KiwiSaver equity for women

Building long-term financial wellbeing

NZIER report to Kiwi Wealth

June 2022

About NZIER

NZIER is a specialist consulting firm that uses applied economic research and analysis to provide a wide range of strategic advice.

We undertake and make freely available economic research aimed at promoting a better understanding of New Zealand's important economic challenges.

Our long-established *Quarterly Survey of Business Opinion* and *Quarterly Predictions* are available to members of NZIER.

We pride ourselves on our reputation for independence and delivering quality analysis in the right form and at the right time. We ensure quality through teamwork on individual projects, critical review at internal seminars, and peer review.

NZIER was established in 1958.

Authorship

This paper was prepared at NZIER by Michael Bealing and Christina Leung.

It was quality approved by Sarah Hogan.

The assistance of Sarah Spring is gratefully acknowledged.

How to cite this document:

NZIER. 2022. KiwiSaver equity for women: Building long-term financial wellbeing. A report for Kiwi Wealth.

Registered office: Level 13, Public Trust Tower, 22–28 Willeston St | PO Box 3479, Wellington 6140
Auckland office: Ground Floor, 70 Shortland St, Auckland
Tel 0800 220 090 or +64 4 472 1880 | econ@nzier.org.nz | www.nzier.org.nz

Key points

Background

This report coincided with the 15-year review of KiwiSaver by the Ministry of Business Innovation and Employment. The intent of the report was to assist policy makers by deliberately exploring and providing opportunities to get more equitable settings in place.

The drivers of KiwiSaver inequity are well understood, and it is clear that more can be done to improve equity in KiwiSaver outcomes for women. Failure to act would be detrimental to the long-term wellbeing of women in New Zealand. Sticking to the status quo, when many countries are acting on retirement savings equity, would continue to allow the erosion of our international rankings (Mercer and CFA Institute 2021).

The recommendations

The following actions for government, business and individuals would contribute to improving KiwiSaver outcomes for women:

Actions for government

- Introduce legislation requiring gender pay gap reporting and pay transparency
- Develop a policy for KiwiSaver contributions for parents caring for children, regardless of gender
- Maintain a watching brief on international developments to ensure that New Zealand remains well-ranked for retirement savings
- Consider whether more needs to be done to address the adequacy and sustainability weaknesses identified in an international comparison by Mercer and CFA Institute (2021)
- Partner with KiwiSaver providers to improve financial confidence and knowledge among women
- Require transparency about who (age-sex groups) is doing what, so women understand the potential average returns relative to other fund types.

Actions for business and other organisations

- Offer employees the benefit of continuing their KiwiSaver contribution while on parental leave
- Partner with KiwiSaver providers to improve financial confidence and knowledge among women
- Assess and report gender pay gaps in your business, and work on eliminating them
- Actively work to eliminate unconscious gender bias
- Employ more women.

Actions for individuals

- Continue to advocate for pay equity and KiwiSaver equity

- Accept pay transparency as a mechanism to support pay equity
- Consistently contribute to KiwiSaver and other forms of retirement savings.

The findings

The KiwiSaver gender gap

- In New Zealand, the average KiwiSaver balance for women is 20% lower than the average balance for men across all age groups (Te Ara Ahunga Ora Retirement Commission 2022b).

There are four key drivers of the KiwiSaver gender gap

The literature shows that four drivers can explain the KiwiSaver gender gap:

- The labour force participation gap
- The pay equity gap
- Career gaps and changes due to motherhood
- Self-reported low confidence and knowledge associated with KiwiSaver.

Solutions for addressing drivers

Table 1 shows that each potential solution addresses one or more of the drivers of the KiwiSaver gap.

Table 1 Matching the challenges and solutions

Solution	Drivers of the KiwiSaver gap			
	Labour force participation	Pay equity	Career gaps	Confidence and knowledge
Improving pay equity		✓		
Continuation of payments during maternity leave			✓	
Improving financial capability and literacy				✓
Universal carer payments	✓		✓	

Source: NZIER

Our findings show that each solution could make a difference

Pay equity

- Pay equity would increase contributions for a woman working full-time on the median wage by between 8.1% and 9.0%, depending on the type of KiwiSaver fund used.
- The median gender pay gap was 9.1% in 2021, and the gap has been closing over the last 20 years.

- Gender pay equity is a persistent challenge that has proven tough to address. Transparency and equal representation of women in all industries and staff levels is key to improving pay equity. Addressing pay equity requires a consistent and determined effort from regulators, employers, staff, and industry associations.

Continuation of payments during maternity leave

- A 30-year-old woman who takes maternity leave from full-time work for one year will sacrifice KiwiSaver contributions of $4,905.03 based on the median income and 3% employee contribution.
- The financial impact of a one-year break in contributions in terms of the impact on KiwiSaver balance at age 65 was estimated to be $15,100.
- The effect of motherhood on KiwiSaver balances at age 65 could be between $58,000 and $318,000 if motherhood leads to part-time work or leaving the labour force, compared to full-time employment.
- The cost to employers of continuing payments on behalf of their valued employees would be $4,383.60, assuming the government still pays the government contributions to KiwiSaver.
- For business, such an investment in staff wellbeing and loyalty is a good investment compared to the potential costs of recruiting new employees and getting them up to speed.

Improving financial confidence and knowledge

- For a woman who contributes 3% of their median full-time income to a growth fund rather than a conservative fund, the difference in KiwiSaver balances at retirement could be $298,146, which is a 77% increase on a conservative balance.
- There is a confidence gap between men and women that closes over time with financial options. Improving the confidence and financial literacy of young women will have life-long benefits for their financial freedom, self-empowerment, and overall wellbeing – not to mention the financial implications for retirement.

Universal carer payments

- Carer payments aim to close the pension gap for someone who is the primary carer for dependants and other family members that need a high degree of support.
- Women more often fill these roles than men in families.
- Carer payment approaches are used in a number of countries (Huang and Curtin 2019), and New Zealand could gather insights about what works best and what to avoid.
- A carer payment system can be designed in a number of ways, including direct payments into KiwiSaver funds on behalf of the carer to compensate them for the forgone savings.

Areas for further research

Further research in three key areas would make a valuable contribution to addressing KiwiSaver equity for women.

- KiwiSaver equity across different ethnic communities, including Māori, is an important issue that deserves a report of its own.
- Access to more detailed data on KiwiSaver patterns and outcomes would improve the quality of research and allow those designing solutions to address KiwiSaver equity for women to be more specific about what is needed to improve outcomes.
- This report did not investigate the implications of relationship breakdown for KiwiSaver outcomes, but this is a space that needs more research in New Zealand to ensure that our system is consistent with international practice and improvements.

Contents

Figures

Tables

1 Objectives and scope

Kiwi Wealth commissioned NZIER to assess the potential drivers of KiwiSaver inequity among women in New Zealand and recommend policy options to address these.

This report coincided with the 15-year review of KiwiSaver by the Ministry of Business Innovation and Employment. The intent of the report was to assist policy makers by deliberately exploring and providing opportunities to get more equitable settings in place.

1.1 Research objectives

The key research questions NZIER looked to answer in our research were:

- What are the options for improving KiwiSaver savings for women compared to their current levels of savings?
- Is the economic case for more equitable options compelling?

1.2 Research scope

The scope of the research was focused on improving KiwiSaver outcomes for women through KiwiSaver and other related policy interventions.

Retirement savings outside of KiwiSaver and potential changes to universal superannuation were out of scope.

This research did not consider other challenges and solutions associated with inequity and KiwiSaver, such as differences in poverty, education and life expectancy relative to retirement age or the effects of relationship breakdown. These issues remain important and are worthy of further research. In particular, the KiwiSaver outcomes for Māori women deserves a report of its own.

1.3 Research approach

This is not the first report to consider saving and pay equity issues in New Zealand and abroad. We explore the existing literature on the topic and summarise the following themes from existing research findings:

- The size and characteristics of the KiwiSaver gap
- The drivers behind the gap
- Potential solutions for addressing the gap
- International lessons related to savings equity for women.

1.4 Research funding

NZIER was commissioned by Kiwi Wealth to complete this research. The research was conducted independently by NZIER.

2 The size and characteristics of the KiwiSaver gap

2.1 The KiwiSaver gender gap in New Zealand

A recent report from the Retirement Commission on the gender gap in KiwiSaver reported that (Te Ara Ahunga Ora Retirement Commission 2022a):

- Currently 22% of women who have a KiwiSaver account don't contribute, compared to 16% of men
- Men have significantly higher account balances on average
- 39% of women with KiwiSaver estimate they have $10,000 or less in their account compared to 26% of men who estimate this
- 26% of men believe they have over $50,000 compared to only 14% of women
- The average KiwiSaver balance is $29,022, with the average balance for men 20% higher than the average balance for women – men ($32,553) and women ($27,061)
- The widest gaps are between men and women in their 40s and 50s
- On average:
  - women in their 40s have approximately $10,000 (or 30%) less in their KiwiSaver accounts than men
  - women in their 50s have approximately $13,000 (or 32%) less in their KiwiSaver accounts than men.

On KiwiSaver and Māori, the Retirement Commission concluded that "*nearly half of Māori currently contribute to a KiwiSaver account (48%), similar to non-Māori at 51% once income and other variables are accounted for. There are also no significant associations of Māori ethnicity with the amount contributed, or with self-assessed knowledge of how KiwiSaver works*" (Te Ara Ahunga Ora, The Retirement Commission 2021, 8).

2.2 How New Zealand compares with the retirement saving gaps among women in other countries and the OECD

The experience in New Zealand is similar to the challenges faced by women across the OECD (OECD 2021a; 2021b):

- Across the OECD, women receive a lower pension than men, and the average pension gender gap in the OECD is 25%.
- The gap in retirement assets can be seen emerging from ages 25 to 34. Differences in retirement assets compound over time, exacerbating the pension gap.

Mercer and the CFA Institute ranked the adequacy, sustainability and integrity of retirement saving systems at a country level (Mercer and CFA Institute 2021). New Zealand's KiwiSaver system scored quite highly at 15th out of 43 countries. The relative ranking of New Zealand dropped from 10th place in the previous ranking in 2020 (Mercer and CFA Institute 2020), due to the significant pension reform in other countries. Improvements are required for New Zealand to maintain and improve the competitiveness of our system relative to other countries. The results for New Zealand are shown in Table 2.

Table 2 Mercer and the CFA Institute assessment of the KiwiSaver system

Dimension	Score	Consideration in the adequacy, sustainability, and integrity sub-indices
Overall score	67.4	
Adequacy score	61.8	Benefits, system design, savings, Government support, home ownership and growth assets
Sustainability	62.5	Pension coverage, total assets, demography, public expenditure, Government debt and economic growth
Integrity	83.2	Regulation, governance, protection, communication and operating costs

Source: Mercer and CFA Institute (2021)

The adequacy and sustainability rankings relative to other countries point to the need to support New Zealanders with growing their KiwiSaver balances to make the most of the retirement income generation opportunities (Mercer 2021). Planning for the future, making trade-offs between consumption now and consumption potential in the future, has been made harder by the challenges of COVID-19 and the rising cost of living.

3 The drivers of the KiwiSaver gap

This section focuses on the drivers of the KiwiSaver gap. The findings are based on the common themes from the international literature and research specific to New Zealand. It is clear that inequity in retirement savings has been an issue throughout OECD countries (OECD 2021b). The themes quickly converge on some common challenges faced by women around the world.

Pension gaps reflect a general pattern of several factors:

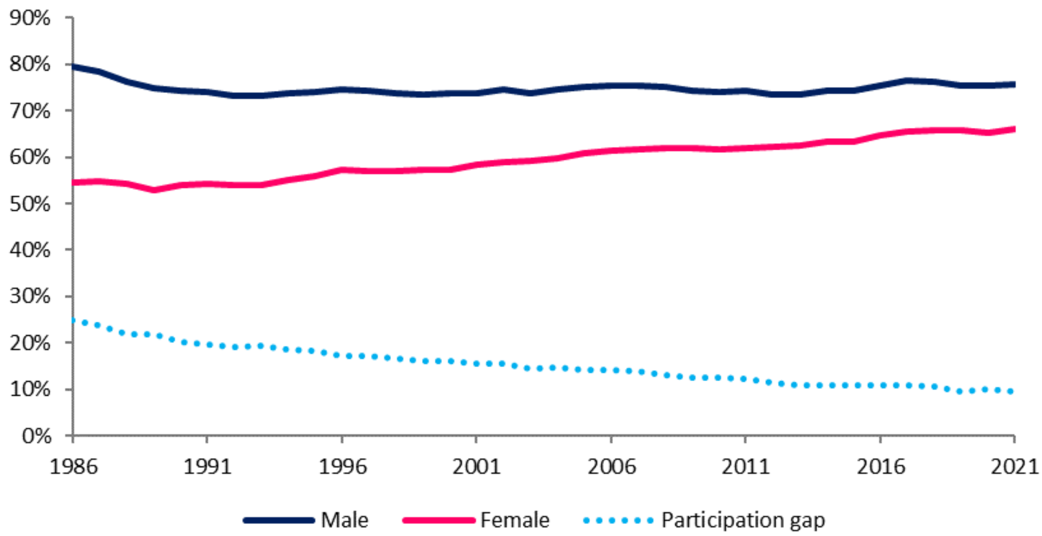
- The employment rate among women is lower
- Incomes among women are lower, including pay-equity issues and sectorial participation differences
- Careers among women are, on average, shorter and experience disruptions due to childbearing and parenting
- Women are less likely to participate in pension funds that yield a high return
- Labour market differences explain a significant part of the retirement gender gap, but other behavioural and cultural factors are at play.

3.1 Employment and labour force participation in New Zealand

Labour force participation is critical for contributions to KiwiSaver because contributions are tied to employment. Those not participating in the labour force miss out on their income-related, employer, and government contributions. Thus, a lower labour force participation rate among women will have a direct negative effect on the KiwiSaver balances of women.

Figure 1 Labour force participation by sex 1986–2021

Labour force participation rate



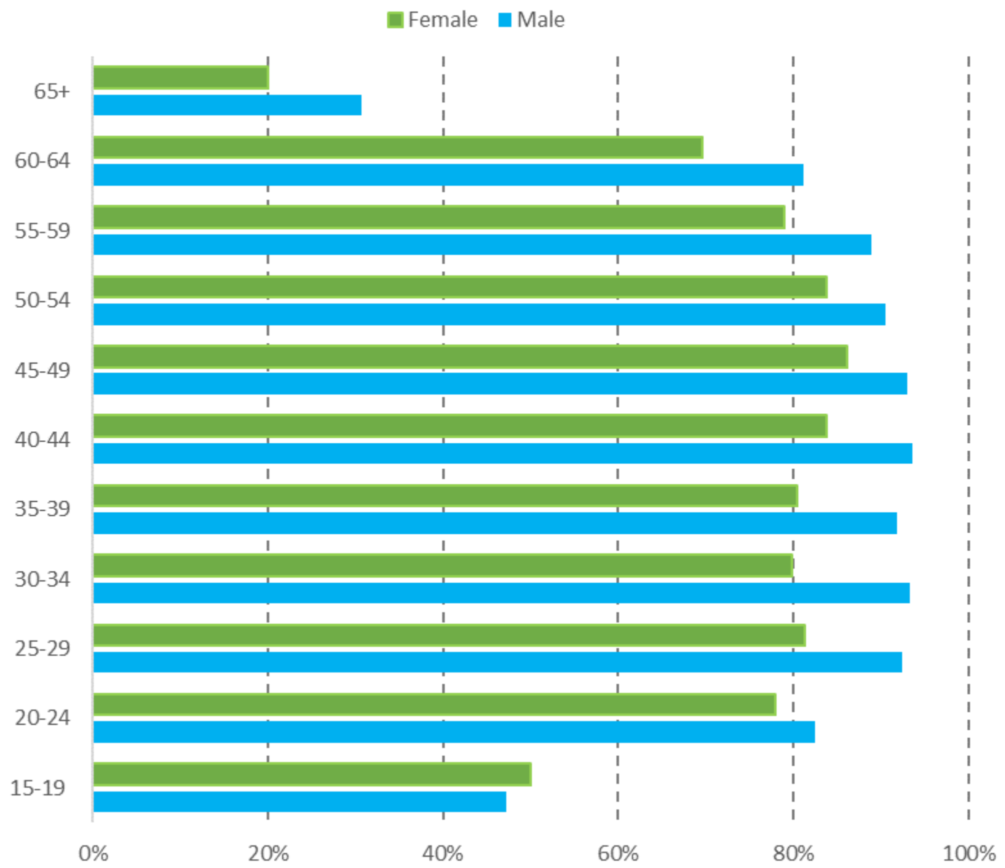
Source: NZIER based on Statistics NZ (2022)

Labour force participation is lower among women than men. In 2021, labour force participation among women was 66.1% compared to 75% for men. However, the labour force participation gap has reduced over time. In 1986, the participation gap was 24.8%, and in 2021, it had closed to 9.5%, its lowest level since 1986 (Figure 1).

Figure 2 shows the labour force participation rate by age group for men and women in 2021. The figure shows that from their early 20s, women participate in the workforce at a lower rate than men, which directly affects their financial independence and ability to contribute to savings plans such as KiwiSaver.

Figure 2 Labour force participation by age group in 2021

Labour force participation rate



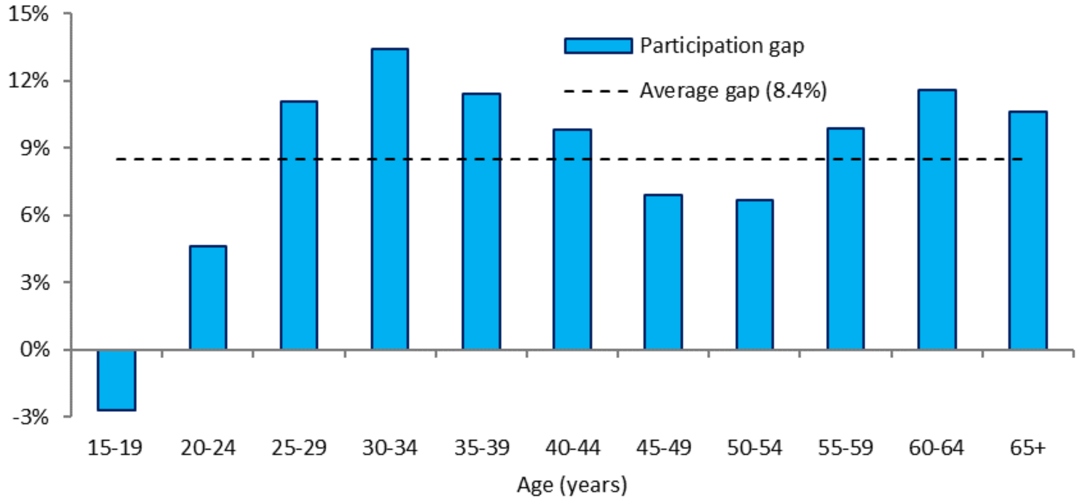
Source: Statistics NZ (2022)

Figure 3 shows the labour force participation gap between women and men over different life stages. Women have a slightly higher participation rate than men in their late teens. But this advantage is quickly eroded as women enter their 20s. After 35, the participation gap decreases until women enter their late 50s.

Overall, women are less likely to access employment income and employment-linked KiwiSaver contributions than men. The effect is compounded by the lower participation rates in early working years as the contributions from these years experience more compounding return on investment over time.

Figure 3 Labour force participation gap by age group in 2021

Labour force participation gap



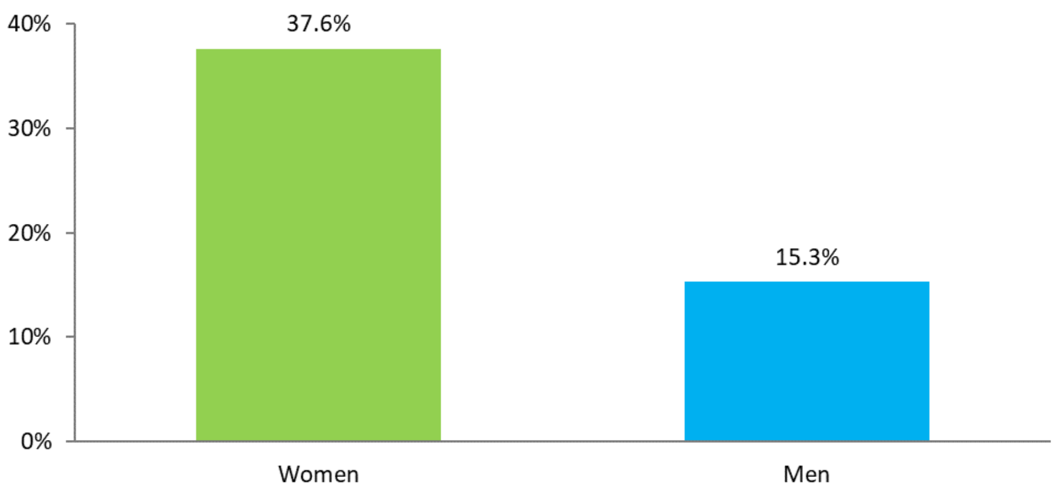
Source: NZIER based on Statistics NZ (2022)

3.2 Part-time versus full-time work

Women employed in the labour force are more than twice as likely to be in part-time work than men. Figure 4 compares the percentage of men (15.3%) and women (37.6%) employees that are working part-time. The implications of this are that the contributions to KiwiSaver will be lower for part-time employees compared to full-time employees. Part-time employees have lower disposable incomes and may face more financial pressures when deciding how much of their income to lock away in KiwiSaver. Or they may consider not contributing at all if the immediate financial challenges, such as rising rent and food costs, are more critical in the short term.

Figure 4 Percentage of employed people working part-time by gender

Percentage of employed people working part-time, Q4 2019



Source: Statistics NZ (2021)

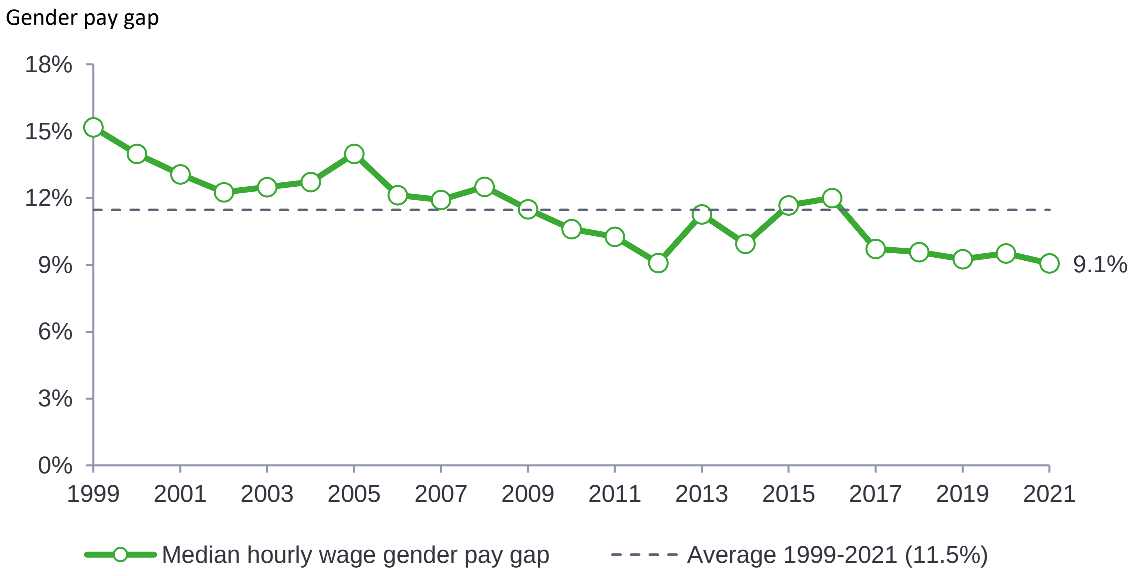
3.3 Women's incomes are lower in New Zealand

Measuring the gender pay gap

The gender pay gap is best measured based on a comparison of median hourly earnings. Median earnings are a better measure than average earnings because it avoids the potential skew that would be caused by unusually high earnings, such as those of executive leadership, which affect average earnings. Hourly rates are better for measuring the gender pay gap when there is a need to exclude the effect of different quantities of work (Statistics NZ 2014).

The median hourly earnings of women are lower than those of men. In 2021, the median hourly rate for women was $26.37 compared with $29.00 for men (Statistics NZ 2022). That means the gender pay gap was 9.1%, based on median hourly earnings.[1] The average gender pay gap between 1999 and 2021 was 11.5% (see Figure 5). The highest gap in the selected years was measured in 1999 at 15.2%. The lowest was 9.1%, which occurred in 2012 and 2021.

Figure 5 Gender pay gap 1999–2021



Source: NZIER based on Statistics NZ (2022)

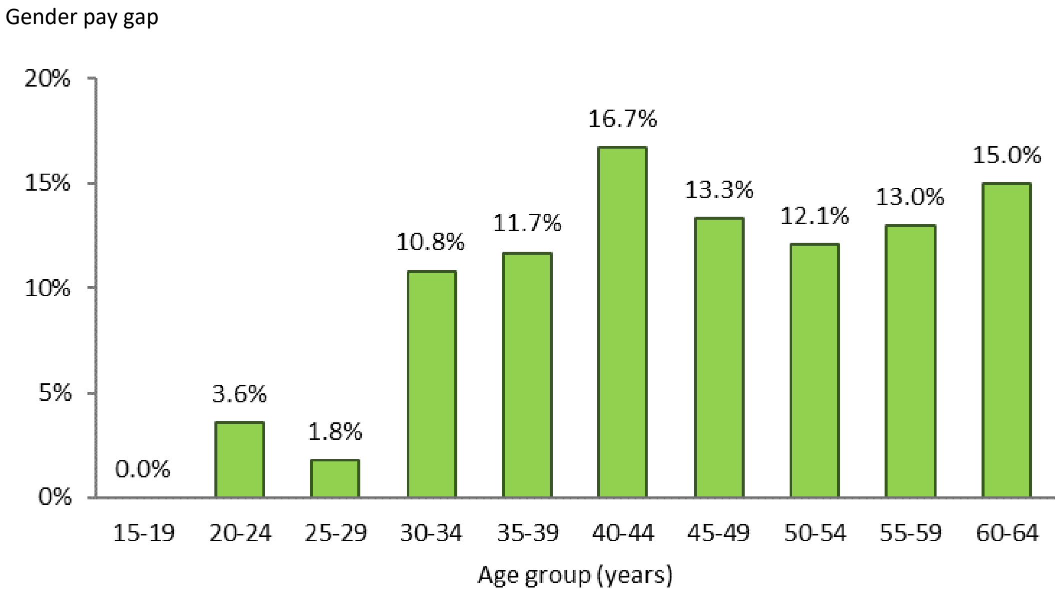
An analysis of the factors that led to the gender pay gap decreasing by 50% between 2005 and 2012 is outside the scope of this report. But it suggests that either there are features of New Zealand's labour market that allow the pay gap to close over a few years, or the results are volatile due to the sample size of the Household Labour Force Survey.

The gender pay gap varies with the age of the working population. Figure 6 shows that it ranges from no difference in the late teens to a peak gap of 16.7% in the early 40s, which coincides with the age when labour force participation among women increases again following the childbearing years. There is a substantial increase in the gender gap between

[1] $Gender\ pay\ gap = \left(1 - \frac{Women's\ hourly\ rate}{Men's\ hourly\ rate}\right)$

the late 20s and early 30s, an age at which the financial pressure of housing and childbearing may reduce the priority of saving for retirement.

Figure 6 Gender pay gap by age group in 2021



Source: NZIER based on Statistics NZ (2022)

3.4 Effects of childbearing and parenting on women's labour market outcomes

Choosing to have a family can affect retirement savings, as even a short break from making retirement contributions can negatively affect the trajectory of long-term savings due to the compounded foregone savings and returns on investment over time. Childbearing can affect labour force participation rates for women. The effects can include:

- Temporary leave from the labour force during pregnancy and the first 12 months of a child's life or longer
- Returning to work on a part-time rather than full-time basis
- Less capacity or desire to seek out work that will increase the probability of promotion
- Returning to work in a role with less responsibility and pressure, which lowers earnings and earning potential
- Employers are uncertain about the likelihood of further children and therefore offer fewer opportunities for career development.

In a report for the Ministry for Women, Sin, Dasgupta, and Pacheco (2018) published findings of a study into labour market outcomes for women from 2006 to 2015. The key findings were:

- Upon becoming mothers, women on average, experienced a 4.4% decrease in hourly wages.
- Employed women decrease the weekly hours they work from a median of 40 hours pre-parenthood to 27 hours post.

- When employed women become parents, their average monthly earnings decrease driven by the combination of fewer hours and lower hourly wages; and their earnings do not return to their pre-parenthood trends within ten years, meaning their lifetime earnings are substantially reduced.

A comprehensive analysis of the relationship between childbearing and labour force participation by Flynn and Harris (2015) found that:

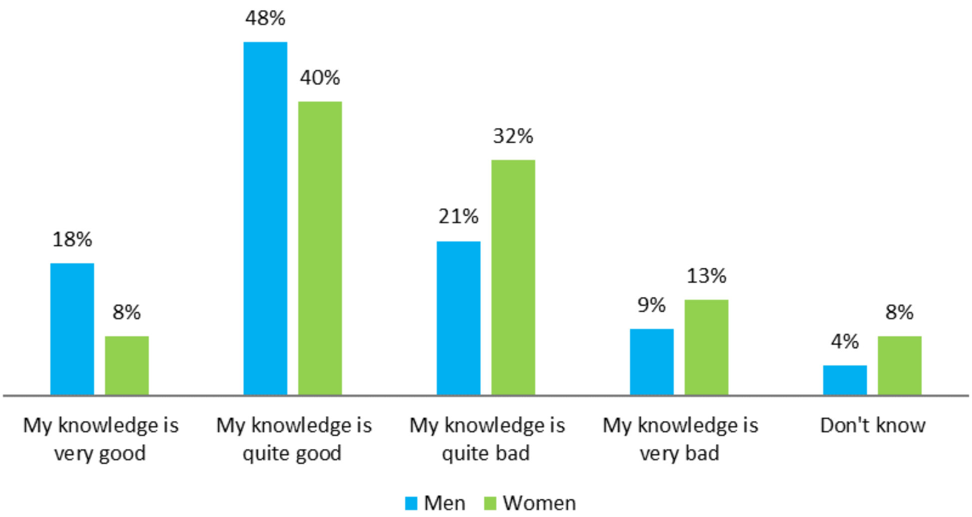
- Increased labour force participation of women aged 25 to 49 years over the prior 20 years was largely driven by the increased participation of mothers in the labour market, and the change was particularly significant for women who were sole parents.
- Despite improved participation, women who were sole mothers were still behind partnered mothers and had a higher proportion of unemployment in the working-age population. The level of the improvements in participation varied with the ethnicity of mothers. Māori and Pacific mothers were more likely to be sole parents than European and Asian mothers and more likely to be unemployed.
- For employed women, partnered mothers had similar statuses in employment, occupation, and industry to women with no dependent children.
- Women who were sole parents were more likely to be temporary workers, less likely to be professionals, and more likely to work in health care and social assistance, retail trade, accommodation, and food services.
- Having a bachelor's degree or higher mattered in terms of higher levels of employment, regardless of parent and partner statuses. But women who were sole parents were less likely to have this level of qualification and more likely to have no qualifications.

3.5 Women report lower self-rated knowledge of KiwiSaver

In 2021, The Retirement Commission surveyed women on their financial wellbeing, activities and confidence with investments such as KiwiSaver (Te Ara Ahunga Ora Retirement Commission 2022a). The findings shed light on the confidence and behaviours among women that contribute to the KiwiSaver gap.

There is a gender gap in the use of and confidence associated with financial services and investing. Women report that they are more likely to select the basics, such as a current account, insurance and a credit facility, rather than to have investments and health insurance. The differences are even more marked for wāhine Māori and Pacific women, with fewer holding even current or savings accounts compared to men (Te Ara Ahunga Ora Retirement Commission 2022a). Women also rated themselves lower for knowledge of how KiwiSaver works (see Figure 7). This doesn't necessarily mean that women are less financially capable, but rather their engagement with financial products is lower, or they are less confident in their capabilities.

Figure 7 Gender differences in self-reported knowledge of how KiwiSaver works

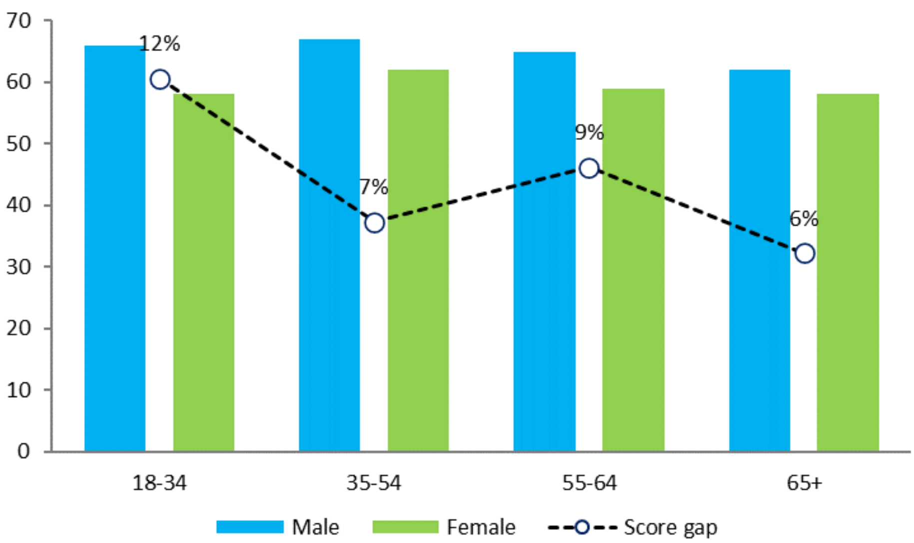


Source: Te Ara Ahunga Ora Retirement Commission (2022)

Women's confidence in their ability to compare financial products and choose the right one for their goals and preferences grows with age. In a world of compounding returns on investment choices, early decisions can profoundly affect long-term savings outcomes. The gender gap in self-assessed knowledge of comparing financial products is largest among young people and narrows with age (but does not disappear). Interventions focused on young women would contribute to closing the gap (see Figure 8).

Figure 8 Self-assessed scores for knowledge of comparing financial products by age group and gender

Score out of 100



Source: Te Ara Ahunga Ora Retirement Commission (2022)

3.6 Summary of the drivers of the KiwiSaver gap

Four key drivers of KiwiSaver savings inequity among women have been identified by distilling the international and domestic literature. The commonality of these drivers among the OECD members shows the complex and systemic nature of the challenge. The four drivers of the pension gap can be summarised as follows:

- **Gender pay inequity** fundamentally lowers the level of contributions and may contribute to the willingness to lock funds away for a long time.
- **Labour force participation** affects contributions to KiwiSaver. Like many retirement-savings systems globally, KiwiSaver is linked to employment. Lower labour force participation among women systemically affects the share of the cohort that is contributing to KiwiSaver.
- **Career gaps** for childbearing and child-rearing affect the level and continuity of women's contribution to retirement savings. When women return to work from maternity leave, they don't always return to full-time work or the same career trajectory.
- **The confidence and knowledge gap.** Women report lower confidence and knowledge of investing and KiwiSaver, which may lead to a lower return on investment over time.

4 Assessing the effects of the drivers of the gap on savings

This section focuses on assessing the effects of the drivers of the KiwiSaver gap. The effects were quantified using scenario modelling based on the potential KiwiSaver balance a woman could achieve by age 65 if she joined KiwiSaver at 18 years old. Three scenarios considered at the individual level were:

- effects of addressing the gender pay gap
- effects of the motherhood penalty, which includes aspects of the impact of differences in labour force participation
- effects of more conservative investment tendencies.

4.1 Assessing the effects of addressing the gender pay gap

The gender pay gap directly affects the level of contributions to KiwiSaver. The effect on total KiwiSaver contributions and balances was modelled by comparing contributions to a balanced KiwiSaver fund assuming employee and employer contributions of 3% of earnings and an average annual return on investment after fees and tax of 2.5%, 3.5% or 4.5%, depending on the type of KiwiSaver fund (Financial Markets Authority 2020a). The median wage for full-time employees was used to control for differences in labour force status. KiwiSaver balances were estimated from 18 to 65 years old, with and without adjusting for median wage gender pay gaps, which vary by age (see Figure 6).

Table 3 shows the effect of addressing the gender pay gap. For a woman working full-time and earning the median wage, the gender pay gap penalty on KiwiSaver contributions at 65 years old is between $34,850 and $55,905, depending on the KiwiSaver fund preference. For a balance fund saver, the difference is equivalent to an additional 3.4 years of retirement income, assuming a weekly withdrawal of $250 and no returns on savings after 65 years old. That is a meaningful difference in spending potential as women tend to live 3.5 years longer (Statistics NZ n.d.) and retire sooner than men. The gender pay gap means that women will have less to spend on necessities and leisure every year of retirement for the same years of work than their male comparators.

Table 3 The effect on women's KiwiSaver balances of addressing the gender pay gap

Scenario	Without addressing gender pay equity	After addressing gender pay equity	The difference in KiwiSaver balances at age 65
Conservative fund	$388,712	$423,562	$34,850
Balanced fund	$513,878	$557,833	$43,954
Growth fund	$686,858	$742,763	$55,905

Source: NZIER

4.2 Assessing the effect of the motherhood penalty on KiwiSaver balances

Motherhood is a key driver of lower labour force participation among women compared to men. A career break for maternity and parenting can significantly affect contributions to KiwiSaver and associated investment returns.

Motherhood can involve several changes to the nature of work, such as:

- Shifting from full-time to part-time (temporarily or permanently)
- Transitioning into less demanding or more flexible work, resulting in lower hourly wage rates
- Exiting the labour force permanently.

These are examples of how motherhood might affect the employment profiles of women, and many combinations of different scenarios are conceivable. The following scenarios were modelled to assess the effects on KiwiSaver balances:

- Scenario 1: Permanently exiting the labour force at age 30 to start a family.
- Scenario 2: Shifting from full-time work to part-time work from age 30, reducing contributions by 40% to reflect a change from working five days per week to three days per week.
- Scenario 3: Shifting from full-time work to part-time work from age 30, reducing contributions by 40% to reflect a change from working five days per week to three days per week, then returning to full-time work at 40 years.
- Scenario 4: Applies the findings of Sin, Dasgupta, and Pacheco (2018), which showed that women, on average, experienced a 4.4% decrease in hourly earnings and worked 32.5% fewer hours post parenthood compared to pre-parenthood.

The comparator was a woman working full-time who did not take any time off.

The following assumptions were used:

- median earnings for women
- no adjustment for pay equity
- an average rate of return of 3.5% per annum after tax and fees
- one pregnancy
- one year maternity leave with no KiwiSaver contributions
- 3% employer contribution and 3% employee contribution.

Table 4 shows the effect of each of the scenarios on a KiwiSaver balance at age 65 relative to a woman who worked full-time continuously from 18 to 65 years of age. The results show that those KiwiSaver contributions due to a permanent or temporary departure from full-time work will have a material effect on KiwiSaver balances at age 65, accompanied by a loss of spending power during retirement from income forgone.

Table 4 Assessing the effect of the motherhood penalty

Scenario	KiwiSaver balance at age 65	Financial effect	Percentage
Continue to work full-time	$513,878	-	
Exit the labour force at 30 y.o.	$195,493	-$318,385	-62.0%
Return to 3 days only at 31 y.o.	$391,160	-$122,718	-23.9%
Return to 3 days only at 31 y.o. and then full-time from 40 y.o.	$456,239	-$57,640	-11.2%
Sin et al. (2018) motherhood penalty	$400,947	-$112,931	-22.0%

Source: NZIER

A woman who is 30 years old and takes maternity leave for one year from full-time work will sacrifice KiwiSaver contributions of $4,905.03 based on the median income and 3% employee contribution. At age 65, her KiwiSaver balance will be $15,100 lower, if a balanced fund type is chosen.

Table 5 shows the motherhood penalty in terms of total lost KiwiSaver savings, lost annual retirement spending potential and lost weekly retirement spending potential. The annual and weekly losses in potential spending are based on retirement at age 65 and a life expectancy of 83.5 years (Statistics NZ n.d.). In all scenarios, the motherhood penalty is material and will affect consumption choices in retirement. It is assumed there is no return on investment after 65 years old.

Table 5 Assessing the effect of the motherhood penalty on spending power

Relative to continuing to work full-time (no time off at all)

Scenario	Financial effect	Lost annual retirement spending	Lost weekly retirement spending
Exit the labour force at 30 y.o.	-$318,385	-$17,210	-$331
Return to 3 days only at 31 y.o.	-$122,718	-$6,633	-$128
Return to 3 days only at 31 y.o. and then full-time from 40 y.o.	-$57,640	-$3,116	-$60
Sin et al. (2018) motherhood penalty	-$112,931	-$6,104	-$117

Source: NZIER

As previously discussed, Sin, Dasgupta, and Pacheco (2018) found that, on average, women experienced a 4.4% decrease in hourly earnings and a 32.5% decrease in hours worked when comparing pre-parenthood and post-parenthood outcomes. Men do not seem to experience the same parenthood effects. The combined effect of a decrease in hourly earnings and fewer hours worked is a 35.5% decrease in potential income and KiwiSaver contributions. If it is assumed that parenthood occurs at age 30 for a woman on the median wage, and they are using a balanced KiwiSaver fund, then by age 65, their KiwiSaver balance would be 22% ($112,931) lower compared to without children.

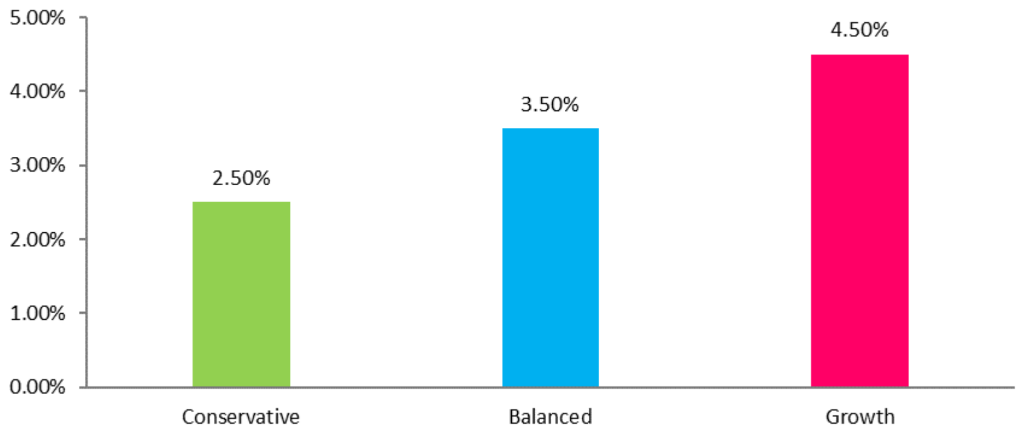
4.3 Financial capability and knowledge could matter

Women say they are less confident with investing than men and report receiving less financial literacy education. Confidence may affect how women approach investing. Further research is needed to substantiate whether a women's self-reported confidence and capability gap translate into a preference for a lower risk investment profile associated with KiwiSaver.

Survey results published by the Financial Markets Authority in 2020 showed the respondents that reported taking a conservative fund approach were more likely to be women than men. Conversely, men were overrepresented in growth funds (Financial Markets Authority 2020b). If lower confidence and capability among women drive women to be more conservative, it will be associated with a lower return on investment for their KiwiSaver contributions. Figure 9 shows the average rates of return on investment after taxes and fees for conservative, balanced and growth KiwiSaver funds. Over time the return on KiwiSaver balances compounds, and the higher the return on investment rate, the more KiwiSaver balances grow. Based on average returns (in the short run returns and balances would be more variable). The choice of a conservative approach over another fund approach will have long-term consequences.

Figure 9 Annual return on investment after fees and taxes by fund type

Annual return on investment after fees and tax

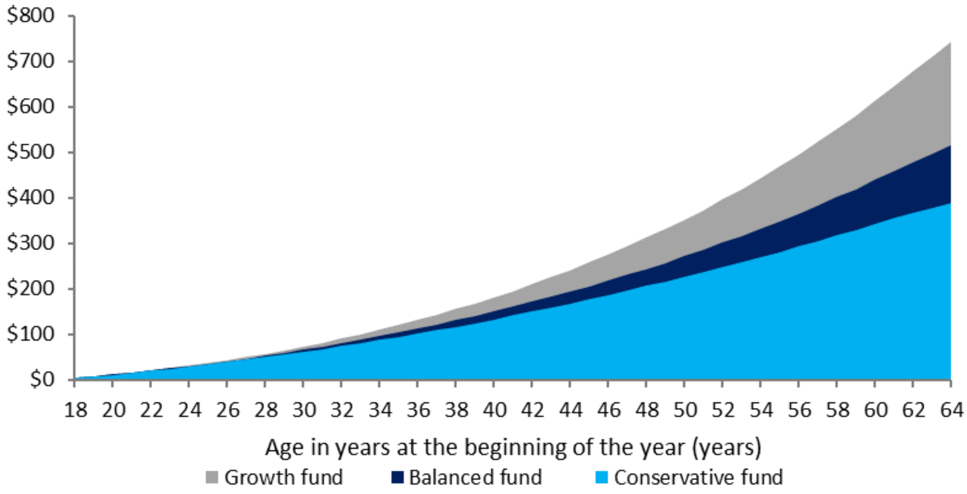


Source: Financial Markets Authority (2020a)

Figure 10 shows the substantial effect on KiwiSaver balances due to choosing a fund with a higher risk and reward profile than the most conservative fund. For a woman who contributes 3% of her median full-time income to a growth fund rather than a conservative fund, the difference in KiwiSaver balances at retirement could be $298,146, which is a 77% increase on the conservative balance.

Figure 10 Comparing KiwiSaver outcomes by fund type

KiwiSaver balance (thousands)[2]



Source: NZIER

[2] Based on average returns - in the short run returns and balances would be more variable.

5 Assessing the options to improve outcomes for women

5.1 Local research points to a suite of solutions

In a report prepared for the Commission for Financial Capability's Review of Retirement Income Policy, Huang and Curtin (2019) outline a suite of recommended policies and changes to improve retirement savings outcomes for women in New Zealand. They suggest the following approaches could help close the retirement savings gap:

- Maintaining a public pension scheme as a universal basic income
- Contributing to pension schemes for staff during parental leave periods
- Paid parental leave for both mothers and fathers
- Enhancing flexible working arrangements
- Applying gender-neutral annuity divisors
- Exploring a form of care credit system that could co-exist with KiwiSaver.

Pay equity, the continuation of payments and care credits are highly aligned to the findings on drivers and solutions from NZIER's analysis.

5.2 The retirement savings gap is a global issue

Closing the retirement savings gap is an issue important in many countries, and it has been the subject of reports published by the OECD (OECD 2021a; 2021b). The policy options discussed by the OECD are summarised in Table 6. It also includes an assessment of the relevance and potential positive impact on improving retirement savings outcomes through KiwiSaver. The options are grouped into the following clusters:

- Options to increase women's access to retirement savings plans
- Options to increase women's participation in retirement savings plans
- Options to increase the level and frequency of contributions for women
- Options to better accommodate the career patterns of women
- Options to improve investment returns for women
- Options to increase the individual retirement benefit entitlements of women
- Labour market options.

Table 6 Policy options to close the retirement savings gap

Option cluster	Option	Initial assessment in the NZ context	Potential of impact in NZ
Options to increase women's access to retirement savings plans	Increase the availability of retirement savings arrangements in industries employing women	KiwiSaver is universally available	Low
	Relax eligibility requirements for occupational arrangements	KiwiSaver is universally available	Low
Options to increase women's participation	Encourage participation through hard or soft compulsion	Compulsory opt-out solutions could be relevant	Medium
	Provide financial incentives to join the plan	Increase existing incentives	Medium
	Tailor financial education to women	Greater investment in financial literacy among women	Medium
Options to increase the level and frequency of contributions for women	Encourage contributions from employers	While on maternity leave	High
	Allow additional contributions from spouses	Tax incentives to encourage additional contributions	Medium
	Provide financial incentives to increase contributions for those with low income	Admin fee refunds, matching, earlier access	Medium (distributional effect)
	Provide payments to account for maternity and caretaking	Increase existing subsidies, utilise "carer credits"	High
	Allow contribution limits to be carried forward	There is no limit on contributions	Low
	Target communication to educate women on the importance of regular contributions	Greater investment in financial literacy among women	Medium
Options to better accommodate the career patterns of women	Allow for flexible contribution levels	Already flexible	Low
	Adapt the fee structure for small balances	Regulation of fee indexation	Medium (distributional effect)
Options to improve investment returns for women	Implement a non-conservative default option	Recent changes already in place	High
	Offer objective assessments of risk tolerance	It could be more targeted to women in NZ	Medium
Options to increase the individual retirement benefit entitlements of women	Split the retirement benefit entitlement of the spouse	Explore income splitting, but too politically challenging	Medium
	Facilitate the split of retirement benefit entitlements upon divorce	Legal proceedings	Medium
	Increase women's awareness of the possibility of sharing their ex-spouse's retirement benefits	Legal proceedings	Medium
	Equalise retirement ages between genders	Not applicable in NZ	Low

Option cluster	Option	Initial assessment in the NZ context	Potential of impact in NZ
	Calculate retirement income based on unisex mortality	Not applicable in NZ – KiwiSaver is not an annuity payment	Low
	Provide a subsidy to compensate women for higher life expectancies	Difficult to make a case for while a universal pension exists	Low
	Promote pay-out options with survivor income	KiwiSaver becomes part of the deceased estate	Low
	Encourage the availability of pay-out solutions that increase payments over time	Indexation	Low
Labour market	Pay equity	A large factor	High
	Flexible work	Seeking higher labour force participation	Medium

Source: OECD (2021b)

Based on the assessment of the relevance and potential contribution to improving KiwiSaver outcomes among women, four options were identified by NZIER to address the drivers of the retirement savings gap:

- **Addressing pay equity** as a fundamental source of divergence in retirement savings between men and women
- **Continuation of payments** while women are on maternity leave, either by employers or the government depending on the size of the business
- **Improving financial literacy and capability** to even the playing field
- **Carer payments** that recognise the social value of childcare provided by parents and compensate through something like a universal basic income[3], including KiwiSaver contributions.

Each option is linked to addressing one or more of the drivers of the retirement savings gap (see Table 7). The combination of options covers distributional issues as well.

[3] This idea is not new and has been explored by some pre-eminent economists (see Folbre 1994).

Table 7 Matching the challenges and solutions

Solution	Drivers of the retirement savings gap			
	Labour participation	Pay equity	Career gaps	Confidence and knowledge
Improving pay equity		✓		
Continuation of payments during maternity leave			✓	
Improving financial capability and literacy				✓
Universal carer payments	✓		✓	

Source: NZIER

5.3 Addressing pay equity as a fundamental source of divergence

The median gender pay equity gap across the labour force was 9.1%, but the gap varies by age and is lower in the early years. This means the effect of the gender pay gap on KiwiSaver balances is lower than the median gender pay gap. At the median income level, the effect of addressing the gender pay gap varies between 5.6% and 9.0%. The effects on balances are shown in Table 8. The increased KiwiSaver balance is the difference in balances from adjusting for pay equity for a woman earning the median income contributing 3%, which their employer matches.

Table 8 Addressing pay inequity

Fund type	KiwiSaver balance increases with pay equity	Increased balances with pay equity
Conservative	9.0%	$34,850
Balanced	8.6%	$43,954
Growth	8.1%	$55,905

Source: NZIER

The upper limit of the number of women that will benefit from pay equity is 2,187,300 based on the total number of females in the labour force measured in the fourth quarter of 2021. Some women earn the same as men or more. A detailed assessment of administrative data would shed light on the scale of the issue. The cost of addressing pay inequity would be a median pay increase of 9.1% for all women in employment. While employers will face the cost of addressing pay inequity, it is important to consider that the material increase in wages for women will increase consumption and contributions to KiwiSaver.

International experience shows that pay transparency can close the gender pay gap. In the case of the Canadian University pay gap, Baker et al. (2019) found that legislative requirements on pay transparency and reporting reduced the pay gender gap by between 20% and 40%. That would be equivalent to closing the median wage gender gap by 1.8% to

3.6% in New Zealand if that result was generalisable to all industries in the New Zealand labour market.

There is some evidence that gender pay policies can have unexpected effects, such as lowering men's wages and the overall cost of labour. In the case of Demark, Bennedsen et al. (2019) showed that internal pay transparency, without public reporting, helped to even the playing field for women and closed the pay gap by 13%. The policy slowed wage growth among men rather than increasing the wages for women, and it also increased the proportion of women among new recruits. Overall the policy lowered the cost of wages, and profitability remained unchanged, suggesting the lower wages were accompanied by lower productivity. Careful policy design is required to avoid unintended consequences.

In a study of 100,000 US academics, Obloj and Zenger (2022) found evidence that pay transparency causes significant increases in both the equity and equality of pay, and significant and sizeable reductions in the link between pay and individually measured performance.

The Human Rights Commission has called for an independent pay transparency agency to be established in New Zealand (see Human Rights Commission 2022). The Commission's call was supported by some case studies from the Ministry for Women that looked at what other countries have done to address the gender pay gap (Ministry for Women n.d.), for example:

- In Australia, non-public sector employers with 100 or more employees are required to report on pay equity annually. Compliance is managed by the Workplace Gender Equality Agency. Non-compliance has the effect of excluding businesses from the ability to tender for Government contracts.
- The UK requires all employers with more than 250 employees to publish information relating to the gender pay gap in their organisation. This includes information on the difference between the average hourly rate of pay to male and female employees and bonuses paid.
- In Germany, reporting on pay equality is required by commercial regulations.
- In Ontario, Canada, all employers with 100 or more employees must publish a pay transparency report that must include the composition of the workforce and differences in compensation with respect to gender.

The European Parliament has backed proposed legislation to address gender pay gaps through pay transparency requirements, including obligations on companies to report on gender pay gaps and prohibiting pay secrecy in employment contracts (European Parliament 2022).

New Zealand appears to be slow to act on the issue of pay transparency as a mechanism to address the gender pay equity gap. While many government agencies and businesses have action plans to address the gender pay gap (Ministry for Women 2020; 'Mind The Gap Registry' n.d.), more could be done to regulate universal actions and behaviours.

5.4 Continuation of payments while women are on maternity leave

A woman who is 30 years old and takes maternity leave for one year from full-time work will sacrifice KiwiSaver contributions of $4,905.03 based on the median income and 3% employee contribution. At age 65, her KiwiSaver balance will be $15,100 lower. The cost to employers of continuing payments on behalf of their valued employees would be $4,383.60, assuming the government contributions to KiwiSaver are still paid by the government.

An investment in talent retention and staff wellbeing

For business, such an investment in staff wellbeing and loyalty is a good investment compared to the potential cost of recruiting new employees and the costs of getting them up to speed. Many large businesses in New Zealand already offer women this employee benefit. Recruiting permanent staff members has been estimated to cost around $7,700 when the experience and management time (opportunity cost) are added up (ERG Recruitment 2020).

There's a role for Government support and action

Achieving better KiwiSaver outcomes for women would be addressed by legislation that makes this a universal benefit for all women. This may mean small businesses will need government assistance to meet some of the costs in the early years to avoid deterring small businesses from hiring women due to the additional cost associated with female employees relative to employees.

Opportunity for a gender-neutral approach

A gender-neutral approach should also be explored, whereby companies continue the KiwiSaver contributions of all staff taking parental leave. The gender of the primary caregiver should not matter when seeking to achieve equitable KiwiSaver outcomes for parents. Gender-neutral approaches should be explored where the opportunity arises to prevent distortion from being introduced that later requires an amendment to employment laws that are costly and time-consuming. Efficient regulatory design contributes to smart government and improves the wellbeing of all New Zealanders. It is important to note that for many women, maternity leave is something they take after their first child only, and subsequent children may not attract these benefits due to the woman not returning to work in between children. Therefore this approach would not address all lost contributions from child-related gaps in labour force participation.

5.5 Improving financial literacy and capability

The impact of investing in a growth fund instead of a conservative fund for a woman earning the median income was estimated to be $298,146 by age 65. Increasing women's confidence and knowledge about investing in KiwiSaver funds do not need to be costly. Many KiwiSaver fund providers offer short courses at no cost to the attendees. This is partly because they will profit from achieving a higher return on investments via ad valorem fees. KiwiSaver providers could partner with employers to improve employee financial literacy, capability and long-term wellbeing.

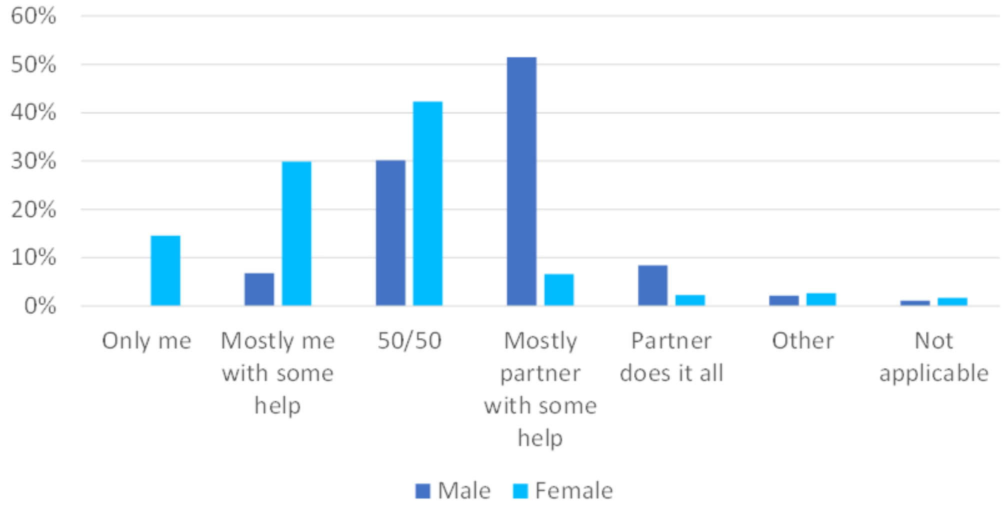
Other mechanisms for improvements could include requiring transparency about who (age-sex groups) is doing what, so women understand the potential average returns relative to other fund types.

5.6 Carer payments that recognise the social value of childcare provided by parents

Carer payments aim to close the retirement savings gap for someone who is the primary carer for dependants and other family members that need a high degree of support, such as people with severe disabilities, health problems or age-related care needs. These carer roles are more often filled by women in the family than men (Statistics NZ 2013). More recently, survey results showed that women were most likely to report that they did most or all of the childcare and homeschooling during the COVID-19 lockdowns in New Zealand (see Figure 11 and Figure 12). Unlike professional carers, family members and mothers do not receive compensation for the service they provide to society. Women are also far more likely to provide informal care to elderly parents and reduce their hours or retire early to do so (see Rosenblatt 2013) or retire early to help care for grandchildren (see Lumsdaine and Vermeer 2015).

Figure 11 How homeschooling responsibilities were shared between respondents and their partners during COVID-19 pandemic restrictions

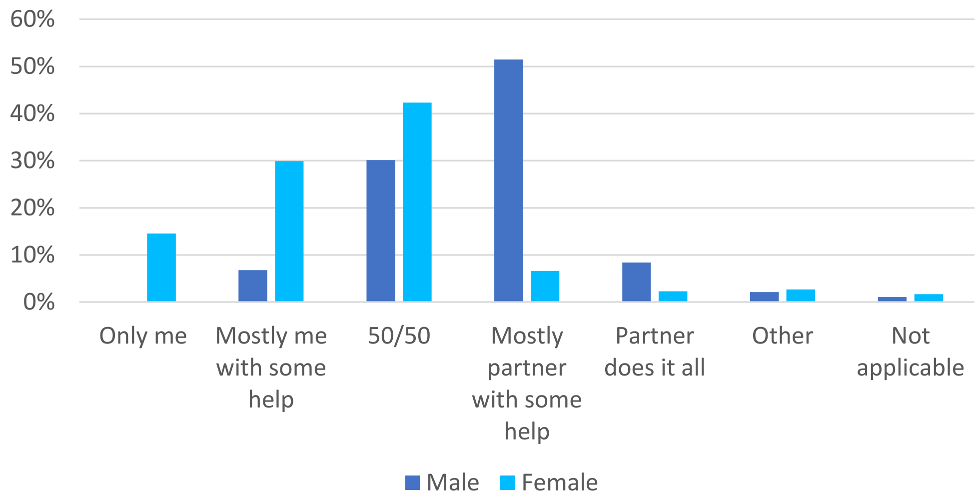
% of each gender



Source: Leung and Hogan (2022)

Figure 12 How childcare responsibilities were shared between respondents and their partners during COVID-19 pandemic restrictions

% of each gender



Source: Leung and Hogan (2022)

Carer payment approaches are used in a number of countries (Huang and Curtin 2019), and New Zealand could gather insights about what works best and what to avoid. A carer payment system can be designed in a number of ways, including direct payments into KiwiSaver funds on behalf of the mother or carer to compensate them for the forgone savings. In Luxembourg, contributions to pension funds are made for the first four years of a child's life. Estonia pays employer contributions during childcare periods (which are limited to three years per child). Norway credits individuals for periods of care work at a rate of around 70% of the average full-time wage. These examples support the primary carer to parent before the child starts school. In New Zealand, this would make a positive material contribution to mitigating the motherhood penalty, especially for women who do not return to work between children and cannot access the benefits of maternity leave for subsequent children.

New Zealand is well-placed to adopt similar systems of carer payments. Such a policy could include changes to the Best Start payment policy. The government would contribute 6% of the national median wage to KiwiSaver accounts for those not participating in the labour force due to being the primary carer of children or adults. This could be adjusted for part-time or full-time departures from the labour force.

6 References

Baker, Michael, Yosh Halberstam, Kory Kroft, Alexandre Mas, and Derek Messacar. 2019. ‘Pay Transparency and the Gender Gap’. Working Paper 25834. Working Paper Series. National Bureau of Economic Research. https://doi.org/10.3386/w25834.

Bennedsen, Morten, Elena Simintzi, Margarita Tsoutsoura, and Daniel Wolfenzon. 2019. ‘Do Firms Respond to Gender Pay Gap Transparency?’ Working Paper 25435. Working Paper Series. National Bureau of Economic Research. https://doi.org/10.3386/w25435.

ERG Recruitment. 2020. ‘The Cost of Recruiting Permanent Staff’. 2020. https://www.ergnz.co.nz/news/the-cost-of-recruiting-permanent-staff/51719/.

European Parliament. 2022. ‘Gender Pay Gap: Parliament Backs Binding Pay-Transparency Measures | News | European Parliament’. 4 May 2022. https://www.europarl.europa.eu/news/en/press-room/20220401IPR26532/gender-pay-gap-parliament-backs-binding-pay-transparency-measures.

Financial Markets Authority. 2020a. ‘KiwiSaver Projections’. FMA. 2020. https://www.fma.govt.nz/investors/resources/kiwisaver-projections/.

———. 2020b. ‘KiwiSaver Statements: General Public Research’. https://www.fma.govt.nz/assets/Reports/FMA-KiwiSaver-Statements-Survey-2020.pdf.

Flynn, Sophie, and Magdalen Harris. 2015. ‘Mothers in the New Zealand Workforce’. *Labour, Employment and Work in New Zealand*, February. https://doi.org/10.26686/lew.v0i0.2216.

Folbre, Nancy. 1994. ‘Children as Public Goods’. *The American Economic Review* 84 (2): 86–90.

Huang, Y., and J. Curtin. 2019. ‘A Review of Gender Differences in Retirement Income’. Auckland University.

Human Rights Commission. 2022. ‘Learn More about Pay Transparency’. Demand Pay Transparency. 2022. https://www.demandpaytransparency.org.nz/learn-more.

Leung, Christina, and Sarah Hogan. 2022. ‘Zooming into Better Work-Life Balance? Gender and Equity Insights from New Zealanders’ Experiences with Working from Home’. 2022. https://www.nzier.org.nz/publications/zooming-into-better-work-life-balance-gender-and-equity-insights-from-new-zealanders-experiences-with-working-from-home.

Lumsdaine, Robin L., and Stephanie J.C. Vermeer. 2015. ‘Retirement Timing of Women and the Role of Care Responsibilities for Grandchildren’. *Demography* 52 (2): 433–54. https://doi.org/10.1007/s13524-015-0382-5.

Mercer. 2021. ‘Global Pension Index Calls for Major Superannuation Reform’. 2021. https://www.mercer.co.nz/newsroom/global-pension-index-calls-for-major-superannuation-reform-to-close-gender-pension-gap.html.

Mercer, and CFA Institute. 2020. ‘Mercer CFA Institute Global Pension Index 2020’.

———. 2021. ‘Mercer CFA Institute Global Pension Index 2021: Pension Reform in Challenging Times’.

‘Mind The Gap Registry’. n.d. Mindthegap. NZ. Accessed 9 May 2022. https://www.mindthegap.nz/registry.

Ministry for Women. 2020. ‘Public Sector Gender Pay Gap Action Plans’. 28 August 2020. https://women.govt.nz/work-skills/income/gender-pay-gap/public-sector-gpg-action-plans.

———. n.d. ‘Case Studies on Pay Transparency - AU, DK, FR, DE, IS, UK.’ Accessed 9 May 2022. https://women.govt.nz/sites/public_files/Case%20studies%20on%20pay%20transparency%20-%20AU%2C%20DK%2C%20FR%2C%20DE%2C%20IS%2C%20UK.pdf.

Obloj, Tomasz, and Todd Zenger. 2022. ‘The Influence of Pay Transparency on (Gender) Inequity, Inequality, and the Performance-Basis of Pay’. SSRN Scholarly Paper 3523828. Rochester, NY: Social Science Research Network. https://doi.org/10.2139/ssrn.3523828.

OECD. 2021a. *Pensions at a Glance 2021: OECD and G20 Indicators*. OECD Publishing.

———. 2021b. *Towards Improved Retirement Savings Outcomes for Women*. OECD. https://doi.org/10.1787/f7b48808-en.

Rosenblatt, Carolyn. 2013. ‘Is Caring For Aging Parents Unfair to Women?’ Forbes. 2013. https://www.forbes.com/sites/carolynrosenblatt/2013/05/09/is-caring-for-aging-parents-unfair-to-women/.

Sin, I., K. Dasgupta, and G. Pacheco. 2018. ‘Parenthood and Labour Market Outcomes’. https://motu-www.motu.org.nz/wpapers/18_08.pdf.

Statistics NZ. 2013. ‘Caring for Children: Findings from the 2009/10 Time Use Survey | Stats NZ’. 2013. https://www.stats.govt.nz/reports/caring-for-children-findings-from-the-200910-time-use-survey.

———. 2014. ‘Measuring the Gender Pay Gap’.

———. 2021. *Quarterly Employment Survey: Filled Jobs by Industry (ANZSIC06) by Sex and Status in Employment (Quarterly) December 2021*.

———. 2022. *Labour Market Statistics*. https://nzdotstat.stats.govt.nz/wbos/index.aspx.

———. n.d. ‘Life Expectancy’. Accessed 25 April 2022. https://www.stats.govt.nz/topics/life-expectancy.

Te Ara Ahunga Ora Retirement Commission. 2022a. ‘New Zealand Financial Capability: Focus on Women’. https://cffc-assets-prod.s3.ap-southeast-2.amazonaws.com/public/Uploads/Deep-dive-on-womens-financial-capability.pdf.

———. 2022b. ‘Policy Brief 01: KiwiSaver Balances’. https://assets.retirement.govt.nz/public/Uploads/Retirement-Income-Policy-Review/TAAO-RC-Policy-Brief-2022_Kiwisaver.pdf.

Te Ara Ahunga Ora, The Retirement Commission. 2021. ‘New Zealand Financial Capability: Focus on Māori’. https://cffc-assets-prod.s3.ap-southeast-2.amazonaws.com/public/Uploads/Research-2020%2B/TAAO-_NZ-financial-capability_maori.pdf.