, property-owning households with at least one of the occupants aged 65+ had a median net worth of \$960,000, similar households still paying off a mortgage had a median net worth of \$934,900, while the median net worth of similar households that rent was just \$40,800 (Thompson & McDonald, 2020). Also, according to CoreLogic, saving a 20% deposit for a house in any Australian capital city now takes nine years for a typical household, and a median-priced property in Sydney now costs more than eight times the average household income (Thompson & McDonald, 2020).

Poverty and hardship outcomes

In Australia, older women are the fastest growing group in poverty (Hodgson, 2018), the gender pay gap is 19%, the SG savings gender gap is 46%, and one in three women currently have no SG savings (C. Wood & Buckley, 2015). A recent European Commission study confirms that gender gaps in retirement income savings are many times as wide as pay gaps, and suggests that the hope that improvements in pay gaps will percolate through to pensions is unfounded (European Commission, 2018).

Australian women aged over 50 are at greater risk of financial and housing insecurity than older men. This has been linked to a number of compounding and systemic factors. Women in this older age group today did not benefit from compulsory superannuation at the beginning of their working lives, they were more likely to have been paid at a lower rate than their male counterparts and were likely to have taken time out of the paid workforce to have children and fulfil

⁶⁸ See https://www.theguardian.com/australia-news/2020/may/11/free-childcare-has-been-amazing-australian-parents-hope-pandemic-may-pave-way-for-reform?utm_term=RWRpdG9yaWFsX0d1YXJkaWFuVG9kYXIBVVMtMjAwNTEx&utm_source=esp&utm_medium=Email&CMP=GTAU_email&utm_campaign=GuardianTodayAUS.

caring roles. (National Older Women’s Housing and Homelessness Working Group, 2018, p. 4)

The National Rental Affordability Index shows that for single aged pensioners, an unaffordable private rental market, the decimation of social housing, and the increasing cost of renting and home purchase means the demand for affordable housing far exceeds current supply (National Older Women’s Housing and Homelessness Working Group, 2018, p. 6).

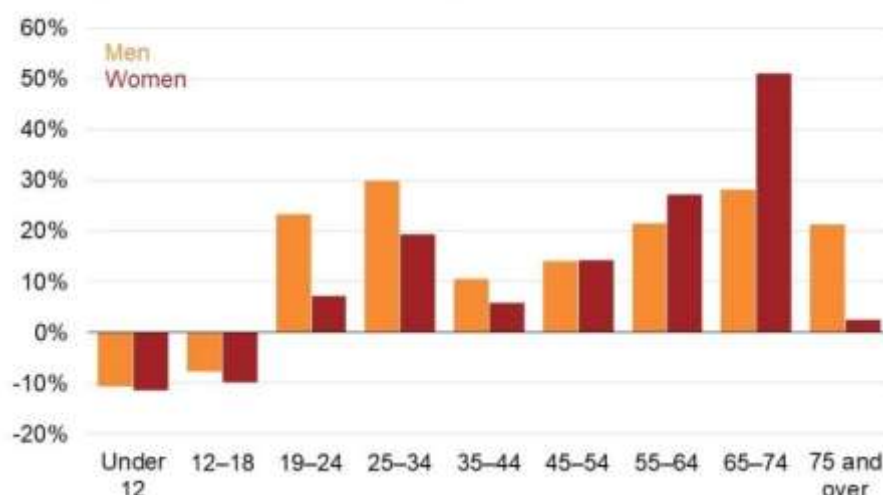
Fewer retirees in future will be in social housing. Historically, more than 50% of those retirees renting did so from housing authorities, but recent years show that proportion has fallen to less than 40%. Overall, only 11% of all renter households are in public and social housing (Coates & Nolan, 2020, p. 19).

The 2016 Census by the ABS showed that, while men accounted for 63% of all those homeless aged 55+, and their numbers increased by 26% (to 11,757 in 2016), the number of homeless women aged 55+ increased by 31% between 2011 and 2016 from 5,234 to 6,866 (Hartge-Hazelman, 2019, p. 18). *“The root cause of all homelessness is poverty”* (National Older Women’s Housing & Homelessness Working Group, 2018, p. 6).

More recent data from Grattan Institute (Figure 11) shows homelessness continues to grow most rapidly among older women.

Figure 11. Homelessness is growing most rapidly among older women⁶⁹

Percentage increase in homelessness, by gender and age, 2011 to 2016



Australian Age Pension

[T]he Age Pension ... 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 periods of unemployment, caring responsibilities, or working part-time. (Coates & Nolan, 2020, p. 14)

The Australian Age Pension⁷⁰ is the main income support for people who have reached eligibility age of currently 66 years, increasing by 6 months every 2 years until reaching 67 on 1 July 2023. Eligibility for citizens and residents also requires Australian residence for at least 10 years, including 5 consecutive years. Australia (with Norfolk Island and

⁶⁹ See <https://blog.grattan.edu.au/2019/06/who-is-homeless-in-australia/>.

⁷⁰ See <https://www.servicesaustralia.gov.au/individuals/services/centrelink/age-pension>.

Lord Howe Island) has international social security agreements with some countries, including New Zealand, Ireland and Canada, where living/working may give eligibility.⁷¹

Table 5 shows the different rates of Age Pension payments for singles and couples. Relationship status can affect the payment rate,⁷² and rates differ for some people getting a pension in 2009. Amounts shown in Table 5 are the maximum annual rates.⁷³

Table 5. Maximum annual rates of the Australian Age Pension (A\$) as at April 2020

	Single	Couple each	Couple combined	Couple apart due to ill health
Maximum basic rate	\$22,375.60	\$16,866.20	\$33,732.40	\$22,375.60
Maximum Pension Supplement	\$1,809.60	\$1,365.00	\$ 2,730.00	\$1,809.60
Energy Supplement	\$3,666.00	\$275.60	\$551.20	\$366.60
Total	\$24,551.80	\$18,506.80	\$37,013.60	\$24,551.80

The fortnightly Energy Supplement⁷⁴ is available for those who qualify through eligibility for an Age Pension, Carer Payment or Disability Support Pension (and aged 22 years +). Income and asset tests apply to receipt of the full Age Pension, although a recipient can earn up to an extra \$24.60 per fortnight for each dependent child.

Age Pension Income and Asset Tests

The Income and Asset Tests for eligibility for the Age Pension work in tandem. Table 6 shows the maximum allowable earned income before the Age Pension is abated.

Table 6. Income test applying to full Age Pension receipt from 20 March 2020 (A\$)

Situation	Income per fortnight	Deduction applied
Single	Over \$174	50c per dollar
Couple living together or apart	Over \$308	50c per dollar

Table 7 shows how, depending on family situation, earned income over the specified amounts creates cut-off points for eligibility for the Age Pension, although eligibility for a part pension may remain. The Work Bonus reduces the amount of employment income or eligible self-employment income applied to the income test.⁷⁵

Table 7. Maximum earnings to be eligible for the Age Pension (A\$)

Situation	Cut-off point for eligibility
Single	\$2,062.60 per fortnight
Couple, combined income	\$3,115.20 per fortnight
Couple, separated due to illness, combined income	\$4,085.20 per fortnight

The amount of Age Pension a person is eligible for reduces by \$3 per fortnight per \$1,000 of assets exceeding the amounts shown in Table 8.⁷⁶

⁷¹ See <https://www.servicessaustralia.gov.au/individuals/services/centrelink/international-social-security-agreements/which-countries-have-agreements-us>.

⁷² See <https://www.servicessaustralia.gov.au/individuals/services/centrelink/age-pension/how-much-you-can-get/your-relationship-status>.

⁷³ In addition, in response to the pandemic, the Government paid an \$750 Economic Support Payment to those eligible living in Australia between 12 March and 13 April 2020. A second \$750 Economic Support Payment will be paid from 13 July to those eligible and not in receipt of the \$550 Coronavirus Supplement.

⁷⁴ See <https://www.servicessaustralia.gov.au/individuals/services/centrelink/energy-supplement/how-much-you-can-get/payment-rates-pension-or-allowance#a1>.

⁷⁵ See <https://www.servicessaustralia.gov.au/individuals/services/centrelink/work-bonus/how-it-works>.

⁷⁶ See <https://www.superquide.com.au/in-retirement/age-pension-asset-test-thresholds>.

Table 8. Asset test applying to full Age Pension receipt from 20 March 2020 (A\$)

Situation	Homeowner	Non-homeowner
Single	\$263,250	\$473,750
Couple, combined	\$394,500	\$605,000
Couple, separated due to illness, combined	\$394,500	\$605,000
Couple, 1 partner eligible, combined	\$394,500	\$605,000

Rent assistance may be available for those paying rent, fees in a retirement village, lodging, board and lodging, site or mooring fees if the main home is a caravan, relocatable home or a boat. Fortnightly rent over A\$124.60 for a single person, and A\$201.80 for a couple qualifies them for assistance, up to a maximum of A\$139.60 and A\$131.60 respectively. Higher rates are available for those caring for children.⁷⁷

The Pension Supplement⁷⁸ (Table 9) is paid as part of regular fortnightly income support payments to help eligible recipients meet the costs of daily household and living expenses.

Australians over the age of 60 on the Age Pension or other welfare benefit may also qualify for the Pensioner Concession Card giving access to cheaper utility and medical bills, and discounts on public transport. The Seniors card, offering a discount on public transport and some goods and services; and/or the Commonwealth Seniors Health Card, ensuring cheaper prescriptions and medical appointments are available to those not on the age pension.⁷⁹

Table 9. Fortnightly Pension Supplement (guide only) (A\$)

Situation	Minimum	Maximum
Single	\$37.40	\$69.60
Couple, combined	\$28.20 each	\$52.50 each
Couple, separated due to illness, combined	\$37.40 each	\$69.60 each

In 2018, around 67% of Australians over the eligibility age received the Age Pension, with 41% on the full pension and 25% on a part-pension. The proportion of the male and female population aged 65 and over receiving income support payments remained relatively stable with slightly more females than males.

Superannuation Guarantee

The Australian Superannuation Guarantee (SG) is Australia's compulsory saving second tier. The SG requires employers to contribute a minimum of 9.5% of each eligible employee's earnings (ordinary time earnings) to a complying super fund or retirement savings account. To be eligible an employee must earn A\$450 or more before tax in a calendar month.⁸⁰

Critically, many women do not earn the minimum required to access the employer contribution to the SG. An estimated 43% of women work part-time, and have more than one employer, meaning around 220,000 women miss out on A\$125 million of superannuation contributions as they do not meet the requirement to earn A\$450 per month (before tax) from one employer (Women in Super, 2020).

⁷⁷ See <https://www.servicesaustralia.gov.au/individuals/services/centrelink/rent-assistance/how-much-you-can-get>.

⁷⁸ See <https://www.servicesaustralia.gov.au/individuals/services/centrelink/pension-supplement/how-much-you-can-get>.

⁷⁹ See <https://moneysmart.gov.au/retirement-income/age-pension-and-government-benefits>.

⁸⁰ See <https://www.ato.gov.au/business/super-for-employers/>.

The SG design and the eligibility threshold work to the disadvantage of women with multiple jobs and it is not easy to see how this could be resolved by aggregation in a system that is based on the individual's employer contributions.⁸¹

The SG rate is due to rise incrementally from 9.5% to 12% between 2021 and 2025.⁸² It is worth noting that the Federal Treasury, along with the superannuation industry, recognised that lifting compulsory superannuation contributions to 12% will not help women close the gender pension gap. Moreover, *"Increasing compulsory superannuation to 12% of wages will cost Australian workers \$20 billion a year in take-home pay and exacerbate sluggish wage growth"* (Kehoe & Cranston, 2019). On the other hand, Women in Super argue *"that the legislated rise in SG is critical to improving women's adequacy in retirement... We estimate that \$21,000 is the amount that low income earners will lose in super savings if the SG increases does not go ahead as planned up to 2025"*.⁸³

The move to raise contributions to the SG illustrates the tensions if improved equity for women is the goal. If the intent is to shift the balance of retirement resources away from the Age Pension by expanding the paid work contribution, it could be to the detriment of women: higher employer contributions could be at the expense of wage rises, reducing their already low standard of living pre-retirement.

The SG is taxed very concessionally compared to other savings vehicles. Contributions by the employer, salary sacrifice, and personal deductible contributions are taxed at 15% up to a cap of \$25,000 per annum. For those who would not pay this amount of tax there is a low-income superannuation tax offset (LISTO) up to \$500 per annum which the government pays automatically into eligible employees' SG if their fund has their tax file number.⁸⁴ The effect of this is for those earning under A\$37,000 is that the 15% tax is effectively paid back into the SG account. If income and super contributions combined are more than \$250,000, then an extra 15% tax is payable.

Voluntary contributions out of after-tax income are also favourably treated for taxation in a complex set of arrangements (co- contributions) but are unlikely to be of much benefit to low income women.⁸⁵

Earnings in the fund are taxed at 15%, and withdrawals are largely tax-free if after age of preservation. While this is not the full EET tax treatment of traditional superannuation schemes (more like ttt or ttE) the advantages are highest for those on the highest tax marginal rates while negligible for those on the lowest or zero rate⁸⁶. Women will therefore receive far less than men on average from tax incentives.

Grattan Institute researcher Brendan Coates estimates if the rate of contribution is raised to 12% the costs of extra super tax breaks would be more than the saving in the Age Pension spending. *"It's a \$2 billion-a-year hit to the budget once super hits 12 per*

⁸¹ Compare the SG multiple schemes and providers, the lost pots of many contributors who have changed jobs multiple times, and the exclusion of many women via the eligibility threshold, to the simplicity of KiwiSaver's IRD 'clearing house' model.

⁸² See <https://www.afr.com/policy/tax-and-super/fears-review-could-foil-move-to-12pc-super-20190527-p51rjx>.

⁸³ Comment via 21 September 2020 email: Sandra Buckley, CEO, Women in Super, womeninsuper.com.au.

⁸⁴ See <https://www.ato.gov.au/Individuals/Super/In-detail/Growing-your-super/Low-income-super-tax-offset/>.

⁸⁵ See <https://www.ato.gov.au/Individuals/Super/Growing-your-super/Adding-to-your-super/Government-super-contributions/#Supercocontribution>.

⁸⁶ See <https://www.australiansuper.com/compare-us/fees-and-costs/how-your-super-is-taxed>.

cent, and those extra super tax breaks skew heavily to the wealthiest 20 per cent of Australian workers."⁸⁷

Those aged between 55 and 60 can withdraw a lump sum up to the low rate threshold, currently \$185,000, tax-free. This is a lifetime limit and is indexed annually. The threshold does not include the tax-free portion of the SG account. If some of the SG is withdrawn under age 60 but after preservation age (55 to 59 depending on date of birth), it will attract tax on some elements whether the money is taken as a lump sum or an income stream. For those aged 60 or over, this income is usually tax-free, while those under 60 years may pay tax on their SG income stream.⁸⁸

Women save less via superannuation because they earn less, and the current generous annual caps on pre-tax contributions are predominately understood and accessed by older, high-income men to reduce their tax bills (Coates, 2018).

Half the benefits flow to the wealthiest 20% of households, who already have enough resources to fund their own retirement, are unlikely to qualify for an Age Pension, and therefore do not need government support. (Coates & Nolan, 2020, p. 16)

Over the 2018 – 2019 year, while the gender pension gap was narrower than it has ever been for women aged 15 and over, the average SG balance was \$121,300 for women compared to \$168,500 for men (Hartge-Hazelman, 2019, p. 8). The medians show an even less positive picture. In 2017–18, the median SG balance was \$118,556 for women and \$183,000 for men aged 55-64 years. Clare (2017, p. 5) highlights that "Overall medians are much lower, especially for women, reflecting the larger portion of women who report no superannuation savings at retirement."

COVID-19 in 2020

In 2020, COVID-19 precipitated demands for access to accumulated retirement savings and the rules around early access to SG were changed. People adversely financially affected by COVID-19, may be able to access some of their SG early. Eligible citizens and permanent residents of Australia or New Zealand can apply once in the 2020–21 financial year to access up to \$10,000 of their SG. In addition to the COVID-19 adverse financial effect, one of the following circumstances must apply: the applicant is unemployed or a beneficiary, has been made redundant, has had their working hours reduced by 20% or more (including to zero), or was a sole trader and their business was suspended or there was a reduction in turnover of 20% or more.⁸⁹

The August 2020 figures from APRA (Australian Prudential Regulation Authority) reveal super funds have paid out over \$30 billion to members across more than four million payment applications in 2020 as part of the COVID-19 response. Around 97% of applications received were accepted, and APRA noted that 151 of the 175 funds in APRA's data collection program had made payments during the week to 2 August, indicating demand for early release was widespread across industries.⁹⁰

⁸⁷ See <https://www.abc.net.au/news/2020-09-22/superannuation-guarantee-increase-has-growing-opposition/12684662>.

⁸⁸ See <https://moneysmart.gov.au/how-super-works/tax-and-super>.

⁸⁹ See <https://www.ato.gov.au/individuals/super/in-detail/withdrawing-and-using-your-super/covid-19-early-release-of-super/#Eligibility>.

⁹⁰ See https://www.ifa.com.au/news/28378-early-super-payments-surge-above-30-billion?utm_source=IFA&utm_campaign=10_08_2020&utm_medium=email&utm_content=1&utm_emailID=292172c370dc5ae82f3ed7fdcc03e62abcaa8c0774a28e5e04cac66d1cd246a0.

Women in Super, the Australian Institute of Superannuation Trustees and Mercer analysed the aggregated data of approximately one quarter of all Australians who accessed early release. They found women were overrepresented, increasing the gender pensions gap with effects likely to get worse 'when the second tranche ends 31 December 2020':

- Over 40% of early release applicants were between the ages of 25-34
- One in five women aged 25-34 made an early release application
- On average, early release applicants started with lower SG balances
- Women, starting with lower balances than men, eroded their accounts more
- The early release scheme increases the gender pension gap for women
- Gender pension gap for women aged 25-34 vs men increased from 21% to 45%
- Gender pension gap for women aged 55-59 vs men increased from 44% to 51%.⁹¹

Women's Agenda reports Treasury data showing that as of 11 May, almost 1.4 million people accessed their SG early: more than 463,000 were under the age of 30, and 581,700 were women. Jobs have slumped 8.1% for women compared to 6.2% for men and hours worked by women have reduced by 11.5%, compared with 7.5% (Hill, 2020).

Young women are particularly affected due to their overrepresentation in crisis affected industries such as retail, hospitality and childcare as well as in casual employment. Job losses are heaviest in accommodation and food services where 40% of those losing work are young people aged 20-29. Women make up over half of the 950,000 casual employees ineligible for income support payments and young women aged 15-24 are more likely to be contracted on a casual basis compared with workers over the age of 25.... young people are being forced to withdraw from their super.... However, this could have significant long-term consequences. Early modelling shows that a 20-year-old woman withdrawing \$20,000 from superannuation today could lose \$120,000 by the time they retire. A 30-year-old-woman could lose \$100,000. (Hill, 2020)

Of course, as shown above, not everyone has an SG account they can draw on, and as also noted, women's accumulated SG is on average already smaller than men's average SG as a result of cumulative negative gender effects. There is wide concern at the ease with which people are drawing on these balances and maybe using the money in short-sighted or fraudulent ways, including withdrawing and recontributing SG for a tax advantage.⁹²

Men dipping into their superannuation nest-egg during the pandemic have spent 12% more than normal on gambling in the fortnight after receiving the payment, twice the increase devoted to betting by women who have accessed their super early.... Women making early super withdrawals have been more likely than men to increase their purchases on essentials for themselves and their families ... But there was little difference in the amount used to make debt repayments with women devoting 15% of early super withdrawals to that purpose and men 14%. (Wade, 2020)

Possible ways forward

Solutions to the gender pension gap must begin prior to pension age. Wood et al (2020) argue that addressing childcare costs is a critical issue. They suggest a subsidy of 95% of child-care costs for low-income families, tapering down slowly to zero as family income increases, would cost taxpayers an additional A\$5 billion a year, and would enable many women who want to increase their paid work to do so. This would support

⁹¹ Comment via 21 September 2020 email: Sandra Buckley, CEO, Women in Super, womeninsuper.com.au.

⁹² See <https://www.ato.gov.au/Individuals/Super/In-detail/Withdrawing-and-using-your-super/COVID-19-early-release-of-super---integrity-and-compliance/>.

the post-COVID recovery and boost GDP by about \$A11 billion a year in the medium term through higher workforce participation.

This assessment from Riach, O'Hare, Dalton, & Wang (2018) suggests that any move that increases the role of compulsory saving through employment and diminishes the role of the state pension will adversely affect women:

Tied to paid work, the current superannuation system benefits those who are able to work full time and continuously before retirement, enabling them to accrue enough superannuation for a comfortable retirement. Those who do not or cannot work like this are much more susceptible to retirement poverty. (Riach, O'Hare, Dalton, & Wang, 2018, pp. 28 - 29)

To reduce the overall gender pension gap and outcomes in retirement for women there are practical improvements to policy that could be made.

A first simple step would be stronger encouragement of the self-employed to contribute to their retirement savings, which could be progressed by raising awareness of the super tax concessions available.

If the age pension was reformed and redesigned as an individual payment, not subject to a means test based on joint assets and income, low income women would have more autonomy in retirement. For many this would be an improvement in their well-being.

Also, the parameters of the Superannuation Guarantee could be changed. For example, Australian Super (2020) is lobbying the government to benefit women by abolishing the SG \$450 a month threshold; and advocating for mandatory SG for those on paid parental leave and carers payments. The devil would be in the detail of such policies that are unlikely to help many low-income women without a work history.

More controversial is the Australian Super (2020) argument that an increase in the rate of contribution would help women accumulate a more adequate SG. As noted earlier, caution is recommended by the Federal Treasury whose modelling suggests note that an increasing compulsory superannuation to 12% of wages would exacerbate sluggish wage growth as well as costing workers \$20 billion a year in take-home pay (Kehoe & Cranston, 2019). It might look like the employer is paying but it is likely that any increased employer contribution will be at the expense of wage rises, and that could hurt low income women the most.

Coates (2018, p. 2) proposes two reforms to 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.*" This is an urgent and necessary reform.

The second reform he proposes is a targeted boost to the Age Pension for retirees who do not own their own home, delivered as higher Commonwealth Rent Assistance (Coates, 2018, p. 2). Unfortunately, the second suggestion, as applied in New Zealand with the Accommodation Supplement rental assistance, has proved to be a boon captured by landlords rather than a benefit to renters.

Sandra Buckley, *Women in Super* CEO, recommends rectifying the inequity which sees the lowest two income tax deciles receive no positive government contribution to their SG. The average LISTO payment of \$240 p.a. to a low-income earner is only an offset to the 15% tax levied on all employer contributions. A highly targeted policy measure to put funds directly into the accounts of low-income earners would address this structural

tax inequity which is a factor in driving the gender super gap. *Women in Super* advocates for payment to be made to:

- anyone who earns \$37,000 or less p.a. (payment could be made through the existing LISTO mechanism);
- has a super account balance of less than \$150,000 and
- is over the age of 25 years (to avoid capturing university students).⁹³

⁹³ Comment via 21 September 2020 email: Sandra Buckley, CEO, Women in Super, womeninsuper.com.au.

8. Women in the Irish retirement system

Overview

Ireland has around the same population as New Zealand, but unlike New Zealand, Ireland has a piecemeal and complex pension system comprising a plethora of traditional workplace pension schemes and a complex, first tier state pension scheme based on a contributory record and means-tested top-ups.

Women in Ireland face similar issues of gender pay gaps, high cost child-care, lower contributions to savings schemes that are found in other countries. These disadvantages are compounded for Irish women in retirement by the design of pension policy.

Many efforts have been made to reform the Irish pension system. In particular, since 2006, the intention has been to move Ireland to an auto enrolment system for private savings from 2022 (see for example Government of Ireland, 2007, 2010a, 2010b). Reforms however have stalled with the Government of Ireland's roadmaps and strawman consultation resulting in little firm political action (St John, 2018). In 2020, the new coalition government is making auto enrolment a priority, but while increased coverage and streamlining of administration are worthy goals there is little recognition of the specific issues that distort retirement savings schemes for women.

Following the 2020 election negotiations, the two main Irish political parties Fianna Fáil and Fine Gael in coalition with the Green Party agreed to defer the increase in the State pension age that was set to rise from 66 to 67 years in 2021, allowing access to a retirement benefit without work seeking requirements at age 66. A new commission on pensions will be tasked with reporting back by June 2021. It is likely that the controversy over the age will be a focus with concerns that unless the age is raised the pension will be 'unaffordable'. For the significant proportion of the working population who have no private or employed-based pension plan, it was expected that an auto-enrolment, opt-out scheme with matching contributions from workers and employers will be phased in over a decade.

The advent of COVID-19 has changed the landscape. It is likely that the implementation of any new auto-enrolment scheme now could be much further away from the original 2022 start date,⁹⁴ and there appears to be little discussion of state pension changes. Issues of early access to locked-in retirement savings schemes under pressures from COVID-19 appear to be less of an issue in Ireland than Australia or New Zealand where such schemes are more dominant.

Pension poverty outcomes

The OECD figures in Appendix 1 do not show a markedly higher rate of poverty for women (7.7%) in older age than for men (5.7%). However, such figures do not reveal hidden poverty within households where women may have little financial autonomy. Many of the concerns around poverty outcomes for women focus on the shortcomings of the state pension discussed in the next section.

The state pension must provide a sufficient income to avoid poverty and guarantee a decent standard of life. As women disproportionately rely on the state pension, income certainty is crucial. Indexing must allow for women's longer life span. 10.8% of women over 65 are at risk of poverty according to latest CSO SILC data. An adequacy benchmark of 40% net average industrial earnings would ensure

⁹⁴ See for example: <https://www.mhc.ie/latest/insights/pensions-covid-19-the-post-pandemic-pensions-landscape>.

quality of life and ensure pension income standard would increase in line with average living standards and earnings. (National Women's Council of Ireland, 2018)

Women who do not have a secure state pension are also likely to have unmet housing needs.

The scarcity of good quality, safe, secure, long term, affordable housing options contributes to instability and distress for many low income older women. Older women usually become homeless due to their low incomes, not because of having complex needs, so it is difficult for them to access priority social housing. They are marginalised in the housing market, in the private rental market, in the social and affordable housing markets, and even in the homelessness services sector (National Older Women's Housing and Homelessness Working Group, 2018, p. 7).

The State Pension (contributory)

The first tier comprises two state pensions. The first is contributory and requires compulsory pay-related social security contributions (PRSI) from employees and employers at a complex variety of different rates. It is the weeks of contributions that matter not the amount contributed, but for part-time earnings the PRSI rate is less than a full-time rate. To qualify for any state pension, 520 paid contributions must have been made. For the maximum personal rate of State Pension (Contributory) 2,080 or more PRSI contributions (or 40 years of employment) are required. The complex contributions rules for the contributory state pension are set out (in simplified form) in Box 1.

Box 1. Contributions required for state pension (contributory)⁹⁵

The date of *entry into insurance* has complex rules and exemptions but is used to calculate the yearly average number of PRSI contributions. An average of 10 contributions a year is needed to get a minimum pension, and an average of 48 a year to get the maximum pension.

Since 6 April 1994, the [Homemakers' Scheme](#) has disregarded up to 20 years spent as a homemaker when calculating the yearly average. For those who reach pension age on or after 1 September 2012, the [new Total Contributions Approach](#) (TCA) may be used from 2020 instead of a yearly average.

To qualify for a homecaring credit a person must be full-time caring for a child under age 12 or an ill or disabled person aged 12 or over. The person being cared for must be so disabled or incapacitated as to need continuous supervision. Only one person can be regarded as the homecarer at any one time.

Under the new arrangements a person who has a 40 year record of paid and credited social insurance contributions, subject to a maximum of 20 years of the new HomeCaring credits, will qualify for a maximum contributory pension where they satisfy the other qualifying conditions for the scheme. (Department of Employment Affairs and Social Protection, 2019).

The 2020 rates of state pension vary according to contributions records as shown in Table 10. If there is a "dependant" adult (spouse, civil partner or defacto) an additional amount can be payable to that person. The principal applicant's income is not taken into account in this assessment but the income of that partner is, as is any property apart from the home.

⁹⁵ See

file:///C:/Users/sstjo/AppData/Local/Packages/Microsoft.MicrosoftEdge_8wekyb3f

And

https://www.citizensinformation.ie/en/social_welfare/irish_social_welfare_system/social_insurance_prsi/home_makers_scheme.html.

These complex and limiting rules mean that women can fall far short of the contributions needed to gain a full state pension in their own right. For example, the National Women’s Council of Ireland (2017) found that:

- *On average, women’s State pensions are smaller than men’s by more than a third;*
- *Women account for just over a third of those receiving a full State pension;*
- *Six out of 10 women aged over 70 have to get by on the much lower State (non-contributory) pension;*
- *Older people living alone are at particular risk of poverty, and 7 out of 10 lone adults aged between 75 and 84 are women.*

Table 10. State Pension (Contributory) rates 2020 for people who qualified on or after 1 September 2012 (PRSI: pay-related social security contributions)

Yearly average PRSI contributions	Personal rate per week	Increase for a qualified adult* (under 66)	Increase for a qualified adult* (over 66)
48 or over	€ 248.30	€ 165.40	€ 222.50
40-47	€ 243.40	€ 157.40	€ 211.40
30-39	€ 223.20	€ 149.80	€ 200.50
20-29	€ 211.40	€ 140.10	€ 188.70
15-19	€ 161.80	€ 107.80	€ 144.50
8-14	€ 99.20	€ 65.70	€ 89.50

Social Justice Ireland (2019) give an example to illustrate how women can easily fall through the cracks and how complicated the system is.

Joan is 69 years old. She entered employment at the age of 16 in 1965. In 1974 her first child Mark was born with a disability. Joan was unable to return to work and devoted her life to caring for Mark who required fulltime care. Joan reached age 66 in 2015 and was advised by the Department of Social Protection that as she had only 460 paid contributions and 62 reckonable contributions she would not qualify for the State Pension (Contributory).

Because Joan’s husband was employed as a civil servant and paid a Class B stamp (pre-1995), his civil service pension was fully assessable in the means test of the State Pension (Non-Contributory) and so Joan didn’t qualify for either the State Pension (Non-Contributory) or an increase for a Qualified Adult (IQA), nor could she make voluntary contributions. Therefore, despite caring fulltime for Mark for 43 years, Joan has no entitlement to Carers’ Allowance or any State Pension and so relies entirely on her husband for financial support.

The outcomes for women are a denial of financial autonomy:

...many older women in Ireland who receive a very reduced pension or are only recognised through a ‘Qualified Adult’ increase in their husbands’ payment do not feel they can apply for the State Non-Contributory because it will involve a test of household assets - assets which they may have no control over or access to - and there is also a fear that it could jeopardize their husbands income. (National Women’s Council of Ireland, 2018, p. 5)

The State Pension (Non-contributory)

Women who do not received the State Pension (contributory) may gain access to a part pension as a qualified adult depending on their partner’s record as shown in Table10, or qualify for a lower means tested non-contributory pension. The maximum non-

contributory weekly pension in 2020 is €237 but it is essentially reduced dollar for dollar above the first \$30 of other income.⁹⁶

The two Irish state pensions discussion

Any system that relies on a contributory basis and a means-tested top up will put women at a disadvantage. It is especially so in Ireland as credits for time out of the workforce are rigidly defined and do not cover all the caregiving situations women experience. Paid work contributions are required as well as the care credits, limiting again their usefulness for women who do not have these. The complexity is daunting, making it very difficult for many women to understand what their actual entitlement on retirement might be.

While reforms of the state pension to adequacy and indexation were proposed in the 'Roadmap for pensions reform' (see Government of Ireland, 2018a), the contributory basis remains hard to dislodge in Irish discourse. The OECD's 2013 review of the Irish state pension system however suggested there were many signs of a weakening of the contributory principle (OECD, 2013, pp. 89-91). The OECD concluded:

This brief discussion shows that, contrary to public impression, the link between contributions and benefits in the current State pension scheme is very weak and that there are already numerous elements of redistribution in the system which have a more universal character. When the total contributions approach is adopted in 2020, some of these problems will be remedied. On the other hand, paying a full-rate pension on condition of 30 years of contributions will raise further questions on the contribution benefit link. The treatment of non-contributory periods, such as time out of work for reasons of childcare or unemployment, will be crucial. If, as planned, up to ten years will be credited for such periods, workers will receive the same benefit whether they pay contributions for 20 or 30 years. The system would then take more and more of the characteristics of a flat-rate universal pension system. At that point, there would appear to be a strong case for changing the logic of the scheme in a more transparent way by moving either to a universal or a means-tested pension system which is no longer based on contribution requirements. (OECD, 2013, p. 91)

Subsequently, the 2020 reforms for the Total Contributions Approach may improve outcomes for some women with care giving years but do not constitute a fundamental rethink. There is a need to question the case for maintaining such a complex system that has such clear inequities for women. The contributory basis in Ireland contrasts with New Zealand's universal, residency-based state pension upon which other savings can be built. It is one of the factors that has made the introduction of the auto-enrolment (AE) scheme (KiwiSaver) more straightforward.⁹⁷

In the case of Ireland, grafting on a second broad contributory scheme compounds rather than simplifies the retirement income system. Worse, as discussed below it is not currently designed to address the morass of existing private pension arrangements.

The critical decision is the relative importance in the pension system of the first-tier state pension. If the core of the pension system is an adequate, individual, comprehensive state pension, the lower poverty is likely to be and the greater the access women have to an independent income in old age.

⁹⁶ See <https://www.gov.ie/en/publication/6aec4d-current-rates-of-payment-for-social-welfare-payments-sw19/>.

⁹⁷ See Appendix and St John (2016) for details.

Women's groups have been vocal in calling for change. The National Women's Council of Ireland has argued for state pension reform that greatly simplifies and is more equitable for women by putting in place either a universal basic pension or a means-tested basic pension (National Women's Council of Ireland, 2018).

Social Justice Ireland (2019) have also strongly supported the view that a universal, individual state pension based on residency is a critical first step in achieving pension equality.

One of the ways in which a lack of fairness has long permeated the Irish pension system is manner in which entitlement to a pension from the State has been based on social insurance contributions. This ties pension entitlements to an individual's labour market participation history and has historically resulted in lower pension payments (and sometimes no pensions at all) for people (mainly women) who have spend long periods away from the labour force raising families or caring for elderly family members.⁹⁸

Occupational pensions.

There is no compulsory second tier in Ireland. There is a plethora of small workplace schemes, some may not be high quality and many appear not particularly transparent or accountable.

With 160,000 occupational pension schemes and just 1% of the EU population, Ireland is home to about 50% of all pension schemes in the EU. Notwithstanding this disproportionately high number of schemes, the proportion of employees in Ireland with supplementary pension cover is low by comparison with those countries that have mandatory/quasi-mandatory systems – just 35% of the private sector workforce has such cover (despite the availability of generous tax reliefs. (Government of Ireland 2018b, p14).

The average membership per scheme in Ireland is just 24 people (excluding single member schemes) and is "in sharp contrast to international practice which routinely achieve economies of scale with hundreds of thousands, and even millions, of members". (Government of Ireland, 2018c, p. 24)

Ireland has been very slow to act on the IORP II directive of the European Union which sought to improve the operation on of pensions schemes across the EU (IPE) by January 2019)⁹⁹. The Irish Association of Pension Funds has called for "an exemption from IORP II rules for pension funds with 100 members or fewer until suitable consolidation options become available".¹⁰⁰ Needed consolidation of smaller schemes through, for example, master trusts is well overdue.

Many DB schemes are facing funding problems for pensions in a time when longevity is increasing and interest rates are low but there is little appetite for the kind of reform that New Zealand undertook in the late 1980s (St John & Ashton, 1993).

Public sector employees have a higher rate of coverage so that the overall coverage of the workforce is around 50%. These public sector arrangements are embedded in the Irish culture whose benefits include politicians making their highly subsidised nature hard to challenge.

⁹⁸ See <https://www.socialjustice.ie/content/policy-issues/programme-government-misses-opportunity-pension-reform>.

⁹⁹ <https://www.asinta.com/news/ireland-legislative-update-retirement-eu-directive-iorp-ii-adoption-delayed/>.

¹⁰⁰ <https://www.ipe.com/news/regulation/iorp-ii-how-the-eu-directive-has-reshaped-the-pensions-industry/10029076.article>.

Over time, the participation of women has risen but this has not translated to a closing of the pensions gap. Collins (2020) shows that men contribute between 30% and 35% more than women to pension schemes. Other findings are that amongst retired people, 55% of retired men receive a private or occupational pension, compared to only 28% of women (Foster, Wijeratne, & Mulligan, 2020).

People may end up with several pension pots from several different employer-based schemes making pensions complicated to understand. Expensive tax concessions that primarily are of benefit to high income members remain an embedded part of the system and will be hard to dislodge.

Tax support for private pensions peaked at 1.9% of GNP in 2006, which was not far short of public support for state pensions at 2.1% of GNP. (Hughes & Maher, 2016)

The lack of the reform to this sector, including the use of expensive tax subsidies remains a likely impediment to the design and implementation of a straight-forward AE scheme.

As commentators have noted, women are not the main beneficiaries of tax incentives and their existence adds to the gender gap.

The redistributive impact of pensions arises not only from the generosity (or otherwise) of pensions but also from the mix of direct state expenditures and indirect tax expenditures. Even if these are not wholly equivalent, there is a clear trade-off between tax subsidies (for example to occupational and private pensions) and improvements to the state pension. Indirectly, women benefit less than men from tax expenditures, and therefore general equity considerations and gender equality principles suggest that reforms should focus on a considerably enhanced state pension in the context of a more limited use of tax for supplementary pensions. (Collins & Hughes, 2017)

The Irish Auto-Enrolment reform debate

The roll-out of automatic enrolment (AE) scheme in Ireland¹⁰¹ proposed for 2022 was expected to complement, not replace existing schemes (Government of Ireland 2018c, p. 8). In contrast, in New Zealand, it is expected that AE KiwiSaver will eventually supplant most conventional superannuation schemes, ie KiwiSaver will continue to grow while other schemes are static or falling in both membership and assets.

This suggests that AE in Ireland, with its multiplicity of schemes, will signal a shift towards further complexity rather than pursuing routes to simplifying the system – despite widespread acceptance that the current Irish system is overly complex and in need of simplification.

The National Women’s Council (2018) noted the emphasis on increasing occupational, second tier pensions through the development of the auto-enrolment scheme:

...Tying reform of the pension system more closely to the employment and earnings could exacerbate gender inequalities, given well researched gendered patterns of part-time and precarious employment. We are concerned that resources directed to the development of administrative and management supports for this system will be diverted from first tier pensions without a clear analysis of how this will impact women and workers in low-paid, part-time and precarious employment.

¹⁰¹ See Government of Ireland’s (2018a) roadmap for consultation on pensions reform, a separate paper on the universal social charge (Government of Ireland, 2018a) and a paper for final consultation on the design of a new AE savings ‘strawman’ programme (Government of Ireland, 2018b).

St John (2018) provides a commentary on the broad design of the AE proposals such as use of a clearing house, default providers and governance, high-lighting some of the specific issues of gender in the Irish proposals.

Box 2 sets out the critical proposals for membership inclusion (as set out in "A Strawman Public Consultation Process for an Automatic Enrolment: Retirement Savings System for Ireland") While there are some good and inclusive features such as no waiting time before enrolment, self-enrolment for self-employed and those outside the formal paid workforce, there are some aspects that have less benign implications for women. These include the age limits of 23-60, the €20,000 pa minimum earnings and the nature of the state subsidisation.

The care-giving years for women are typically with the age limit 23-60, and while those outside of these age limits can opt in, it is likely that many women, especially those who are out of the paid workforce to have children before qualifying for auto-enrolment, will miss out. Women are increasingly working in later life to make up for time out of the workforce and for those who return after the age of 60, the exclusion is inequitable and undermines the aim to close the gender pensions gap. Some of these women may be in a double bind if they do not have even the basic full Tier 1 State Pension because the means tested supplementary age benefit may capture the AE saving.

The Irish AE as proposed appears to disadvantage the growing number of women (and men) who experience more precarious employment, variable work hours, and other labour market uncertainties and the need to retrain from time to time. In these cases, a threshold based on annualised income may work unfairly, especially for those with several employers. Women, already disadvantaged in the state pension arrangements, and whose working life may involve casual part-time employment with several employers are most at risk here. Their exclusion from auto-enrolment gives the impression that they should not join the scheme when, in fact, they need the strongest of signals to join.

Box 2. Strawman Proposals: Target Membership (AE) (Government of Ireland 2018c)

- Thresholds based on annualised gross earnings and employee/member age will be used to determine who will be automatically enrolled.
- Current and new employees aged between 23 and 60 years of age and earning €20,000 or above per annum would be automatically enrolled.
- Those earning under €20,000 per annum and those employees aged under 23 and over 60 will be able to 'opt-in' to the system.
- There will be no employee waiting period before enrolment.
- Rather than being automatically enrolled, self-employed people will be able to 'opt-in' to the system.
- Employees who are existing members of a pension scheme/contract which meets prescribed minimum standards and contribution levels will not be automatically enrolled.
- An opt-in facility will also be considered for those outside of the paid workforce.

When employer contributions are made only to workers who are auto-enrolled, women may find they are effectively paid less and subsidise other members via the employer contribution. A 'total remuneration' approach may clarify this and could be considered.

Recent developments in the labour market, exacerbated with the effects and legacy impacts of COVID-19 will affect both genders but it will be more pronounced for women and younger workers. The chosen threshold income of

€20,000 is extraordinarily high. In contrast there is no effective threshold for New Zealand's AE scheme, and the threshold for Australia is much lower at an annual A\$5,400. For those whose income is variable, sometimes above and sometimes below €20,000, it is likely to be very complicated.

Issues around the 'clearing house' design and minimum earnings to qualify are paramount for women. It has been suggested in some circles that the Revenue could make real time adjustments for earned income that could overcome the lack of aggregation where women have several jobs and the total exceeds the threshold. Even so, it is far from clear how that would work in a world of short contracts, 'just in time' employment and variable hours of work, let alone during the impact of a pandemic.

In New Zealand, KiwiSaver has not resolved the 'total remuneration' debate, and the employer contribution can act as a subsidy to members paid for by those not in KiwiSaver whose total remuneration is consequentially lower. If the goal is to improve equity for women and low-income people, there is a case for reviewing the employer contribution and taking the emphasis away from employment earnings as the basis.

It is not only important that the self-employed and those outside the formal labour market are encouraged to opt in but that the contributions they make are rewarded. New Zealand offers a way of subsidising contributions in a way that contains costs. In KiwiSaver the reward of the Government Contribution of NZ\$521 (€288) is based on the first NZ\$1,043 (€598) contributed each year and is not related to being in employment. To get this subsidy, women in unpaid work at home may have their contribution paid from household income.

The Strawman's 1% initial contribution rate seems to be too low especially if there is no kickstart or fees subsidy. Small contributions may be eaten away and the popularity of the scheme questioned. New Zealand started with 4% employee and 1% rising over time to 4% employer contribution. Then in 2011 reduced both rates to 2% later rising to 3% each with options for employees to contribute at 4% or 8% (now including 6% and 10%). Initially there was a \$1,000 (€570) kickstart that cushioned small contributions.

In Ireland the eventual rollout to 6% employee and employer contributions will mean that those outside of the AE scheme will be seriously disadvantaged in a total remuneration sense. Employer contributions disadvantage those who do not belong because the increasing employer subsidy is at the expense of general wage rises.

Box 3 outlines the state incentives for the proposed AE scheme. The third and fourth proposals advantage those on higher pay, who are already advantaged. If the state provides an incentive, it is not clear that the employer also needs to provide one. The employee could be given a total remuneration package and make contributions of 2% rising to 12% contributions over time.

Box 3. Strawman Proposals: State-provided Financial Incentives (Government of Ireland 2018c)

- The State will provide an incentive for people to participate in the AE system.
- Although both the value and the mechanism for providing this incentive will only be finalised following this consultation, the incentive is, for the purpose of this Strawman, presented as a contribution worth €1 for every €3 the employee contributes towards their retirement savings account.
- Where the employee makes contributions in excess of minimum requirements, the State may also make additional contributions subject to a maximum level of contributions of 2% of annualised salary.
- The State contributions will match employee contributions on a pro-rata basis subject to a cap – possibly linked to a defined annual earnings level such as the proposed €75,000 maximum earning threshold or an average annual earnings threshold as reported by the Central Statistics Office.

While the incentives are tailored ostensibly to achieve equity goals, the €1 for €3 subsidy up to €75,000 implies a starting maximum subsidy of €250 rising over time to a maximum subsidy of €1500 on a 6% contribution. This is in direct contrast to the New Zealand approach which was to start with generous subsidies that lured people into the scheme and then progressively remove them. The remaining tax subsidy in KiwiSaver is minimal and targeted to be maximised at low annual contributions levels as described in section 5. Given that contributions on earnings are automatic for those in KiwiSaver, incentives are not strictly needed for those who are already members.

Nevertheless as noted, the original Kickstart of \$1,000 when people were first enrolled in KiwiSaver performed two useful functions. First as a significant incentive for low-income people to join and second as a cushion for small value accounts where otherwise fees might erode balances over time. Women would be advantaged by such provisions and it should be considered in the Irish case.

The tension is that subsidies are either expensive and inequitable, or cheap and largely ineffective. These tensions are not easily resolved. Nor should it be overlooked that incentives are costly to the state and they either reduce public saving or necessitate higher taxes elsewhere. They do, however, act to acknowledge that funds are 'locked up' and hence different to other savings. If state subsidies are minimal in the accumulation phase, there may be more scope for well-designed subsidisation of the decumulation phase (St John 2004 and St John and Dale 2019b).

It is highly likely that the cost of any proposed subsidy for Irish AE will be a sticking point in the current deliberations. Fiscal considerations can be expected to be at the fore especially now that the age of entitlement to the state pension is on hold. If Ireland was to consider something similar to the more modest tax subsidies in the New Zealand scheme, then a subsidy could be paid for in a way that is revenue neutral for the government – such as by redesigning current expensive tax subsidies so that the cost of such a 'broadening and recognising participation' incentive is paid from within the current resources used to support pension contributions (see Colins 2020).

Final comments

Ireland's tradition of using the contributory principle for the Irish State pension means many women face complex and confusing rules, with only a minority of women

qualifying for a full contributory State pension. Many women are disadvantaged by the means test on the qualified adult rate, and others by the stiff means test on the non-contributory state pension. There is an urgent need for simplification of Tier 1 and a need for the basic state pension to be adequate and accessible for all.

There is nothing in the roll out of auto-enrolment to suggest the proliferation of 'not fit for purpose' small schemes will diminish in Ireland. The Irish AE scheme has been described as a complement to existing schemes rather than a replacement. Progress on rationalisation of the existing schemes does not hold out much promise. The New Zealand experience suggests that for the AE scheme to be successful there needs to be a rethink of how the new scheme will replace these multiple small schemes over time and the mechanisms for achieving this.

Ireland appears to be retaining full subsidies for existing schemes including DB schemes for state employees. These are expensive and regressive. A reform may allow for a remodelling of these generous tax subsidies that have not served the needs of average women well. The new AE scheme also has expensive and regressive tax subsidies even though it is income capped. It is difficult to see how the cap applies to subsidies in situations where people have several jobs or are self-employed. It would be more targeted to give a kickstart subsidy to new enrollees and to design the state subsidies so that they can be readily accessed by members outside the paid workforce who may make contributions.

Women have been systematically disadvantaged in the Irish pension system, both state and occupational. It would be a pity to introduce an AE scheme that further entrenches this disadvantage with thresholds and exemptions that are too onerous. It is not only women who will be disadvantaged as the modern labour market becomes more precarious, and casual work and self-employment become more common.

The reform of pensions in Ireland, if well designed to take into account the changing labour market and the changes brought about by COVID-19, will enhance outcomes for both genders. But to make meaningful change for women, two sacred cows will first need to be relinquished: the contributory basis for the state pension with its means-tested non-contributory pension for those who fail the contributions test, and second the design of existing and proposed tax subsidies for private schemes.

The two state pensions could be joined up into one simple adequate comprehensive wage-linked individually-based non-contributory state pension based on simple residency criteria. Once that is done, along with the reform of tax incentives, a good centrally administered, auto-enrolment 'IrishSaver' that is women friendly can be grafted on and begin to replace the multiple 'not fit for purpose' current employer-based schemes.

9. Conclusions: three country comparisons

The long-standing issues around gender gaps in pay and pensions have been vastly exacerbated by the COVID-19 pandemic. The pressure applied to allow hard-pressed individuals to draw down their pension savings to meet short-term needs or to undertake risky business activities has been unfortunate and will make the rebuilding more difficult.

But the deep recession and the recovery phase also offer the possibility for improved policies that have the potential to reduce the gender inequality of outcomes in retirement. Perhaps the silver lining of the COVID crisis is that it has highlighted the issues faced by women in combining caring duties and working. 'Normalising' working from home raises the possibility of continued opportunities to work flexibly for women and men, enabling families to better combine childcare with working.

While this paper uses a gender lens, policies that improve outcomes for women in retirement will also be good for everyone, including the increased number of men whose life trajectories are beginning to look more like those of most women as part-time, variable hours, and insecure work spreads across the 'new' economy.

The issues are much wider than the design of pension policy as this paper has outlined. The needed reforms to other aspects such as costs of childcare, discrimination, unequal sharing of the caregiving role, access to affordable housing, costs of long-term care, are described here but are outside the scope of this paper to address. However, if pensions policies can be reformed to be more women-friendly, it may aid in raising the profile for the other needed reforms.

Women, Business and the Law 2020 tracks how a country's laws affect women at various stages in their lives. One of their critical measures is whether periods of absence due to child care are accounted for in pension benefits (World Bank, 2020, p. 29). Globally, few countries consider the pension penalties resulting from care-provision for children or for other family members. A problem both New Zealand and Australia face is that the basis on which such 'care credits' could be set is difficult for a Second Tier scheme based on employment earnings. As noted, in contrast to Ireland, neither Australia nor New Zealand require care credits for their First Tier state pension. However, somewhat optimistically, the thirteenth recommendation in New Zealand's Retirement Commissioner's 2019 Review of Retirement Income Policies is: "Introduce care credits to reduce the risk of being penalised for time out of employment caring" (Retirement Commissioner, 2019, p. 76).

This paper has examined retirement and policies in New Zealand, Australia and Ireland as countries that have very different retirement incomes policies, yet are similar in their reliance on a foundation tier of a basic state pension.

New Zealand has chosen a simple non-contributory, universal Tier One state pension, and a comprehensive opt-out auto enrolment scheme - KiwiSaver - as a quasi-compulsory Second Tier. Over time KiwiSaver is likely to replace other legacy employment-based schemes ensuring improved simplicity, portability and better governance.

Australia has a non-contributory Tier One state pension that is means tested. The well-established compulsory Second Tier - the Superannuation Guarantee - is partially tax incentivised as are their other savings schemes. Compared to New Zealand, the state pension is complex, the tax incentives are regressive and expensive, and the SG scheme does not have the New Zealand advantage of one central clearing house and one account per person.

Ireland has a complex mix of a contributory state pension and a non-contributory means-tested state pension as Tier One. There is a highly tax-incentivised array of traditional occupational defined contribution and pension schemes for a minority, especially in the public sector. It is actively investigating a comprehensive Auto Enrolment employment scheme similar to KiwiSaver in New Zealand. If grafted on the top of the other traditional schemes, the overall expense and complexity of an already complex system will increase.

It is not that any one country has the right approach, but there are broad inferences for policy that can be drawn from the experiences of all three countries if the intent is to reduce the gender penalty that women face in retirement from design of pension policy. Policies for long-term care have not been examined in detail here but are clearly of importance to women who on average use these services more than men.

It is clear that, in each of the countries surveyed here, insufficient data is gathered using a gender lens. It is nigh impossible to develop efficient, effective policies without reliable data. New or improved policies that will lift retirement outcomes for women who will otherwise fall further behind should, where possible, reflect principles of simplification, adequacy, inclusion and sustainability. Improved policies would acknowledge the value and range of the unpaid work, largely performed by women, that sustains our economies.

First Tier

First, and most critically, given emerging poverty and diminishing prospects for older women, there must be one secure, simple, comprehensive, inclusive, non-contributory state pension. This provides an important acknowledgement of everyone's contribution regardless of whether it was paid or unpaid. The following aspects need to be considered:

- **Adequacy.** The Tier One basic state pension must be sufficient, along with suitable housing policy, to protect older women against poverty.
- **Indexation.** The state pension must be supported by suitable indexing (such as to wages) so that living standards for women reliant on this tier do not fall relative to the average.
- **Individual entitlement.** Women's needs are best served when the state pension is an individual entitlement that is not reduced for their partners' income.
- **Tax-based income test.** If the state pension is taxable, a progressive tax system can ensure some clawback if that is desired. Care should be taken with an asset test as it adds complexity. An income test should be based on the individual's own income alone, including any shared income from relationship property if applicable.
- **Qualifying Age.** Any lifting of the qualifying age in the short-term is unlikely to be women-friendly. If it is used to save money, women may pay the price in other ways such as reliance on an inadequate and stigmatising welfare system. The adverse distributional consequences of raising the qualifying age may justify a search for other techniques, such as improved clawback through the tax system.

Second Tier

Women's outcomes in retirement can be also improved by the way the second tier operates. While an adequate Tier One is required to protect those with no other saving,

on its own it does not ensure that lower-middle income women will achieve a dignified and fulfilling retirement in which their living standards do not plummet. The state pension alone does not offer a buffer to protect women from unexpected costs such as for health needs.

- **Access.** For Tier Two to meet the needs of women, access and membership should be part of being a citizen, and not confined only to those in the paid workforce. Voluntary contributions could be encouraged from family income for women in caregiving roles and/or contributions could be made by the state. Those who are self-employed should be incentivised to contribute via access to modest well-designed tax concessions,
- **Contributions.** In opt-out schemes where the employer alone contributes it may not seem so obvious that the individual is actually paying the employer contribution through lower wages. Women may be better served by worker contributions alone. This is also more consistent for the self-employed and many women have that kind of employment.
- **Role of compulsion.** A voluntary scheme with employer contributions can penalise those workers who are outside of the scheme if the codified employment approach is not 'total remuneration'. Compulsion is one answer but may have adverse effects on low-income people. Another approach is to remove the employer contribution but not the obligation to deduct the equivalent amount from gross wages that are reset inclusive of current employer contributions. A 'total remuneration' employment system is the simplest solution.
- **Access to savings.** Access to a temporary suspension, with automatic re-start of contributions after one year, would provide maximum flexibility to best meet the needs of women. The automatic restart could be accomplished via the central clearing house (in New Zealand, the IRD). Withdrawals in cases of hardship/COVID-19 impacts may undermine women's ability to achieve retirement security as may withdrawals for housing and need careful consideration.
- **Choice of rate of contribution.** Higher rates of contribution may serve the purpose of generating more realistic lumpsums on retirement, but they should be carefully balanced against the impact of these higher rates in depressing wages and affecting the current living standards of women. A choice of rates, as is possible in KiwiSaver, along with education and encouragement, may fulfil the purpose best.
- **Unpaid work.** Until contributions from the work of women at home is recognised with a commensurate monetary payment there must be some mechanism in superannuation policy for compensating women for their unpaid contributions to the economy. If this is to be simple and yet not exclude large numbers of women whose unpaid work is not of a standard type, it may be difficult to design. A state contribution to mothers and other caregivers does not solve the inequities of boundaries around who qualifies. One alternative would be to adopt a more generous Tier One - perhaps balanced with higher taxation.
- **Age for auto-enrolment.** It is best for women if auto-enrolment to Tier Two applies to everyone over the age of 18 and there is no age cap. Rather than annual subsidies and employer contributions applying only between a band of ages, women should have access to these payments for the same number of years as men, especially if there is no allowance built in for the caregiving years.
- **Income threshold for auto-enrolment.** An income threshold below which the employer does not have to contribute harms women when they have multiple

jobs or have part-time, non-permanent or low-paid employment. It is better to exclude only very minor short-term employment for simplicity, and to promote the inclusion of all women.

- **Clearing house model.** As in the KiwiSaver system, a single membership per person, and central collection and dispersal of contributions (by the IRD) avoids the problem of small, scattered accumulations.
- **Incentives and subsidies.** Women would benefit from well-designed incentives to belong and to contribute to Tier Two schemes. Traditional tax incentives for saving are expensive and should be minimised. The savings could be applied to far less regressive measures that advantage women. These might include a **Kickstart on joining** of a lumpsum to protect low balances from erosion. If there are matching subsidies from government for member contributions, these should be low level and capped to focus on low contributions.
- **Financial Education.** Improved decision-making is important for women who have on average less financial literacy than men. Financial capability can be included in the school curriculum, promoted by the state, and be part of the requirements for retirement saving scheme providers. Development of a free 'dashboard', such as in New Zealand an expansion of the *Sorted* website, would enable people to calculate their total retirement assets, determining and revising their preparedness. Sweden, where women are heavy users of their dashboard, offers a good model for all three countries to examine.
- **Lumpsum or pensions?** On average, women face a higher longevity risk than men. They may also experience loss of cognitive function as they age and may be susceptible to fraud and abuse in the management of their lumpsum. Mechanisms to allow for gender-neutral annuitisation of Second Tier lumpsums should be explored. Limited state subsidisation of annuitisation may be justified.

10. Appendices

Appendix 1. OECD Poverty rates for women and men

Income poverty rates by age and gender (OECD 2017, p. 137)

Percentage with incomes less than 50% of median household disposable income

	2014 or latest available						2014 or latest available						
	Older people (aged over 65)					Whole population	Older people (aged over 65)					Whole population	
	By age			By gender			By age			By gender			
	All 66+	66-75	76+	Men	Women		All 66+	66-75	76+	Men	Women		
Australia	25.7	23.4	29.2	23.6	27.5	12.8	Korea	45.7	38.8			13.8	
Austria	8.8	8.1	9.9	7.0	10.3	9.0	Latvia	26.5	22.2	31.6	13.9	32.4	16.2
Belgium	7.7	7.0	8.6	7.0	8.3	9.1	Luxembourg	3.9	4.1	3.4	3.1	4.6	8.1
Canada	9.0	8.5	9.9	6.7	11.0	12.6	Mexico	25.6	22.6	30.3	23.9	27.0	16.7
Chile	16.3	16.2	16.4	16.1	16.4	16.1	Netherlands	3.7	2.5	5.5	3.4	3.9	7.9
Czech Republic	3.7	3.5	4.1	1.5	5.3	5.9	New Zealand	10.6	7.7	15.2	6.6	14.0	10.9
Denmark	3.2	2.1	4.9	2.3	4.0	5.5	Norway	4.3	2.2	7.3	1.9	6.3	8.1
Estonia	25.0	21.9	28.5	13.3	30.8	15.5	Poland	7.6	8.3	6.7	4.6	9.3	10.4
Finland	5.2	2.9	8.5	3.2	6.8	6.3	Portugal	9.7	8.5	11.2	7.1	11.6	13.5
France	3.6	2.8	4.5	2.7	4.2	8.2	Slovak Republic	3.8	3.3	4.8	1.9	4.9	8.7
Germany	9.5	8.4	10.3	6.8	11.5	9.5	Slovenia	13.1	10.3	16.9	6.4	17.8	9.4
Greece	8.2	7.1	9.5	6.9	9.3	14.8	Spain	5.4	4.7	6.2	3.7	6.7	15.3
Hungary	8.6	7.8	9.9	5.0	10.6	10.1	Sweden	10.0	6.6	15.2	6.4	13.1	9.0
Iceland	5.4	4.9	6.1	3.5	7.1	6.5	Switzerland	19.4	16.3	23.8	16.6	21.8	9.9
Ireland	6.8	5.2	9.3	5.7	7.7	9.2	Turkey	18.9	16.2	23.2	17.0	20.4	17.3
Israel	21.2	17.6	26.1	17.7	23.9	19.5	United Kingdom	13.8	10.4	18.5	11.1	16.0	10.9
Italy	9.3	8.9	9.7	6.7	11.2	13.7	United States	20.9	17.6	25.7	17.2	23.9	16.8
Japan	19.0	17.0	21.3	15.1	22.1	16.1	OECD	12.5	10.7	13.9	8.7	13.6	11.5

Note: 2012 for Japan. 2015 for Chile, Finland, Israel, Korea, the Netherlands, the United Kingdom and the United States.

Source: OECD Income Distribution Database, www.oecd.org/social/income-distribution-database.htm.

StatLink  <http://dx.doi.org/10.1787/888933634477>

Appendix 2. New Zealand's 2019 Review of Retirement Income Policies: Recommendations

1. Governance for the Retirement Commissioner and their office should be provided jointly by the Ministries of Social Development and Business, Innovation and Employment.
2. The regular review cycle should be amended to fall in the year after an election, rather than prior.
3. Value and ensure the ongoing provision of NZ Superannuation at its current settings.
4. Establish a new government 'employment connection' service.
5. Introduce a 'small steps' employee contribution programme to KiwiSaver as the default for new members, and as an option for current members.
6. Target the government contribution to incentivise voluntary contributions to KiwiSaver by non-employees.
7. Phase in employer contributions for KiwiSaver members aged over 65, and consider implications of doing so for those aged under 18.
8. Phase out inclusion of KiwiSaver in total remuneration packages.
9. Model the potential range of impacts if the owner-occupied requirement for first-home withdrawals from KiwiSaver was to be withdrawn.
10. Establish a centralised financial capability hub for KiwiSaver hardship applications.
11. Add a 'sidecar' savings facility to KiwiSaver for short-term emergencies.
12. Auto-enrol beneficiaries in KiwiSaver through a government contribution.
13. Consider the introduction of care credits to KiwiSaver accounts to reduce the risk of being penalised for time out of employment caring.
14. A purpose statement for New Zealand's retirement income system to be advanced by the Retirement Commissioner.
15. Exclude fixed fees from low-balance KiwiSaver accounts. For all balances under \$5000, require providers to remove fixed fees.
16. Display fee projections on KiwiSaver members' annual statements, and include a comparison to the average fee projection for that type of fund.
17. Mandate improved disclosure around share investing in KiwiSaver, further distinguishing between emerging vs established markets, as well as New Zealand versus Australian shares.
18. Make Prescribed Investor Rates (PIR) tax refundable. This would change PIR status to 'not a final tax', and accommodate people who use incorrect tax rates.
19. Introduce taxpayer funding of Mindful Money to guarantee the charity continues to publish unbiased, responsible investment information, and erase any potential conflict of interest.

11. References

- Australian Institute of Health and Welfare. (2018). Older Australia at a glance. from Australian Government <https://www.aihw.gov.au/reports/older-people/older-australia-at-a-glance/contents/social-and-economic-engagement/employment-and-economic-participation>
- AustralianSuper. (2020). The gender super gap: How gender inequality affects superannuation. *AustralianSuper.com*. Retrieved from <https://www.australiansuper.com/superannuation/superannuation-articles/2020/02/gender-equality-and-your-super>
- Barr, N. (2019). *Gender and family: conceptual overview*. Washington, DC: World Bank. Retrieved from http://eprints.lse.ac.uk/101237/1/Barr_gender_and_family_conceptual_overview_published.pdf
- Borkowska, M., & Pelikh, A. (2019). Expensive childcare is making it harder for women to return to work. *Women's Agenda*
- Broad, J., Ashton, T., Gott, M., McLeod, H., Davis, P., & Connolly, M. J. (2015). Likelihood of residential aged care use in later life: a simple approach to estimation, with international comparison. *Australian New Zealand Journal of Public Health*
- Business/Personal Finance. (2018, 25 February). A third of women have less than \$5000 in KiwiSaver accounts, *NZ Herald*. Retrieved from https://www.nzherald.co.nz/personal-finance/news/article.cfm?c_id=12&objectid=12001571
- Callister, P. (2014). *The Employment of Older NZ Women*. Wellington: National Advisory Council for the Employment of Women (NACEW). Retrieved from <http://superseniors.msd.govt.nz/documents/nacew-employment-of-older-women-report-final-version-with-cover.pdf>
- Chen, A., & Munnell, A. H. (2020). Can Older Workers Work from Home? *Issues in Brief, Center for Retirement Research, 2020-9*
- Clare, R. (2017). *Superannuation account balances by age and gender*. Association of Superannuation Funds of Australia. Retrieved from https://www.superannuation.asn.au/ArticleDocuments/359/1710_Superannuation_account_balances_by_age_and_gender.pdf.aspx?Embed=Y
- Clarke, C. (2020). More pensioners are taking up part-time work to avoid the threat of pension poverty. *abc.net.au/news*. Retrieved from <https://www.abc.net.au/news/2020-01-22/pensioners-taking-up-part-time-work-to-avoid-pension-poverty/11889208>
- Coates, B. (2018). *What's the best way to close the gender gap in retirement incomes?* Australia: Grattan Institute. Retrieved from <https://grattan.edu.au/wp-content/uploads/2018/02/899-Best-way-to-close-gender-gap-retirement-incomes.pdf>
- Coates, B., & Nolan, J. (2020). *Balancing act: managing the trade-offs in retirement incomes policy. Submission to the Retirement Income Review 2020*. Australia: Grattan Institute. Retrieved from <https://grattan.edu.au/wp-content/uploads/2020/03/Grattan-Institute-sub-balancing-act-retirement-income-review.pdf>
- Collins, M. (2020). Private Pensions and the Gender Distribution of Fiscal Welfare. *Social Policy and Society - Online, March 2020*, 1 - 17. <https://doi.org/10.1017/S1474746420000111>
- Collins, M., & Hughes, G. (2017). Supporting pension contributions through the tax system: outcomes, costs and examining reform. *The Economic and Social Review*, 8(Winter)
- Curtin, J., Morrison, S., & Bickerton, S. (2020). What the Budget means for women. *Policy Commons Blog*, (16 May). Retrieved from <https://www.policycommons.ac.nz/2020/05/16/what-the-budget-means-for-women/>
- Dale, M. C., & St John, S. (2016). *New Zealand Superannuation policy and overseas state pensions*. Auckland: Retirement Policy and Research Centre, prepared for the Commission for Financial Capability. Retrieved from <https://cdn.auckland.ac.nz/assets/business/about/our->

[research/research-institutes-and-centres/RPRC/OtherPapers/RPRC%20CFFC%20overseas%20pensions%2030%20September%202016%20Final.pdf](https://cdn.auckland.ac.nz/assets/business/about/our-research/research-institutes-and-centres/RPRC/OtherPapers/RPRC%20CFFC%20overseas%20pensions%2030%20September%202016%20Final.pdf)

- Dale, M. C., & St John, S. (2020). *Pension Commentary 2020-03 The Kiwis falling through the KiwiSaver cracks*. Auckland: University of Auckland. Retrieved from <https://cdn.auckland.ac.nz/assets/business/about/our-research/research-institutes-and-centres/RPRC/Commentary/PC%202020-3%20Kiwis%20falling%20through%20KiwiSaver%20cracks.pdf>
- Dale, M. C., & St John, S. (2020). *The Kiwis falling through the KiwiSaver cracks*. Retirement Policy and Research Institute, University of Auckland. Retrieved from <https://cdn.auckland.ac.nz/assets/business/about/our-research/research-institutes-and-centres/RPRC/Commentary/PC%202020-3%20Kiwis%20falling%20through%20KiwiSaver%20cracks.pdf>
- Demolder, K. (2020, 27 February). The Gender Pay Gap In Ireland Broken Down, *Irish Tatler*. Retrieved from <https://irishtatler.com/worklife/gender-pay-gap-ireland--2>
- Department of Employment Affairs and Social Protection. (2019, *Government announces significant improvements to pension calculations for post 2012 pensioners* [Press release]. Retrieved from <https://www.gov.ie/en/press-release/4e9e4d-government-announces-significant-improvements-to-pension-calculation/?referrer=https://www.welfare.ie/en/pressoffice/Pages/pr230118.aspx>
- Ebbinghaus, B. (2020). Multiple Hidden Risks for Older People: The Looming Pension Crisis Following this Pandemic. *Journal of European Social Policy Blog*, 30 April
- EIGE. (2017). *Gender Equality Index 2017: Measuring gender equality in the European Union 2005-2015 - Report*. Brussels: European Institute for Gender Equality. Retrieved from <https://eige.europa.eu/publications/gender-equality-index-2017-measuring-gender-equality-european-union-2005-2015-report>
- European Commission. (2018). *2018 report on equality between women and men in the EU*. European Union. Retrieved from https://ec.europa.eu/newsroom/just/document.cfm?doc_id=50074
- Evans, K. (2018). Daddy's home! Why aren't more men taking paternity leave? *North & South Magazine*, June. Retrieved from <https://www.noted.co.nz/currently/currently-currently/paternity-leave-new-zealand-fathers-taking-paid-leave>
- Exley, C. L., & Kessler, J. B. (2019). *The Gender Gap in Self-Promotion*. National Bureau of Economic Research, USA. Retrieved from <https://www.nber.org/papers/w26345>
- Ferris, D. (2020, 10 March). Women face retiring with 39% less in pension pot. *PensionsAge*. Retrieved from <https://www.pensionsage.com/pa/Women-retiring-with-39-less-in-pension-pot.php>
- Financial Markets Authority. (2019). *KiwiSaver Annual Report*. Auckland: Financial Markets Authority. Retrieved from <https://www.fma.govt.nz/assets/Reports/20191004-FMA-KiwiSaver-Annual-Report-2019.pdf>
- Fitzsimmons, C. (2019). Women are more likely than men to own a home, *The Sydney Morning Herald*. Retrieved from <https://www.smh.com.au/money/investing/women-are-more-likely-than-men-to-own-a-home-20190308-p512qt.html>
- Foster, L., Wijeratne, D., & Mulligan, E. (2020). Gender and proposed Auto-enrolment in the Republic of Ireland: Lessons from the UK. *Producer*.
- Gibb, S. J., Fergusson, D. M., Horwood, L. J., & Boden, J. M. (2014). The Effects of Parenthood on Workforce Participation and Income for Men and Women. *Journal of Family and Economic Issues*, 35(1), 14-26.
- Government of Ireland. (2007). *Green Paper on Pensions*. Dublin: The Stationary Office,. Retrieved from <http://www.pensionsgreenpaper.ie/downloads/GreenPaper.pdf>

- Government of Ireland. (2010a). *National Pensions Framework*. Dublin: The Stationary Office. Retrieved from <http://www.pensionsgreenpaper.ie/downloads/NationalPensionsFramework.pdf>
- Government of Ireland. (2010b). *New Auto-Enrolment Pension Scheme to be introduced from 2014: Major Changes in New National Pensions Framework will be Phased in to Improve Pension Provision While Protecting Competitiveness*. Dublin: Taoiseach, Minister for Finance and Minister for Social and Family Affairs. Retrieved from http://www.nationalpensionsframework.ie/news_3rdMarch2010.html
- Government of Ireland. (2018a). *A roadmap for pensions reform 2018-2023*. Ireland: Department of Finance and Department of Employment Affairs and Social Protection. Retrieved from <https://www.welfare.ie/en/pressoffice/pdf/PensionsRoadmap.pdf>
- Government of Ireland. (2018b). *A Strawman Public Consultation Process for an Automatic Enrolment: Retirement Savings System for Ireland*. Ireland: Department of Employment Affairs and Social Protection. Automatic Enrolment Programme Management Office.
- Government of Ireland. (2018a). *Income tax & universal social charge*. Ireland. Retrieved from <https://www.finance.gov.ie/wp-content/uploads/2018/07/TSG-18-02-Income-Tax-JC.pdf>
- Government of Ireland. (2018c). *A Strawman Public Consultation Process for an Automatic Enrolment: Retirement Savings System for Ireland*. Ireland
- Hamilton, M., & Newman, C. (2020). The heartbreaking prospect of asking grandparents to stay away. *Women's Agenda*. Retrieved from <https://womensagenda.com.au/latest/the-heartbreaking-prospect-of-asking-grandparents-to-stay-away/>
- Hancock, F. (2020). NZ's \$400,000 gender pay gap. *Newsroom*. Retrieved from <https://www.newsroom.co.nz/2020/01/23/997999/nzs-400000-gender-pay-gap>
- Hartge-Hazelman, B. (2019). *2019: The Year in Review. Fearlessly Supporting the Economic Progress of Women*. Australia:.. Retrieved from https://financy.com.au/wp-content/uploads/2020/01/FWX_Dec19_Report_Final_2019.pdf
- Hill, S. (2020). Superannuation withdrawals during COVID-19 leave young women with a not-so-super future. *Womens Agenda*, (29 May). Retrieved from <https://womensagenda.com.au/latest/superannuation-withdrawals-during-covid-19-leave-young-women-with-a-not-so-super-future/>
- Hodgson, H. (2018). We won't fix female super until we fix female pay, but Labor's ideas are a start. *The Conversation*, (20 September). Retrieved from <https://theconversation.com/we-wont-fix-female-super-until-we-fix-female-pay-but-labors-ideas-are-a-start-103529>
- Huang, Y., & Curtin, J. (2019). *A review of gender differences in retirement income. A research report prepared for the Commission for Financial Capability's Review of Retirement Income Policy, July 2019*. Auckland: Public Policy Institute, University of Auckland. Retrieved from <https://cffc-assets-prod.s3.ap-southeast-2.amazonaws.com/public/Uploads/Retirement-Income-Policy-Review/2019-RRIP/Research-docs/The-big-picture/Ak-Uni-PPI-Gender-Pension-Gap-Report.pdf>
- Hughes, G., & Maher, M. (2016). Redistribution in the Irish Pension System: Upside down? In M. Murphy & F. Dukelo (Eds.), *The Irish Welfare State in the Twenty-First Century. Challenges and Change* (pp. 93-118 i). Basingstoke: Palgrave Macmillan.
- Hurnard, R. (2005). *The effect of New Zealand superannuation eligibility age on the labour force participation of older people*. Wellington: New Zealand Treasury. Retrieved from <https://treasury.govt.nz/publications/wp/effect-new-zealand-superannuation-eligibility-age-labour-force-participation-older-people-wp-05-09-html>
- Hyslop, D., Rice, A., & Skilling, H. (2019). Understanding labour market developments in New Zealand, 1986–2017 *Reserve Bank of New Zealand Discussion Paper Series, DP2019/02*, 46. <https://doi.org/10.1111/1467-8462.12310>
- Johnson, A., Howden-Chapman, P., & Eaqub, S. (2018). *A Stocktake of New Zealand's Housing*. Wellington: Ministry of Business, Innovation and Employment. Retrieved from

- <https://www.beehive.govt.nz/sites/default/files/2018-02/A%20Stocktake%20of%20New%20Zealand%27s%20Housing.pdf>
- Jones, N. (2019, 20 August). Rest-home costs under microscope, *NZHerald*, p. A9.
- Kehoe, J., & Cranston, M. (2019). Higher super won't help women much: Treasury. *Financial Review*, (20 September). Retrieved from <https://www.afr.com/policy/tax-and-super/higher-super-won-t-help-women-much-treasury-20190920-p52tfx>
- Kitney, M. (2018). Unconscious bias in volunteering? *Volunteering New Zealand*. Retrieved from <https://www.volunteeringnz.org.nz/research/unconscious-bias-in-volunteering/#:~:text=In%20one%20study%20conducted%20by,%2D100%25%20of%20volunteers.%E2%80%9D>
- Matthews, C. (2019). *2019 Retirement Expenditure Guidelines*. Auckland: Fin-Ed Centre, Massey University. Retrieved from https://www.massey.ac.nz/shadomx/apps/fms/fmsdownload.cfm?file_uid=18330758-8D36-4EF6-A79B-92C86889BFAB
- McGinnity, F., Grotti, R., Kenny, O., & Russell, H. (2017). *Who experiences discrimination in Ireland? Evidence from the QNHS Equality Modules* Ireland: Economic and Social Research Institute (ESRI). Retrieved from <https://www.esri.ie/publications/who-experiences-discrimination-in-ireland-evidence-from-the-qnhs-equality-modules>
- McKenzie, A. (2019, 26 April). *Older New Zealanders: Some Emerging Trends*. Paper presented at the RPRC Summit: The 2019 Retirement Income Policy Review & You, University of Auckland. Retrieved from <https://cdn.auckland.ac.nz/assets/business/about/our-research/research-institutes-and-centres/RPRC/OtherPapers/Session%204%20Equity%20and%20distribution.pdf>
- Ministry for Women. (2020). *Gender pay gap*. Wellington: New Zealand Government. Retrieved from <https://women.govt.nz/work-skills/income/gender-pay-gap>
- Ministry of Business Innovation and Employment. (2013). *Labour Supply Forecasting by Age, Gender and Qualification: August 2013*. Wellington: Ministry of Business, Innovation and Employment (MBIE) Retrieved from <https://www.mbie.govt.nz/dmsdocument/2953-labour-supply-forecasting-age-gender-qualification-pdf>
- Ministry of Social Development. (2019). *Breakdown of welfare recipients*. Wellington. Retrieved from <http://msd.govt.nz/documents/about-msd-and-our-work/publications-resources/official-information-responses/2019/july/20190705-breakdown-of-welfare-recipients-by-type-of-benefit-ethnicity-and-gender.pdf>
- Molyneux, V. (2019, 28 November). Kiwi female doctors earn 12 percent less than male doctors, *Newshub*. Retrieved from <https://www.newshub.co.nz/home/new-zealand/2019/11/kiwi-female-doctors-earn-12-percent-less-than-male-doctors.html>
- National Older Women's Housing and Homelessness Working Group. (2018). *Retiring into poverty. A national plan for change: increasing housing security for older women*. Canberra, Australia: YWCA Canberra. Retrieved from <https://www.mercyfoundation.com.au/wp-content/uploads/2018/08/Retiring-into-Poverty-National-Plan-for-Change-Increasing-Housing-Security-for-Older-Women-23-August-2018.pdf>
- National Women's Council of Ireland. (2017). *NWCI Guide to lobbying for pension equality*. https://www.nwci.ie/learn/publication/nwci_guide_to_lobbying_for_pension_equality
- National Women's Council of Ireland. (2018). *NWCI Submission on Government Proposals for a Total Contributions Approach for the State Pension*. https://www.nwci.ie/images/uploads/Submission_on_the_TCA_to_the_Department_of_Employment_and_Social_Protection_September_2018.pdf
- Neuwelt-Kearns, C., & Ritchie, J. (2020). *Investing in children? Privatisation and early childhood education in Aotearoa New Zealand*. Auckland: Child Poverty Action Group. Retrieved from <https://www.cpag.org.nz/assets/Backgrounders/CPAG%20Backgrounder%20->

[%20Privatisation%20and%20early%20childhood%20education%20in%20Aotearoa%20New%20Zealand%20.pdf](#)

- Nippert, M. (2020, 1 March). The \$44,000 gender pay gap TVNZ tried to keep secret, *NZHerald*. Retrieved from https://www.nzherald.co.nz/business/news/article.cfm?c_id=3&objectid=12312501
- OECD. (2013). Review of the Irish pension system.
- OECD. (2019). *Pensions at a glance*. OECD. Retrieved from https://www.oecd-ilibrary.org/social-issues-migration-health/pensions-at-a-glance-2019_b6d3dcfc-en
- OECD Family Database. (2017). PF3.4: Childcare support. *OECD Family Database*. Retrieved from <http://www.oecd.org/els/family/database.htm>
- Parker, T. (2019, 18 September). Westpac reveals whopping 30pc gender pay gap, *NZHerald*. Retrieved from https://www.nzherald.co.nz/business/news/article.cfm?c_id=3&objectid=12267912
- Perry, B. (2019). *Household Incomes in New Zealand: trends in indicators of inequality and hardship 1982 to 2018*. Wellington: Ministry of Social Development. Retrieved from www.msd.govt.nz/about-msd-and-our-work/publications-resources/monitoring/index.html
- Pledger, M., McDonald, J., Dunn, P., Cumming, J., & Saville-Smith, K. (2019). The health of older New Zealanders in relation to housing tenure: analysis of pooled data from three consecutive, annual New Zealand Health Surveys. *Australian and New Zealand Journal of Public Health*, 43(2), 182 - 189.
- Retirement Commissioner. (2019). *Review of Retirement Income Policies: Facing the Future*. Auckland: Commission for Financial Capability. Retrieved from <https://cffc-assets-prod.s3.ap-southeast-2.amazonaws.com/public/Uploads/Retirement-Income-Policy-Review/2019-RRIP/CFFC-Review-of-Retirement-Income-Policies-2019.pdf>
- Riach, K., O'Hare, C., Dalton, B., & Wang, C. (2018). *The Future Face of Poverty is Female. Stories Behind Australian Women's Superannuation Poverty in Retirement*. Australia: Monash University & AustralianSuper. Retrieved from <https://www.australiansuper.com/campaigns/future-face-of-poverty>
- Rosenberg, B. (2017). The gap between the gender pay gaps. Retrieved from <https://www.union.org.nz/wp-content/uploads/2016/11/The-wrong-pay-gap-FINAL.pdf>
- Saville-Smith, K., & James, B. (2019). *Where the heart is*. Wellington: Ministry of Social Development. Retrieved from <http://superseniors.msd.govt.nz/about-superseniors/ageing-population/housing/housing.html>
- Savings Product Working Group. (2004). *A Future for Work-based Savings in New Zealand. Final Report*. Wellington: New Zealand Government. Retrieved from <https://www.beehive.govt.nz/sites/default/files/WorkplaceSavings.pdf>
- Social Justice Ireland. (2019). A Universal State Pension would ensure fairness for Carers. <https://www.socialjustice.ie/content/policy-issues/universal-state-pension-would-ensure-fairness-carers>
- St John, S. (1999). Superannuation. Where Angels Fear to Tread. In P. Dalziel, J. Boston & S. St John (Eds.), *Redesigning the Welfare State in New Zealand: Problems Policies Prospects* (pp. 278-298). Auckland: Oxford University Press.
- St John, S. (2007a). New Zealand's experiment in tax neutrality for retirement saving *The Geneva Papers*, 32, 532-552.
- St John, S. (2007b). Farewell to tax neutrality: the implications for an aging population. *Economic and Labour Relations Review*, 18 (1), 27-52.
- St John, S. (2016). *New Zealand's KiwiSaver; Lessons for Ireland*. Auckland: Retirement Policy and Research Centre, Economics Department, The University of Auckland. Retrieved from <https://www.business.auckland.ac.nz/en/about/our-research/bs-research-institutes-and-centres/retirement-policy-and-research-centre-rprc/publications-28/working-paper-series-1.html>

- St John, S. (2018). *Feedback on the 'strawman' proposal for Irish pension reform from New Zealand experience: Report for Insurance Ireland and TOR Financial Consulting*. Retirement Policy and Research Centre.
- St John, S., & Ashton, T. (1993). *Private pensions in New Zealand: Can they avert the crisis?* Wellington: Institute of Policy Studies.
- St John, S., & Dale, M. C. (2019a). *Decumulation: time to act*. Auckland: Retirement Policy and Research Centre, prepared for the Commission for Financial Capability. Retrieved from <https://www.business.auckland.ac.nz/en/about/our-research/bs-research-institutes-and-centres/retirement-policy-and-research-centre-rprc/publications-28/other-papers.html>
- St John, S., & Dale, M. C. (2019b). *Intergenerational impacts: the sustainability of New Zealand Superannuation. A research report prepared for the Commission for Financial Capability's Review of Retirement Income Policy, July 2019*. Auckland: Retirement Policy and Research Centre.
- St John, S., & Dale, M. C. (2019c). Submission to the Social Services and Community select committee, Modernisation and simplification of NZ Superannuation 16th December, 2019.
- St John, S., Littlewood, M., & Dale, M. C. (2014). *Now we are six. Lessons from New Zealand's KiwiSaver* Auckland: Retirement Policy and Research Centre, Department of Economics, the University of Auckland. Retrieved from <http://docs.business.auckland.ac.nz/Doc/WP-2014-1-KiwiSaver.-Now-we-are-six.pdf>
- Statistics New Zealand. (2019). Labour market statistics (income): June 2019 quarter. *Information Releases*. Retrieved from <https://www.stats.govt.nz/information-releases/labour-market-statistics-income-june-2019-quarter>
- Statistics New Zealand. (2019b). KiwiSaver nest eggs grow \$5,000 in three years. Retrieved from <https://www.stats.govt.nz/news/kiwisaver-nest-eggs-grow-5000-in-three-years>
- The Economist. (2020). Covid-19 threatens Europe's success at fighting inequality. *The Economist*, 4 June. Retrieved from <https://www.economist.com/finance-and-economics/2020/06/04/downturns-tend-to-reduce-gender-inequality-not-under-covid-19>
- Thompson, G., & McDonald, A. (2020, 10 February). Older Australians who own their home more than 20 times better off than those who rent, data shows, *ABC News*. Retrieved from <https://www.abc.net.au/news/2020-02-10/older-australians-who-own-home-more-than-20-times-better-off/11815006>
- Topping, A., Barr, C., & Duncan, P. (2018, 4 April). Gender pay gap figures reveal eight in 10 UK firms pay men more, *The Guardian*. Retrieved from <https://www.theguardian.com/money/2018/apr/04/gender-pay-gap-figures-reveal-eight-in-10-uk-firms-pay-men-more>
- TOR Financial Consulting Ltd. (2020). *Women Approaching and In Retirement: Global Review of the Challenges for Pension Reform and Generating Social Fairness: A Primer*. Insurance Ireland, Dublin.
- Wade, M. (2020, 15 June). Sex and super: how men spend their nest-egg withdrawals differently to women, *The Sydney Morning Herald*. Retrieved from <https://www.smh.com.au/business/consumer-affairs/sex-and-super-how-men-spend-their-nest-egg-withdrawals-differently-to-women-20200614-p552he.html>
- Wadsworth, M., Findlater, A., & Boardman, T. (2001). *Reinventing Annuities*. Paper presented at the Staple Inn Actuarial Society, 16 January 2001. Retrieved from https://www.watsonwyatt.com/images/database_uploads/euAnn-01/paper.pdf
- Waring, M. (1988). *Counting for Nothing: What Men Value and What Women are Worth*. Wellington, NZ: Allen & Unwin/Port Nicholson Press.
- Welfare Expert Advisory Group. (2019). *Whakamana Tāngata – Restoring Dignity to Social Security in New Zealand*. Wellington: Welfare Expert Advisory Group. Retrieved from <http://www.weag.govt.nz/assets/documents/WEAG-report/aed960c3ce/WEAG-Report.pdf>

- Women's Agenda. (2020). Permanently raising the Child Care Subsidy is an economic opportunity too good to miss. *Women's Agenda*. Retrieved from <https://womensagenda.com.au/latest/permanently-raising-the-child-care-subsidy-is-an-economic-opportunity-too-good-to-miss/>
- Women in Super. (2020). The facts about Women and Super. from Women in Super <https://www.womeninsuper.com.au/content/the-facts-about-women-and-super/gjumzs>
- Wood, C., & Buckley, S. (2015). Women in Super: Submission to the Senate Inquiry into the Economic Security of Women in Retirement. (October), 25. Retrieved from <https://clarety-wis.s3.amazonaws.com/userimages/2015%2010%20%20WIS%20submission%20to%20Senate%20Inquiry.pdf>
- Wood, D., Griffiths, K., & Emslie, O. (2020). Permanently raising the Child Care Subsidy is an economic opportunity too good to miss. *The Conversation*, (27 April). Retrieved from <https://theconversation.com/permanently-raising-the-child-care-subsidy-is-an-economic-opportunity-too-good-to-miss-136856>
- Workplace Gender Equality Agency. (2020). *Australia's Gender Pay Gap Statistics*: Australian Government. Retrieved from <https://www.wgea.gov.au/data/fact-sheets/australias-gender-pay-gap-statistics>
- World Bank. (2020). *Women, Business and the Law 2020*. Washington, DC: World Bank Group, International Bank for Reconstruction and Development. Retrieved from <https://openknowledge.worldbank.org/bitstream/handle/10986/32639/9781464815324.pdf?sequence=6>
- Wynn, K. (2020, 23 January). Pay gap: Female academics earn \$400,000 less than men over life-time, *NZ Herald*. Retrieved from https://www.nzherald.co.nz/business/news/article.cfm?c_id=3&objectid=12302591