

A Review of Gender Differences in Retirement Income

Yanshu Huang and Jennifer Curtin

A research report prepared for the Commission for Financial Capability's Review of Retirement Income Policy, July 2019



Acknowledgements

We would like to thank Suzanne Woodward and Lincoln Dam of the Public Policy Institute, the CFFC reviewers for their insights and feedback, and the ANZ for sharing with us their 2017 Financial Wellbeing Questionnaire raw data. We hope they also find our descriptive analyses useful.

Public Policy Institute

10 Grafton Road,
University of Auckland,
Auckland,
New Zealand,
1010

T: +64 9 923 6979

W: www.ppi.auckland.ac.nz

E: ppi@auckland.ac.nz

[@PolicyAuckland](#)

Recommended citation: Recommended citation: Huang, Y., & Curtin, J. (2019). *A review of gender differences in retirement income*. Auckland, New Zealand: Public Policy Institute.
DOI:10.17608/k6.auckland.9699443

This paper is covered by the Creative Commons Attribution License 4.0 International: When reproducing any part of this report, full attribution must be given to the report authors.

Cover images: Pixabay

Table of Contents

<i>Acknowledgements</i>	2
<i>Statement of Work</i>	4
<i>Introduction</i>	5
1 <i>Gender Gaps in Pension Income: New Zealand Compared</i>	7
2 <i>Gender gaps in Public – Private Coverage: New Zealand Compared</i>	8
3 <i>Gender gaps in KiwiSaver coverage and value</i>	9
4 <i>Closure of the gender pension gap over time?</i>	11
5 <i>Factors explaining gender pension gaps</i>	12
6 <i>What can be done to reduce the gender pension gap?</i>	30
7 <i>Future research and potential indicators</i>	33
<i>References</i>	35
<i>About the Researchers</i>	39
<i>About the Public Policy Institute</i>	40

Statement of Work

The Public Policy Institute (PPI) was commissioned by the Commission for Financial Capability to deliver this Background Paper on Gender Differences in Retirement Income as part of the 2019 Review of Retirement Income Policy. The Report cuts across a number of terms of reference and considers the following questions:

- How wide is the Gender Pension Gap in New Zealand? What is the coverage of KiwiSaver by gender? How does this compare with international trends?
- Is the Gender Pension Gap reducing (as gender pay gaps are) over time (drawing on both international and NZ data where available)? What accounts for these gaps?
- What might a cohort analysis by gender reveal (given KiwiSaver is relatively young) and will the financial wellbeing of women increase over time?
- What do we see internationally, and what does this tell us about cohorts in New Zealand?
- What impact does lower socio-economic status have on the gender gap, internationally and in New Zealand?
- What do we know about intra-household gender pension gaps? What data should we be collecting to illuminate the risks of insufficient pension income for different groups of women in the future?

Drawing on international and New Zealand research, the report identifies a range of possible determinants, mechanisms and indicators that could inform future gender analysis and policy reforms aimed at eliminating the gender pension gap.

Introduction

The presence of a Gender Pension Gap (GPG) is evident internationally as well in New Zealand (Burkevica, Humbert, Oetke, & Paats, 2015; OECD, 2017a). While the gaps vary widely across countries, nowhere has the gap closed completely. This is of concern for a number of reasons. First, we see that there are also gender gaps in poverty rates amongst retirees. For example, across the OECD, on average, 13.6 per cent of women aged 66 and older experience income poverty compared to 8.7 per cent of men (OECD, 2017b). In New Zealand, poverty rates amongst older people in 2014 reveals that 14.0 per cent of women aged 65 or older in New Zealand were living in poverty (defined as having an income less than 50 per cent of median household disposable income) compared to 6.6 per cent of men of the same age range (OECD, 2017a).

Second, globally and in New Zealand, women live longer than men, make up the majority of those over 65, and are a greater proportion of those over 80 (in 2013, women made up 59.9% of people over 80 years old (Statistics New Zealand, 2019a)). This means that, on average, women will need to make their retirement funds last longer. Although public pensions, like New Zealand Superannuation, are equally accessible and are available for the duration of the life of a retiree, in most countries additional private pensions are necessary as a top-up to ensure good quality of life. However, data indicates women have less money than men in their pension pots at retirement (OECD, 2017b; Statistics New Zealand, 2016).

The remainder of this report examines the various dimensions of the Gender Pension Gap, internationally and in New Zealand, including accumulation, coverage rates, and the likelihood of closure over time. We look at the reasons why we see a Gender Pension Gap, and what this means for the financial wellbeing of different groups of women (including Māori and those with low socio-economic status), relative to men, over the life course.

There is now a considerable amount of research cross-nationally that indicates the size of the Gender Pension Gap can be attributed to three main sources: a) variation in the labour market participation of women and the male/female wage gap, b) variation in marriage, divorce and sole parent patterns and gender differences in longevity, and c) pension design and the extent to which differences in lifetime earnings are reflected in the distribution of pension benefits.

There are also gender gaps in financial knowledge which, if closed, may also shift the Gender Pension Gap. Thus, there are both structural and behavioural factors of significance. We conclude the report with a consideration of what data we need to be collecting, on intra-family income distribution and time use, in order to develop gender sensitive indicators of retirement wellbeing that might inform a gender equality target in the future.

1 Gender Gaps in Pension Income: New Zealand Compared

A Gender Pension Gap (GPG) has been observed in the European Union (Burkevica et al., 2015) as well as OECD as a whole (OECD, 2017b). According to data from 2017, there was a 26.27 per cent gap in pension incomes between women and men across the OECD. These gaps range from 3.39 per cent difference in Estonia to 45.7 per cent in Germany. In the European Union, the average GPG in 2016, across the 28 member states, was 37.2 per cent (European Commission, 2018).

In Australia, data from 2015-16 superannuation accounts of people aged 15 and older reveals that women's balances were approximately 61.2 per cent of the size of men's (Clare, 2017).

In New Zealand National Superannuation remains the primary source of pension income and, as it is a universal state-funded scheme, women are not disadvantaged. However, given the poverty rates noted above, it is likely that KiwiSaver or other private sources of funding remain important to ensure women's economic wellbeing in retirement. Recent research suggests many Māori women will not have the same retirement savings as either their husbands and partners nor non-Māori. This is attributed to the fact that Māori women spend considerable time looking after whānau (NZMC, 2019). More generally, Māori are more likely to go into retirement in debt and are less likely to own their own homes in retirement (NZMC, 2019). These responses reflect similar patterns to those found in the CFFC Financial Barometer Survey.

2 Gender gaps in Public – Private Coverage: New Zealand Compared

In addition to differences in overall retirement income between men and women, it is important to assess differences in coverage in public versus private pensions. This is because public pensions may not necessarily be available or are insufficient replacements for working life income, leading to increased likelihood of old-age poverty (OECD, 2017b). According to data from the European Union, access to public pensions are mostly equal between men and women (European Commission, 2018). However, public pension systems that rely on a contribution-based social insurance approach may lead to unequal coverage because women spend less time across working age in paid employment (European Commission, 2018).

In contrast to public pensions, private pension coverage is low generally, and gender gaps vary widely. The European Commission (2018) has shown that where occupationally-based private pensions are widespread and popular (Denmark, Germany, Netherlands, and Sweden), the gender gap in coverage ranges from 5.9 per cent in Sweden to 33.8 per cent in the Netherlands.

It is worth noting here that the higher life-expectancy of women, compared to men, means that women have a stronger interest in the payment from private pension schemes of life annuities as opposed to lump sum benefits or benefits paid out over a fixed number of years (Halvorsen & Pedersen, 2017).

3 Gender gaps in KiwiSaver coverage and value

Across all age groups, 49 per cent of women participate in the KiwiSaver scheme, a similar rate to men overall who participate at 48 per cent (Statistics New Zealand, 2019b).

However, there are gender differences within age groups. For example, for age groups 15-24, 35-44, and 65+, men participate at slightly higher rates than women. For 25-34, 45-54, and 55-64 cohorts, women participate at higher rates than men.

The Financial Markets Authority (2018) reports different figures to Statistics New Zealand but the proportions are nonetheless similar. Specifically, they report that 51 per cent of women participate in KiwiSaver in comparison to 49 per cent of men (this remains largely unchanged since 2014) (Financial Markets Authority, 2014, 2016, 2017). In other words, the proportion of women and men participating in KiwiSaver appears to be quite stable.

In terms of gender differences in membership over time, data from KiwiSaver suggests that as total enrolment increases each year, there are consistently more women relative to men enrolled. In addition, it appears that women are likely to contribute as much to their KiwiSaver accounts as their male counterparts (Groom, 2018). However, this may not be the case for all women in New Zealand. For example, one survey found that Māori women felt that they were unable to save for retirement because of the pressure of rising living costs and low wages (NZMC, 2019).

Finally, in terms of gender differences in KiwiSaver balances, data from ANZ suggests that for age cohorts over the age of 30, women are more likely to have smaller balances than their male counterparts (see figure below).

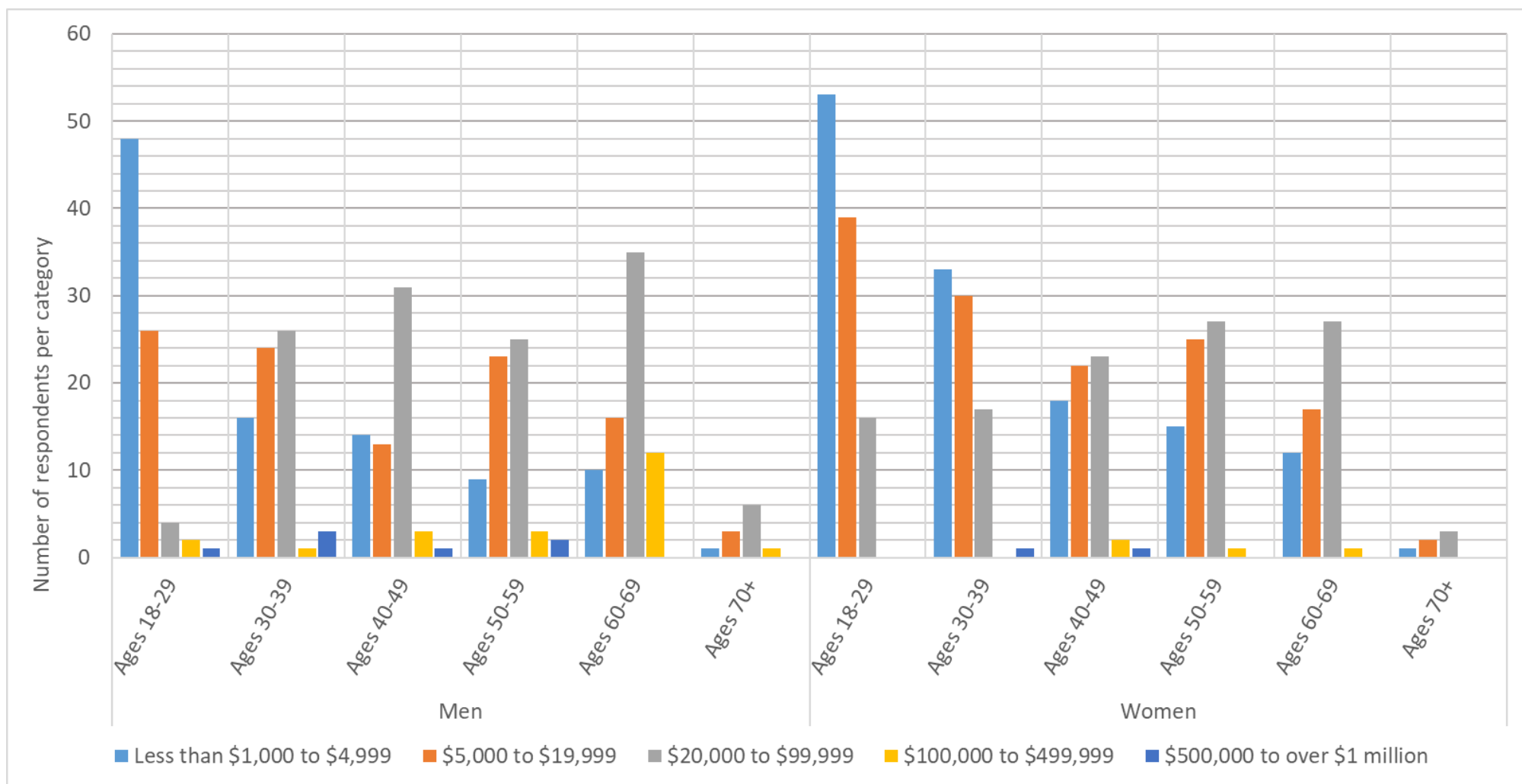


Figure 1. KiwiSaver balances by age cohort and gender (2017 ANZ Financial Wellbeing Questionnaire data).

Note. Some groups may have small sub-sample sizes and, as such, caution is required when interpreting these results.

4 Closure of the gender pension gap over time?

Data from the OECD, comparing gender gaps in total pension income across 25 nations between 2007 and 2015, suggests that the gender gap in pensions has decreased over time for most nations (OECD, 2017a). The average gap across the 25 nations assessed was 27 per cent in 2007 and 25 per cent in 2015.

By contrast, a report compiled by the European Union suggests that across the EU, the gender gap in pensions widened slightly from 38 per cent to 39 per cent between 2008 and 2012, but since then has remained stable (European Commission, 2018; Tinios, Bettio, & Betti, 2015). In only a handful of countries do we see an ongoing closing of the gap and/or relatively smaller gaps (i.e., Denmark, Estonia, Slovakia, and Slovenia).

However, the pension gap in Australia, where compulsory superannuation contributions have been in place for several decades, the gap appears to be closing (Clare, 2017). In the case of New Zealand, it may be too soon to assess whether the Gender Pension Gap in KiwiSaver payouts is decreasing. It is likely that the Gender Pay Principles (MfW, 2019) will be important to ensuring gender equality in future retirement income for women currently in the labour market. We elaborate on the connections between gender pay gaps and gender pension gaps below.

5 Factors explaining gender pension gaps

Gender Pay Gap

The most significant factor influencing the gender pension gap is the presence of a gender pay gap across the working life. The OECD reports that women on average earn 15 per cent less relative to men (OECD, 2017a). This gap has remained stable over time, suggesting that if worker contribution schemes are the primary source of retirement income, then gender pension gaps are likely to persist.

In New Zealand, the gender pay gap was estimated to be 9.2 per cent in 2018, which is smaller than the OECD average (Statistics New Zealand, 2018). Women in New Zealand are paid 84 cents for every \$1 a man makes in New Zealand for work of the same value (Sin, Stillman, & Fabling, 2017).

However, this is complicated by several factors including occupational segregation over the life course, both vertical and horizontal. Men are over-represented in higher income brackets relative to women (vertical segregation) and women are over-represented in lower income brackets relative to men (Statistics New Zealand, 2015). This reflects international trends (for example, women are near-universally under-represented in management positions, see Credit Suisse, 2016; OECD, 2017a).

Across the OECD, women tend to be over-represented in industries and sectors that have lower incomes relative to industries dominated by men (horizontal segregation) (OECD, 2017a). Data from New Zealand also suggests that women are over-represented in lower wage industries (Sin et al., 2017). Thus, working in a female dominated profession is related to lower wages overall, leading to lower retirement savings.

Despite this, the gender pay gap appears to be decreasing over time (Statistics New Zealand, 2018). This is particularly the case for younger cohorts (e.g., 30–34, 35–39), suggesting that younger women in the workforce may be better able to contribute to their KiwiSaver accounts for their future retirement. Further analysis of age cohorts and pay gaps is necessary however, since because research suggests that while gender gaps in income may be small at the start of

one's working life, these can widen over time (for a range of reasons listed below), resulting in lower retirement funds (Dale, 2015; European Commission, 2018; OECD, 2017a).

We also need to know more about different groups of women. For example, since 2012, Māori women's labour force participation has increased by 5.4 per cent and up by 2.4 per cent for men, reaching 65.3 and 74.7 per cent respectively (MBIE, 2017).

We also know that Māori make up a high proportion of workers employed in lower-skilled occupations, and in industries particularly vulnerable to changes in technology and economic cycles (e.g. manufacturing, wholesale, retail trade and construction). However, between 2012 and 2017, the biggest increases in Māori employment were for managers (up 45 per cent), professionals (up 32.0 per cent) and service workers (up 22.0 per cent). While fewer Māori were employed in these occupations, Māori representation has improved (MBIE, 2017), and there are likely to be flow-on effects in terms of having the capacity to contribute to retirement savings.

Finally, in terms of income differences, although women earn less weekly relative to men, there are several ethnic group differences of note (Statistics New Zealand, 2019a). As shown in the figure below, Pacific and Asian women earn less relative to their European counterparts, while the differences between Māori, Pacific and Asian men and European men is even more stark.

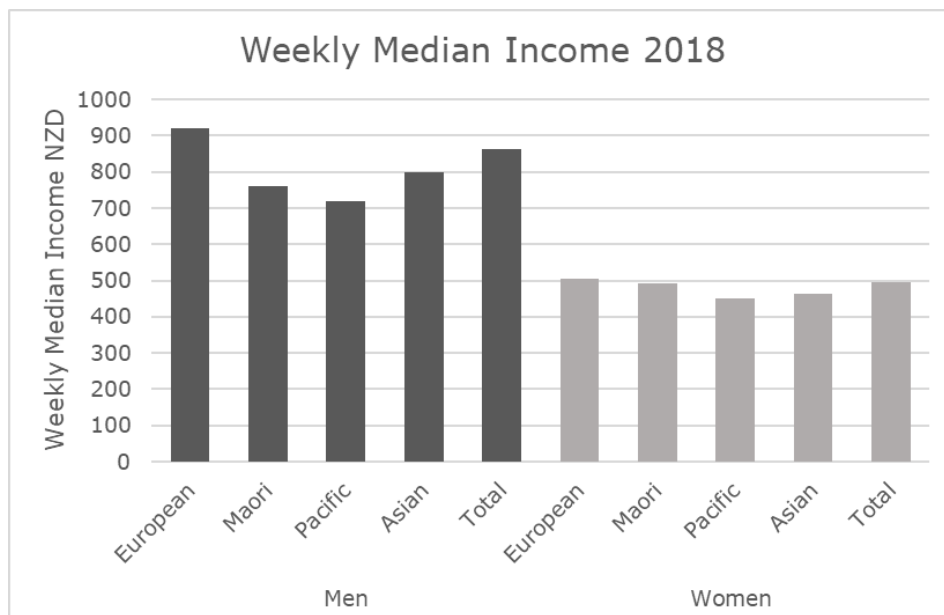


Figure 2. Weekly median income in 2018 by ethnicity and gender (Statistics New Zealand, 2019a).

Career gaps or time out of work

The original design of contributory pension systems was based on the assumption that individuals will be engaged in full-time work for the entirety of their working lives, i.e., the male breadwinner model (Burkevica et al., 2015; Frericks, Maier, & de Graaf, 2008).

Those who take breaks from paid employment – such as for parental leave, childcare, care for other dependents, and education – have fewer years to contribute to a pension plan. These interruptions are experienced by women more often than men, due to social expectations and individual choice (OECD, 2016, 2017a). In addition, women find it harder to return to paid work relative to men due to these care roles as well as finding employment opportunities, compounding gender differences in opportunities for career advancement (OECD, 2016).

For women not engaged in full-time employment there is a significant opportunity cost in terms of losing the option to contribute to pension funds or to earn credits where a credit-based pension systems exists (Germany, for example). A common solution proposed is to

encourage women to work more hours and more often, but a full-time life-long period of employment is impossible for most women who choose to have children.

However, across OECD nations, in order to manage caring responsibilities, women are more likely than men to be in part-time occupations, jobs that often pay less relative to other industries (OECD, 2017a). In New Zealand, women occupy a large proportion of the part-time workforce (71.7 per cent in 2018) compared to their proportion of the full-time workforce (43.6 per cent (Statistics New Zealand, 2019a)). Furthermore, women are disproportionately represented in unpaid care roles, as shown in the figures below. Of those who perform unpaid care work, fewer women are employed full-time relative to men. In addition, more women than men are employed part-time or are unemployed, especially amongst those caring for people outside their home. The gendered impact of unpaid care work is also evident in differences in personal income between men and women. Men who perform unpaid care work are more likely to earn more relative to women who are over-represented in lower personal income brackets (likely due to differences in employment status, as outlined earlier). Moreover, when men become parents, changes in occupation status and work hours are minimal (OECD, 2017a).

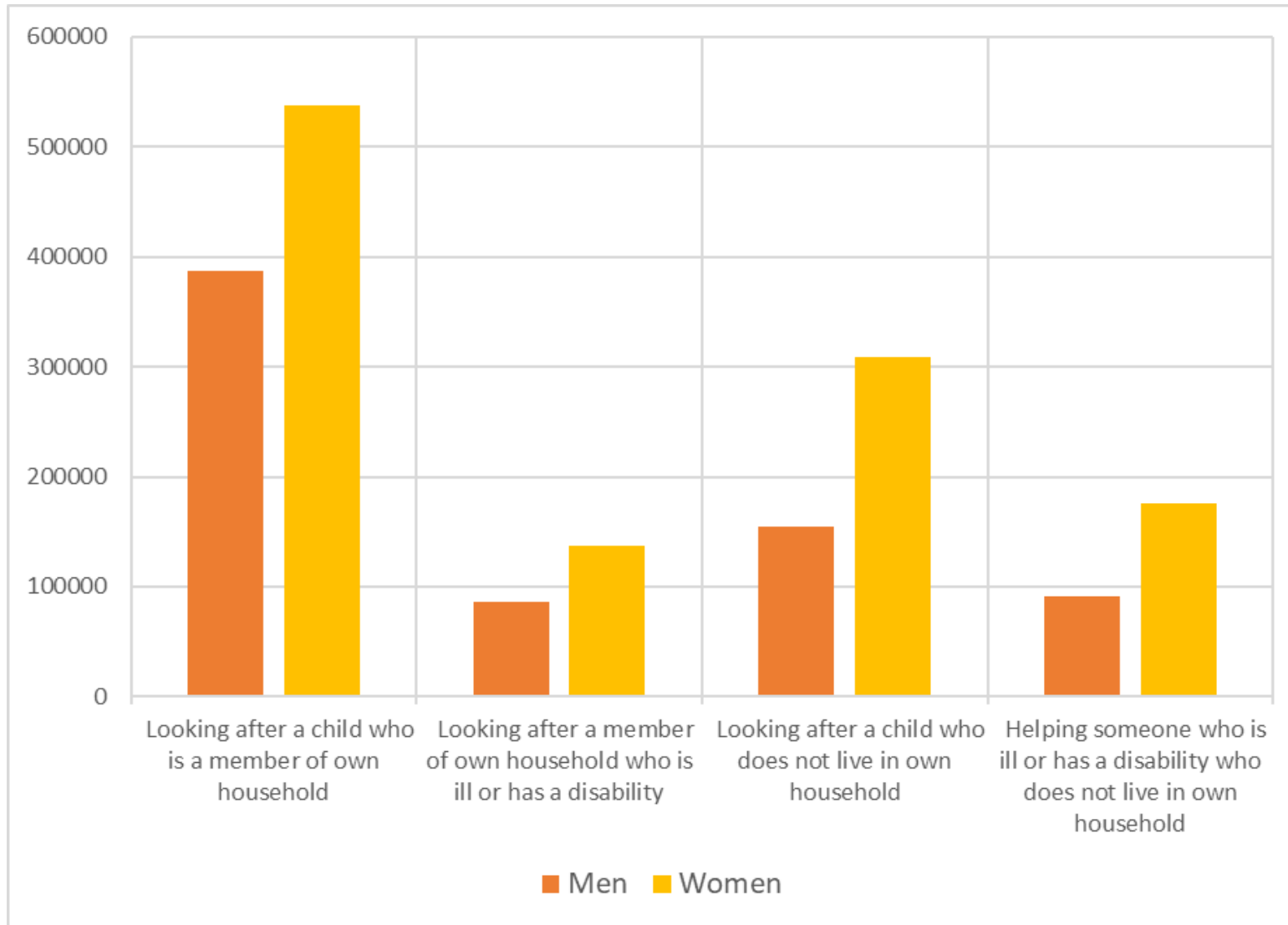
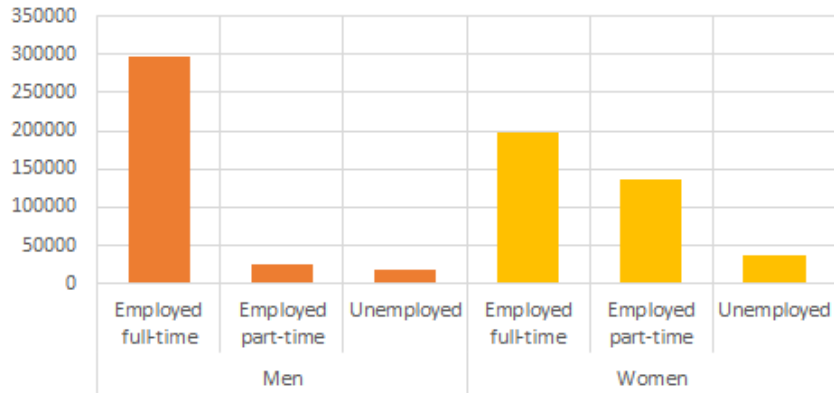
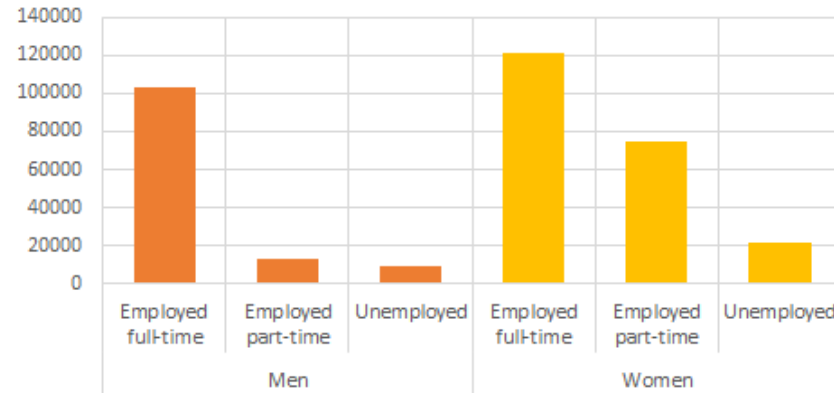


Figure 3. Number of individuals who engage in unpaid care work, by type of care work and by gender (2013 Census data).

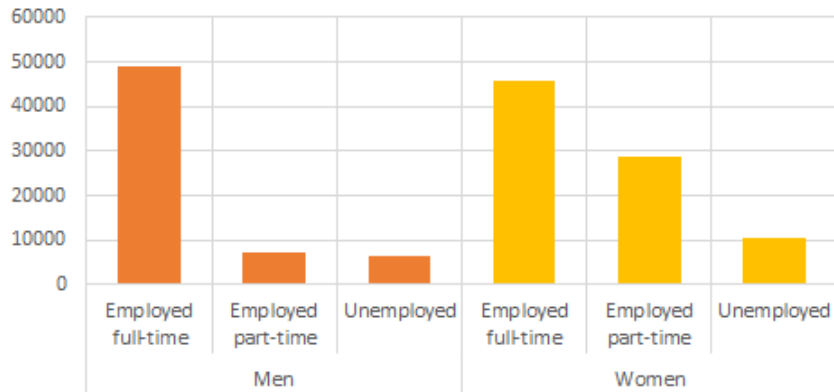
Looking after a child who is a member of own household



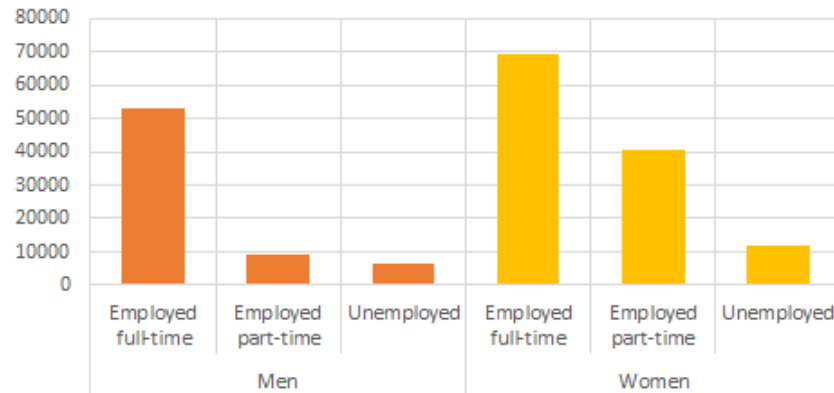
Looking after a child who does not live in own household



Looking after a member of own household who is ill or has a disability

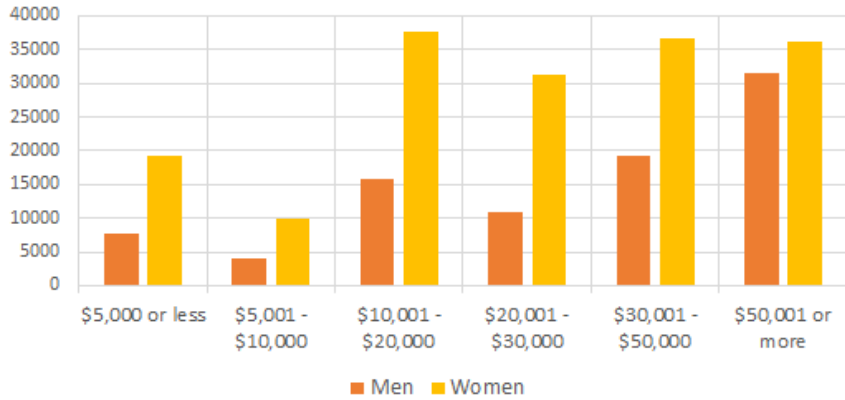


Helping someone who is ill or has a disability who does not live in own household

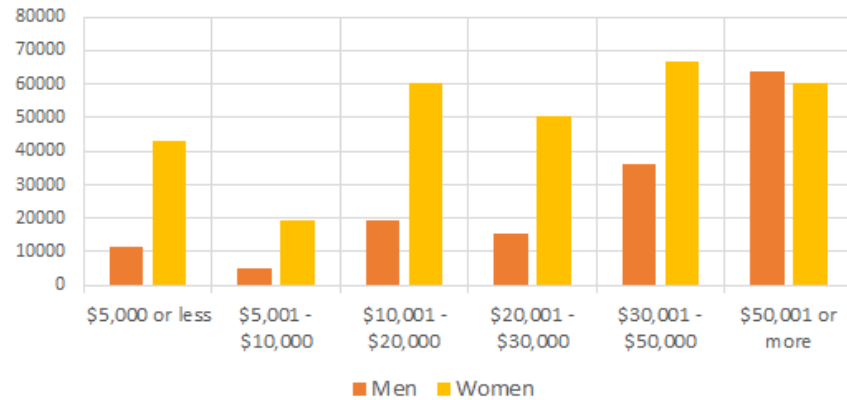


Figures 4-7. 2013 Census: Number of individuals who engage in unpaid care work, by employment status and by gender.

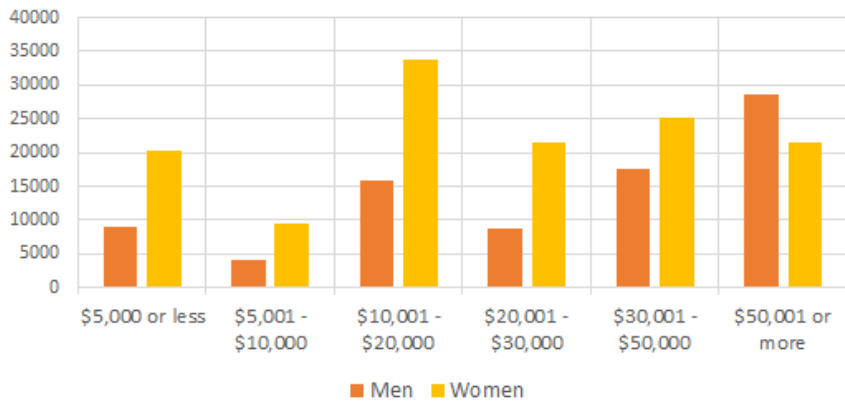
Helping someone who is ill or has a disability who does not live in own household



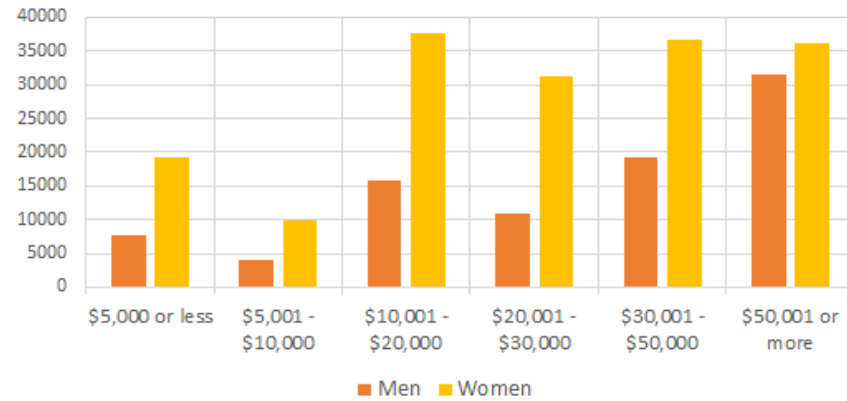
Looking after a child who does not live in own household



Looking after a member of own household who is ill or has a disability



Helping someone who is ill or has a disability who does not live in own household



Figures 8-11. 2013 Census: Number of individuals who engage in unpaid care work, by personal income and by gender.

Managing care responsibilities often leads women to choose part-time work over full-time work. In Australia, according to data from 2015, women constitute only 35 per cent of the full-time workforce, whereas a majority of women (70 per cent) make up the part-time workforce (ANZ, 2015). The majority of women working part-time (84 per cent) have a child under two years of age and engage in twice as many hours of unpaid work than their male counterparts.

There is variation in trends across Europe. Women in some countries return to paid work within two years after the birth of their child (e.g., in Western European nations with generous parental leave provisions and where this is socially accepted). This contrasts with the experience of women from Eastern European nations, who tend to return to paid work when their children reach school age (OECD, 2016).

A number of these features have been observed in New Zealand (Sin, Dasgupta, & Pacheco, 2018) where 61 per cent of women return to work 12 months after childbirth, rising to 69 per cent after 24 months. However, like their OECD counterparts, New Zealand men do not experience a decrement in employment after becoming parents (Sin et al., 2018).

In addition to penalties arising from career interruptions, women who are mothers face workplace discrimination relative to their childless female counterparts and men (Correll, Benard, & Paik, 2007). Specifically, stereotypes about mothers lead to increased perceptions of incompetence toward mothers and lower suggested starting salaries, and women who undertake caregiving roles tend to have fewer opportunities to advance their careers and gain salary increases (OECD, 2017a).

In Australia, women returning to work after twelve months of parental leave experience an approximate wage penalty that begins at 7 per cent, before rising to 12 per cent the following year (ANZ, 2015a). This penalty is also observed in New Zealand, where women's wages decrease sharply after becoming parents (Sin et al., 2018). This is a combination of both a reduction in work hours (e.g., transitioning to part-time work rather than returning to full-time employment) as well as lower wages in general. As a result, women experience a 4.4 per cent decrease in wages succeeding a six-month period of caregiving, and a 8.3 per cent decrease for childcare periods of over twelve months.

Marital and partnership status

A demographic difference between men and women with important implications for pensions and economic well-being in retirement is the propensity for (predominantly heterosexual) women to marry (or cohabit with) partners who are older than themselves. For example, in Norway, the average age gap between spouses is currently 3.5 years (Halverson & Pedersen, 2017).

In New Zealand, the average age gap tends to sit between two to three years for heterosexual couples and is wider for same-sex couples. However, just under a quarter of couples have an age gap of six years or more and, in most cases, the older person is male. Age-gap couples often have blended families, with one or both partners having children from a previous relationship and perhaps with each other. In the long term, this can create complexity for retirement and estate planning (Koh, 2018).

The bigger the age gap, the bigger the retirement pension pot required because the retirement timeframe can lengthen considerably - lasting from the time the older partner retires to the time the longest-surviving partner dies. Koh (2018) argues one way to reduce the financial risks for a younger partner may be to purchase a variable annuity, which would give a guaranteed income for life. This product has a built-in insurance component, thereby ensuring that the annuity is paid even if the account balance reaches zero.

An age gap between spouses (assuming that women are the younger partner, which is the norm in most heterosexual relationships), means that women have a far higher risk of becoming widows and can expect to spend a longer part of the retirement phase single. This means that women retirees may experience a lower level of economic wellbeing compared to male pensioners, even if their old age pension benefits were equal to those of men. As such, women have a stronger interest than men in pension mechanisms or benefit components that compensate widows/widowers for the loss of economies of scale that come with sharing expenses in a household (Halvorsen & Pedersen, 2017) .

Other demographic factors that have the potential to impact the gender pension gap are divorce and sole parenthood. In New Zealand there has been a trend toward marrying later, and this has led to an upward trend in age at divorce. The median age at divorce in 2016

(including the dissolution of couples from both marriages and civil unions) was 46.8 years for men and 44.4 years for women. Approximately one third of marriages end in divorce and the proportion of blended families has increased as the number of divorcees remarrying has increased. More research is needed to reveal the gendered impact of divorce on the accumulation of retirement savings and payouts as a result.

Single women with children, on average, are less likely to be employed relative to partnered women with children (OECD, 2016). Of the OECD countries, New Zealand has a comparatively greater gap in employment rates between single and partnered mothers. Moreover, there are more than 200,000 'one parent with children' families in New Zealand, representing 18 per cent of all family types. Of these families, 84 per cent are headed by women (Ministry of Social Development, 2018; Statistics New Zealand, 2014). In June 2019, the sole parent benefit was \$334.05 per week.

These gender differences in labour market behaviour and in demographic variables do not directly decide financial wellbeing in retirement. However, these factors are significant in that they interact with the features of a country's pension system to produce particular trends in the distribution of pensions and economic wellbeing amongst a generation of retirees. Thus, while the government may find it difficult to use policy to close gender pay gaps, there is a need to recognise the future implications of current gender pay gaps on the economic wellbeing of future retirees.

Financial knowledge and capability

The literature on reducing the Gender Pension Gap has yet to examine the impact of gender gaps in financial knowledge relative to the labour market and demographic factors listed above. However, we know quite a lot about gender differences in financial knowledge and these have the potential to translate into different retirement saving decisions between men and women.

A gender gap in financial literacy exists cross-nationally, with women less likely, relative to men, to answer financial literacy questions correctly. This trend is visible across different income levels, ages, and by financial topic. In addition, women are more likely to indicate that they "do not know" in response to financial literacy questions, suggesting that women are less

confident in their financial knowledge and more aware of gaps in their knowledge than men (Lusardi, 2019). In New Zealand, women are also reported to have lower financial knowledge in general than men (cited in OECD, 2013).

Indeed, according to ANZ data, women appear to have slightly lower knowledge of different financial products relative to men (see figure below). In addition, there appears to be small differences between ethnic groups where New Zealand European individuals appear to have better knowledge of financial products overall, with the exception of Asian men who also displayed slightly higher levels of knowledge.

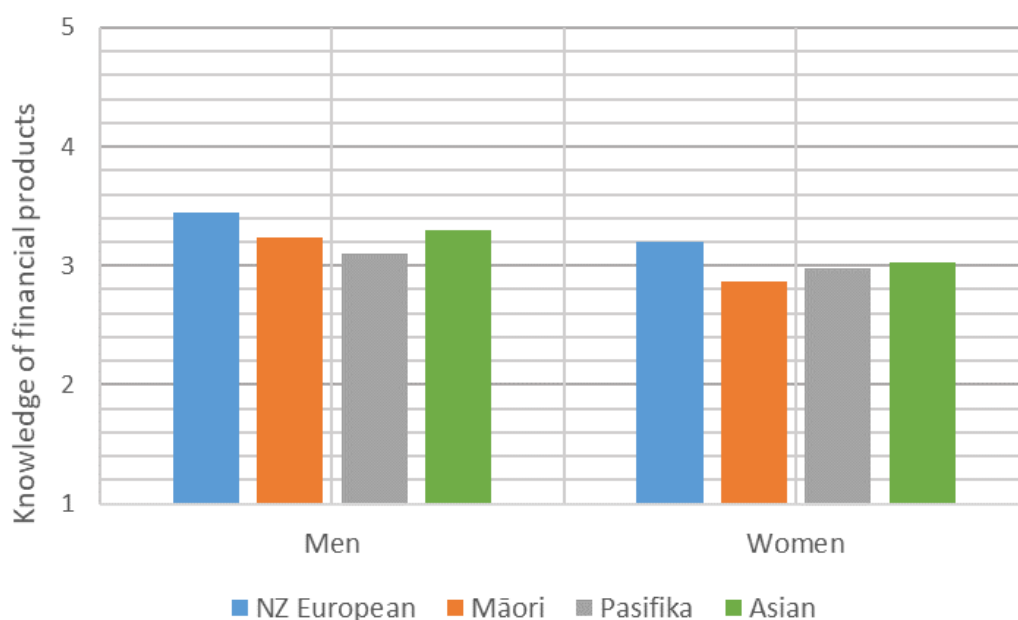


Figure 12. Knowledge of financial products by gender and ethnicity (2017 ANZ Financial Wellbeing Questionnaire data). Note. Some groups may have small sub-sample sizes and, as such, caution is required when interpreting these results.

In terms of knowledge of financial risk, New Zealand European and Māori individuals appeared to have similar levels of knowledge, with little difference between men and women. Asian individuals overall appeared to have slightly lower knowledge of risk as well as Pasifika women.

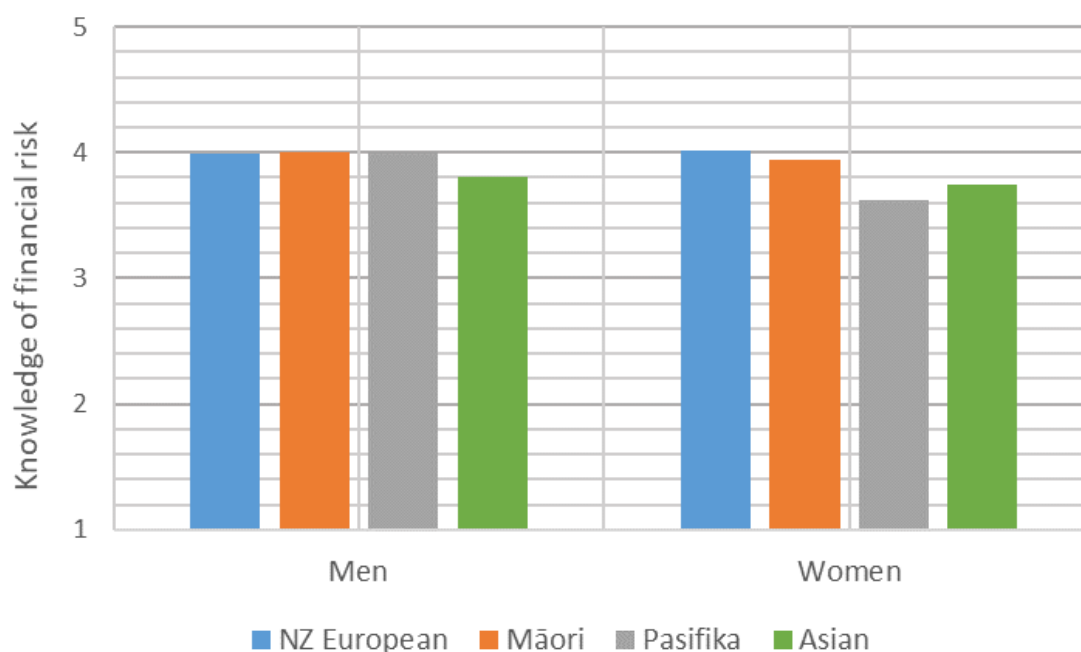


Figure 13. Knowledge of financial risk by gender and ethnicity (2017 ANZ Financial Wellbeing Questionnaire data). *Note.* Some groups may have small sub-sample sizes and, as such, caution is required when interpreting these results.

Financial confidence

Women tend to be less confident with their financial knowledge and are aware of their shortcomings in terms of their financial knowledge (Bucher-Koenen, Lusardi, Alessie, & van Rooij, 2017). In tests of financial knowledge, women, relative to men, are more likely to answer questions incorrectly and are more likely to indicate that they “do not know” the answer of a question. This has been observed cross-nationally (OECD, 2013) and in New Zealand (Crossan, Feslier, & Hurnard, 2011). Men are more likely to be over-confident about their financial capability, although over-confidence may lead to decreased intentions to seek external financial help or advice, or to seek further financial education (Barber & Odean, 2001; OECD, 2013).

Lower financial knowledge may also reflect lower interest in financial matters (OECD, 2013). This relationship could be bi-directional in that women with lower financial knowledge are less interested in financial matters or the decreased interest in finance leads to less motivation to seek financial information. Finally, it appears women invest less than men, and are more risk-

averse, in that men are more likely to invest in risky assets. These results hold even when accounting for other factors like income and financial knowledge, although the differences in some studies are small suggesting further research would be useful (Charness & Gneezy, 2011; Nelson, 2012; OECD, 2013).

In New Zealand, according to ANZ data, women appear to be slightly less confident in their money management skills relative to men, as seen in the figure below. In addition, it appears as though – relative to NZ European women – Māori, Pasifika, and Asian women display slightly lower financial confidence (although the same size is small).

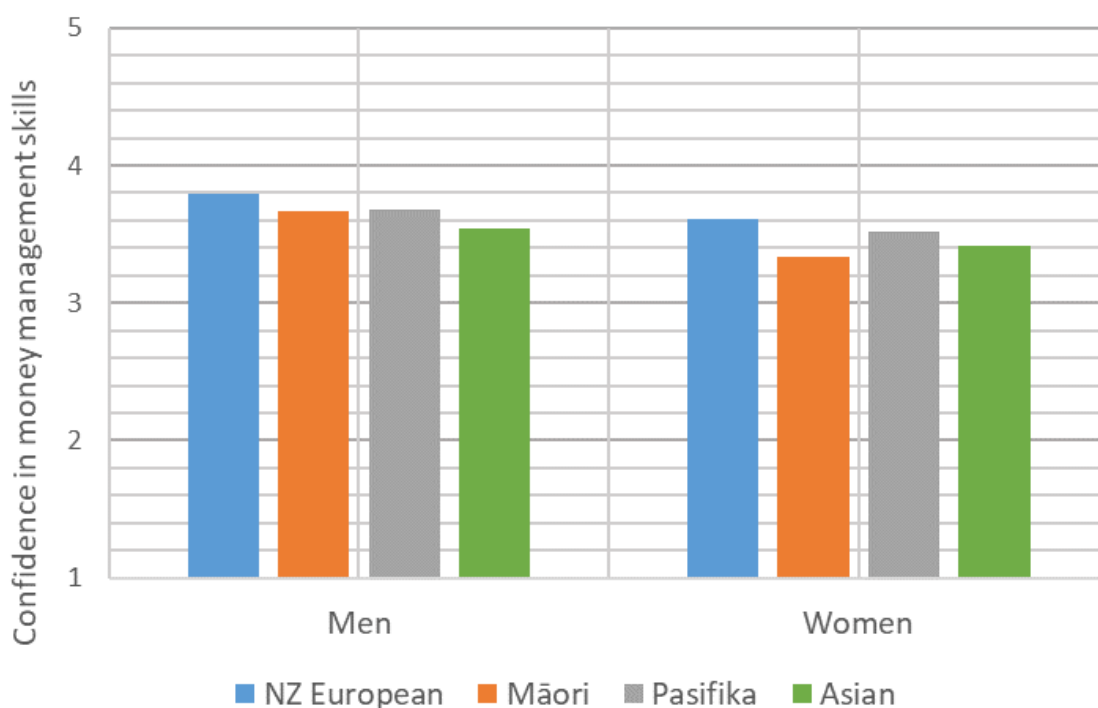


Figure 14. Confidence in own money management skills by gender and ethnicity (2017 ANZ Financial Wellbeing Questionnaire data). Note. Some groups may have small sub-sample sizes and, as such, caution is required when interpreting these results.

Financial behaviour

Although a majority of couples say they both take responsibility for everyday financial decisions, women are more likely to have a budget relative to men, although the gap is not significant (Atkinson & Messy, 2012). In New Zealand, women are more likely to report careful management of their expenses (ANZ, 2015).

When it comes to addressing insufficient funds, men and women engage in different approaches (OECD, 2013). Women are better at managing their day-to-day finances, but they are more likely than men to report finding it difficult to make ends meet. This may be attributable to the different approaches to ameliorating insufficient funds. Women are more likely to choose to reduce spending, leading to poorer everyday living conditions, as well as lower pension payments (Atkinson & Messy, 2012). In contrast, men are more likely to seek further work to earn more money to address insufficient funds.

Men and women seem to have little difference in terms of purchasing savings products (Atkinson & Messy, 2010), however, across the OECD, women have lower savings relative to men, including retirement savings (Hui, Vincent & Woolley, 2011; Westaway & McKay, 2007 as cited in OECD, 2013). The OECD suggests that these differences in accumulated funds are attributable to factors such as women’s higher risk aversion, leading to more conservative investments which lead to lower investment returns.

For New Zealanders, women plan and budget their finances slightly more than men, although again, some differences amongst women are evident (Figure 15).

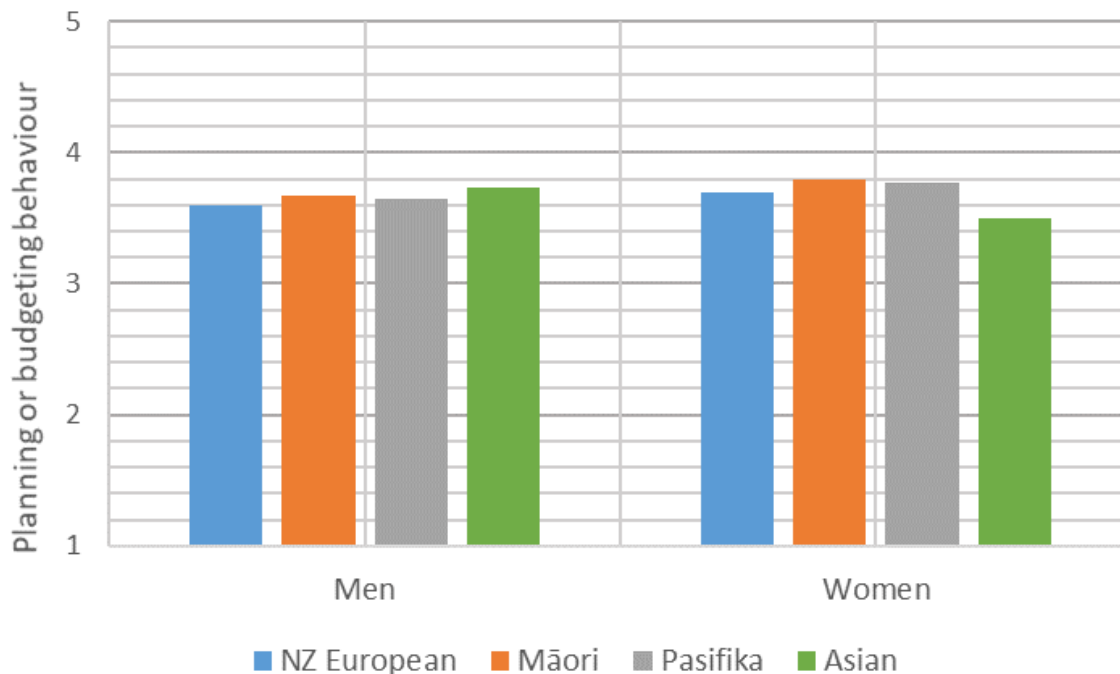


Figure 15. Tendency to plan or budget by gender and ethnicity (2017 ANZ Financial Wellbeing Questionnaire data). Note. Some groups may have small sub-sample sizes and, as such, caution is required when interpreting these results.

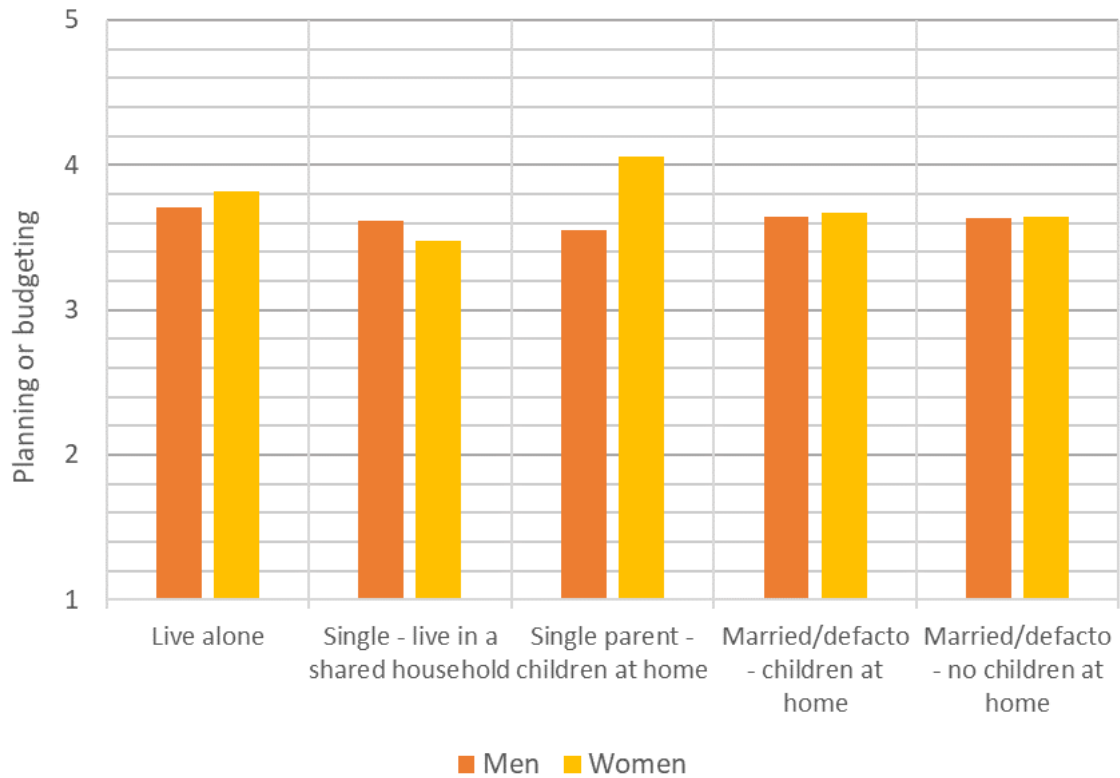


Figure 16. Tendency to plan or budget by household arrangement (2017 ANZ Financial Wellbeing Questionnaire data). *Note.* Some groups may have small sub-sample sizes and, as such, caution is required when interpreting these results.

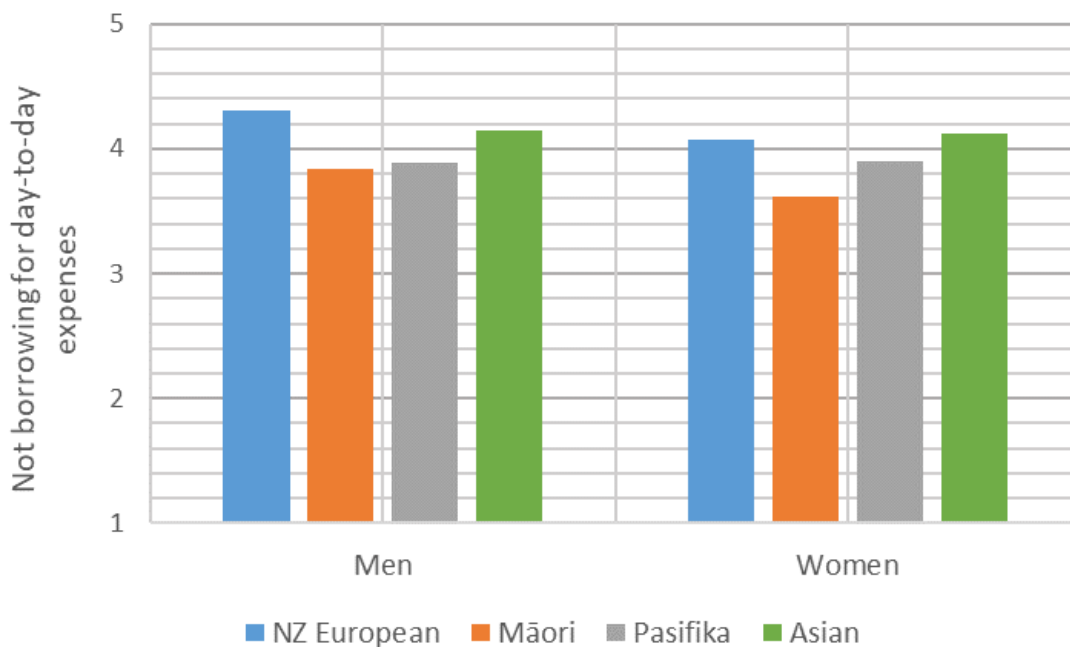


Figure 17. Inclination not to borrow for day-to-day expenses by gender and ethnicity (2017 ANZ Financial Wellbeing Questionnaire data). *Note.* Some groups may have small sub-sample sizes and, as such, caution is required when interpreting these results.

When examining differences between types of household arrangement, single women caring for children appear to be more inclined to budget or save relative to others (Figure 16 above); men are less likely to borrow funds for everyday expenses, compared to women (Figure 17 above); and sole parents are more inclined to borrow money for everyday expenses (Figure 18 below).

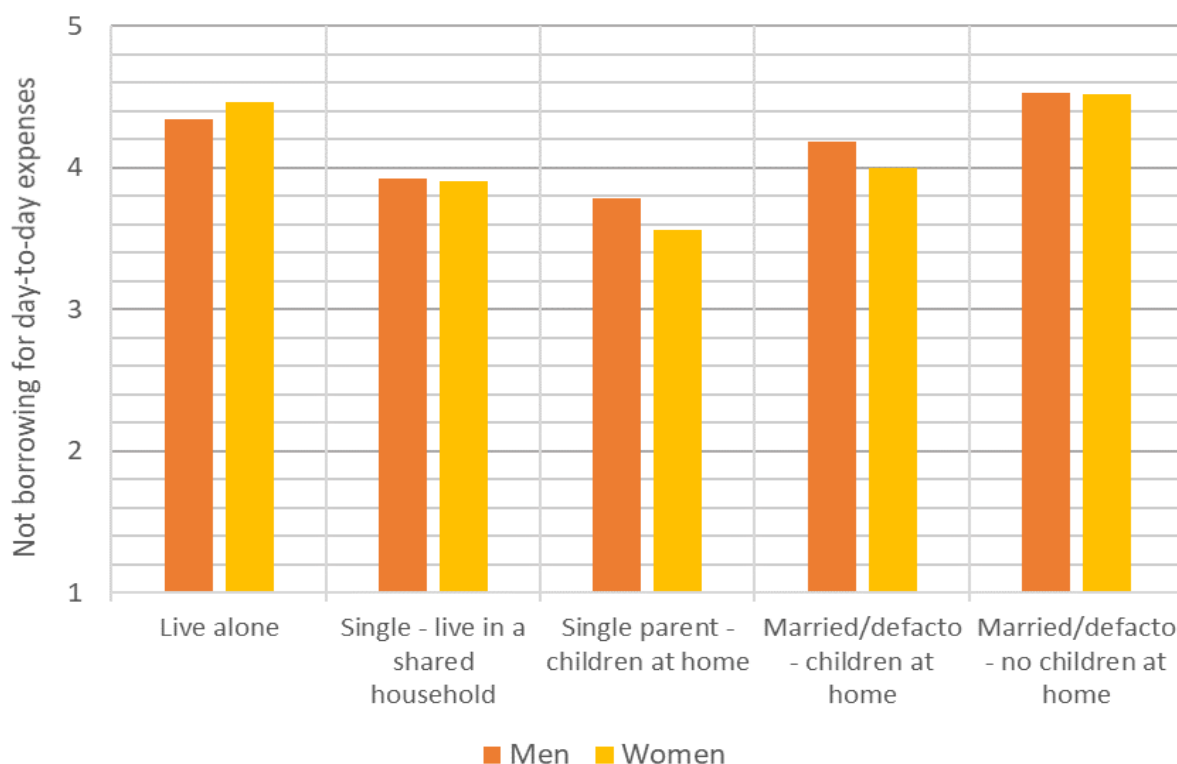


Figure 18. Inclination not to borrow for day-to-day expenses by household arrangement (2017 ANZ Financial Wellbeing Questionnaire data). Note. Some groups may have small sub-sample sizes and, as such, caution is required when interpreting these results.

In contrast to the gender differences observed above, men and women actively save at very similar rates (Figure 19). However, we do see differences in tendencies to save according to household arrangement in that sole parents are less likely to save (Figure 20).

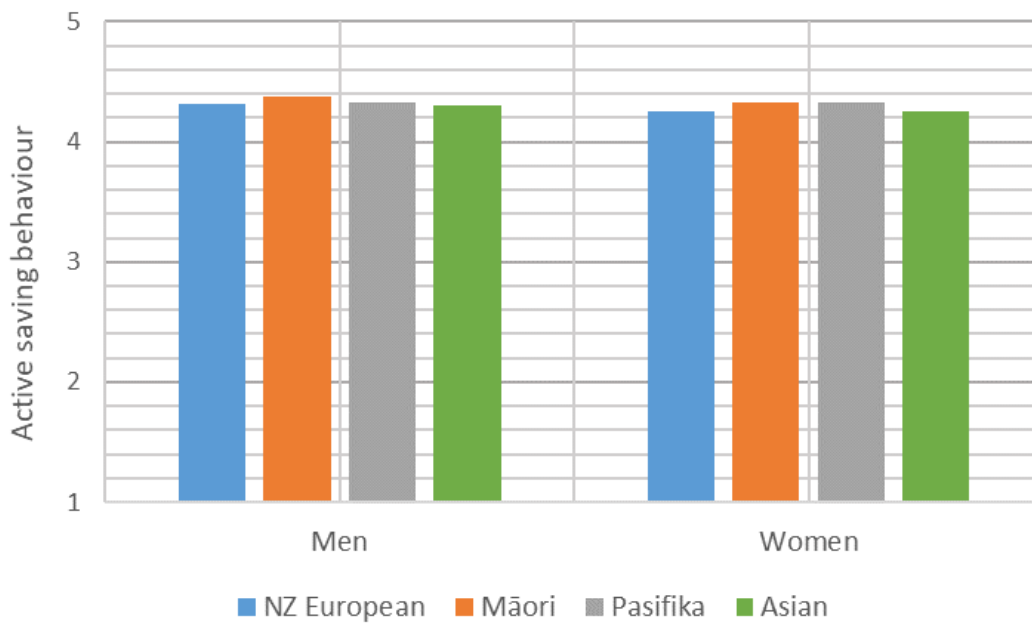


Figure 19. Tendency to actively save by gender and ethnicity (2017 ANZ Financial Wellbeing Questionnaire data). *Note.* Some groups may have small sub-sample sizes and, as such, caution is required when interpreting these results.

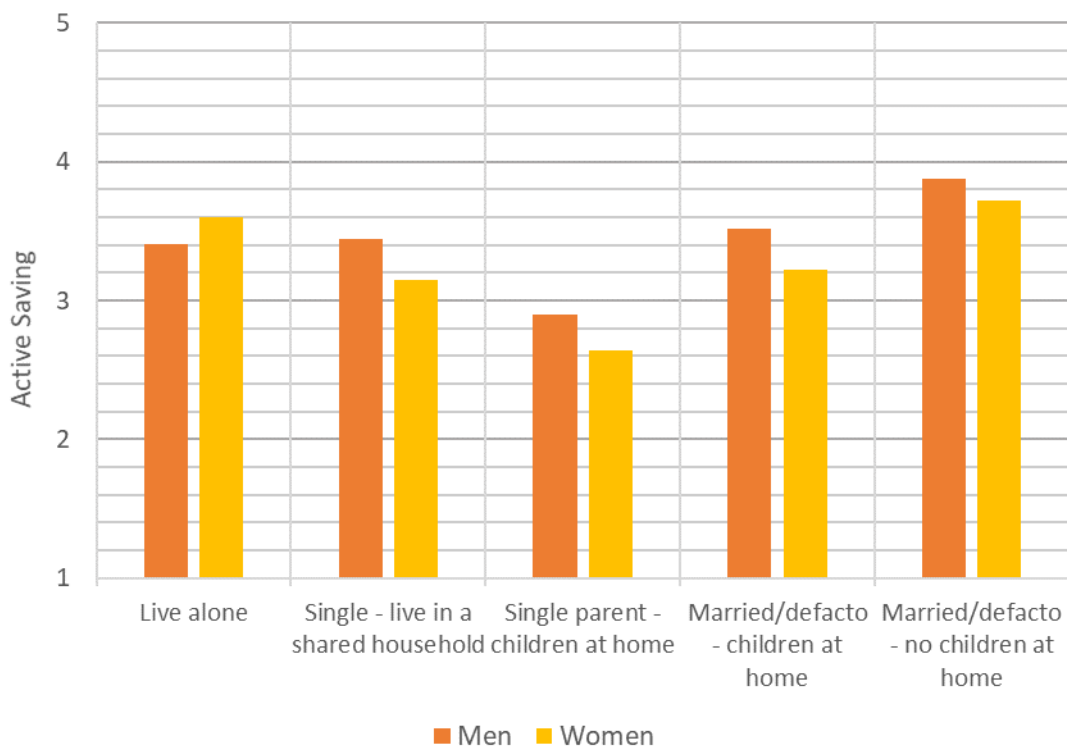


Figure 20. Tendency to actively save by household arrangement (2017 ANZ Financial Wellbeing Questionnaire data). *Note.* Some groups may have small sub-sample sizes and, as such, caution is required when interpreting these results.

Gender differences in financial knowledge and confidence are partially explained by socio-economic factors (OECD, 2013). Women who are not working (either because they are

unemployed, students, sole parents, unpaid caregivers, or retirees) have the lower financial knowledge relative to those who are employed. Women living in households with a household income below the median income and have not completed secondary school have the lowest levels of financial knowledge.

Intra-familial finances

Loss of income or employment affects men and women differently (OECD, 2017a). Specifically, due to gender differences in incomes, women's job losses affect household incomes less than when men experience job loss. The OECD's analysis suggests that when incomes are pooled together as part of a total household budget, women's job losses (or cessation of employment to take on full-time caregiving roles) can be partially mitigated (this is limited to households with two adults). However, it appears that only around half of OECD countries provide additional pension income (a pension advantage) to single-earner couples relative to unmarried single individuals. New Zealand is one such country, however, more data is required to understand possible interactive effects between intra-family income distribution in retirement and the gender pension gap.

6 What can be done to reduce the gender pension gap?

There are a number of possible policies that can be utilised to limit the impact of the structural and social factors that influence the Gender Pension Gap.

Maintaining a public pension scheme as a universal basic income is valuable to women.

Evidence from the OECD demonstrates that systems where social insurance or worker contributory schemes are the primary source of income in retirement are those with the highest Gender Pension Gap (Halvorsen & Pedersen, 2017).

Contributing to pension schemes for staff during parental leave periods. In 2015, ANZ began the initiative to ‘top-up’ KiwiSaver benefits for employees on parental leave, with the intention of mitigating KiwiSaver size disparities between men and women resulting from childbearing and childrearing (ANZ, 2015).

Paid parental leave for both mothers and fathers (OECD, 2016, 2017a) and utilising incentives that encourage men to prioritise childcare and change traditional norms (this might include extensions to paternity leave and giving greater flexible work arrangements for fathers).

Enhancing flexible working arrangements – for example, allowing employees to work from home or to have flexible start and finish times – can help facilitate balanced childcare and, in turn, enable both women and men to continue to pay contributions to their retirement schemes (OECD, 2017a).

Applying gender neutral annuity divisors. This only applies in countries where life-long annuities are common, but it is a useful reminder of the need to be conscious of gender in designing decumulation options. Where life-long annuities exist, groups with a relative high life-expectancy participate on equal terms with groups with a relatively low life-expectancy. Each cohort may pay for their own (estimated) life-expectancy, but applying a gender neutral annuity divisor has the potential to operate as an implicit redistribution from men to women given the latter’s longer life expectancy. When benefits are linked to wage indexation, the redistribution effects in the gender neutral annuity divisor are enhanced (Halvorsen & Pedersen, 2017).

Explore a form of ‘care credit’ system that could co-exist with KiwiSaver. Care credit systems have been implemented in a number of countries (Frericks & Maier, 2008). The intention is to reduce the gender pension gap by accounting for the caregiving roles and periods that women undergo during their working life. The system is only likely to reduce the gender gap if applied to both private and public pensions, given the latter alone are unlikely to provide sufficient retirement income (OECD, 2015).

The types of care work that are covered by pension credits are typically for caring for children, although some systems provide credits in the case of periods of unpaid care work of elders or people with disabilities (Vlachantoni, 2008). In some systems, the individual needs to have contributed a minimum amount into the system already before they qualify for care credits. This may prove punitive given individuals who have interrupted work histories may also have less opportunity to fulfil the minimum contributions due to their already reduced participation in the labour market.

Credits can compensate for pension differences in two ways (OECD, 2015). The first is by lengthening the period of insurance in a pension scheme (primarily employed by contribution-based pension plans). The intention of this approach is to provide a better income upon withdrawal. For example, Luxembourg accounts for the first four years of childcare per child (known as “baby years”) as insured time.

The second approach is to increase pension entitlements directly. This approach quantitatively calculates additional pension benefits according to the individual’s earnings (either prior to the break or across the working life) and contributions paid during their absence from the paid labour market. In contributions-based systems, the state may pay for contributions during unpaid leave periods. For example, Estonia pays employer contributions during childcare periods (which are limited to three years per child). Similarly, Norway credits individuals with periods of care work with approximately 71 per cent of the average full-time wage.

Alternatively, unpaid leave periods are accounted for when calculating pension benefits upon retirement. For example, Finland employs different calculations for periods of childcare, whereby the state pays for pension contributions for up to three years per child. By contrast, in Denmark, the beneficiary pays a third of the contribution and the state pays for the remaining

two-thirds during the parental leave period. Other systems have undertaken a life-course model whereby, through a scheme, workers can save a proportion of their wages during periods of employment to go towards other purposes such periods of childrearing or directly towards retirement (Maier, de Graaf, & Frericks, 2007).

7 Future research and potential indicators

Building up data on the economic contribution of unpaid care work undertaken is an important step, especially given the precarious nature of the future of work. Here, Time Use Surveys are an important mechanism to “count” the economic contribution many women make to the care of children and elders. The next step would be to investigate ways that such work could attract a contribution to a pension fund like KiwiSaver. Undertaking time use surveys is part of a general recommendation by the OECD (2017a) which suggests that governments should record time use better to identify divisions of labour between men and women, and the consequences this has for retirement income.

It would be useful if the NZ Treasury’s Living Standards Framework Dashboard of Indicators could be analysed more comprehensively. Currently, it is impossible to disaggregate various wellbeing measures by gender but not by gender plus age or gender plus ethnicity, which, as noted previously, is important to consider when addressing retirement income gaps. An updated set of measures would be useful to track perceptions of economic wellbeing and material wellbeing overtime, and develop a model that would enable a cohort analysis.

It is likely that this would be possible through an analysis of data in the Integrated Data Infrastructure, but this would be new research that would take a longer period of time. For example it would be good to follow several specific birth cohorts: those who preceded the start of KiwiSaver, those who have cashed out their KiwiSaver for retirement income, and those who are currently in KiwiSaver but are five-to-ten years out from retirement. It might also be possible to run models, such as microsimulations, of the latter cohort with respect to labour earnings, demographic factors, etc. This would allow us to identify in a more granular form, the significance of a persistent gender pension gap on women’s economic wellbeing.

However, based on the research findings reviewed above, we suggest the indicators in Table 1 represent a useful first step in identifying the multiplicity of measures required to close the pension gender gap over time.

Table 1: Indicators of influence for the Gender Pension Gap

<p>Gender pay gap</p>	<ul style="list-style-type: none"> • The presence of a gender pay gap across the working life contributes lower retirement savings, leading to the gender pension gap. • The gap is influenced by occupational segregation, whereby men are overrepresented in higher income brackets and higher wage industries, and women are overrepresented in lower income brackets and lower income sectors. • The impact of these factors may be stronger for women of ethnic minority backgrounds, such as Māori, Pacific, and/or Asian women.
<p>Career gaps or time out of work</p>	<ul style="list-style-type: none"> • Pension system design was based on the assumption that individuals would be engaged in full-time work for the duration of their working lives. • The reality is individuals may need to take time out of paid employment to undertake unpaid care roles (e.g., childcare or care for other dependents). • These interruptions disproportionately affect women. More women than men engage in unpaid care work in New Zealand. • Leaving full-time employment to undertake care roles leads to gaps in pension contributions, thereby contributing to the gender pension gap.
<p>Marital and partnership status</p>	<ul style="list-style-type: none"> • Women are more likely to marry or cohabitate with a partner who is older (for heterosexual couples). The age gap is larger for same-sex couples. • This age gap means that the younger partner, who is more likely to be the woman, requires retirement finances to last longer. • Women are also more likely to be sole parents than men. Single women with children are less likely to be employed relative to partnered women with children.
<p>Financial knowledge and capability</p>	<ul style="list-style-type: none"> • Gender differences in levels of financial knowledge can contribute to gender differences in retirement savings decisions. • Women have slightly lower financial literacy than men.
<p>Financial confidence</p>	<ul style="list-style-type: none"> • Women are less confident with their financial knowledge compared to men. • Men are more likely to be over-confident about their financial capability. • Women are more risk-averse than men in terms of investment.
<p>Financial behaviour</p>	<ul style="list-style-type: none"> • Men and women address times of financial hardship differently. • Women are more likely to reduce spending, including contributing less to pension savings. • Men are more likely seek additional work to compensate for insufficient funds.
<p>Intra-familial finances</p>	<ul style="list-style-type: none"> • As women earn less relative to men, women’s job loss affects household incomes less relative to men. • There is limited data available on how retirement incomes are shared within households.

References

- Atkinson, A., & Messy, F. (2012). *Measuring financial literacy: Results of the OECD / International Network on Financial Education (INFE) pilot study*. OECD Working Papers on Finance, Insurance and Private Pensions, No. 15. Retrieved from <http://dx.doi.org/10.1787/5k9csfs90fr4-en>
- ANZ. (2015). *ANZ women's report: Barriers to achieving financial gender equity*. Retrieved from <http://malechampionsofchange.com/wp-content/uploads/2015/08/ANZ-Womens-Report-Barriers-to-Achieving-Financial-Gender-Equality-Singl....pdf>
- Barber, B. M., & Odean, T. (2001). Boys will be boys: Gender, overconfidence, and common stock investment. *The Quarterly Journal of Economics*, 116(1), 261-292.
- Bucher-Koenen, T., Lusardi, A., Alessie, R., & van Rooij, M. (2017). How financially literate are women? An overview and new insights. *Journal of Consumer Affairs*, 51(2), 255-283.
- Burkevica, I., Humbert, A. L., Oetke, N., & Paats, M. (2015). *Gender gap in pensions in the EU: Research note to the Latvian Presidency*. Vilnius, Lithuania: European Institute for Gender Equality (EIGE).
- Charness, G., & Gneezy, U. (2012). Strong evidence for gender differences in risk taking. *Journal of Economic Behavior & Organization*, 83(1), 50-58.
- Clare, R. (2017). *Superannuation account balances by age and gender*. Retrieved from https://www.superannuation.asn.au/ArticleDocuments/359/1710_Superannuation_account_balances_by_age_and_gender.pdf.aspx?Embed=Y
- Correll, S. J., Benard, S., & Paik, I. (2007). Getting a job: Is there a motherhood penalty? *American Journal of Sociology*, 112(5), 1297-1338.
- Credit Suisse. (2016). *The CS Gender 3000: The reward for change*. Retrieved from <https://www.wgea.gov.au/sites/default/files/documents/csri-gender-3000.pdf>
- Crossan, D., Feslier, D., & Hurnard, R. (2011). Financial literacy and retirement planning in New Zealand. *Journal of Pension Economics & Finance*, 10(4), 619-635.
- Dale, M. C. (2015). *Options for dis-saving 'safely'*. Auckland, New Zealand: Retirement Policy and Research Centre.
- European Commission. (2018). *2018 report on equality between women and men in the EU*. Retrieved from https://ec.europa.eu/newsroom/just/document.cfm?doc_id=50074

- Financial Markets Authority. (2014). *KiwiSaver Report 2014: For the year ended 30 June*. Retrieved from http://www.fma.govt.nz/assets/Reports/_versions/5123/140630-FMA-KiwiSaver-Report-2014.1.pdf
- Financial Markets Authority. (2016). *KiwiSaver annual report: 1 July 2014 – 30 June 2015*. Retrieved from <http://www.fma.govt.nz/assets/Reports/151005-FMA-KiwiSaver-Report-2015.pdf>
- Financial Markets Authority. (2017). *KiwiSaver annual report: 1 July 2015 – 30 June 2016*. Retrieved from <http://www.fma.govt.nz/assets/Reports/161004-FMA-KiwiSaver-Report-2016.pdf>
- Financial Markets Authority. (2018). *KiwiSaver annual report 2018*. Retrieved from <https://www.fma.govt.nz/assets/Reports/KiwiSaver-Report-2018.pdf>
- Frericks, P., Maier, R., & de Graaf, W. (2008). Male norms and female adjustments: The influence of care credits on gender pension gaps in France and Germany. *European Societies*, 10(1), 97-119.
- Groom, M. (2018). Beyond the pay gap: The retirement disadvantage of being female. *Policy Quarterly*, 14(1), 64-67.
- Halvorsen, E., & Pedersen, A, W. (2017). *Closing the gender gap in pensions. A microsimulation analysis of the Norwegian NDC pension system*. Discussion Papers, No. 855, Statistics Norway. Retrieved from <http://hdl.handle.net/10419/192837>
- Hui, S., Vincent, C., & Woolley, F. (2011). *Understanding gender differences in retirement saving decisions: Evidence from the Canadian Financial Capability Survey (CFCS)*. Retrieved from http://www.srdc.org/uploads/cea_deck_vincent_en.pdf
- Koh, L. (2018, November 10). *Here's how retirees can survive a market downturn*. Retrieved from <https://www.stuff.co.nz/business/108412888/heres-how-retirees-can-survive-a-market-downturn>
- Lusardi, A. (2019). Financial literacy and the need for financial education: evidence and implications. *Swiss Journal of Economics and Statistics*, 155(1), 1-8.
- Maier, R., de Graaf, W., & Frericks, P. (2007). Policy for the 'peak hour' of life: Lessons from the new Dutch life course saving scheme. *European Societies*, 9(3), 339-358.

- MBIE. (2017). *Māori in the labour market*. Retrieved from <https://www.mbie.govt.nz/assets/c71b557b32/2017-monitoring-report-maori-in-the-labour-market.pdf>
- MfW. (2019). *Gender pay principles*. Retrieved from https://women.govt.nz/sites/public_files/Gender%20Pay%20principles.pdf
- Ministry of Social Development. (2018). *Sole parenting in New Zealand: An update on key trends and what helps reduce disadvantage*. Retrieved from <https://www.msd.govt.nz/documents/about-msd-and-our-work/publications-resources/research/sole-parenting/sole-parenting-in-nz-an-update-on-key-trends-and-what-helps-reduce-disadvantage.pdf>
- Nelson, J. A. (2012). *Are women really more risk-averse than men?* Retrieved from https://papers.ssrn.com/sol3/Delivery.cfm/SSRN_ID2158950_code571363.pdf?abstractid=2158950&mirid=1
- NZMC. (2019). *Māori women more likely to head into retirement in debt with little savings*. Retrieved from <https://www.maorieverywhere.com/single-post/2019/03/12/Maori-Women-more-likely-to-head-into-retirement-in-debt-little-in-savings>
- OECD. (2013). *Women and financial education: Evidence, policy responses and guidance*. Paris, France: OECD Publishing.
- OECD. (2015). *Pensions at a glance 2015: OECD and G20 indicators*. Retrieved from https://www.oecd-ilibrary.org/pensions-at-a-glance-2015_5jrtpt44c0f3.pdf?itemId=%2Fcontent%2Fpublication%2Fpension_glance-2015-en&mimeType=pdf
- OECD. (2016). *Walking the tightrope: Background brief on parents' work-life balance across the stages of childhood*. Paris, France: OECD.
- OECD. (2017a). *The pursuit of gender equality: An uphill battle*. Retrieved from <https://www.oecd-ilibrary.org/deliver/9789264281318-en.pdf?itemId=/content/publication/9789264281318-en&mimeType=application/pdf>
- OECD. (2017b). *Pensions at a glance 2017: OECD and G20 indicators*. Retrieved from https://www.oecd-ilibrary.org/docserver/pension_glance-2017-en.pdf?expires=1564966807&id=id&accname=ocid177592&checksum=0A055999828239B007463A6622DF6252

- Sin, I., Stillman, S., & Fabling, R. (2017). *What drives the gender wage gap? Examining the roles of sorting, productivity differences, and discrimination*. Motu Working Paper 17-15. Retrieved from <http://ftp.iza.org/dp10975.pdf>
- Sin, I., Dasgupta, K., & Pacheco, G. (2018). *Parenthood and labour market outcomes*. Retrieved from https://papers.ssrn.com/sol3/Delivery.cfm/SSRN_ID3187106_code518411.pdf?abstractid=3187106&mirid=1
- Statistics New Zealand. (2014). *2013 Census QuickStats about families and households: One parent with children*. Retrieved from <http://archive.stats.govt.nz/Census/2013-census/profile-and-summary-reports/qstats-families-households/one-parent-children.aspx>
- Statistics New Zealand (2015). *Women at Work 1991-2013*. Retrieved from [file:///C:/Users/jcur017/Downloads/women-at-work-1991-2013%20\(1\).pdf](file:///C:/Users/jcur017/Downloads/women-at-work-1991-2013%20(1).pdf)
- Statistics New Zealand. (2016). *Cohort life expectancy – the best measure of average lifespan*. Retrieved from http://archive.stats.govt.nz/browse_for_stats/health/life_expectancy/cohort-life-expectancy.aspx
- Statistics New Zealand (2018) *Gender pay gap is second-smallest*. Retrieved from <https://www.stats.govt.nz/news/gender-pay-gap-is-second-smallest>
- Statistics New Zealand. (2019a). *NZ.Stat*. Retrieved from http://nzdotstat.stats.govt.nz/wbos/Index.aspx?_ga=2.191021098.1841938304.1564963377-1815840504.1564963377
- 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>
- Tinios, P., Bettio, F., & Betti, G. (2015). *Men, women and pensions*. Retrieved from https://ec.europa.eu/info/sites/info/files/150618_men_women_pensions_en.pdf
- Vlachantoni, A. (2008). *Care credits in European pension systems*. Retrieved from https://eprints.soton.ac.uk/166799/1/Microsoft_Word_-_CRA_DP_0801.pdf

About the Researchers

Jennifer Curtin is a Professor of Politics and Director of the Public Policy Institute at the University of Auckland. She teaches into the Master of Public Policy programme, and has published widely on comparative policy analysis, gender and public policy, and trans-Tasman politics. She is currently working on a project to design a gender budgeting initiative for New Zealand that draws on best practice from abroad.

Yanshu Huang is a Postdoctoral Research Fellow with the Public Policy Institute at the University of Auckland. Her research focusses on attitudes towards gender relations, changes in population-level attitudes towards gender equality, and support for reproductive rights in New Zealand. She has published several articles on these topics and recently contributed a number of media commentaries on New Zealanders' attitudes to abortion law reform.

About the Public Policy Institute

The Public Policy Institute (PPI) has been established to foster independent, critical research on key policy issues affecting New Zealand, the Asia Pacific, and the global community.

We bring together researchers from across disciplines to create and disseminate evidence-informed, policy-relevant knowledge that speaks to policy agendas, amplifies policy impact, and grows our partnerships with governments, both local and central, as well as non-profits, communities and others engaged in policy research and evaluation in New Zealand and internationally.

The PPI is committed to creating strong relationships with iwi and hapū to ensure that all aspects of our research, teaching, and external activities support and engage with mātauranga Māori and the goals of Māori self-determination and development.

The PPI is also home to the Master of Public Policy, where postgraduate students engage in learning and knowledge exchange with researchers and professionals to address a range of challenging policy questions. (www.ppi.auckland.ac.nz)



**PUBLIC POLICY
INSTITUTE**
Te Whare Marea Tātari Kaupapa



THE UNIVERSITY OF
AUCKLAND
Te Whare Wananga o Tāmaki Makaurau
NEW ZEALAND

**PUBLIC POLICY
INSTITUTE**

Te Whare Marea Tātari Kaupapa