

**Women in Social and
Economic Research (WiSER)**
Curtin University

**Submission to the Senate Inquiry into
Economic Security for Women in Retirement**

October 2015



Women in Social & Economic Research

ABOUT WISER

Women in Social and Economic Research (“WISER”) was founded in April 1999 under the name Women’s Economic Policy Unit. It was formed in response to a growing void - within Australia and internationally - in the gender analysis of economic and social policy issues that confront women.

WISER is committed to producing high quality quantitative and qualitative feminist research on a broad range of issues that women identify as undermining their ability to achieve equity and autonomy in the current context.

Through its academic and consultancy research into women's experiences of social and economic policies WISER provides a meaningful gender analysis of policy. An analysis strongly put forward via active contribution to government policy debates.

Our broad objectives include:

- Identifying the cases and causes of women's disadvantaged social and economic status and to contribute appropriate policy initiatives to address this disadvantage;
- Demonstrating the way in which social factors, particularly gender, influence the construction of economic theory and policy;
- Extending current theory and research by placing women and their social context at the centre of analysis;
- Contributing an interdisciplinary approach to the understanding of women's position in society. In turn, this should enable the unit to better reflect the interrelatedness of the social, economic and political discourses in policy and their consequent implications for women;
- Fostering feminist research both nationally and internationally;
- Expanding linkages with industry;
- Establishing and supporting a thriving Curtin University postgraduate research community with a common interest in feminist scholarship.

For further details see: www.cbs.curtin.edu/research

1. Introduction

“Women in Social and Economic Research” (WISER) is a multidisciplinary research unit at Curtin University in Perth, Western Australia. We welcome the opportunity to make a submission to the Senate Economics Committee’s Inquiry into the Economic Security for Women in Retirement.

In this submission we summarise the findings from a number of our research projects on the Australian retirement income and savings system. These demonstrate the central role of the age pension in ensuring economic security for women in retirement and in achieving an efficient retirement income system. They also highlight the negative impacts on women’s economic security caused by the large tax expenditures and limited controls on superannuation contributions and disbursements. More generally, this submission highlights the importance of adequately resourcing institutions, such as the Office for Women and the Australian Bureau of Statistics, which can ensure that advice and information on gender inequality is regularly and systematically brought to the realm of policy making. These changes are necessary to achieve a coordinated and long-lasting policy response to the barriers to women’s economic security in retirement.

The submission begins with a detailed summary of our gender impact analysis of the superannuation and the age pension tax and transfer system. This forthcoming publication in the *Australian Tax Forum* primarily addresses a number of the Committee’s terms of reference (TOR), especially TOR i) through iv). In addition, we summarise WISER research project findings on superannuation and women’s retirement incomes (TOR iii) and v)); and the gender wealth gap (TOR ii)

Copies of the publications are provided in appendices to this submission.

This submission draws on the research effort of many WISER researchers over recent decades, including Professor Rhonda Sharp, A/Prof Siobhan Austen, A/Prof Helen Hodgson and A/Prof Therese Jefferson. Any questions regarding this submission should be directed to A/Prof Siobhan Austen or by e-mail:

2: Gender Impact Analysis and the Taxation of Retirement Savings in Australia by Siobhan Austen, Rhonda Sharp and Helen Hodgson, [Australian Tax Forum](#), 2015 forthcoming.

In this paper we identified the key principles of gender impact analysis and examined the large gender gap in retirement income and savings. Our analysis identified a number of critical features of Australia's retirement income and savings system that respond to the circumstances and interests of men rather than women. The paper is included as Appendix 1 to this submission, whilst an overview that highlights aspects of the paper most relevant to the Committee's terms of reference is provided in the paragraphs below.

2.1 Gender Impact Analysis

The three key principles of Gender Impact Analysis (GIA) are:

1. *The effects of policies on both the paid and unpaid economies must be assessed.* The cost of any incentives being provided to either paid or unpaid work should be justified and the consequences of reducing production in one sector to increase it in another should be assessed.
2. *The gender distribution of the effects of policies in the paid and unpaid economies must be examined.* Do the policies add to or reduce gender inequality? Do the policies promote or reduce the opportunities for economic autonomy and wellbeing for men and women?
3. *The effects of policies on gender equality both between households and within them must be explored.* Do the policies adversely affect households with a particular gender composition? Do the policies reinforce or help to break down existing gender inequalities in the distribution of money, work, and power within households?

GIA emphasises the need to canvass the impact of policy settings on paid and unpaid work for several reasons. First, there are strong links between economic performance and both paid *and* unpaid work. Unpaid work, such as caring labour performed for children and others in family situations, contributes in numerous and significant ways to the provisioning of community needs and wants. Whilst it is less visible than its paid counterpart, and its 'value' of unpaid work is notoriously difficult to measure, it is estimated that 21.4 billion unpaid care work hours were

performed in Australia in 2009–10, with an imputed value of \$650.1 billion.¹ Unpaid work is also vital for the production and maintenance of human capabilities relied upon by the formal economy.² Therefore, on efficiency grounds, policies that encourage an increase in paid work should be rejected if they cause a large sacrifice of ‘production’ in the informal economy, or if they result in a sacrifice of the development of human capabilities.

A further reason for GIA’s focus on unpaid work relates to gender equity. Gender equality is typically harmed by policies that improve the conditions of individuals who participate in paid work and neglect the contribution to production made through unpaid work. This is because paid work is much more the domain of men than it is of women, with the opposite being true for unpaid work. The most recent time use data (for 2006) shows that Australian men spend, on average, 4.33 hours on paid work activities, and 2.52 hours on unpaid activities each day³. The pattern of time use for women is almost a mirror image of this. On average, Australian women spend 2.21 hours each day on paid work activities and 5.13 hours on unpaid activities.

GIAs that examine the effects of economic policies on paid and unpaid work also draw our attention to the division of labour within households. In doing so they help policy makers avoid the pitfalls of assuming that men and women who share a household (for example, as husband and wife) have identical interests and share resources equally. The weight of empirical evidence shows that the distribution of resources in couple households is not always equal as it is commonly influenced by perceptions of the financial contribution of different household members.⁴ This evidence is supportive of policies that enhance the ability of women to participate in paid work – as paid work can enhance women’s bargaining power within their families and households. More generally, evidence on the unequal distribution of resources and power within households supports policies that take account of both the level of household income and wealth, and its gendered distribution within the household.

¹ Hoenig, S.A., and Page, A.R.E., 2012, *Counting on Care Work in Australia*, Report prepared by AECgroup.

² See, for example, n.21 in the paper, pp.52–53; Stewart, M., 2009, *Gender Equity in Australia’s Tax System*. Available at http://www.law.unimelb.edu.au/files/dmfile/Stewart_Gender_Tax_Policy_20-11-091.pdf, Retrieved March 2015.

³ Australian Bureau of Statistics, 2015, 4125.0, *Gender Indicators, Australia*, Canberra: Australian Bureau of Statistics. Available at <http://www.abs.gov.au/ausstats/abs@.nsf/Lookup/4125.0main+features410Feb%202015>, Retrieved May 2015.

⁴ A seminal paper is Lundberg, S., and Pollak, R., 1996, ‘Bargaining and Distribution in Marriage’, *Journal of Economic Perspectives* 10(4), pp. 139-158

2.2. Gender impact analysis of Australia's retirement incomes and savings policies

The context for the assessment of women's economic security in retirement is a situation already characterised by high levels of gender-based income and wealth inequality. Amongst full-time workers, the gender pay gap favouring men is currently 18.2 per cent; with men, on average, earning \$283.20 more per week from their full-time paid work roles than women.⁵ The gender gap in *incomes* is larger. Australian women's share of total income has stubbornly remained around 37 per cent in recent decades.⁶ Gender disparities in wealth are also substantial, with single Australian men⁷ having, on average, levels of wealth in 2010 that were 22.8 per cent higher than single women.⁸

Ideally, retirement and savings policies would act to ameliorate gender inequality. However, the opposite is currently true. The superannuation pillar of Australia's retirement system adds to gender inequality because contributions are linked to earnings. Women's relatively low wages, together with lower hours of paid work and broken patterns of workforce participation, reduce their ability to accumulate superannuation assets.⁹ Thus, because superannuation only interacts with the paid economy it transposes high levels of inequality amongst working age men and women into high levels of gender-based inequality amongst older Australians.

The generosity of the tax expenditures on superannuation, and the limited controls on contributions, greatly magnify the negative effects of a superannuation system on gender inequality. The groups most able to benefit from the tax expenditures on superannuation are high-income earners and those with flexible assets that can be moved into the tax-advantaged superannuation system. Because women are underrepresented in these groups, they receive a relative small share of the benefits of the increasingly large tax expenditures on superannuation.

⁵ Australian Bureau of Statistics, 2014, *6302.0, Average Weekly Earnings, Australia, Nov 2014*, Canberra: Australian Bureau of Statistics.

⁶ Austen, S., and Redmond, G., 2008, 'Women's Incomes' in Australian Bureau of Statistics, *4102.0, Australian Social Trends, 2008*, Canberra: Australian Bureau of Statistics. Available at <http://www.abs.gov.au/AUSSTATS/abs@.nsf/Lookup/4102.0Chapter8002008>, Retrieved May 2015.

⁷ Australian data collections do not permit an analysis of the gender wealth gap amongst partnered men and women.

⁸ Austen, S., Ong, R., Bawa, S., and Jefferson, T., 2015, 'Exploring recent increases in the gender wealth gap among Australia's single households', *Economic and Labour Relations Review*, 26 (1), pp.3–28. Available at <http://elr.sagepub.com/content/26/1/3>, Retrieved June 2015.

⁹ See, for example, Jefferson, T., and Preston, A., 2005, 'Australia's "other" gender wage gap: baby boomers and compulsory superannuation accounts', *Feminist Economics*, 11, pp.79–101.

Gender impacts are associated with tax expenditures on each part of the superannuation system. The value of the concessional tax treatment of *contributions* to individuals is proportional to the amount of the contribution and the contributor's marginal tax rate¹⁰. Reflecting this, 50 per cent of the tax expenditures on superannuation contributions flow to individuals in the top two tax groups,¹¹ whilst there is no tax advantage associated with making contributions to superannuation for individuals in the lowest tax bracket.¹² Gender impacts arise in this part of the system because, due to their lower market earnings, the proportion of women in the top two tax brackets is less than half the proportion of men (14, as compared to 29 per cent).¹³ A much higher proportion of female taxpayers are in the lowest tax bracket (33, as compared to 22.6 per cent of male taxpayers). The negative gender impact of the expenditures on superannuation tax concessions increases further when account is taken of individuals (more commonly women) who are not in the paid workforce and, thus, are generally not liable for income tax.

Tax expenditures on superannuation accumulations and disbursements also have negative impacts on gender equality. Almost two-thirds of the tax expenditures on accumulations (which are uncapped) flow to individuals in the top two tax groups, where, as has already been noted, women are poorly represented.¹⁴ For both accumulations and disbursements, the value of the tax expenditures is proportional to the balance of the superannuation account. However, the average superannuation balance of Australian women is less than half that of men, and a substantially higher proportion of women (34.6 per cent) than men (26.1 per cent) have no superannuation.¹⁵

In contrast to superannuation, the age pension pillar of Australia's retirement system does not reinforce patterns in the distribution of income and wealth associated with the performance of paid and unpaid work. Payments under the age pension are capped and subject to income and assets tests. As such they are distributed relatively evenly, with the largest (but still very modest) amounts available to those with relatively small assets (outside the family home) and low market

¹⁰ Contribution caps place some limits on these benefits.

¹¹ Clare, R., 2014, *The Equity and Sustainability of Government Assistance for Retirement Income in Australia*, Sydney: Association of Superannuation Funds of Australia.

¹² Currently the Low Income Superannuation Offset is available to taxpayers earning less than \$37,000 per annum to ensure that superannuation is concessionally taxed. However this has been repealed with effect from 2017: *Minerals Resource Rent Tax Repeal and Other Measures Act 2014* (Cth).

¹³ Taxation statistics 2011–12. Available at <http://data.gov.au/dataset/taxation-statistics-2011-12/>, Retrieved April 2015.

¹⁴ see n.59 in the paper.

¹⁵ Clare, R., 2014, *An Update on the Level and Distribution of Retirement Savings*, Sydney: Association of Superannuation Funds of Australia.

incomes. Women, more than men, are represented in these groups. Thus, the aged pension helps to ameliorate gender inequality. Women comprise 55.7 per cent of all Australian age pension recipients and 60.8 per cent of the age pension recipients on the maximum pension rate.¹⁶ However, increasingly attempts are being made to limit access to the age pension (for example, by raising the age requirements), and the level of financial support it provides (as witnessed, for example, by the 2014 proposals to tie adjustments in the age pension to the CPI, rather than changes in average weekly earnings).¹⁷

Our overall evaluation of Australian policy on retirement savings and income on the criteria of gender equity is negative. The shift in focus toward superannuation, and especially the large tax expenditures on superannuation, has exacerbated rather than reduced gender inequality. Generally, the policy settings are also contributing to higher levels of inequality in the incomes of older Australians.¹⁸ Under the current policy settings some retirees, and statistically more men than women, who have accumulated significant assets in superannuation will access large tax-free incomes in retirement and derive the benefits for health and care that this provides. Others, and more commonly women than men, will continue to depend on the age pension, which will deliver them an increasingly frugal existence. The superannuation-based policies promote the economic opportunities and wellbeing of those who have been able to participate successfully in paid work over their working lives. Due to their massive call on fiscal resources, these policies also reduce the scope for improving the age pension, and thus the opportunity to improve the economic autonomy and wellbeing of the many women and men who have been less able to participate in paid work and achieve high earnings.

Other principles of GIA are also relevant to the policy debate over retirement savings and income. For example, the lack of incentives for women with children to participate in paid work can be identified as a significant impediment to private retirement savings. As Patricia Apps, Ray Rees and Margi Wood observe, Australian policy is characterised by a contradiction between policy settings

¹⁶ Department of Social Services, 2012, Statistical Paper No. 11, Canberra: Australian Government Department of Social Services. Available at <https://www.dss.gov.au/about-the-department/publications-articles/research-publications/statistical-paper-series/statistical-paper-no-11-income-support-customers-a-statistical-overview-2012>, Retrieved March 2015.

¹⁷ See, for example, 'Joe Hockey flags changes to age pension, Opposition says that would break election promise', 2014, *ABC News*, 13 April. Available at <http://www.abc.net.au/news/2014-04-13/joe-hockey-flags-changes-to-age-pension-eligibility-age/5386828>, Retrieved May 2015.

¹⁸ Whiteford, P., 2011, 'Are the rich getting richer and the poor getting poorer?', *Inside Story*, 28 September. Available at <http://insidestory.org.au/are-the-rich-getting-richer-and-the-poor-getting-poorer>, Retrieved March 2015.

that provide tax subsidies to encourage savings for retirement and income tax and Family Tax Benefit policy settings that strongly reduce the financial incentive for second earners in families with children to engage in paid work.¹⁹

As noted earlier, whilst the individual is ostensibly the formal unit of assessment in Australia's income tax system, Family Tax Benefits Parts A and B shift the tax-transfer system towards a family unit based system. The tax benefits impose very high effective marginal tax rates on second earners (most commonly women) in households. Part A is means tested and withdrawn at rates of 30 per cent and an additional 20 per cent if the family qualifies. When added to the marginal tax rate, these withdrawals can cause a second earner to lose 80–90 per cent of gross earnings on returning to work, and this is before childcare costs are met.

Given that women's labour supply is relatively elastic, particularly when they have children, the policy settings have large negative effects on women's workforce participation.²⁰ Further, given that household savings are strongly correlated with the earnings of the second worker, the policy settings are negative for private retirement savings.²¹ Our GIA thus also highlights that the current policy settings create *disincentives* for women with children to participate in paid work, with negative implications for their retirement savings. We can also note that the income test on the Australian age pension also discourages paid work by its recipients – and in this way restricts their opportunities for wellbeing.²²

The final part of our GIA considered the effect on particular household types of Australia's policy on retirement savings and income, and its effects on the intra-household distribution of household money, work and power. One type of household that is particularly vulnerable in the current policy environment is households comprised of older single women. They make up the large majority of households dependent on the full age pension, with more than twice as many single women

¹⁹ Apps, P., Rees, R., and Wood, M., 2007, 'Population ageing, taxation, pensions and health costs', *Australian Journal of Labour Economics*, 10, (2), pp.79–97.

²⁰ Apps, P., 2007, 'Taxation and labour supply', *Australian Tax Forum*, 22 (3), pp.89–116.

²¹ Apps, P., 2015, 'Personal income tax rates, work and saving', presentation to the *Looking Forward at 100 years: Where Next for the Income Tax* conference, Tax and Transfer Policy Institute, ANU, 27 April.

²² Guest notes that workforce participation rates amongst 'older' men and women in New Zealand are substantially higher due to the absence of income tests. He also cites survey data showing that a substantial number of age pension recipients who wanted to work had turned down part-time employment because they would have faced a cut in their pension. Guest, R., 2013, *Comparison of the New Zealand and Australian Retirement Income Systems*. Available at https://www.melbourneinstitute.com/downloads/hilda/Bibliography/Other_Publications/2013/Guest_RI-Review-2013_Comparison_NZ_&_Aus_Retirement_Income_Systems.pdf, Retrieved May 2015.

depending on the full age pension as men.²³

Due to their current high rate of dependency on the age pension, older single women are particularly vulnerable to policy changes that restrict the growth in age pension rates and increase eligibility limits. As single women, much more than single men, often have a 'wealth portfolio' that is heavily dominated by the family home, any moves to include primary home assets in the assets test for the age pension will have a disproportionate negative impact on them²⁴. Due to their relatively low incomes, this group is also highly vulnerable to reductions in government spending on health, aged care, transport and other services.

The single age pension is meagre. The ASFA standard for a comfortable lifestyle specifies a minimum income of \$42,158 for single people who own their own home²⁵; however, the current full single age pension (including Pension Supplement and Clean Energy Supplement) only equates to around \$22,365. The age pension rate is closer to ASFA's standard for a 'modest' lifestyle, which allows \$74.23 per week for food expenditures and \$38.06 per week for health²⁶. The low level of the age pension contributes to a relatively high level of old age poverty in Australia. For example, when the poverty line is defined as a household income that is 50 per cent below median income, the poverty rate amongst older Australians is 35.7 per cent, placing us in the bottom 2 OECD countries.

In couple households, the redirection of fiscal resources away from the age pension and towards tax expenditures on superannuation creates further negative gender impacts, by concentrating household money and power in the hands of the primary 'earner'. The age pension is paid separately to individuals in couple households. In contrast, superannuation accounts are 'owned' by their contributors. These distinctions are important given that there are potentially fundamental differences between men's and women's 'interests' in resource allocation in older households, associated with their different life expectancies. An individual's pure self-interest is to exploit all resources before they die, which will conflict directly (and significantly) with the interests of a surviving (and 'dependent') spouse.

²³ see, n.62 in paper.

²⁴ See Austen, S.E., Jefferson, T.M., and Ong, R., 2014, 'The gender gap in financial security: what we know and don't know about Australian households', *Feminist Economics*, 20 (3), pp.25–52.

²⁵ Clare, R, Spending patterns of older retirees: New ASFA Retirement Standard – September quarter 2014 ASFA <http://www.superannuation.asn.au/policy/reports> Retrieved June 2015

²⁶ ASFA, 2013, Super system evolution: Achieving consensus through a shared vision, ASFA White Paper – Part 4, May.

2.3 The paper's summary and conclusions

Current retirement income and savings policy settings are negative for gender equality. The large tax expenditures on superannuation favour the economic opportunities and wellbeing of individuals with unbroken patterns of workforce participation and high earnings. Thus they add to, rather than correct for, the substantial gender pay and earnings gaps that characterise the Australian labour market.

The tax expenditures on superannuation have a high fiscal cost and have placed significant pressure on federal expenditure programs. The role of the age pension has been downgraded to a safety net for those unable to accumulate private retirement savings. The pension continues to help correct the skewed distribution of the tax expenditures on superannuation; however, the positive role that the age pension plays in promoting gender equality is being eroded.

Other features of Australia's taxation and transfer system, together with high child care costs, create impediments to private retirement savings by women with children. This highlights the problem of poor policy integration – and a lack of focus on the opportunities for women to participate in paid work. The current design of Australia's retirement savings and income policies also discourage paid work by age pension participants, the majority of whom are women.

There are particular vulnerabilities for older single women in the current policy environment. Women comprise the large majority of single age pension recipients. The low rate of the pension prevents them from achieving a basic acceptable standard of living, taking into account community standards, let alone a comfortable lifestyle. The group is highly vulnerable to reductions in government spending on health, aged care, transport and other services.

Current policy settings are also further concentrating household resources in the hands of 'breadwinners'. The redirection of fiscal resources toward superannuation negatively impacts on gender equality within households, and undermines the opportunities to pool longevity risk.

Looking forward, a number of policy changes are required to protect and promote the economic security of women. Fundamentally, there is a need to re-balance the resourcing of superannuation tax concessions and the age pension. This will require a substantial winding back of the tax concessions available for superannuation. ASFA's current recommendations are a good start as they include: lifetime caps for non-concessional contributions, in place of the current annual and three-year bring-forward caps; and the exclusion of very high account balances (e.g. those over

\$2.5m) from tax concessions.

Improvements in the rate of the age pension are necessary to bring it closer to community standards for comfortable living. Current policy frames the age pension as a safety net; as a fall-back source of income for people who have not been able to save enough for their retirement. This is an individualised approach, which ties retirement income to a person's earnings, consumption and savings 'choices' over the life course. Apart from neglecting the strong economic arguments in favour of pooling longevity risk, the approach fails to take account of the unpaid contributions of especially women both when they are younger (for example, in their roles as parents) and when they are older. The latter contributions are substantial (estimated at \$15.5 billion per annum)²⁷ – and predicted to grow. The age pension should be re-established as the central pillar of Australia's retirement system and recast to better reflect the importance of unpaid work. One potential, suggested by Guest, is for the 'citizenship dividend' aspects of the age pension to be re-emphasised.²⁸

The barriers to women's workforce participation created by the income tax/family benefit system (including high childcare costs) need to be rectified. To further support the opportunities for women to save for their retirement, the Low Income Superannuation Contribution should be at least retained and the SG rate should be increased. The income tests on the age pension need to be eased, to improve the opportunities for older women (and men) to participate in paid work.

Achieving these policy improvements is undoubtedly a difficult task. Whilst our GIA identified important concerns – and made some policy recommendations – it is not enough to bring about gender-responsive policy and budget changes. Achieving change will require attending to the political context and the institutional structures associated with retirement saving and income policies in Australia; the development of strategies to communicate the findings of this GIA and other related studies; and a clear understanding of relevant policy actors, their roles and the links between them.

New institutions, such as a re-established Office for Women, are important to ensure that information on gender inequality is regularly and systematically brought to the realm of policy making. Australia achieved this in the past through the production of women's budgets and

²⁷ Brooke, E., 2015, *Appreciating Value: Measuring the Economic and Social Contributions of Mature Age Australians*, Brisbane: National Seniors Australia.

²⁸ see n.68 in the paper.

published budget documents that used a variety of printed and agency sex-disaggregated data. It also had a woman in the federal cabinet responsible for the government's policies and active civil society groups advocating what needed to change.

In 2000 the UN General Assembly called upon governments to 'Incorporate a gender perspective into the design, development, adoption and execution of all budgetary processes ... in order to promote equitable, effective and appropriate resource allocation and establish adequate budgetary allocations to support gender equality'.²⁹ In 2014 the World Bank and UN Women launched an initiative to support finance ministers to promote 'financing for results'.³⁰ To ensure a coordinated and long-lasting policy response to the problem of gender inequality it is vital that Australia re-establishes its reputation and leadership with GIA and reinvigorates institutions within the bureaucracy that are able to monitor and effect positive change for women's economic security.

3: *Retirement Savings and Gender: An Australasian Comparison* by Helen Hodgson and Lisa Marriott (2013) 28 Australian Tax Forum, pp.725-752

3.1 The gender superannuation gap in Australia and New Zealand

This article was co-authored by Helen Hodgson and Lisa Marriott, of Victoria University of Wellington. The theme of this article was to compare the Australian and the New Zealand superannuation systems, as they stood in 2013. The paper is included as Appendix 2 to this submission, whilst an overview that highlights aspects of the paper most relevant to the Committee's terms of reference is provided below. The issues raised in this paper address primarily Terms of Reference (iii) and (v).

The New Zealand superannuation system (Kiwisaver) is less well established than the Australian system, having been implemented in 2007, yet a gender gap in superannuation balances is already emerging.

There are significant differences between the Australian and the NZ retirement income support systems. Kiwisaver is at a much lower rate than the Australian superannuation guarantee rate; being capped at 2% employer contribution and 4% or 8% employee contribution. Further, the NZ scheme is an opt out system, thus it is not compulsory.

²⁹ UN General Assembly resolution S-23/3, annex.

³⁰ See Elson, D., 2014, *Gender Responsive Budgeting: Achievements and Future Perspectives*. Available at http://wu.ac.at/fileadmin/wu/d/i/vw3/Public_Conf_Key_Note_Diane_Elson.pdf, Retrieved June 2015.

In New Zealand the age pension is universal, without being subject to means testing, which mitigates the gender gap in retirement income. The effect of the universal age pension is that in 2008 the OECD³¹ reported that the net pension replacement rate³² in New Zealand was similar for men and women, and the distribution was progressive, decreasing from 79% for workers on half average weekly earnings to 29% for workers on 1.5 times average weekly earnings. This is in contrast to Australia where the 2008 data showed that pension replacement rates for females are consistently several percentage points lower than for males. The data also shows that the Australian system is less progressive than NZ with the net pension replacement rate for males earning 1.5 times average weekly earnings being 45%, compared to 29%.

Further, in New Zealand retirement savings do not attract the generous tax concessions available in Australia. There is a government contribution, or tax credit, available based on the level of contributions by the employee and the employer, but contributions to the fund are taxed at the member's tax rate and earnings of the fund are also taxed in the fund.

The paper notes that the high level of tax concessions in Australia acts to encourage superannuation as a form of savings. In 2012 superannuation concessions were estimated at 27% of all tax concessions³³, which was already being regarded as unsustainable. The majority of these tax expenditures benefitted went to men as they had both higher contribution levels and higher superannuation account balances.

3.2 Tools to ameliorate the issue

The paper then goes on to consider what tools are available to reduce the gender superannuation gap, taking account of the different structure of superannuation savings in the two countries. The paper acknowledges that it is important to address labour market participation rates and the gender pay gap, however these issues were out of the scope of this analysis.

This research was undertaken before the announcement that the Low Income Superannuation Contribution would be withdrawn with effect from 30 June 2017. The paper notes that any policy that assist low income earners will have a disproportionate effect on women's superannuation

³¹ OECD, 2012, *Pensions at a Glance 2011*, Paris: OECD Publishing. These figures are based on a single individual who has no career break, and enters the retirement system at age 20 and retires at the national age of retirement.

³² The Net Replacement Rate is the individual net pension entitlement divided by net pre-retirement earnings

³³ Australian Treasury, 2013, *Tax Expenditures Statement 2012*, Canberra: Australian Treasury, Table 1.1

savings as women are overrepresented among low income earners due to the higher number of women engaged in part time or casual work. Other policies could be introduced to address the broken workforce patterns of women.

Some of the tools available in the Australian system include:

- A scheme of carer credits could be implemented for eligible full time carers. This draws on proposals of the Human Rights Commission³⁴. The proposal was for an offset similar to the LISC, which is now scheduled to be withdrawn; available for carers receiving a carer benefit or on parental leave.
- Superannuation contributions should be an integral part of any paid parental leave scheme, whether a government funded scheme or an employer scheme.
- The current exemption from the superannuation guarantee for employees earning less than \$450 per month should be removed³⁵. This exemption is open to abuse by employers that operate more than one registered business who rely on casual workers.
- Superannuation coverage should be extended by enforcing the requirement that contractors are covered where a contract is principally for labour.
- The current Spouse Superannuation Tax Offset is inefficient and rarely used. It should be removed and replaced with other mechanisms that more effectively encourage the accumulation of spousal superannuation. However this proposal is problematic as it would be skewed to higher income families that could afford additional superannuation contributions, and it could have an impact on paid workforce participation levels.
- Annual contribution caps should be reformed to allow a person who has taken time out of the workforce as a carer to catch up their contributions. The paper suggests a system of rolling caps rather than a lifetime cap.
- Arrangements, including EBAs, awards and other forms of employment contract that facilitate higher voluntary levels of superannuation contribution should be encouraged. However higher contribution levels should be voluntary.

3.3 Conclusions

In summary, as the compulsory superannuation system is based on earnings it reflects the gender differences in earning patterns through the gender pay gap, career interruptions and reduced

³⁴ Australian Human Rights Commission, 2013, *Investing in Care: Recognising and valuing those who care*, Volume 1: Research Report 2013, Sydney: Australian Human Rights Commission

³⁵ *Superannuation Guarantee (Administration) Act 1992*, s.27

workforce participation. A superannuation system that is linked to earnings will inevitably ensure higher levels of retirement income to families with a greater capacity to save. Although there are some changes that can be made to the rules around contributions to reduce the impact of these changes, they are an inherent part of the current system.

A strong age pension that provides an adequate level of support in retirement, as in New Zealand, is an essential component of a fair retirement income system.

4: “The Gender Gap in Financial Security: What We Know and Don't Know about Australian Households” by Siobhan Austen, Therese Jefferson, and Rachel Ong in *Feminist Economics* 20 (3), 2014, pp. 25-52; and “Exploring Recent Increases in the Gender Wealth Gap Among Australia’s Single Households”, by Siobhan Austen, Rachel Ong, Sherry Bawa, and Therese Jefferson, in *Economic and Labour Relations Review* 2014: 1-26.

These papers, attached as appendices 3A and 3B, addressed the limited nature of evidence on gendered patterns of wealth in Australia. In the *Feminist Economics* paper we used wealth data collected through the Household Income and Labour Dynamics in Australia (HILDA) survey to achieve the first published study of the gender wealth gap (GWG) in Australia, reporting that the accumulated wealth of single adult men in 2006 was, on average, 14.4% higher than that of single women. Cross sectional analysis of this data showed that relatively higher rates of divorce/separation, older ages and higher rates of bachelor degree qualifications are positive for the relative wealth position of single households headed by single females. On the other hand, higher rates of parenthood, lower earnings and lower proportions of time spent in paid work negatively impact on the wealth holdings of households headed by single females compared to single males. The effects of personal characteristics on the wealth of households headed by single adults, however, differ across the wealth distribution and play only a small role in explaining differences in wealth accumulation between single men and women in the upper quartiles of the wealth distribution where the largest GWGs are found.

The research published in the *Economics and Labour Relations Review* extended our analysis of the GWG by examining how the gap evolved over the 8 year period from 2002 to 2010. Importantly, we revealed that the GWG among single women and men more than doubled from 10.4% in 2002

to 22.8% in 2010. This was associated with a relatively rapid increase in the value of housing assets held by single men. The paper also documented how the GWG among singles has increased despite women's historically high levels of labour market participation and in the context of relatively well-developed policies promoting gender equity. We identified an important need for additional data and the development of sophisticated theory to gain insights into the wealth holdings of partnered men and women.

Appendix 1: Gender Impact Analysis and the Taxation of Retirement Savings in Australia

Gender Impact Analysis and the Taxation of Retirement Savings in Australia

Siobhan Austen, Rhonda Sharp and Helen Hodgson

Abstract

Gender impact analysis of the tax transfer system makes gender issues in policies and budgets visible and enables their complexities to be revealed. By doing so it facilitates the development of more equitable and efficient alternatives. This paper provides a gender impact analysis of Australia's taxation and expenditure arrangements for superannuation and the aged pension. By including both paid and unpaid work in the analysis, it identifies a number of critical features of the tax and transfer system that foster gender inequality. The paper concludes that the gender impacts of the current policy on retirement savings and income should be addressed through a range of policy and budgetary changes. In particular, it advocates re-balancing the resourcing of superannuation tax concessions and the age pension, improving the rate of the age pension and removing the existing barriers to women's workforce participation that have been created by the income tax/family benefit system, including high childcare costs.

1 INTRODUCTION

Australia's policy on retirement savings and income has a long history, and shares several milestones with the *Income Tax Assessment Act 1915* (Cth). The age pension actually pre-dates the ITAA 1915. The *Invalid and Old Age Pensions Act 1908* (Cth) provided all Australians aged over 65 with a pension, subject to a means test.¹ The ITAA 1915 itself provided for tax deductibility of employer contributions to superannuation made on behalf of employee² and contributions to personal superannuation of up to £50.³ Superannuation fund earnings were also exempted from taxation by the Act.⁴

If we apply a gender lens to this early legislation we can see that some aspects responded implicitly to the economic positions and interests of men. Most notably, the tax deductibility of contributions to superannuation were primarily relevant to employees, and especially those with access to employer contributions and/or the ability to save privately for their retirement. Around the time of the ITAA 1915, the large majority of employees were men. Indeed, the initial Census of the Commonwealth of Australia in 1911 counted ('exclusive of full-blooded aborigines') 1,566,876 male 'breadwinners', and only 394,719 female breadwinners⁵. As a corollary, there were 924,500 women aged over 20 years who were dependent on 'natural guardians' (lawful parents) as compared to only 3,451 men. With employer superannuation contributions largely restricted at that time to professional employees, we can also note that there were almost twice as many men (91,638) in this group than women (52,973). These gender differences were embedded by the Commonwealth Court of

¹ There was also a character test, and a man who deserted his wife was not eligible for the pension.

² ITAA 1915, s 18(j).

³ ITAA 1915, s 18(g).

⁴ ITAA 1915, s 11(f). The Commonwealth's use of its taxation power to control superannuation funds, evident from the beginning, was consolidated by the High Court decision in *Fairfax v FCT* [1965] HCA 64 (1965) 114 CLR 1.

⁵ Australian Bureau of Statistics, 2011, *Census of the Commonwealth of Australia, 1911*, Canberra: Australian Bureau of Statistics. Available at [http://www.ausstats.abs.gov.au/ausstats/free.nsf/0/672F01666C9728B9CA2578390013E61F/\\$File/1911%20Census%20-%20Volume%20III%20-%20Part%20XII%20Occupations.pdf](http://www.ausstats.abs.gov.au/ausstats/free.nsf/0/672F01666C9728B9CA2578390013E61F/$File/1911%20Census%20-%20Volume%20III%20-%20Part%20XII%20Occupations.pdf), Retrieved 16 May 2015.

Conciliation and Arbitration, which established a male basic wage in the 1907 Harvester Judgment⁶ but did not establish a basic wage for women until 1919, at only 54 per cent of the male basic wage⁷. Also a ‘marriage bar’ excluded married women public sector employees from permanent positions, further serving to disqualify women from superannuation schemes and undermining their capacity to save for retirement.⁸ The eligibility criteria for the Invalid and Old Age Pension made it more relevant to the economic and social positions of women – and this was enhanced when, in 1910, the Governor General acted on the powers provided to him under the *Invalid and Old Age Pensions Act* 1908 to reduce the eligibility age for women (to 60 years of age).

Whilst it is perhaps not too surprising that the gender impacts of income tax and other policy settings did not feature in policy conversations in early twentieth-century Australia, it is inconceivable that they would be left out of the dialogue 100 years later. However, a full consideration of whether tax and policy settings promote or retard progress towards greater gender equity has, we argue, been lacking in recent debates over the taxation of retirement savings and income policy settings. A very crude measure of this is the absence of explicit references to gender equity (or, for that matter, gender or women) in key government documents that are framing the current debate.⁹

In response to the lack of visibility of gender issues in European public debates, a 2015 study estimated the gender pension gap favouring men for EU countries to

⁶ Ex Parte HV McKay (Harvester Case) (1907) 2 CAR 1

⁷ The Federated Clothing Trades of Australia v J.A. Archer & Others (*Clothing Trades Case*) (1919) 13 CAR 64

⁸ The first ABS national survey of superannuation coverage was not conducted until 1974. It found only 34% of the workforce held membership of a superannuation scheme (36% male and 15% female). Furthermore only 24% of persons had coverage in the private sector compared to 58% in the public sector. See Nielson, L., and Harris, B., 2010, *Chronology of superannuation and retirement income in Australia*, *Parliamentary Library of Australia* p.3. Available at www.aph.gov.au/library, Retrieved May 2015.

⁹ The ‘Re:think’ discussion paper by the federal Department of the Treasury contains a single reference to women, but only in the context of women’s labour force participation rates. (The Australian Government the Treasury, 2015, *Re:Think: Tax Discussion Paper*, March). Miranda Stewart makes a similar observation about the final report of the Henry Tax Review, 2009: Stewart, M., 2009, *Gender Equity in Australia’s Tax System*. Available at http://www.law.unimelb.edu.au/files/dmfile/Stewart_Gender_Tax_Policy_20-11-091.pdf, Retrieved March 2015.

provide a ‘headline’ indicator of the problem. It identified an average gender pension gap for 27 EU countries of 39 per cent for the 65 and over age group.¹⁰ The researchers argued that unreformed retirement income systems based on the assumption of the male breadwinner, as well as policy reforms based on greater individualisation of rights, had failed to tackle differential gender entitlements to European pensions, and that these differences were not treated as an issue in their own right. The researchers also argued that gender issues in policies and budgets need to be made visible through public debate and research to enable their complexities to be grasped and alternative options generated.

In this paper we adopt a similar approach by undertaking a gender impact analysis of Australia’s current policies on retirement savings and incomes. In particular, we analyse the taxation and expenditure arrangements for superannuation and the aged pension for their contribution to gender-responsive budgeting. We identify a large gender gap in superannuation that favours men and link this to a number of critical features of the tax and transfer system. Our aim is to help redress the current oversight of gender issues in policies and budgets by showing what could be achieved if the current discussion about retirement savings and income policies included a consideration of their gender impacts. The paper starts with an overview of the background and general principles of gender-responsive budgeting and gender impact analysis. Section 3 summarises and then presents a gender impact analysis of Australia’s current policies on retirement savings and income. The final section makes some suggestions for policy reform aimed at improved gender equity and economic efficiency.

2 GENDER-RESPONSIVE BUDGETING AND GENDER IMPACT ANALYSIS

Gender differences in economic activity exist in paid employment, unpaid work, income and wealth, consumption/savings and capabilities. These domains need

¹⁰ Betti, G., Bettio, F., Georgiadis, T., and Tinios, P., 2015, *Unequal Ageing in Europe*, New York: Palgrave Macmillan.

to be taken into account in order to understand the impact of government expenditures and taxation on men and women and redress gender inequalities.¹¹ Gender-responsive budgeting (GRB) is a strategy designed to do this by mainstreaming a gender perspective in policies and budgets.¹² It is achieved by both ensuring analyses of the gender-differentiated impacts of government budgets (as measured in a gender impact analysis), as well as changes in budgetary decision-making processes and priorities.¹³

Gender-responsive budgeting is strongly supported at the international level.¹⁴ IMF economist Janet Stotsky argues that GRB is ‘just good budgeting’ as it seeks to capture positive externalities that occur with improvements in women’s health, education and employment, noting that programs and policies that improve women’s employment outcomes contribute to higher rates of economic growth.¹⁵ In 2000 the UN General Assembly called upon governments to ‘Incorporate a gender perspective into the design, development, adoption and execution of all budgetary processes ... in order to promote equitable, effective and appropriate resource allocation and establish adequate budgetary allocations to support gender equality’.¹⁶ In 2014 the World Bank and UN Women launched an initiative to support finance ministers to promote ‘financing for results’.¹⁷

Australia should be a leader in GRB as it has an important place in the history of these initiatives. In the 1980s the Australian federal, state and territory governments were the first in the world to scrutinise their annual budgets for their impact on women and girls and gender equality and to publish a ‘Women’s

¹¹ Barnett, K., and Grown, C., 2004, *Gender Impacts of Government Revenue Collection: The case of Taxation*, Commonwealth Secretariat: London.

¹² See Sharp, R., 2001, ‘The economics and politics of gender-sensitive budget analyses’, *Investigacion Economica*, 61(236).

¹³ Elson, D., and Sharp, R., 2010, ‘Gender-responsive budgeting and women’s poverty’ in S Chant (ed), *Handbook on Gender and Poverty*, Edward Elgar, London, p. 522.

¹⁴ See, for example, Elson, D., 1998, ‘Integrating gender issues into macroeconomic policy’, *Journal of International Development*, 10, 929–41; Rubin, M.M., and Bartle, J.R., 2005, ‘Integrating gender into government budgets: a new perspective’, *Public Administration Review*, 65, 259–272.

¹⁵ Stotsky, J., 2006, *Gender Budgeting*, International Monetary Fund Working Paper 06/232, Washington, DC: IMF, p.3.

¹⁶ UN General Assembly resolution S-23/3, annex.

¹⁷ See Elson, D., 2014, *Gender Responsive Budgeting: Achievements and Future Perspectives*. Available at http://wu.ac.at/fileadmin/wu/d/i/vw3/Public_Conf_Key_Note_Diane_Elson.pdf, Retrieved June 2015.

Budget Statement' (WBS) as one of the budget papers.¹⁸ The WBS of the federal government continued in some form under both Labor and Coalition governments for 30 years until PM Tony Abbott, as Minister for Women, failed to publish a WBS as part of the 2014–15 budget documentation.

This is not to deny that Australia's GRB efforts experienced some problems. Critics argue the WBS varied in quality over time and increasingly served as an advertisement of the government's achievements for women's choices (the expressed goal of Coalition governments) and gender equality (the expressed goal of Labor governments), rather than useful gender impact analyses or effective mechanisms for change.¹⁹ However Sharp and Broomhill argue Australian governments continued to publish an annual WBS because they recognised women as an important political constituency with gender issues potentially having an influence on public policy debates.²⁰

What is of particular concern is that following the abolition of the WBS in 2014–15 no alternative commitment has emerged to undertake gender impact analyses (GIA) of policies and their expenditures and revenues. This is detrimental to both equity and economic efficiency. GIA is positive for equity by making visible, and contributing understandings of, the different effects of policies on men and women. This visibility and understanding is important to ensuring that any new policy does not exacerbate existing gender inequality. It can also help guide the evaluation of policy alternatives by identifying those

¹⁸ Sharp, R. and Broomhill, R., 2013, *A Case Study of Gender Responsive Budgeting in Australia*, London: Commonwealth Secretariat.

¹⁹ See, for example, Maddison, S., and Partridge, E., 2007, *How Well Does Australian Democracy Serve Australian Women?* Canberra: Australian National University; Sharp, R., and Broomhill, R., 2002, 'Budgeting for equality: the Australian experience', *Feminist Economics*, 8 (1), 25–47.

²⁰ Above, n.18. One indicator of the power of the women's movement in having a voice about policy and resources has been a well-resourced and strategically placed Office for the Status of Women. Under the Howard Coalition government in particular, the Office for the Status of Women became less influential in setting policy as a so-called post-feminist agenda rose in prominence. In 2004 the Office for the Status of Women was renamed the Office for Women, downsized and transferred to the Department of Families and Community Service. The WBS was accordingly downgraded because it had relied on the coordinating policy power of the Office for the Status of Women in the Department of the Prime Minister and Cabinet to engage line departments with the process. The idea was promoted that there was no longer any need for gender-specific action and instead the rhetoric of choice and 'family values' became common. The Rudd and Gillard governments revived the WBS but maintained the Office for Women and its location.

policies that, amongst their various other attributes, help to reduce gender inequality. By making the gender impacts of alternative policies visible, political pressure on governments to improve gender equity is likely to increase.²¹

GIA can also play an important role in ensuring more efficient economic outcomes. This is because, due to their different economic and social positions, men and women have different behavioural responses to many economic policies. Men, due to the traditional male breadwinner role, are more likely to have only a limited ability/willingness to adjust their working hours when their (net) wage changes. Women, due to their different socially determined responsibilities, have, on average, lower paid work hours – and thus a greater ability to respond to changing (net) wage rates. Unless account is taken of gender differences of this type, policy is likely to be poorly targeted, and is unlikely to be effective in achieving its specified goals.

GIA requires appropriate tools of analysis and a conceptual framework that captures the complexity of gender impacts in different domains. A variety of methods can be used for GIA including gender-disaggregated beneficiary assessments, expenditure incidence analysis, tax incidence analysis, impact of the budget on time use and gender-aware policy appraisals. Expenditure incidence analysis (EIA) is likely to be familiar to many economists, and the ability to incorporate a gender perspective has been widely recognised.²² However, this potential has not been acted on to any substantial degree. Lionel Demery observes that the majority of expenditure incidence analyses have overlooked gender ‘either as a cause of concern in itself, or as a means of interpreting the findings’.²³ A survey of the gender-disaggregated EIA literature undertaken by Peter Glick, Rumki Saha and Stephen Younger found a mere five

²¹ Himmelweit, S., 2002, ‘Making visible the hidden economy: The case for gender-impact analysis of economic policy, *Feminist Economics* 8 (1), pp. 50-52.

²² For an overview see Austen, S., Costa, M., Sharp, R., and Elson, D., 2013, ‘Expenditure incidence analysis: a gender-responsive budgeting tool for educational expenditure in Timor-Leste?’, *Feminist Economics*, 19(4): 1–24.

²³ Demery, L., 2002, ‘Gender and public spending: insights from benefit incidence,’ in Karen Judd, ed. *Gender Budget Initiatives: Strategies, Concepts and Experiences – Papers from High Level International Conference “Strengthening Economic and Financial Governance through Gender Responsive Budgeting”*, pp. 38-55. New York: UNIFEM, p.39.

systematic studies of the gender differences in access to public services across income distributions.²⁴ Furthermore, the majority of these studies focused on developing countries. Similarly, tax incidence studies tend not to be gender disaggregated, with the largest body of country case studies, albeit of developing countries, being published in 2010.²⁵

Important recent work by Susan Himmelweit has provided a framework for GIA that represents an advance on these existing approaches.²⁶ She describes three key principles of GIA:

1. Assess the effects of policies on both the paid and unpaid economies. The cost of any incentives being provided to either paid or unpaid work should be justified and the consequences of reducing production in one sector to increase it in another should be assessed.
2. Assess the gender distribution of the effects of policies in the paid and unpaid economies. Do the policies add to or reduce gender inequality? Do the policies promote or reduce the opportunities for economic autonomy and wellbeing for men and women?
3. Assess the effects of policies on gender equality both between households and within them. Do the policies adversely affect households with a particular gender composition? Do the policies reinforce or help to break down existing gender inequalities in the distribution of money, work, and power within households?

In setting out these principles, Himmelweit highlights how, to be meaningful, a GIA must also go beyond a gender-disaggregation of formal economic activity and give full consideration how policies might differentially impact on individuals involved in paid and unpaid work on both the paid *and* unpaid

²⁴ Glick, P., Saha, R. and Younger, S., 2004, *Integrating Gender into Benefit Incidence and Demand Analysis*. Food and Nutrition Policy Program Report. Ithaca: Cornell University. pp.39–64.

²⁵ See Grown, C., and Valodia, I., 2010, *Taxation and Gender Equity: A Comparative Analysis of Direct and Indirect Taxes in Developing and Developed Countries*. NY: Routledge.

²⁶ See n.21

economies. This is because, although both men and women participate in both economies, rates of participation still diverge strongly on gender lines.²⁷

The importance of canvassing policy impacts on paid and unpaid work also derives from the strong links between economic performance and both paid and unpaid work. Whilst less visible than its paid counterpart, unpaid work, such as caring labour performed for children and others in family situations, contributes in numerous and significant ways to the provisioning of community needs and wants. Whilst the ‘value’ of unpaid work is notoriously difficult to measure, an estimated 21.4 billion unpaid care work hours were performed in Australia in 2009–10, with an imputed value of \$650.1 billion.²⁸ Unpaid work is also vital for the production and maintenance of human capabilities relied upon by the formal economy.²⁹ It makes little sense, for example, for policy to encourage an increase in paid work if this involves a large sacrifice of ‘production’ that currently occurs in the informal economy, or a sacrifice of the development of human capabilities. The latter point was acknowledged in the Henry Tax Review of 2009: ‘assistance should not encourage short-term choices which compromise the development of capabilities that offer potential medium to long-term improvements in a person’s well-being’.³⁰

However, without a GIA, too commonly unpaid work, and women’s economic contributions more generally, becomes invisible in the policy development process, with detrimental consequences for gender equity as well as efficiency. Gender equality is typically harmed by policies that improve the conditions of individuals who participate in paid work and neglect the contribution to

²⁷ See, for example, Craig, L., Mullan, K., and Blaxland, M., 2010, ‘Parenthood, policy and work-family time in Australia 1992–2006’, *Work, Employment and Society*, 24 (1), pp.27–45. doi:<http://dx.doi.org/10.1177/0950017009353778>

²⁸ Hoenig, S.A., and Page, A.R.E., 2012, *Counting on Care Work in Australia*, Report prepared by AECgroup. North Sydney: economic Security4Women.

²⁹ See, for example, above, n.21, pp.52–53; Stewart, M., 2009, *Gender Equity in Australia’s Tax System*. Available at http://www.law.unimelb.edu.au/files/dmfile/Stewart_Gender_Tax_Policy_20-11-091.pdf, Retrieved March 2015.

³⁰ Treasury, 2009, *Australia’s Future Tax System. Final Report to the Treasurer*. Canberra: Australian Treasury. Available at taxreview.treasury.gov.au/content/Content.aspx?doc=html/pubs_reports.htm, Retrieved June 2015.

production made through unpaid work. This is because paid work is much more the domain of men than it is of women, with the opposite being true for unpaid work. The most recent time use data (for 2006) shows that Australian men spend, on average, 4.33 hours on paid work activities, and 2.52 hours on unpaid activities each day³¹. The pattern of time use for women is almost a mirror image of this. On average, Australian women spend 2.21 hours each day on paid work activities and 5.13 hours on unpaid activities. The negative impacts of extended periods out of paid work – associated with large caring roles – on the lifetime income of women has been documented in a range of Australian and international studies.³²

Of course, paid and unpaid work are not mutually exclusive. Men and women who are in paid employment also undertake a substantial amount of unpaid work. Thus, account must be taken of the unpaid work performed by individuals who are also in paid jobs. Lyn Craig and Killian Mullen make this point by noting that parents who attempt to combine parenthood and paid work experience substantial time strains – with consequent impacts on their health and wellbeing.³³ They emphasise that, whilst '[s]ocial welfare has traditionally been measured in financial terms, ... time scarcity is a crucial supplementary indicator'.³⁴

Craig and Mullen also highlight how this issue is gendered as mothers do substantially more childcare than fathers, even when employed.³⁵ Thus, policies such as cuts in public expenditures on childcare, eldercare and health care that shift caring responsibilities into the 'private' domain will have a larger (negative) impact on women than men, including those living in dual-income families.

³¹ Australian Bureau of Statistics, 2015, *4125.0, Gender Indicators, Australia*, Canberra: Australian Bureau of Statistics. Available at <http://www.abs.gov.au/ausstats/abs@.nsf/Lookup/4125.0main+features410Feb%202015>, Retrieved May 2015.

³² For an overview see Craig, L., and Mullan, K., 2010, 'Parenthood, gender and work-family time in the United States, Australia, Italy, France, and Denmark', *Journal of Marriage and Family*, 72 (5), pp.1344–1361. Available at <http://search.proquest.com/docview/759964889?accountid=10382>, Retrieved June 2015.

³³ Above, n.32.

³⁴ Above, n.32, p.1345.

³⁵ Above, n.32, p.1357.

Conversely, policies that result in improved childcare or eldercare facilities will tend to diminish gender inequalities in both income and wellbeing.

GIAs that examine the effects of economic policies on paid and unpaid work also draw our attention to the division of labour within households. In doing so they help policy makers avoid the pitfalls of assuming that men and women who share a household (for example, as husband and wife) have identical interests and share resources equally. The weight of empirical evidence shows that the distribution of resources in couple households is not always equal as it is commonly influenced by perceptions of the financial contribution of different household members.³⁶ This evidence is supportive of policies that enhance the ability of women to participate in paid work – as paid work can enhance women's bargaining power within their families and households. More generally, evidence on the unequal distribution of resources and power within households supports policies that take account of both the level of household income and wealth, and its gendered distribution within the household.

The Australian and international experience of family payments helps to illustrate and support these points. As Peter Whiteford, Peter Stanton and Matthew Gray explain, policy changes were introduced by federal Labour governments in the 1970s, 1980s and early 1990s to address issues of gender equity and the distribution of income within families.³⁷ In 1976 an increased level of universal cash benefits paid to mothers replaced tax rebates for children, usually paid to the father. In the second half of the 1980s, income-tested family payments were redirected to mothers. At this time child-related payments to unemployed couples and others on income support, which had previously been made as part of the total payment made to claimants, usually fathers, were also redirected to mothers. In the early 1990s, one of the remaining forms of tax

³⁶ A seminal paper is Lundberg, S., and Pollak, R., 1996, 'Bargaining and Distribution in Marriage', *Journal of Economic Perspectives* 10(4), pp. 139-158

³⁷ Whiteford, P., Stanton, D., and Gray, M., 2001, 'Families and income security: changing patterns and related policy issues', *Family Matters*, 60, pp.24–35. Available at <https://aifs.gov.au/sites/default/files/pw.pdf>, Retrieved May 2015; also see Hodgson, H. (2014). "Progressivity in the tax transfer system: Changes in family support from Whitlam to Howard and beyond." *eJournal of Tax Research* 12(1): 218.

assistance for single earner couples with children was also made available in the form of a cash benefit paid to mothers.

Whiteford et al. go on to explain how in 1995 the basic income support system was partially individualised so that women received assistance in their own right rather than as dependents of a male 'breadwinner'.³⁸ The income-testing arrangements were also changed to move away from a 'fully joint' evaluation of private income. However, changes introduced by the Coalition government reversed this trend with detrimental effects on gender equity. Most family benefits were combined into a Family Tax Benefit Part A and Family Tax Benefit Part B, with the first part based on total household income, and the latter assessed on the income of a secondary earner.³⁹ This financially penalised families with dual full-time incomes, and created disincentives for mothers to take up paid work due to very high effective marginal tax rates.⁴⁰

3 A GENDER IMPACT ANALYSIS OF AUSTRALIA'S POLICIES ON RETIREMENT SAVINGS AND INCOMES

There is scope – and an important need – to apply the principles of GIA to an assessment of Australia's policies on retirement savings and income. The details of these policies are generally well understood. However, to date, GIAs that examine the effects of the policies on paid and unpaid work have been lacking. This has limited the evaluation of the efficiency and equity of current policy settings.

Australia's policies on retirement savings and income policies are part of a 'three pillars' model for the retirement system: a mandatory superannuation system

³⁸ Above, n.37.

³⁹ Hill, E., 2007, 'Budgeting for work-life balance: the ideology and politics of work and family policy in Australia', *Australian Bulletin of Labour*, 33 (2), pp.226–245.

⁴⁰ Apps, P., 2006, 'Family taxation: an unfair and inefficient system', *Australian Review of Public Affairs*, 7 (1), pp.77–101.

organised by a Superannuation Guarantee (SG) levy; an age pension; and private savings⁴¹.

Under the current policy settings, significant tax concessions are made available to superannuation, which encourages private savings to be merged with mandatory superannuation. Indeed, Australia has what is known as a 't+E' system that taxes contributions to superannuation funds and income earned by the funds at a concessional tax rate; whilst most disbursements from superannuation funds are exempt.⁴² In the Australian system the age pension is increasingly regarded as a safety net, with income and assets testing applied to limit access.⁴³ However, the family home is excluded from the assets test, and home ownership is completely exempt from income tax.

Australia's approach to the taxation of retirement savings is generous in comparison to the benchmark of standard OECD tax treatments.⁴⁴ A 15 per cent contributions tax is levied on amounts that have not been taxed prior to their contribution to a superannuation fund (this applies to SG contributions, voluntary contributions paid from pre-taxed income, and contributions where the member is able to claim an income tax deduction).⁴⁵ Non-concessional contributions, which are paid from income that has already been subject to personal income tax, are not taxed in the funds. A 15 per cent tax rate is levied on income earned during the accumulation phase of a superannuation fund; that is, before the member retires and commences a pension. Pensions and lump sums

⁴¹ Commonwealth of Australia: *A Plan to Simplify and Streamline Superannuation: Detailed Outline* May 2006: P 1, http://simplersuper.treasury.gov.au/documents/outline/download/simpler_super.pdf retrieved June 2015

⁴² From a fund that has paid tax. Untaxed funds, including some public sector funds, are subject to a different, although still concessional, tax regime.

⁴³ These aspects were strengthened in the 2015 federal Budget, where changes to the means test for the age pension removed access for couples with assets (outside the family home) of over \$823,000. See Morrison, S., 2015, 'Fairer access to a more sustainable pension', media release, 7 May. Available at <http://scottmorrison.dss.gov.au/media-releases/fairer-access-to-a-more-sustainable-pension>, Retrieved June 2015.

⁴⁴ Disney, R., 2009. 'Issues in the Tax Treatment of Pensions and Housing.' Available at http://taxreview.treasury.gov.au/content/html/conference/downloads/conference_report/06_AFTS_Tax_and_Transfer_Policy_Conference_Chap_6.pdf. Retrieved March 2015

⁴⁵ Specifically a person who is self-employed who is not covered by SG contributions can claim an income tax deduction for personal contributions to superannuation.

withdrawn from a taxed superannuation fund are exempt where the member is aged over 60 years, and income within superannuation funds is exempt to the extent that the assets are used to pay a pension. Where a member of a fund who is aged under 60 years meets a condition of release, withdrawals from a taxed superannuation fund are taxed at concessional rates.

The generous tax treatment of retirement savings is costly, with the Treasury's own estimates putting this figure in 2013–14 at \$16.3 billion for the contributions tax concessions; and \$13.4 billion for the superannuation entity concessions.⁴⁶ The combined cost of the tax concessions is rapidly becoming similar to the cost of the system's other key pillar, the age pension, which had an estimated cost of \$39 billion in 2013–14.⁴⁷ By 2017–18 the costs of the two schemes are expected to be approximately equal, at \$49.7 billion for the age pension and \$48.5 billion for superannuation concessions.

A gender impact analysis of retirement savings and income policies is important for reasons that extend beyond the significant fiscal outlays that these policies involve. The policies are 'general policies' affecting all older Australian men and women⁴⁸. Furthermore, the policies are relevant to an increasing proportion of the Australian community as the number of older Australian men and women is rising. Significantly, the policies are especially relevant to women, given that they comprise the large majority (65 per cent) of the Australian population aged over 85.⁴⁹

⁴⁶ Treasury, 2014, *Tax Expenditure Statements 2014*. Available at <http://www.treasury.gov.au/PublicationsAndMedia/Publications/2015/TES-2014>, Retrieved June 2015.

⁴⁷ Budget 2013–14, Social Services Portfolio. Available at https://www.dss.gov.au/sites/default/files/documents/05_2014/2014-2015_dss_pbs.pdf, Retrieved June 2015.

⁴⁸ A key tenet of gender budgeting is that 'general policies and their budgets' (examples of which include retirement savings policies and age pensions), as opposed to programs designed specifically for women or men, have the largest influence on gender equality. See UNIFEM, 2000, *Progress of the World's Women*, New York: United Nations Development Fund for Women; Sharp, R., and Broomhill, R., 1990, 'Women and government budgets', *Australian Journal of Social Issues*, 25, pp.1–14.

⁴⁹ Australian Bureau of Statistics, 2013, *3222.0, Population Projections, Australia, 2012 (base) to 2101*, Canberra: Australian Bureau of Statistics. Available at [http://www.abs.gov.au/ausstats/abs@.nsf/Lookup/3222.0main+features52012%20\(base\)%20to%202101](http://www.abs.gov.au/ausstats/abs@.nsf/Lookup/3222.0main+features52012%20(base)%20to%202101), Retrieved May 2015. Individuals in this age group are relatively unlikely to have

Following the approach recommended by Susan Himmelweit, we assess the effects of the retirement savings and income policies on both the paid and unpaid economies⁵⁰. We evaluate, first, whether the policies add to or reduce gender inequality; and whether they promote or reduce the opportunities for economic autonomy and wellbeing for men and women. The context for this discussion is the already high levels of gender-based income and wealth inequality. Amongst full-time workers, the gender pay gap favouring men is currently 18.2 per cent; with men, on average, earning \$283.20 more per week from their full-time paid work roles than women.⁵¹ The gender gap in *incomes* is larger. Australian women's share of total income has stubbornly remained around 37 per cent in recent decades.⁵² Gender disparities in wealth are also substantial, with single Australian men⁵³ having, on average, levels of wealth in 2010 that were 22.8 per cent higher than single women.⁵⁴

The superannuation pillar of Australia's retirement system adds to gender inequality because contributions are linked to earnings. Women's relatively low wages, together with lower hours of paid work and broken patterns of workforce participation, reduce their ability to accumulate superannuation assets.⁵⁵ Thus, because superannuation only interacts with the paid economy it transposes high levels of inequality amongst working age men and women into high levels of gender-based inequality amongst older Australians.

accumulated superannuation during their working life, which substantially predated the introduction of the superannuation guarantee

⁵⁰ Above, n.21.

⁵¹ Australian Bureau of Statistics, 2014, *6302.0, Average Weekly Earnings, Australia, Nov 2014*, Canberra: Australian Bureau of Statistics.

⁵² Austen, S., and Redmond, G., 2008, 'Women's Incomes' in Australian Bureau of Statistics, *4102.0, Australian Social Trends, 2008*, Canberra: Australian Bureau of Statistics. Available at <http://www.abs.gov.au/AUSSTATS/abs@.nsf/Lookup/4102.0Chapter8002008>, Retrieved May 2015.

⁵³ Australian data collections do not permit an analysis of the gender wealth gap amongst partnered men and women.

⁵⁴ Austen, S., Ong, R., Bawa, S., and Jefferson, T., 2015, 'Exploring recent increases in the gender wealth gap among Australia's single households', *Economic and Labour Relations Review*, 26 (1), pp.3–28. Available at <http://elr.sagepub.com/content/26/1/3>, Retrieved June 2015.

⁵⁵ See, for example, Jefferson, T., and Preston, A., 2005, 'Australia's "other" gender wage gap: baby boomers and compulsory superannuation accounts', *Feminist Economics*, 11, pp.79–101.

The generosity of the tax expenditures on superannuation greatly magnifies the negative effects of a superannuation system on gender inequality. The groups most able to benefit from the tax expenditures on superannuation are high-income earners and those with flexible assets that can be moved into the tax-advantaged superannuation system. Because women are underrepresented in these groups, they receive a relative small share of the benefits of the increasingly large tax expenditures on superannuation.

Gender impacts are associated with tax expenditures on each part of the 'ttE' system. The value of the concessional tax treatment of *contributions* to individuals is proportional to the amount of the contribution and the contributor's marginal tax rate⁵⁶. Reflecting this, 50 per cent of the tax expenditures on superannuation contributions flow to individuals in the top two tax groups,⁵⁷ whilst there is no tax advantage associated with making contributions to superannuation for individuals in the lowest tax bracket.⁵⁸ Gender impacts arise in this part of the ttE system because, due to their lower market earnings, the proportion of women in the top two tax brackets is less than half the proportion of men (14, as compared to 29 per cent).⁵⁹ A much higher proportion of female taxpayers are in the lowest tax bracket (33, as compared to 22.6 per cent of male taxpayers). The negative gender impact of the expenditures on superannuation tax concessions increases further when account is taken of individuals (more commonly women) who are not in the paid workforce and, thus, are generally not liable for income tax.

Tax expenditures on superannuation accumulations and disbursements also have negative impacts on gender equality. Almost two-thirds of the tax expenditures on accumulations (which are uncapped) flow to individuals in the

⁵⁶ Contribution caps place some limits on these benefits.

⁵⁷ Clare, R., 2014, *The Equity and Sustainability of Government Assistance for Retirement Income in Australia*, Sydney: Association of Superannuation Funds of Australia.

⁵⁸ Currently the Low Income Superannuation Offset is available to taxpayers earning less than \$37,000 per annum to ensure that superannuation is concessionally taxed. However this has been repealed with effect from 2017: *Minerals Resource Rent Tax Repeal and Other Measures Act 2014* (Cth).

⁵⁹ Taxation statistics 2011–12. Available at <http://data.gov.au/dataset/taxation-statistics-2011-12/>, Retrieved April 2015.

top two tax groups, where, as has already been noted, women are poorly represented.⁶⁰ For both accumulations and disbursements, the value of the tax expenditures is proportional to the balance of the superannuation account. However, the average superannuation balance of Australian women is less than half that of men, and a substantially higher proportion of women (34.6 per cent) than men (26.1 per cent) have no superannuation.⁶¹

In contrast to superannuation, the age pension pillar of Australia's retirement system does not reinforce patterns in the distribution of income and wealth associated with the performance of paid and unpaid work. Payments under the age pension are capped and subject to income and assets tests. As such they are distributed relatively evenly, with the largest (but still very modest) amounts available to those with relatively small assets (outside the family home) and low market incomes. Women, more than men, are represented in these groups. Thus, the aged pension helps to ameliorate gender inequality. Women comprise 55.7 per cent of all Australian age pension recipients and 60.8 per cent of the age pension recipients on the maximum pension rate.⁶² However, increasingly attempts are being made to limit access to the age pension (for example, by raising the age requirements), and the level of financial support it provides (as witnessed, for example, by the 2014 proposals to tie adjustments in the age pension to the CPI, rather than changes in average weekly earnings).⁶³

Returning to the key principles of GIA, our evaluation of Australian policy on retirement savings and income on the criteria of gender equity is negative. The shift in focus toward superannuation, and especially the large tax expenditures on superannuation, has exacerbated rather than reduced gender inequality. Generally, the policy settings are also contributing to higher levels of inequality

⁶⁰ Above, n.59.

⁶¹ Clare, R., 2014, *An Update on the Level and Distribution of Retirement Savings*, Sydney: Association of Superannuation Funds of Australia.

⁶² Department of Social Services, 2012, Statistical Paper No. 11, Canberra: Australian Government Department of Social Services. Available at <https://www.dss.gov.au/about-the-department/publications-articles/research-publications/statistical-paper-series/statistical-paper-no-11-income-support-customers-a-statistical-overview-2012>, Retrieved March 2015.

⁶³ See, for example, 'Joe Hockey flags changes to age pension, Opposition says that would break election promise', 2014, *ABC News*, 13 April. Available at <http://www.abc.net.au/news/2014-04-13/joe-hockey-flags-changes-to-age-pension-eligibility-age/5386828>, Retrieved May 2015.

in the incomes of older Australians.⁶⁴ Under the current policy settings some retirees, and statistically more men than women, who have accumulated significant assets in superannuation will access large tax-free incomes in retirement and derive the benefits for health and care that this provides. Others, and more commonly women than men, will continue to depend on the age pension, which will deliver them an increasingly frugal existence. The superannuation-based policies promote the economic opportunities and wellbeing of those who have been able to participate successfully in paid work over their working lives. Due to their massive call on fiscal resources, these policies also reduce the scope for improving the age pension, and thus the opportunity to improve the economic autonomy and wellbeing of the many women and men who have been less able to participate in paid work and achieve high earnings.

Other principles of GIA are also relevant to the policy debate over retirement savings and income. For example, the lack of incentives for women with children to participate in paid work can be identified as a significant impediment to private retirement savings. As Patricia Apps, Ray Rees and Margi Wood observe, Australian policy is characterised by a contradiction between policy settings that provide tax subsidies to encourage savings for retirement and income tax and Family Tax Benefit policy settings that strongly reduce the financial incentive for second earners in families with children to engage in paid work.⁶⁵

As noted earlier, whilst the individual is ostensibly the formal unit of assessment in Australia's income tax system, Family Tax Benefits Parts A and B shift the tax-transfer system towards a family unit based system. The tax benefits impose very high effective marginal tax rates on second earners (most commonly women) in households. Part A is means tested and withdrawn at rates of 30 per cent and an additional 20 per cent if the family qualifies. When added to the

⁶⁴ Whiteford, P., 2011, 'Are the rich getting richer and the poor getting poorer?', *Inside Story*, 28 September. Available at <http://insidestory.org.au/are-the-rich-getting-richer-and-the-poor-getting-poorer>, Retrieved March 2015.

⁶⁵ Apps, P., Rees, R., and Wood, M., 2007, 'Population ageing, taxation, pensions and health costs', *Australian Journal of Labour Economics*, 10, (2), pp.79-97.

marginal tax rate, these withdrawals can cause a second earner to lose 80–90 per cent of gross earnings on returning to work, and this is before childcare costs are met.

Given that women's labour supply is relatively elastic, particularly when they have children, the policy settings have large negative effects on women's workforce participation.⁶⁶ Further, given that household savings are strongly correlated with the earnings of the second worker, the policy settings are negative for private retirement savings.⁶⁷ Our GIA thus also highlights that the current policy settings create *disincentives* for women with children to participate in paid work, with negative implications for their retirement savings. We can also note that the income test on the Australian age pension also discourages paid work by its recipients – and in this way restricts their opportunities for wellbeing.⁶⁸

The final part of our GIA considers the effect on particular household types of Australia's policy on retirement savings and income, and its effects on the intra-household distribution of household money, work and power. One type of household that is particularly vulnerable in the current policy environment is households comprised of older single women. They make up the large majority of households dependent on the full age pension, with more than twice as many single women depending on the full age pension as men.⁶⁹

Due to their current high rate of dependency on the age pension, older single women are particularly vulnerable to policy changes that restrict the growth in

⁶⁶ Apps, P., 2007, 'Taxation and labour supply', *Australian Tax Forum*, 22 (3), pp.89–116.

⁶⁷ Apps, P., 2015, 'Personal income tax rates, work and saving', presentation to the *Looking Forward at 100 years: Where Next for the Income Tax* conference, Tax and Transfer Policy Institute, ANU, 27 April.

⁶⁸ Guest notes that workforce participation rates amongst 'older' men and women in New Zealand are substantially higher due to the absence of income tests. He also cites survey data showing that a substantial number of age pension recipients who wanted to work had turned down part-time employment because they would have faced a cut in their pension. Guest, R., 2013, *Comparison of the New Zealand and Australian Retirement Income Systems*. Available at https://www.melbourneinstitute.com/downloads/hilda/Bibliography/Other_Publications/2013/Guest_RI-Review-2013_Comparison_NZ_&_Aus_Retirement_Income_Systems.pdf, Retrieved May 2015.

⁶⁹ Above, n.62.

age pension rates and increase eligibility limits. As single women, much more than single men, often have a 'wealth portfolio' that is heavily dominated by the family home, any moves to include primary home assets in the assets test for the age pension will have a disproportionate negative impact on them⁷⁰. Due to their relatively low incomes, this group is also highly vulnerable to reductions in government spending on health, aged care, transport and other services.

The single age pension is meagre. Although it is intended to provide a basic acceptable standard of living, taking into account community standards, it is currently only indexed to 25 per cent of male average weekly ordinary time earnings⁷¹. The ASFA standard for a comfortable lifestyle specifies a minimum income of \$42,158 for single people who own their own home⁷²; however, the current full single age pension (including Pension Supplement and Clean Energy Supplement) only equates to around \$22,365. The age pension rate is closer to ASFA's standard for a 'modest' lifestyle, which allows \$74.23 per week for food expenditures and \$38.06 per week for health⁷³. Ross Guest links the low level of the Australian age pension to the relatively high rate of poverty amongst older (over 64) Australians.⁷⁴

In couple households, the redirection of fiscal resources away from the age pension and towards tax expenditures on superannuation creates further negative gender impacts, by concentrating household money and power in the hands of the primary 'earner'. The age pension is paid separately to individuals in couple households. In contrast, superannuation accounts are 'owned' by their contributors. These distinctions are important given that there are potentially fundamental differences between men's and women's 'interests' in resource allocation in older households, associated with their different life expectancies.

⁷⁰ See Austen, S.E., Jefferson, T.M., and Ong, R., 2014, 'The gender gap in financial security: what we know and don't know about Australian households', *Feminist Economics*, 20 (3), pp.25–52.

⁷¹ Treasury, 2009, *Australia's Future Tax System*, Canberra: Australian Treasury. Available at http://taxreview.treasury.gov.au/content/ConsultationPaper.aspx?doc=html/publications/Papers/Retirement_Income_Consultation_Paper/Chapter_2.htm, Retrieved June 2015.

⁷² Clare, R, Spending patterns of older retirees: New ASFA Retirement Standard – September quarter 2014 ASFA <http://www.superannuation.asn.au/policy/reports> Retrieved June 2015

⁷³ ASFA, 2013, Super system evolution: Achieving consensus through a shared vision, ASFA White Paper – Part 4, May.

⁷⁴ Above, n.68.

An individual's pure self-interest is to exploit all resources before they die, which will conflict directly (and significantly) with the interests of a surviving (and 'dependent') spouse.

4 SUMMARY

This paper has reviewed the principles of gender impact analysis and applied them to a review of Australia's current retirement savings and income policies. The evaluation has identified significant problems with the policies' impact on gender equity and efficiency.

Our key areas of concern with current policy settings relate, first, to their negative effect on gender equality. The large tax expenditures on superannuation favour the economic opportunities and wellbeing of individuals with unbroken patterns of workforce participation and high earnings. Thus they add to, rather than correct for, the substantial gender pay and earnings gaps that characterise the Australian labour market.

The tax expenditures on superannuation have a high fiscal cost and have placed significant pressure on federal expenditure programs. The role of the age pension has been downgraded to a safety net for those unable to accumulate private retirement savings. It continues to help correct the skewed distribution of the tax expenditures on superannuation; however, the positive role that the age pension plays in promoting gender equality is being eroded.

A further general area of concern, identified in this GIA of Australia's retirement savings and income policies, are the impediments to private retirement savings by women with children. These impediments are the result of current features of the Family Tax Benefit system, in addition to high childcare costs. They highlight the problems that are brought about by poor policy integration – and a lack of focus on the opportunities for women to participate in paid work. The current design of Australia's retirement savings and income policies also discourage paid work by age pension participants, the majority of whom are women.

This GIA has identified particular vulnerabilities for older single women in the current policy environment. Women comprise the large majority of single age pension recipients. The low rate of the pension prevents them from achieving a basic acceptable standard of living, taking into account community standards, let alone a comfortable lifestyle. The group is highly vulnerable to reductions in government spending on health, aged care, transport and other services.

This GIA has also raised concerns about the further concentration of household resources in the hands of ‘breadwinners’. The redirection of fiscal resources toward superannuation negatively impacts on gender equality within households, and undermines the opportunities to pool longevity risk.

5 CONCLUSION

The gender impacts of current policy on retirement savings and income should be addressed in ongoing policy reviews. Looking forward, a number of policy changes are required. Fundamentally, there is a need to re-balance the resourcing of superannuation tax concessions and the age pension. This will require a substantial winding back of the tax concessions available for superannuation. ASFA’s current recommendations are a good start as they include: lifetime caps for non-concessional contributions, in place of the current annual and three-year bring-forward caps; and the exclusion of very high account balances (e.g. those over \$2.5m) from tax concessions.⁷⁵

Improvements in the rate of the age pension are necessary to bring it closer to community standards for comfortable living. Current policy frames the age pension as a safety net; as a fall-back source of income for people who have not been able to save enough for their retirement. This is an individualised approach, which ties retirement income to a person’s earnings, consumption and savings ‘choices’ over the life course. Apart from neglecting the strong economic

⁷⁵ Recently announced ALP policy incorporates some of these recommendations.

arguments in favour of pooling longevity risk, the approach fails to take account of the unpaid contributions of especially women both when they are younger (for example, in their roles as parents) and when they are older. The latter contributions are substantial (estimated at \$15.5 billion per annum)⁷⁶ – and predicted to grow. The age pension should be re-established as the central pillar of Australia’s retirement system and recast to better reflect the importance of unpaid work. One potential, suggested by Guest, is for the ‘citizenship dividend’ aspects of the age pension to be re-emphasised.⁷⁷

The barriers to women’s workforce participation created by the income tax/family benefit system (including high childcare costs) need to be rectified. To further support the opportunities for women to save for their retirement, the Low Income Superannuation Contribution should be at least retained and the SG rate should be increased. The income tests on the age pension need to be eased, to improve the opportunities for older women (and men) to participate in paid work.

Achieving these policy improvements is undoubtedly a difficult task. Whilst our GIA has identified important concerns – and made some policy recommendations – it is not enough to bring about gender-responsive policy and budget changes. Achieving change will require attending to the political context and the institutional structures associated with retirement saving and income policies in Australia; the development of strategies to communicate the findings of this GIA and other related studies; and a clear understanding of relevant policy actors, their roles and the links between them.

New institutions, such as a re-established Office of the Status of Women, are important to ensure that information on gender inequality is brought to the realm of policy making. Australia achieved this in the past through the production of women’s budgets and published budget documents that used a variety of printed and agency sex-disaggregated data. It also had a woman in the

⁷⁶ Brooke, E., 2015, *Appreciating Value: Measuring the Economic and Social Contributions of Mature Age Australians*, Brisbane: National Seniors Australia.

⁷⁷ Above, n.68.

federal cabinet responsible for the government's policies and active civil society groups advocating what needed to change. It is imperative that we attempt this again.

Appendix 2: Retirement Savings and Gender: An Australasian Comparison

Retirement Savings and Gender: An Australasian Comparison

Helen Hodgson¹ and Lisa Marriott²

Abstract

The issues associated with low levels of retirement savings for women are well established. This study quantifies the extent of the problem in Australia and New Zealand and investigates the primary causes of the issue. It subsequently canvases approaches adopted or proposed internationally to assess the likelihood that the issue may be ameliorated with an amended policy approach. We suggest that a combination of policy tools may be adopted in each country to help address the issue.

In New Zealand, a combination of carer credits or changes to the co-contribution model, plus introduction of superannuation splitting and lifetime contribution caps is likely to improve levels of retirement savings for women, along with lower income earners in general. In Australia the existing tools used to assist low income earners could be extended to be available to carers while they are unable to participate in the workforce. Adoption of these approaches would ensure that New Zealand, with a retirement savings gender gap of 25 per cent, which is significantly less than Australia's gap of 77 per cent, can learn from Australian experience and introduce policies earlier to ensure that the problem does not become as large as in Australia.

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1 INTRODUCTION

Gender inequality is a well-established economic and social issue. The problem is effectively captured by the OECD: ‘*women continue to earn less than men, are less likely to make it to the top of the career ladder, and are more likely to spend their final years in poverty*’.³ It is the last of these points that is the topic of this article: levels of retirement savings for women. It is well known that women will enter retirement savings with lower levels of both work and privately accumulated retirement savings than men. Moreover, these lower levels of retirement savings have to support women for longer periods, as women on average live for four years longer than men. This results in women over 65 years of age throughout the OECD being 1.5 times more likely to live in poverty than men of the same age.⁴

Australia has a compulsory employment-related retirement savings scheme: the Superannuation Guarantee. This was introduced in 1992 and currently has approximately A\$1.5 trillion in accumulated retirement savings.⁵ New Zealand has a relatively new non-compulsory retirement savings scheme: KiwiSaver, which currently has retirement savings of NZ\$12.9 billion.⁶ While New Zealand’s scheme has been in place for nearly six years, a pattern of higher KiwiSaver balances for male participants is already visible. In 2012 males, on average, had balances of just over NZ\$10,000, while female members had NZ\$8,000; that is males had 25 per cent higher balances on average than females.⁷ Moreover, KiwiSaver balances are lower for women than men from the age of 16.⁸ In 2009-10, the average superannuation balance for men in Australia was A\$71,645, while for women it was A\$40,475: that is, men had accumulated, on average, 77 per cent more retirement savings than women.⁹ Furthermore, average superannuation payouts for women in Australia in 2009-2010

3 OECD, 2012, *Closing the Gender Gap: Act Now*, Paris: OECD Publishing, p.15.

4 Above, n.3, p.229.

5 Australian Superannuation Funds Association, 2013, *Superannuation Statistics – February 2013*, Available at <http://www.superannuation.asn.au>, Retrieved April 2013.

6 Inland Revenue Department, 2012, *KiwiSaver Annual Report 5, 1 July 2011 – 30 June 2012*, Available at <http://www.ird.govt.nz>, Retrieved April 2013.

7 Infometrics, 2012, *The Potential Impact of KiwiSaver on the New Zealand Capital Market*, Report prepared for the Financial Services Council, Available at <http://www.fsc.org.nz>, Retrieved April 2013. This data is based on a sample of Financial Services Council members that operate KiwiSaver funds, thus should be interpreted as a preliminary indication of different levels of savings between male and female KiwiSaver members.

8 BT Funds Management (NZ) Ltd and Westpac New Zealand Limited, 2013, *Submission to the Ministry of Business, Innovation and Employment on the Review of KiwiSaver Default Provider Arrangements Discussion Document*, 14 January 2013, Available at <http://www.med.govt.nz>, Retrieved April 2013.

9 Above, n.5.

were just over half of those of men and a large proportion of Australian women approach retirement with little or no superannuation savings.¹⁰

The traditional private retirement savings model is tied to employment: individuals in employment make contributions to retirement savings funds at a rate proportional to earnings. However, this model does not reflect the differences in employment patterns of women and men. In addition, the tradition in most OECD countries of providing generous tax concessions for retirement savings '*disproportionately benefits higher income earners who make higher contributions to their superannuation*',¹¹ thus further entrenching the issue of disparities in retirement saving among men and women.

This article examines the issue of gender inequality in retirement savings policy in Australia and New Zealand. First, the study quantifies the extent of the problem. Second, it examines international approaches to ameliorate the issue, with the objective of informing the current policy debate in both countries. While making some suggestions for reform, the study also suggests that New Zealand has the opportunity to learn from Australian experience and implement policy tools to ensure the current retirement savings difference of 25 per cent does not increase to the Australian level of 77 per cent.

The structure of the article is as follows. Section two commences by providing background information on the Australian and New Zealand policy arrangements, in order to establish the contextual environments for the following discussion and analysis. Section three outlines the problem and provides data relating to the extant differences in retirement savings accumulated by men and women in each country, as well as the OECD. Section four examines a range of tools that have either been implemented in other countries or recommended as potential options for addressing the different levels of retirement income savings among men and women. Section five analyses the appropriateness of each of these tools in the Australian and New Zealand environments and makes recommendations for future policy. The article concludes in section six.

2 BACKGROUND

This section provides the contextual background on retirement income savings in Australia and New Zealand. It provides a brief historical account of the development of retirement savings over the past 20 years, in order to explain the history of, and primary influences on, extant policy arrangements.

10 Australian Human Rights Commission, 2013, *Investing in Care: Recognising and valuing those who care*, Volume 1: Research Report 2013, Sydney: Australian Human Rights Commission, p.6.

11 Above, n.10, p.10.

2.1 Australia

Australian retirement income policy is structured around the three pillars approach, consisting of: a means-tested age pension; a mandated superannuation contribution paid by employers; and voluntary private savings, including superannuation.¹² Other factors that impact on the standard of living in retirement include government infrastructure and access to goods and services, including health, education, disability and community services¹³ and home ownership.¹⁴ Superannuation and home ownership have been granted tax preferred status, through a range of tax concessions to encourage investment in assets that will support individuals in their retirement. The age pension is both income- and asset-tested, with different levels of asset-tests applied to homeowners and non-homeowners, thus it is anticipated that as the system matures, fewer individuals will be reliant on the age pension as their primary source of income after retirement.

The Superannuation Guarantee scheme commenced in 1992, building on the superannuation reforms introduced over the 1980s under the Accord between the Labor Government and the unions, which included the introduction of award based superannuation in 1985 when the unions agreed not to pursue wage increases in exchange for a three per cent contribution into superannuation in respect of their members. The 1992 Superannuation Guarantee scheme extended beyond the award based schemes to mandate that all employers pay a prescribed proportion of each employee's wage into superannuation on behalf of that employee. This should not be regarded as an additional cost to the employer, but a redirection of the employee's earnings: a deferral of remuneration with the employer liable for an additional charge if the required contributions are not paid. The required contribution has been increased twice: the starting rate in 1992 was three per cent, which increased over the next decade to reach nine per cent by 2002; and a further increase is being phased in from 2014 to reach 12 per cent by 2020.

There have been a series of reforms to the taxation of superannuation, with the latest significant reforms applying from 1 July 2007. The points at which superannuation may be taxed are at the time of contribution, on earnings of the fund and on withdrawal. Unlike most OECD countries, Australia taxes superannuation on a t,t,E basis: contributions into superannuation and earnings of the fund are taxed at a flat rate of 15 per cent, which is a concessional rate when compared to the lowest marginal tax rate on the personal income tax scale, currently 19 per cent.¹⁵ Following the 2007 reforms, withdrawals from the fund are tax-exempt provided that the member is over 60.

12 Commonwealth of Australia, 2004, *A More Flexible and Adaptable Retirement Income System*, Canberra: Commonwealth of Australia.

13 Harmer J., 2009, *Pension Review Report*, Canberra: FaHCSIA.

14 Yates, J., and Bradbury, B., 2010, 'Home ownership as a (crumbling) fourth pillar of social insurance in Australia', *Journal of Housing and the Built Environment*, 25 (2), 193-211.

15 Although this disregards the effect of the Low Income Tax Offset of four per cent.

The Superannuation Guarantee establishes the mandatory savings pillar, but under the current taxation structure voluntary superannuation contributions are also encouraged as a tax-preferred form of private savings.¹⁶ In order to limit the amount that can be accumulated in this tax preferred environment, annual contribution caps apply: concessional contributions are currently capped at A\$25,000 per annum, and taxed at 15 per cent in the fund. Superannuation contributions by a self-employed person or paid by an employer are concessional contributions, but the compulsory component can be supplemented through a salary sacrifice agreement under which an employee negotiates with their employer to have an additional proportion of their income paid as superannuation, while non-concessional contributions, paid from after-tax income, are capped at A\$150,000 per annum, but not taxed in the fund. Such contributions will generally be from a non-taxable source, for example a windfall gain, or have been taxed in the hands of the contributor, for example a capital gain will have been taxed, albeit on a concessional basis. The caps are regulated through the application of an excess contributions tax on breaches.¹⁷

The system is not yet considered to be a mature system, as many workers retiring now are likely to have been covered by superannuation for about half of their working life, and the contribution rate for the first decade of coverage was not adequate to replace the age pension as the primary source of income in retirement. As the system matures, coverage among younger workers is increasing and, by 2007, 66 per cent of people had some superannuation coverage, although only 50 per cent of individuals over the age of 55 had superannuation cover compared to 87 per cent of people aged between 24 and 55. The balance in superannuation accounts increased with age, with the median balance for people aged 55 – 64 being A\$71,731. However the effect of the maturing superannuation system can be seen: although the median balance in superannuation increases for older cohorts, the progression is not linear, with younger cohorts having proportionately more superannuation than their older counterparts.¹⁸

For this reason, the reforms of 2007 incorporated transitional measures that allowed a person to make a non-concessional contribution of up to A\$1 million in the first year, and doubled the concessional cap for members over the age of 50 for the first five years of the new system. This increased cap was to be extended for members with account balances under A\$500,000, however the proposed change did not have industry support and accordingly when the transitional measures lapsed, older workers lost the ability to make higher contributions. In April 2013, the government

16 For an examination of the effect of the lower tax applied to superannuation, see Henry K., Harmer J., Piggot J., Ridout, H., and Smith G., 2010, *Australia's Future Tax System: Final Report* (The Henry Review), Canberra: Commonwealth of Australia.

17 Although the government has announced that the excess contributions tax will be replaced by the application of the member's personal marginal tax rate: Swan, Wayne (Deputy Prime Minister and Treasurer), 2013, Media Release No 039 *Reforms to Make the Superannuation System Fairer*, 5 April 2013, Available at <http://www.treasurer.gov.au/>, Retrieved May 2013.

18 Australian Bureau of Statistics, 2007, *6361.0, Employment Arrangements, Retirement and Superannuation, Australia*, Canberra: Australian Bureau of Statistics.

announced that the concessional cap will be increased to A\$35,000 for older workers, without reference to the balance in their superannuation account.¹⁹ This increased cap will be available to members over 60 years of age from 1 July 2013, and extended to workers over 50 years of age from 1 July 2014.

The 2012 Tax Expenditures Statement notes that superannuation concessions comprise about a quarter of all tax expenditures, and is similar in scale to housing concessions – the top four tax expenditures in 2012-13 related to superannuation or principal residence concessions. In the 2011-12 income year, superannuation tax expenditure was estimated to be A\$30.3 billion (27.1 per cent of total tax expenditures), with principal residence measures estimated at A\$31 billion (27.8 per cent). By 2015-16 it is estimated that tax expenditures on superannuation will rise to A\$44.8 billion (32.6 per cent) with housing remaining steady at A\$30.5 billion (22.2 per cent).²⁰ In December 2012, the industry had A\$1,507.8 billion under investment.²¹

2.2 New Zealand

New Zealand's retirement savings history is unique among OECD countries. It has not followed the traditional three pillar approach common throughout the OECD and adopted in Australia. For the past 20 years the primary component of retirement policy has been New Zealand Superannuation, which is a universal pension paid on reaching the age of 65. Unlike pensions in most countries, including Australia, New Zealand Superannuation is not means- or income-tested. There is not even a requirement to be 'retired' to gain the pension: the only qualifications are a residency test and that the recipient is over 65 years of age.²²

Unlike Australia, New Zealand has not had a long association with compulsory or employment-related retirement savings. The only time that New Zealand has attempted to introduce mandatory retirement savings was in 1975; a scheme that was abolished within two years of inception. In addition, and also unlike Australia, the acquisition of a home does not attract any tax benefits in New Zealand.²³

19 Swan, Wayne, above n 17.

20 Australian Treasury, 2013, *Tax Expenditures Statement 2012*, Canberra: Australian Treasury, Table 1.1.

21 APRA, 2012, *Statistics: Quarterly Superannuation Performance*, Available at: www.apra.gov.au, Retrieved May 2013.

22 Individuals must be either a New Zealand citizen or permanent resident, and have lived in New Zealand for at least ten years since the age of 20, including five after the age of 50.

23 However, housing is effectively tax preferred in New Zealand as there is no comprehensive capital gains tax.

New Zealand is also unique for its relatively long history of not having tax incentives for retirement savings.²⁴ Prior to 1988, New Zealand did have tax incentives for retirement savings.²⁵ However, in 1988 contributions to superannuation schemes lost their tax exempt status, all superannuation fund income was taxed at a rate approximating the marginal tax rate of the member, and withdrawals were tax free. Thus, retirement savings effectively became taxable on the same basis as any other form of financial investment in New Zealand. This scheme was to remain in place, primarily unchanged, for nearly 20 years.

A major change in New Zealand retirement savings policy was visible with the introduction of the KiwiSaver scheme in 2007. KiwiSaver is a work-based retirement savings scheme. It has a number of unique features, including automatic 'opt-in' (i.e. automatic enrolment) and voluntary 'opt-out' of the scheme when an individual commences a new job. This approach is often referred to as 'soft compulsion'. It is not compulsory, but does require some deliberate action on behalf of the employee to opt-out, which must occur within eight weeks of commencing employment. The automatic enrolment is premised on the behavioural economics indication that inertia will result in a higher uptake when the default position is enrolment, that is, where individuals do not have to engage in any effort to enrol in a savings scheme.²⁶

While tax incentives are associated with KiwiSaver accounts, these are small and have proven to be politically volatile over the short life of the KiwiSaver scheme. A number of financial incentives were associated with the initial KiwiSaver scheme. These included a NZ\$1,000 government contribution to each new KiwiSaver account; annual fee subsidies of NZ\$40; an employer tax exemption; and a government-funded employee co-contribution (up to NZ\$20 per week, or NZ\$1,042.86 per year) in the form of a member tax credit paid to the KiwiSaver account. In order to qualify for the full member tax credit, the member must have contributed at least the equivalent amount of the tax credit to their KiwiSaver account. Once the scheme had been operating for nine months, a compulsory matching employer contribution commenced, starting at one per cent of the employee's income in 2008, with the

24 That is, no deliberate tax incentives were provided: for a time, there was a tax advantage for those paying the top marginal tax rate of 39 per cent who were investing in savings vehicles that had a maximum tax rate of 33 per cent.

25 Personal contributions to superannuation funds were tax deductible for individuals and employers, fund earnings were not taxed, and lump sum payments from superannuation schemes were not taxed on withdrawal. Pension streams were taxed as part of personal income on withdrawal, although some portion of pensions could be converted in some part to a lump sum on retirement and thereby avoid tax. In the early 1980s, lump sum pensions did become taxable, and some of the personal tax exemptions for superannuation contributions were removed.

26 Thaler, R.H., and Benartzi, S., 2004, 'Save More Tomorrow: Using Behavioral Economics to Increase Employee Saving', *Journal of Political Economy*, 112 (1), 164-187; Thaler, R.H., and Sunstein, C.R., 2007, *Nudge: Improving decisions about health, wealth and happiness*, New Haven: Yale University Press.

intention that this would increase by one per cent a year, reaching four per cent in 2011. Employer contributions also received a matching tax credit of NZ\$20 per week.

Additional incentives also exist with KiwiSaver, such as the potential to use the funds for a deposit towards a first home purchase and home mortgage diversion of up to half the contributions, under certain conditions. As at August 2012, when the KiwiSaver scheme had been operational for five years, 4,940 applications had been made for withdrawal of funds for the purchase of a first home and of these 55 per cent had been approved.²⁷ This represents a small proportion of total KiwiSaver members, at 0.14 per cent.

In November 2008, the newly elected National Government made significant changes to the KiwiSaver scheme, which took effect from April 2009. The employer co-contribution, which under the original scheme was to increase to four per cent in 2011, was capped at two per cent. Furthermore, employee contributions were also changed to include a two per cent option, together with the four and eight per cent options that were implemented at scheme inception. The tax exemption on employer contributions was also reduced to two per cent and the annual fee subsidy was removed. Subsequent changes further pared back the attractiveness of KiwiSaver as a retirement savings vehicle. With effect from 1 July 2011, the member tax credit was halved and thereby reduced to a maximum of NZ\$521.43 per year. In addition, all employer contributions became subject to employer superannuation contribution tax from 1st April 2012. This tax is equivalent to an employee's marginal tax rate.

The most recent changes were introduced on 1st April 2013. These amendments yet again changed policy direction. In its short life, KiwiSaver was introduced with an expected minimum contribution level of four per cent, which was subsequently reduced to two per cent. From 1st April 2013, the two per cent increased to three per cent. Therefore, employees and employers who were contributing at the two per cent level would have their contributions increased to the new minimum level of three per cent. Higher options of four or eight per cent remain available. These frequent changes to the relatively young KiwiSaver scheme undermine its sustainability and attractiveness to potential members, by decreasing certainty of the design of the scheme into the future.

Despite the policy changes, KiwiSaver has been successful in attracting members. New Zealand currently has 1.97 million people enrolled in KiwiSaver funds, which is 49 per cent of the eligible population.²⁸ Of those enrolled in KiwiSaver, 68 per cent of members opted-in to the scheme, i.e., they were not automatically enrolled.²⁹ Of those that were automatically enrolled, 255,935 opted out of the scheme.³⁰ While the scheme has had some volatility with rate changes, and there is no reporting on the

27 Above, n.6, p.21.

28 Above, n.6, p.3.

29 Above, n.6, p.3.

30 Above, n.6, p.3.

most recent rate increase to three per cent, as at 30 June 2012, 59 per cent of members were contributing at the lowest rate of two per cent.³¹

To date, Crown contributions are in excess of employer contributions, both on an individual year and aggregate basis. Crown contributions are in the form of member tax credits and initial government contributions of NZ\$1,000. In the year ended 30 June 2012, NZ\$866 million of employer contributions were made, while NZ\$1,045 million Crown contributions were made.³² Similarly, in the year ended 30 June 2012, accumulated employer contributions were NZ\$2.7 billion, while accumulated Crown contributions were NZ\$4.7 billion.³³ Thus, of the NZ\$12.9 billion (approximately A\$10.6 billion) currently in KiwiSaver managed funds, 36 per cent has been contributed by the Crown.

3 THE PROBLEM AND ITS CAUSES

Australia and New Zealand both have legal and policy frameworks that protect individuals against discrimination. However, the differences in retirement savings among men and women are typically the result of different life choices made, together with a range of other multiple and complex factors, rather than any one factor that can be easily addressed by regulatory change.

New Zealand and Australia both have policy tools in place intended to mitigate for the potential for retired individuals to live in poverty. For example, both countries provide pensions for those who are aged above the retirement age. In New Zealand this is a universal provision and in Australia it is provided based on the needs of the individual. Nonetheless, the impact of both these policies is similar: retired Australians and New Zealanders should not have to live in poverty. However, in both countries, additional savings are required if a standard of living above a modest level is desired.

Table 1 outlines the pension replacement rates for men and women in Australia and New Zealand. Replacement rates are important as they provide an indication of how effectively a country's pension system will replace earning in retirement. What is visible from Table 1 is that the New Zealand pension system provides a higher replacement rate for both males and females only for lower income earners, represented by those on half of average earnings, and only for the gross replacement measure. When average and above-average income earners are taken into account, the Australian system is more effective at replacing pre-retirement income. The net replacement rate is higher in Australia at all levels of income. When male and female participation rates are compared, replacement rates are lower for females in Australia.

31 Above, n.6, p.3.

32 Above, n.6, p.3.

33 Above, n.6, p.3.

In New Zealand, replacement rates are the same, as males and females have equal entitlement to New Zealand Superannuation.

Table 1: Pension Replacement Rates in Australia and New Zealand (2008)³⁴

	Male						Female					
	Gross Replacement Rate ³⁵			Net Replacement Rate ³⁶			Gross Replacement Rate			Net Replacement Rate		
x AWE	0.5	1.0	1.5	0.5	1.0	1.5	0.5	1.0	1.5	0.5	1.0	1.5
Aust	73.32	47.29	38.61	82.53	58.91	47.05	70.83	44.81	36.13	79.73	56.90	45.27
NZ	77.49	38.74	25.83	79.43	41.50	29.40	77.49	38.74	25.83	79.43	41.50	29.40

The Commission for Financial Literacy and Retirement Income in New Zealand has proposed ten factors that are most likely to impact negatively on women's financial wellbeing in retirement. These ten factors are outlined below:

1. The family, neighbourhood and community that the woman was born into;
2. Education, training and ongoing professional development;
3. Structural factors in the workplace that limit promotions for women;
4. Work response to employment breaks;
5. The age that women focus on paid employment, together with the nature of that employment;
6. The nature of the household unit;
7. Endowments received from relationship breakups;
8. The extent to which life cycle changes are taken into account in savings schemes;
9. Assets and liabilities;
10. Cultural and ethnic factors.³⁷

34 OECD, 2012, *Pensions at a Glance 2011*, Paris: OECD Publishing. These figures are based on a single individual who has no career break, and enters the retirement system at age 20 and retires at the national age of retirement.

35 The Gross Replacement Rate is the gross pension entitlement divided by gross pre-retirement earnings.

36 The Net Replacement Rate is the individual net pension entitlement divided by net pre-retirement earnings.

37 Commission for Financial Literacy and Retirement Income, 2013, *Women's Retirement Income*, Available at <http://www.clfri.org.nz>, Retrieved April 2013.

This is a comprehensive list. However, many of these factors cannot be addressed through retirement savings policy. Typically the primary explanations proposed for lower levels of retirement savings for women are workforce participation; the amount of unpaid or 'caring' work undertaken by women;³⁸ and overall lower earnings experienced by women over their career. Each of these is discussed in more detail below.

While there are greater numbers of women in the workforce, and both Australia and New Zealand have high levels of female workforce participation,³⁹ they are likely to *'experience more difficulty than men in finding a first job, earn less than them, and are more likely to work part-time'*.⁴⁰ Moreover, research suggests a key factor impacting on savings and wealth accumulation for women is their responsibility for the majority of 'unpaid work', such as raising and caring for children, which limits their access to economic resources.⁴¹ The impact of foregone earnings due to unpaid caring roles is described by the Australian Human Rights Commission as *'very substantial'*.⁴² This problem is well-established in the OECD and is further exacerbated with what the OECD refer to as *'gender segregation in the labour markets'* where women are over-represented in fields such as health and welfare, that typically are lower paid.⁴³ As work-based retirement savings schemes are usually based on a proportion of earnings, women with lower earnings consequently have lower aggregate savings on retirement.

The problem of insufficient retirement saving by women is intensified with the known issues that women work less than men, as well as earning less than men.⁴⁴ In OECD countries women, on average, earn 16 per cent less than men, while female high income earners earn 21 per cent less than their male colleagues.⁴⁵ In addition, only around one-third of managerial positions are held by women and 25 per cent of women work in part-time jobs, while only 6 per cent of men are in part-time employment.⁴⁶ This is subsequently reflected in pension streams to individuals where, on average, women receive pensions that are 34 per cent lower than men.⁴⁷

38 Caring roles incorporate providing care for children, but also extends to looking after those with disabilities or illness, and the elderly.

39 Above, n.3, p.235.

40 Above, n.3, p.15.

41 Heathrose Research Limited, 2012, *Women's Retirement Income: A summary of key issues from the literature*, Report prepared for the Commission for Financial Literacy and Retirement Income, 24 March 2012. Available at <http://www.cflri.org.nz>, Retrieved April 2013.

42 Australian Human Rights Commission, 2013, *Investing in Care: Recognising and valuing those who care*, Volume 1: Research Report 2013, Sydney: Australian Human Rights Commission, p.6.

43 Above, n.3, p.15.

44 OECD, 2010, *Gender Brief Prepared by the OECD Social Policy Division*, Paris: OECD Publishing, p.12/13.

45 Above, n.3, p.15.

46 OECD, 2013, *Overview of Gender Differences in OECD Countries*, Available at <http://www.oecd.org/> Retrieved April 2013.

47 Above, n.3, p.231.

The gap in average income earnings of men and women is equally visible in New Zealand and Australia. In New Zealand, the average weekly income from wages and salaries for men is NZ\$854, while it is NZ\$657 for women.⁴⁸ Moreover, most New Zealand women do not participate in KiwiSaver at a sufficiently high level to receive the full member tax credit, with 40 per cent of women receiving the full tax credit and 60 per cent of women receiving only a partial tax credit.⁴⁹ Approximately 50 per cent of men receive the full tax credit and 50 per cent receive a partial tax credit.⁵⁰

While Australia has a compulsory superannuation scheme, it is employment-focused, with the obligation placed on an employer. Therefore, those who are not employed do not benefit from mandatory coverage. A person who is not employed may make personal contributions to superannuation, but such contributions are only tax deductible if the member is self employed: a person who is outside the workforce, for example while caring for children, receives no immediate tax benefit.⁵¹ Figure 1 shows the differences in males and females with no superannuation coverage in Australia. What is visible in Figure 1 is that while fewer males than females have no superannuation coverage, the difference becomes particularly stark after the age of 55.

Figure 2 outlines the average superannuation balances as at 2009-10 in Australia. Again, these figures show the differences in accumulated retirement savings funds between men and women. Average retirement payouts in 2009-10 in Australia are A\$198,000 for men and A\$112,600 for women: men's retirement payouts are approximately 76 per cent higher than women's.⁵²

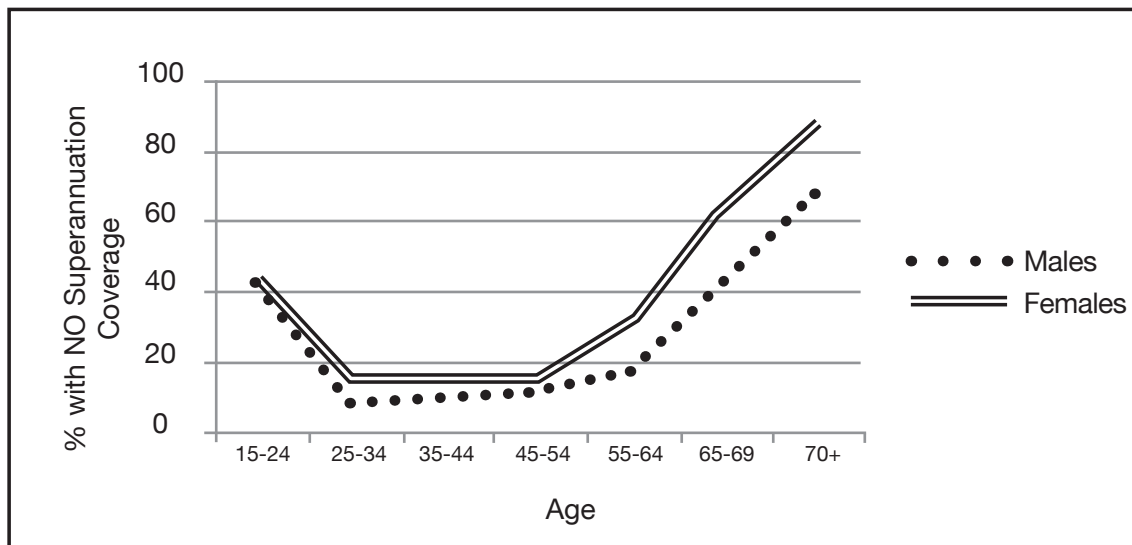
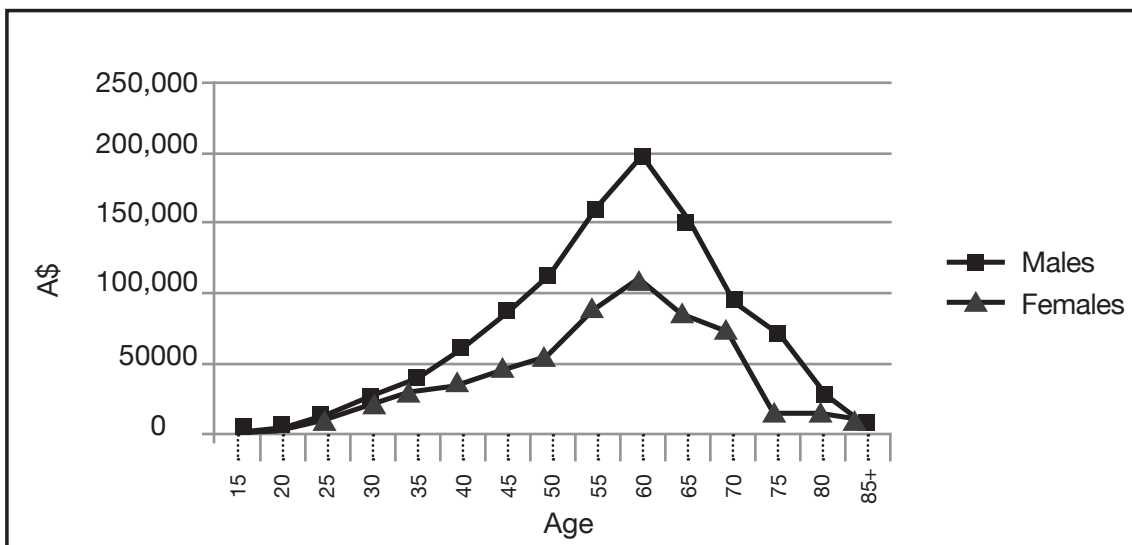
48 Dwyer, M., 2012, *To What Extent Do Individual Superannuation Schemes in New Zealand Address Needs for Retirement Income in a Gender-Neutral Manner?* Report to the Commission for Financial Literacy and Retirement Income, Available at <http://www.cflri.org>, Retrieved March 2013.

49 Above, n.48, p.13.

50 Above, n.48, p.13.

51 Although such contributions are non-concessional contributions and tax preferred when withdrawn from the fund.

52 Clare, R., 2011, *Developments in the Level and Distribution of Retirement Savings*, Sydney: Association of Superannuation Funds of Australia, p.7.

Figure 1: Individuals in Australia without Superannuation Coverage (2007)⁵³**Figure 2: Average Superannuation Balances in Australia (2009-10)⁵⁴**

It is also evident that differences in attitudes towards saving between men and women do not appear to be contributing towards the different levels of retirement savings. Recent research from the Financial Literacy Foundation⁵⁵ finds similar levels of saving habits and behaviours between men and women. However, fewer women report the ability to invest money than men (63 per cent versus 75 per cent), and fewer

53 Australian Bureau of Statistics, 2009, *Employment Arrangements, Retirement and Superannuation, Australia, April to July 2007*, Available at <http://www.abs.gov.au>, Retrieved April 2013.

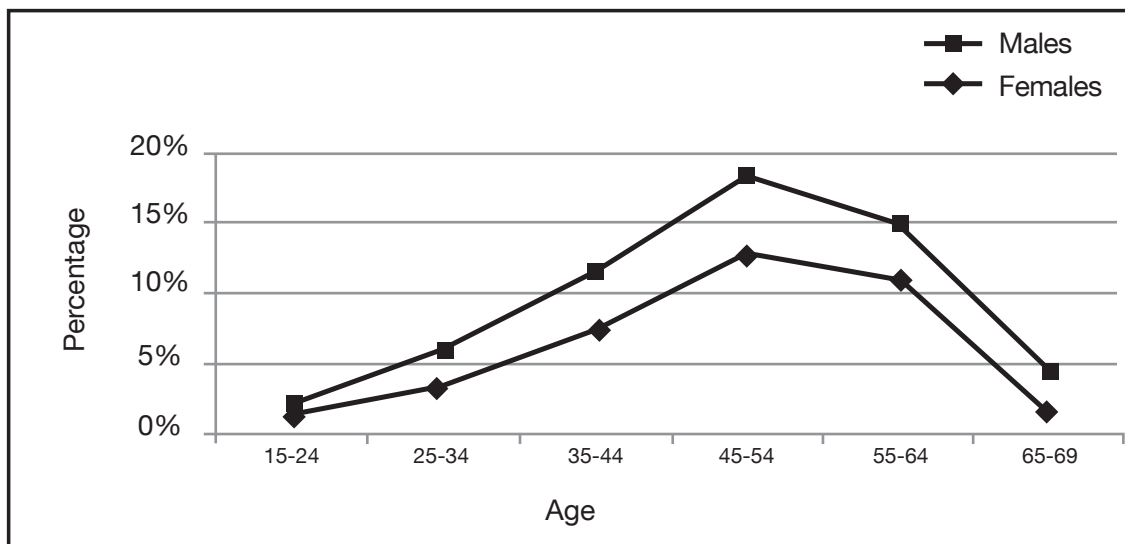
54 Above, n.52.

55 Financial Literacy Foundation, 2008, *Financial Literacy: Women understanding money*, Canberra: Commonwealth of Australia.

women report the ability to plan for their long-term future than men (77 per cent versus 84 per cent).⁵⁶ There is some evidence that women make different investment decisions from men, returning less investment income in their income tax returns.⁵⁷ In particular, single women hold a higher proportion of their assets in their home than single men, and divorced women have significantly lower asset balances than widows.⁵⁸

As can be seen in Figure 3, women are less likely than men to take advantage of salary sacrificing to increase the level of superannuation, particularly among the age groups from 35 to 55. However, among older women the rate of salary sacrificed contributions does not drop off as quickly as among men, suggesting that women are attempting to catch up with their superannuation savings after they have finished child rearing.

Figure 3: Proportion of Persons Making Salary Sacrificed Superannuation Contributions: Australia (2007)⁵⁹



It is important to acknowledge that there are issues relevant to this topic that this article will not attempt to address, as they are either outside the scope of this study or they have been comprehensively addressed by other researchers. Perhaps the two most relevant are the gender pay gap⁶⁰ and the somewhat artificial delineation

⁵⁶ Above, n.55, p.2/3.

⁵⁷ Rosenman, L., and Scott W., 2009, 'Financing Old Age: Why is There Still Gender Inequality?' *Australian Social Work*, 62 (2): 287-298.

⁵⁸ Cobb-Clark, D.A., and Hildebrand, V.A., 2011, 'Portfolio Allocation in the Face of a Means-Tested Public Pension', *Review of Income & Wealth*, 57 (3): 536-560, p.550.

⁵⁹ Australian Bureau of Statistics, 2007, 6361.0 Employment Arrangements, Retirement and Superannuation, Australia, Canberra: Australian Bureau of Statistics, Table 8. These figures include persons making concessional contributions only, and both concessional and non-concessional contributions.

⁶⁰ Above, n.3; Cassells, T., Miranti, R., Nepal, B., and Tanton, R., 2008, *She Works Hard for Her Money: Australian Women and the Gender Divide*, AMP Natsem Income and Wealth Reports, Sydney: NATSEM; Daley, J., McGannon, C., and Ginnivan, L., 2012, *Game-Changers: Economic*

between work, labour and economic activity that determines that unpaid roles are not part of the productive economy and therefore have no 'value'.⁶¹ The gender pay gaps in New Zealand and Australia are illustrated in Figures 4 and 5, and clearly illustrate the differences in average earnings between males and females. While these two issues will not be discussed further in this study, their influence on the problem is clear.

Figure 4: Market income per capita by gender and age group: New Zealand (2010)⁶²

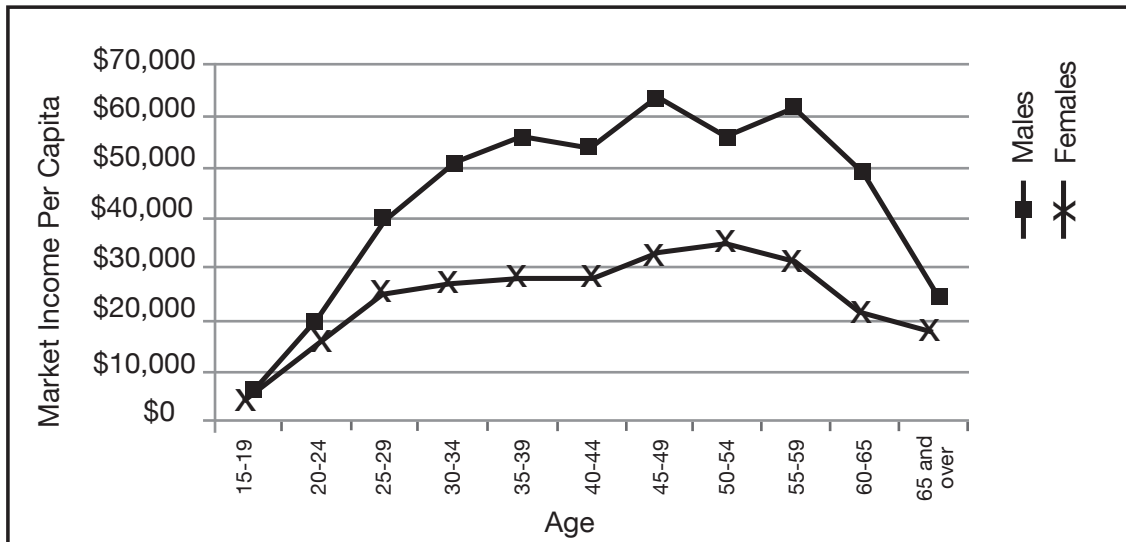
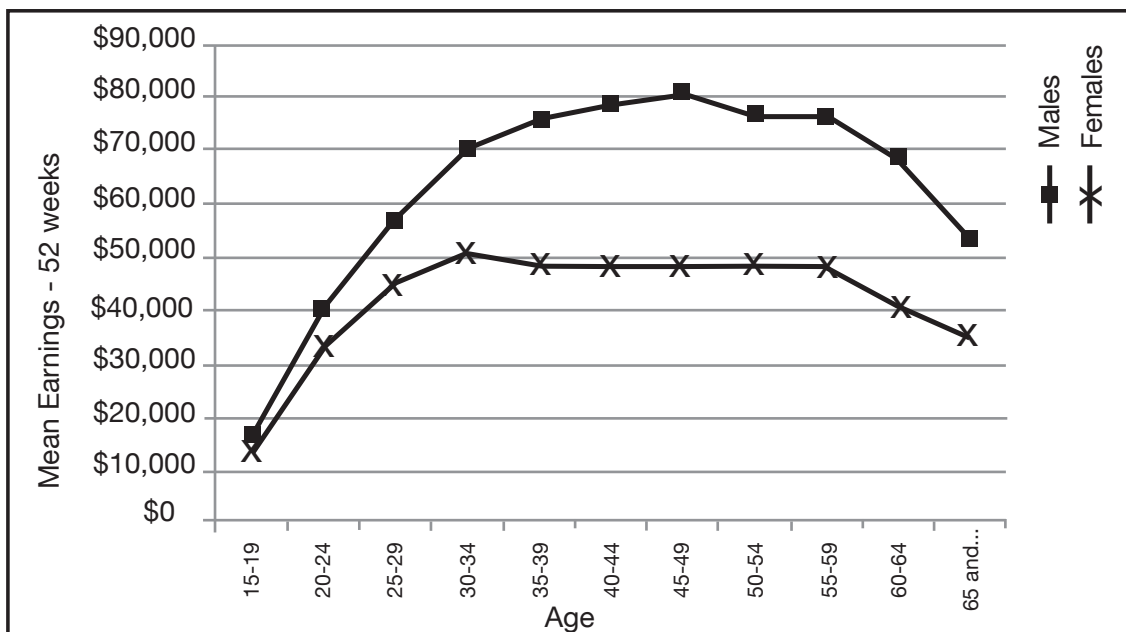


Figure 5: Mean earnings in main job by gender and age group: Australia (2011)⁶³



Reform Priorities for Australia, Melbourne: Grattan Institute.

- 61 See Waring, M., 1988, *Counting for Nothing: What men value and what women are worth*, Wellington: Allen and Unwin.
- 62 Aziz, O., Gemmell, N., and Laws, A., 2013, 'The Distribution of Income and Incidence of Tax and Government Spending Across the Lifecycle for Males and Females', Forthcoming in *Policy Quarterly*.
- 63 Australian Bureau of Statistics, 2012, *6310.0 - Employee Earnings, Benefits and Trade Union Membership, Australia, August 2011*, Canberra: Australian Bureau of Statistics. Note that earnings have been annualised as 52 times weekly earnings.

3.1 Summary

The problems outlined above are not new. Indeed they were identified as an issue in Australia prior to the introduction of the Superannuation Guarantee.⁶⁴ Reduced workforce participation, adoption of greater levels of unpaid work and overall lower earnings over a career, significantly impacts on the ability of women to accumulate sufficient savings to support their retirement. These issues have resulted in a general trend across all OECD countries for women to have fewer resources than men in retirement. The OECD observe that this trend significantly widens from the age of 66 onwards, with the risk of relative poverty for women aged 66-75 years of age assessed at 1.2 times that of the general population, increasing to 1.7 times for women above the age of 75.⁶⁵ By way of comparison, the risk of relative poverty for men only increases above that of the general population when they are aged over 75.⁶⁶ It is also important to acknowledge that these issues will not be resolved in the absence of deliberate policy changes to address them. The issue is becoming particularly urgent in Australia, where the differences in levels of retirement savings are likely to be exacerbated as compulsory retirement savings for workers increase from nine per cent to 12 per cent over coming years.

4 TOOLS TO AMELIORATE THE ISSUE

This section outlines a range of tools that have been highlighted by the OECD and other organisations as having the potential to address the gap in retirement savings among men and women. While the OECD suggests that gender inequality in retirement is the result of differences in labour market experience and life expectancy, rather than the design of pension systems,⁶⁷ we suggest that there are policy approaches that may assist with the current inequality between men and women in retirement saving. Moreover, while we recognise that policies that facilitate voluntary savings are worthy of consideration, this study suggests that a more targeted approach is necessary to assist women, in particular, to increase their retirement savings balances.

This section also sets out the tools currently available in the Australian and New Zealand retirement income systems to assist low income earners that could potentially be adapted or expanded to address the retirement savings gender gap.

4.1 Carer Credits

The Australian Human Rights Commission has outlined a number of tools used in Australia and internationally that may be used to address the issues relating to unpaid caring roles.

64 See, for example, Cox, E., 2007, 'Financing Our Futures – How Privatising Retirement Discriminates Against Women', *Academy of the Social Sciences*, 42-50.

65 Above, n.44, p.14.

66 Above, n.44, p.14.

67 Above, n.3, p.229.

These include:

- Flexible work arrangements, including leave arrangements;
- Carer support payments;
- Services for carers, such as early childhood education or disability support;
- Workplace initiatives, such as reduced work hours or changes in work location; and
- Tools within the retirement income system, such as taxation and income support.⁶⁸

Of these potential tools, it is perhaps the carer support payments that are most likely to impact on retirement savings. Certainly, flexible work arrangements and workplace initiatives may facilitate an individual's return to employment, but what is also needed is assistance while individuals are not in employment. Carer support payments may consist of income support during the period that a person is primarily engaged in caring activities, for example through parental leave schemes or carer benefits, but should also recognise the periods spent caring through credits to an individual's retirement savings account through a system of carer credits.

Australia introduced a statutory Paid Parental Leave scheme with effect from 1 January 2011. The current Paid Parental Leave scheme entitles a parent who is the primary carer for a child to receive up to 18 weeks' pay, at minimum wage rate, following the birth (or adoption) of a child in addition to any other leave entitlements of the parent. To facilitate labour force attachment, eligibility is based on labour force participation prior to the birth, and government-funded entitlements are paid through the employer. Workers who earned more than A\$150,000 in the previous year are not eligible, and payments are pro-rated for part-time workers. A further Paid Parental Leave benefit, Dad and Partner Pay was available from 1 January 2013 to allow up to two weeks of paid leave to the partner of the primary carer on the birth (or adoption) of a child. The Productivity Commission recommended that superannuation be a component of a Paid Parental Leave scheme after a three year settling in period,⁶⁹ however at this stage there is no indication that the scheme will be extended to include mandatory superannuation.

Other carers may be eligible for income support through the Carer Payment if they are unable to work because of the demands placed on them by caring for a person with a severe medical condition or disability, or who is a frail aged person. There is no retirement savings support available as part of the Carer Payment. A separate

68 Above, n.10.

69 Australian Government Productivity Commission, 2009, *Paid Parental Leave: Support for Parents with Newborn Children*, Productivity Commission Inquiry Report No 47, Melbourne: Commonwealth of Australia; Recommendation 2.4

Carer Allowance is available as a supplementary payment to a person with caring responsibilities who may not be eligible for the Carer Payment.

Paid Parental Leave is also provided in New Zealand. This is a government-funded initiative provided to 'eligible working mothers and adoptive parents' when they take parental leave from their employment to care for a new child.⁷⁰ The payment may be transferred to a qualifying spouse or partner. The payment, which is available for a maximum period of 14 weeks, is equal to the individual's normal pay before tax for employees, or average weekly earnings for the self-employed. However, the payment is capped at NZ\$475.16 per week (approximately A\$390). Similarly to Australia, these benefits do not provide extra assistance to facilitate retirement savings. Conversely, individuals who have student loans will have student loan deductions taken from Paid Parental Leave payments.

While these periods of financial assistance are valuable, they are only short-term in nature and do not directly address the issues related to retirement saving outlined in section three. The introduction of a longer-term 'carer credit' paid directly to superannuation accounts would encourage individuals to maintain a longer-term retirement savings arrangement.

The Australian Human Rights Commission notes that 'the introduction of carer credits into a country's pension system provides a method of explicitly recognising these years spent providing unpaid care for a child or a family member with a disability, long-term illness or frailty due to old age'.⁷¹ In addition, a carer credit scheme would mitigate, at least to some extent, the tax incentives that are not widely available to carers and currently disproportionately benefit higher income earners.

Many countries provide a link between carer credits and parental leave, or may encourage return to employment by providing carer credits when individuals return or re-enter the workforce.⁷² In some cases, these can be used to ensure that an individual's pension contributions are not impacted by their time out of the workforce. The Australian Human Rights Commission notes that a number of schemes that previously limited carer credits to parents, are now extending these to all carers, as well as including carer credits in private or occupational pension schemes.⁷³ In these cases, the state has the responsibility for ensuring that credits to the individual's pension account are maintained during their time out of the workforce in a caring capacity.

70 Inland Revenue Department, *Paid Parental Leave*, Available at <http://www.ird.govt.nz>, Retrieved April 2013.

71 Above, n.10, p.10.

72 Above, n.10, p.10.

73 Including the United Kingdom, Germany, Italy, Finland, Luxembourg, the Czech Republic, Poland, Slovakia, Italy and Norway. Above, n.10, p.54.

4.2 Superannuation Co-Contributions

There are currently two schemes in Australia that are targeted to low income earners, under which the government contributes directly to the superannuation balances. The first of these is the co-contribution scheme which requires the member to make a personal non-deductible contribution to a superannuation fund. The government will make a contribution to the person's superannuation fund equal to 50 per cent of the amount of the personal contribution(s) up to A\$500.⁷⁴ Eligibility is income-tested: a person earning less than A\$31,920 is entitled to the maximum of A\$500, with the entitlement phased out when income reaches A\$46,920. The second scheme is the Low Income Superannuation Contribution (LISC), which was introduced with effect from the year ended 30 June 2013. The LISC is designed to rebate the tax paid on mandatory superannuation contributions for members earning less than A\$37,000 per annum. The rebate, paid directly into the superannuation fund, is 15 per cent of concessional contributions up to a maximum of A\$500. This reimburses the contribution tax paid by the fund on the mandatory superannuation contributions.⁷⁵

As women are over-represented among low income earners due to the high rate of part-time employees, women are more likely to benefit from these schemes. However although part-time workers can benefit from these schemes, neither is available to members who do not participate in the workforce during the year, including women on unpaid parental leave or in a full-time caring role. Both schemes have a work requirement under which the member must have earned at least 10 per cent of their gross income for the year from employment or business income.

A system of Carers' Credits could be developed to extend these schemes. In particular the co-contribution scheme could be extended to allow a co-contribution in respect of a person who is taking a career break in order to care for children or other family members. However the current co-contribution scheme is based on matching a contribution that has not been tax deductible, which may be financially out of reach for families that are already experiencing a reduction in income due to the changed circumstances. Similarly the LISC is designed to refund the contributions tax payable on concessional contributions. If the contributions are non-concessional contributions, the tax is not payable.

Therefore the proposed Carer Credit scheme would need to be developed independently of the above schemes to provide that a person who is eligible for the Carers Payment receives a Carer Credit at least equal to the maximum amount available to contributors under the co-contribution scheme. Where a person who is eligible for the Carer Allowance has reduced their hours of work in order to meet their responsibilities as a carer, they should also be eligible for a Carer Credit, although in

74 The co-contribution percentage was 150 per cent for the years ended 30 June 2004 to 2009, then 100 per cent for the years ended 30 June 2010 to 2012.

75 The current mandatory superannuation contribution (nine per cent) in respect of a person earning A\$37,000 is A\$3,330. The tax paid by the superannuation fund on those contributions at 15 per cent would be A\$499.50.

this case a work-test and means-test may be required. Eligibility for Carer Credits should not preclude eligibility for the co-contribution or the LISC.

4.3 Extended coverage of Mandatory Superannuation Contributions

As women are over-represented among part-time and casual workers, any changes to improve coverage among this sector will have a disproportionate benefit to women. As outlined in section two, New Zealand does not have a mandatory superannuation scheme, while the Australian scheme is based on employment. Two areas that require attention are the appropriate classification of workers as employees within the coverage of the superannuation guarantee, and the current exemption from coverage for workers earning less than A\$450 per month.

In the modern workforce the distinction between employees and contractors has become difficult to enforce, with some industries citing the need for a flexible workforce as a motive for engaging workers on contract instead of as employees.⁷⁶ The superannuation legislation applies to all workers engaged on a contract that is principally for the labour of the worker.⁷⁷ However, it is common to hear of workers who are engaged as contractors on the basis that they hold an ABN,⁷⁸ a practice that effectively shifts the requirement to provide for superannuation from the employer to the employee. In the absence of comprehensive legislation clarifying the difference between employees and contractors⁷⁹ this is an education and enforcement issue: employers need a clear understanding of when the contract is a contract of service, and the relevant authorities must enforce compliance.

The second extension that has been proposed is the removal of the exemption from the superannuation guarantee legislation for employees earning less than A\$450 per month,⁸⁰ which would particularly assist women in low paid part-time work. This exemption has been in place since the Superannuation Guarantee (Administration) Act passed in 1992 when it was intended to reduce the compliance burden on employers. Modern payroll systems have reduced the compliance burden to the extent where the exemption can no longer be justified on this basis alone, and there is anecdotal evidence that employers are limiting the hours offered to casual employees to remain below the threshold.⁸¹ However,

76 Australian Building and Construction Commission, 2011, *Sham Contracting Report 2011*, Available at <http://www.fwbc.gov.au/sites/default/files/ShamContractingInquiryReport-1.pdf>, Retrieved May 2013.

77 *Superannuation Guarantee (Administration) Act 1992*, s.12(3).

78 Above note 76 at 94

79 The *Independent Contractors Act 2006* regulates the power of State and Federal governments in respect of independent contractors, but it does not attempt to define the difference between a contractor and an employee.

80 *Superannuation Guarantee (Administration) Act 1992*, s.27.

81 Coleman, M., and Hodgson, H., 2011, *Women's Voices*, National Womens Alliances, Available at, http://www.nfaw.org/wp-content/uploads/2012/06/Womens-Voices_21-September-2011.pdf, Retrieved May 2013.

the practical effect of removing the exemption would be minimal, with a worker on A\$450 per month being entitled to A\$456 over a year.

4.4 Spousal Superannuation Splitting⁸²

Women's economic security is best developed by encouraging some degree of financial autonomy,⁸³ but in Australia and New Zealand the male breadwinner model still predominates with women working part-time while men continue to work full-time,⁸⁴ contributing to lower balances on retirement. The current superannuation system is based on a system of personal accounts. Although some older defined benefit schemes still incorporate spouse benefits that transfer to a spouse, most accumulation style accounts provide for family beneficiaries through insurance policies and death benefits. In contrast, the means-tests that apply to the Age Pension are still based on family income levels.

Women are at significant financial risk following marriage breakdown. Where there are children it is likely that the female partner has reduced her workforce participation during the relationship, with a corresponding impact on her superannuation balance relative to that of her partner. Superannuation balances of both spouses are taken into account when dividing assets following separation,⁸⁵ which increases the pool of assets to be divided, however superannuation splitting is relatively uncommon. In many cases the assets of the relationship consist principally of the family home and superannuation accounts. When the assets are divided the female partner often retains the home with superannuation balances allocated to the holder of the account as the alternative would require the sale of the family home.⁸⁶

Single women, including divorced and widowed women, are at particular risk of poverty. As women progress toward financial partnership with their spouse through increased workforce participation, this financial partnership should extend to retirement with women having access to their own superannuation instead of being reliant on their spouse or the Age Pension in retirement.

82 Australian legislation applies an extended definition of spouse that incorporates de-facto and same sex partners in the definition of spouse. Accordingly the term "spousal" is used in this broad context.

83 De Henau, J., and Himmelweit, S., 2007, *Struggle Over the Pie? The Gendered Distribution of Power and Subjective Financial Well-Being Within UK Households*, *GeNet Working Paper 2007- 27*, Retrieved May 2009; Himmelweit, S., 2002, 'Making Visible the Hidden Economy: The Case for Gender-Impact Analysis of Economic Policy', *Feminist Economics*, 8 (1): 49-70.

84 Craig, L., and Mullan, K., 2009, 'The Policeman and the Part-Time Sales Assistant: Household Labour Supply, Family Time and Subjective Time Pressure in Australia 1997-2006', *Journal of Comparative Family Studies*, 40 (4): 545-561.

85 *Family Law Act 1975*, Part VIIIB

86 Sheehan, G., Chrzanowski, A., and Dewar, J., 2008, 'Superannuation and Divorce in Australia: An evaluation of post-reform practice and settlement outcomes', *International Journal of Law, Policy and the Family*, 22 (2): 206-230.

In Australia there is currently little incentive to encourage a breadwinner to make contributions into the account of a spouse who is not participating in the paid labour market.⁸⁷ A person who has made contributions into a superannuation fund can apply to split those contributions with their spouse.⁸⁸ The amount that can be transferred into a spouse account is based on the contributions that the contributor made in the prior financial year, net of the 15 per cent contributions tax imposed on concessional contributions. There is no explicit incentive for members to apply to split contributions, although where there is an age difference between spouses there may be a benefit based on the date that each spouse may be able to access preserved superannuation benefits or the age pension.

Contributors could be encouraged to split contributions with a low income spouse through an extension of the LISC. The existing LISC is available to low income workers without reference to the income of a spouse. Subject to our previous recommendations in relation to the work requirement, contributions transferred from a spouse account could be included as eligible contributions for the LISC, effectively reimbursing the contributions tax that had been paid by the spouse when first contributed, prior to being transferred to the spouse contribution account. Alternatively the contribution cap could be extended where benefits have been transferred to a spouse account.

Although there is an explicit tax rebate available where a taxpayer makes a contribution in respect of a low income spouse⁸⁹ this rebate is very limited: the spouse must earn less than A\$13,800 pa, and the maximum contribution is limited to A\$3,000, giving a maximum rebate of A\$540. It is clearly ineffective and with a limited effect in encouraging contributions by a taxpayer on behalf of a non-working spouse. In the 2009/10 year 15,970 claims were made, at a total cost of A\$6,464,663, or an average rebate of A\$405,⁹⁰ equating to about A\$2,250 as the average contribution made to spouse superannuation accounts.

4.5 Contribution Caps

The contributions caps are based on annual contributions, a change which was intended to simplify the system, which previously was based on Reasonable Benefit Limits. However the system of annual caps does not assist women, who have a different pattern of workforce participation. When a woman first enters the workforce she will work similar hours to her male counterpart, however her hours of workforce participation typically drop over her 30s to 40s.

87 Self Managed Superannuation Funds allow more flexibility, particularly if used in conjunction with a family owned business where both spouses are employed, however concessional contributions are still based on work status or tax deductibility.

88 *Superannuation Industry (Supervision) Regulations 1994*, part 6.7.

89 *Income Tax Assessment Act 1997*, s.290-230.

90 Australian Tax Office, 2012, 'Taxation statistics 2009-10', Australian Taxation Office: Canberra, Available at <http://www.ato.gov.au/>, Table 5.

There is evidence that women increase their rate of savings into superannuation in their 50s in an attempt to catch up for the years when their contributions were restricted.⁹¹ This can be seen in the increase in the level of superannuation savings, and the increased rate of voluntary contributions through salary sacrifice arrangements at this age. While women still lag behind men of the same age, the gap does narrow.⁹²

The most significant limitation on the ability for women to catch up is the gender pay gap. Among older women the gender pay gap is influenced by discrimination experienced earlier in their career, and the opportunities not available to them due to disrupted work patterns. However where a women does have the financial capacity to make significant superannuation contributions, the caps operate as a further barrier. It has been suggested that a lifetime cap would be fairer to workers with 'lumpy' income, including women,⁹³ however managing a lifetime cap could face the same criticisms of complexity levied against the previous reasonable benefit limit system.

5 ANALYSIS AND RECOMMENDATIONS

Section three of this article establishes the problem that women will, on average, retire with significantly lower levels of retirement savings than their male counterparts. Section four outlines some policy suggestions that have the potential to alleviate the issue. This section discusses each of the policy suggestions with reference to their potential suitability and likely acceptance in Australia and New Zealand. The tools outlined below are primarily discussed from the perspective of facilitating increased levels of retirement savings by women. However, the policy tools raised are equally likely to benefit lower income earners as well as individuals who have time out of the workforce.

The policy suggestions for Australia fall into two categories, which will benefit different groups of women. Suggestions to modify superannuation caps and encourage spousal contributions on behalf of a low income spouse would only be used by households with the capacity to save. The benefit of these proposals is that they encourage financial autonomy for women, independent of their spouse. This would provide an independent source of income in retirement, and improve the financial security of women if their circumstances change through death of a partner or divorce.

The second group of proposals are based on increasing superannuation contributions through government subsidies and employers. Any change to the system that assists low income earners will help to redress the gender imbalance, as women are over-represented in this group of workers. However, any proposals to increase mandatory contributions, such as the proposal to remove the exclusion for wages under A\$450

91 Australian Bureau of Statistics, 2009, 6361.0.55.004, *Employment Arrangements, Retirement and Superannuation, Australia, April to July 2007*, Canberra: Australian Bureau of Statistics.

92 Above note 91; Table 21.

93 CPA Australia, 2013, *Pre Budget Submission 2012 – 2013*, CPA Australia, Available at: <http://www.cpaaustralia.com.au/>, Retrieved May 2013.

per month, must be approached with caution; as superannuation is regarded as a form of remuneration, increases in the mandatory contribution are usually reflected in wages paid. There may not be a drop in cash wages, but there is likely to be a trade-off in future wage increases, with an adverse impact on low-wage workers.

Proposals for carer credits would be funded by the government. If pegged to the existing co-contribution, and taking into account fiscal constraints, the amount that would be paid on an annual basis would be minimal: \$500 invested for 20 years would triple in value, but is still a minimal contribution to retirement savings. The importance of a carer credit is symbolic: it shows that society values carers, and the credit maintains the connection that the carer has with the retirement income system.

Unlike Australia, for over 20 years the New Zealand tax environment has been underpinned by a philosophy of neutrality, that is, policies to deliberately influence particular behaviours have been unpopular. Also unlike Australia, New Zealand does not publish a tax expenditure statement. This reflects the New Zealand environment where tax incentives are insufficient to warrant highlighting and discussion. KiwiSaver was a significant change to retirement savings policy. However, the scheme is not compulsory and considerable resistance remains to both making it compulsory or increasing the minimum levels of saving. Given this background, the New Zealand environment is likely to remain unreceptive to policies that are intended to both target a specific group and introduce a benefit in the form of a tax incentive. While this policy approach may appear to indicate a disregard for supporting those in their retirement, retirement policy is supported by the presence of New Zealand Superannuation: no New Zealander who meets the residency requirement will retire after the age of 65 without a state-provided pension. Thus, the political argument has historically been that as the state provides a pension, further assistance in the form of tax incentives is unnecessary. Given this background, each of the policies raised in the previous section is discussed below from the perspective of their likely benefit in Australia and New Zealand.

5.1 Carer Credits

Neither Australia nor New Zealand currently provides carer credits. The introduction of carer credits into either superannuation system would ensure that those people who spend time out of the workforce in caring roles are not financially disadvantaged when they retire. Not only does this approach recognise the value of unpaid caring roles in the community, it also signals the importance that the government places on ensuring people are financially independent when they retire. Different models of carer credits have been adopted throughout the OECD. However, the most common model is when the state credits an individual's pension account while they are out of the workforce in a caring capacity. The value of the credits may be linked to earnings prior to leaving the workforce, but the most common approach is that it is based on a proportion of minimum or average earnings. This approach would clearly have a cost implication. However, if Australia and New Zealand wish to improve the overall

standard of living for women in retirement, it will be necessary to incur some financial costs in implementing policies to achieve this.

5.2 Superannuation Co-Contributions

In Australia, direct government contributions are currently limited to the co-contribution scheme and the LISC. As noted in section four, and in contrast to the New Zealand scheme, the major restriction on providing these contributions to carers is the requirement that the recipient be in the workforce. These schemes should be extended to include carers. The co-contribution could be extended to carers by removing the work requirement for carers that meet certain established criteria. The criteria could be aligned with the criteria currently existing for the Carer Payment or Carer Allowance, but extended to include the parents of young children. Extending the LISC to carers would require a more substantial change, as proposed in section 5.4 below, as it is based on rebating the tax paid by the fund on concessional contributions, which generally require a nexus to employment.

At the present time, the New Zealand government will make an annual 'member tax credit' contribution to the KiwiSaver account of a contributing member. The tax credit is paid annually to complying funds. At the present time, the member tax credit is NZ\$521.43 per annum, which is paid in full when members pay NZ\$1,042.86 into their KiwiSaver account on an annual basis. While the tax credit is available to those who are not in paid employment, unlike Australia, there are no concessions to assist low income earners in making their own contributions, either voluntarily or through an employment-based scheme. The New Zealand government could consider directly assisting lower income earners, either by lowering the co-contribution required for low income earners to gain the full member tax credit, or adopting the Low Income Superannuation Contribution approach of Australia, which rebates the tax paid on retirement savings contributions for low income earners. This rebate is then paid directly into the KiwiSaver fund to help meet the balance required to gain the member tax credit.

5.3 Extended Coverage of Mandatory Superannuation Contributions

In Australia, the extension of mandatory superannuation contributions to include workers who earn less than A\$450 per month would be particularly beneficial to those workers who rely on a number of low paid, casual jobs. Although the annual amount that would be contributed to superannuation is currently less than A\$500 (rising to A\$648 by 2020) this amount is similar in scale to the current government co-contribution or LISC. However, the implementation issue would be to ensure that there was no reduction in the take-home pay of these workers, who in most cases are unlikely to have any capacity to save. One solution would be to address the issue through the minimum wage however employers are likely to resist the resulting significant wage increase. Accordingly the change would need to be phased in, with some level of government subsidy required.

Extended coverage of mandatory superannuation contributions is less relevant in New Zealand. New Zealand does not have the exemption of coverage for lower income earners that is present in Australia. However, the issue that does remain in New Zealand is encouraging lower income earners to participate in the KiwiSaver scheme. Methods discussed in sections 5.1, 5.2, 5.4 and 5.5 are intended to assist with this issue.

5.4 Spousal Superannuation Splitting

In Australia, the current offset for contributions to a spouse's superannuation account is clearly ineffective. To be effective the rebate should be restructured to encourage higher contribution rates by increasing the income level at which the spouse qualifies for the offset; the maximum amount of contributions rebated and/or the amount of the rebate. However the offset was designed under the pre-2007 superannuation regime, accordingly other spousal splitting arrangements may be more effective.

The ability to split superannuation contributions between spouse accounts currently attracts no direct incentive, and is designed to be tax neutral. If the LISC was extended to apply to contributions transferred from a spouse account, this would place carers in a similar position to low income workers. Currently if a family is a typical 1.5 earner family, both would be covered by the superannuation guarantee levy with the secondary earner eligible for the LISC. If the family were a single income family with the capacity for the earner to split superannuation with the carer, the superannuation outcome would be similar at a minimal additional cost to the government.⁹⁴

At the present time in New Zealand there is no facility for an individual to split their KiwiSaver contributions with a spouse or partner. KiwiSaver accounts will be considered as joint relationship property when relationships end. Therefore, it could be argued that an equitable split of assets is likely to result at the point where a relationship terminates. However, in the event that either individual in a relationship would wish to maintain an independent financial situation, and minimise the potential for retirement savings to be diluted in the event that a relationship ends, spousal superannuation splitting is a practical solution. There would be no additional cost to the New Zealand government in the form of contributions and instead would offer greater flexibility to the current scheme and its members.

5.5 Contribution Caps

In Australia, maximum benefit limits exist to limit the amount of tax concessions that may be claimed for retirement saving. The frequent changes in the level of the caps has been criticised as a source of instability in the system, but the annual basis

94 Assume that the first family earns A\$120,000, split between the earners as A\$35,000/A\$85,000. The superannuation guarantee levy (at 9 per cent, after 15 per cent tax) would be A\$2,677.50/A\$6,502.50, with the secondary earner entitled to a LISC of A\$472.50. If the earner in the single income family earned A\$120,000 the superannuation guarantee contribution would be A\$9,180, which could be split on the same basis as the first family.

of these caps is unsympathetic to anyone with a “lumpy” income pattern, including self-employed persons as well as carers. Although a case could be made for a lifetime cap, this could encourage a person to roll forward contributions as a tax minimisation strategy if a person has an unusually high income early in their working life; which would increase the balance in the fund, and the compounding nature of the returns would have the effect of multiplying tax concessions in later years.

Accordingly adjustments to the caps should not be based on a lifetime cap but allow them to be rolled forward for each year that a person is a primary carer. The rollover period would need to allow for the fact that the transition back into full-time work can be lengthy, and for much of that time the family faces higher costs including childcare and schooling of the children. This could be linked to a system of carer credits with a carer credit also available in years that the cap is rolled forward.

Another option, linked to spousal contributions (discussed in 5.4), would be to allow concessional contributions over the cap to the sole earner in a single income family, on condition that the additional contributions were split to the spouse. This would clearly be skewed to families where the sole earner was on a high income, and would be a difficult proposal to sustain on the grounds of vertical equity.

No limits on superannuation contributions exist in New Zealand, as the maximum amount of tax concessions that may be claimed is relatively low. However, the tax concession is limited on an annual basis, that is, the matching co-contribution from the government is contingent on the employee making an individual financial contribution. A mechanism to ameliorate for those who have periods of time out of the workforce, whether through undertaking carer responsibilities, unemployment, illness, or other events, is to provide an opportunity to add contributions to KiwiSaver accounts, up to a maximum lifetime limit. That is, the annual government matching tax credit could be amended to be a lifetime limit, which would allow individuals to take advantage of periods in their working lives that would allow for retirement savings. While it is desirable for individuals to create saving patterns throughout their working lifetime, this proposed change recognises that this ideal is not always achievable for many individuals. It would also benefit the system by introducing greater flexibility and acknowledging the different circumstances of many workers.

5.6 Summary

This discussion assesses how well each policy tool may work in the Australian and New Zealand environments. While there are considerable differences in retirement savings policy in the two jurisdictions and different appetites for using the tax system to influence behaviour, each of the policy tools raised is likely to go some way to alleviating the disparities of retirement savings among men and women. Indeed, there is an argument to be made that adoption of the majority of the suggestions would provide an optimal outcome.

6 CONCLUSION

This article discusses the well-established issue of lower levels of retirement savings for women. There is a fundamental difference in the design of the retirement savings systems in each country as the Australian mandatory contribution component is based on earnings, but in both countries the capacity for voluntary savings is also related to current earnings. We acknowledge that any government support, whether through contributions or tax expenditures, will be more beneficial to families that have a greater capacity to save, and would thus breach principles of vertical equity. However this is a fundamental flaw in the design of retirement income systems that are based on the capacity to save, and principles of horizontal and gender equity that recognise the role of the carer should be invoked in this debate to ensure that carers are not further disadvantaged through the design of the system.

A number of policy suggestions are made with the intention of raising possible options that may go some way to alleviating the disparities of retirement savings between men and women. While the aim of the study was to suggest individual policy tools that may assist women in increasing their retirement savings, the tools that are discussed in the article are likely to be more effective if they are not adopted in isolation. For example, in New Zealand, a combination of carer credits or changes to the co-contribution model, plus introduction of superannuation splitting and lifetime contribution caps is likely to produce an optimal outcome.

In Australia the optimal approach would involve the extension of the existing co-contributions and LISC to carers, incorporating a mechanism based on splitting spousal contributions. The parameters of eligible carers would need to be defined, but should be consistent with the Carer Payment, with the inclusion of carers of young children. The exemption of low income earners should also be phased out, with net wages protected through the minimum wage system combined with employer subsidies.

What is apparent is that this issue is unlikely to disappear in the absence of deliberate policy tools to address the situation. Australia already has a gap of 77 per cent of retirement savings among men and women. New Zealand's gap is 25 per cent. New Zealand has the opportunity to take advantage of Australian experience and introduce policies to ensure that the problem does not grow further. However, Australia must also take deliberate action to address the problem.

Appendix 3A: The Gender Gap in Financial Security

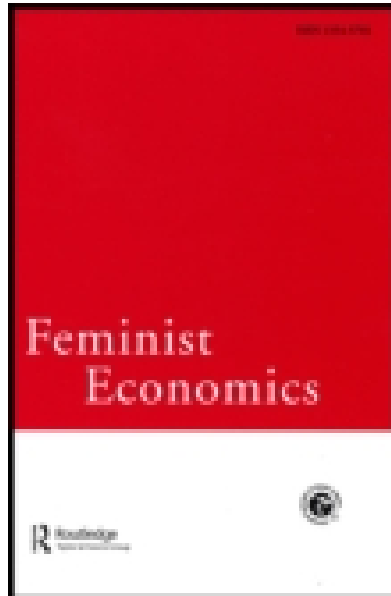
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The Gender Gap in Financial Security: What We Know and Don't Know about Australian Households

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THE GENDER GAP IN FINANCIAL SECURITY: WHAT WE KNOW AND DON'T KNOW ABOUT AUSTRALIAN HOUSEHOLDS

Siobhan Austen, Therese Jefferson, and Rachel Ong

ABSTRACT

This study investigates the gender wealth gap in Australia by examining differences in the net worth of households headed by single women and men, using data from the 2006 Household, Income and Labour Dynamics in Australia (HILDA) Survey. It demonstrates that the gender wealth gap is concentrated in particular types of assets, and differences in the *composition* of wealth, especially in high net worth households, are an important feature of the wealth gap in Australia. Using decomposition techniques within a quantile regression framework, the study explores the effects of individual characteristics of single male and female households on their wealth and finds that individual factors play a relatively small role in accounting for the large gender wealth gap at the top of the wealth distribution. Therefore, differences in the composition of men and women's wealth portfolios contribute to the gender wealth gap, and future research must account for these differences.

KEYWORDS

Gender analysis, wealth, assets, portfolio composition, financial security

JEL Codes: B54, D31

INTRODUCTION

Wealth is an important determinant of financial security. Accumulated assets can assist with smoothing consumption across the life cycle and provide a buffer against life's emergencies. These assets can generate current services such as accommodation; contribute income such as rent, interest, and dividends; provide collateral when credit is required; be converted to cash to support current consumption; and satisfy motivations to leave a bequest (Carmen Diana Deere and Cheryl R. Doss 2006). However, when Deere and Doss (2006) summarized international research in the field, they concluded that there is little evidence overall for the gender differences in wealth. Just four of the studies they identified utilized national-level data for the purposes of estimating the presence and size of a gender wealth gap and all were

ARTICLES

included in the same issue of *Feminist Economics* as Deere and Doss's review (John Gibson, Trinh Le, and Grant Scobie 2006; Lucie Schmidt and Purvi Sevak 2006; Tracey Warren 2006; Alexis Yamokoski and Lisa A. Keister 2006). Since Deere and Doss's (2006) review, two further studies on the gender wealth gap have been published: a Canadian study by Margaret Denton and Linda Boos (2007) and a German study by Eva Sierminska, Joachim R. Frick, and Markus M. Grabka (2010).¹

These studies suggest a high level of inequality and substantial cross-country differences in the distribution of wealth, reflecting, in part, the importance of formal and informal institutions governing inheritance, divorce, and retirement incomes. They also reveal a gender wealth gap favoring men in most countries. However, this evidence base is currently too small to make definitive conclusions on the size of the gender wealth gap or its sources.

We aim to improve the evidence base on the gender wealth gap by examining differences in the level of net worth (the net balance of total assets less total debt) of households headed by single Australian women and men using data from the Household, Income and Labour Dynamics in Australia (HILDA) Survey. We use these data to describe current patterns of asset holdings and then utilize decomposition techniques within a quantile regression framework to explore the importance of differences in the individual characteristics of single male and female households. Our regression analysis is to the approach adopted by Schmidt and Sevak (2006) in their study of gender wealth gaps in the United States, extended to utilize a quantile regression framework. Our results reveal that while several characteristics of Single Female Households (SFHs) negatively affect their wealth, individual factors play a relatively small role in accounting for the large gender wealth gap at the top of the wealth distribution. Among those with higher wealth, the gender wealth gap is linked with differences in the "returns" on various individual characteristics, such as age, and other factors not measured in this analysis. This finding indicates a need for further research into the factors that contribute to observed differences in the composition and size of men and women's wealth portfolios.

PREVIOUS STUDIES OF THE GENDER WEALTH GAP IN DEVELOPED COUNTRY CONTEXTS

Using data on non-pension wealth, Schmidt and Sevak (2006) identified a large disparity between the wealth of couples as compared to single households as well as similarities in the mean wealth of single men and women at all but the lowest quartile of the wealth distribution. However, their group of single households included widows and widowers, and once they accounted for the different characteristics of male and female households, a "strong and significant gender gap" in wealth became apparent and was

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particularly large in the top quartile of single households (Schmidt and Sevak 2006: 152). Yamokoski and Keister (2006) also investigated non-pension wealth of US men and women aged 36 to 43 and found an advantage favoring couples over single households. In contrast to Schmidt and Sevak's findings, Yamokoski and Keister's results indicated that the median non-pension wealth of single men and women was similar once their different socioeconomic characteristics were taken in account.

Warren's (2006) contribution focused on the United Kingdom and included data on pension wealth. She found that women's relatively low pension assets accounted for a large part of the observed gender wealth gap favoring men. Analysis of wealth holdings in New Zealand revealed a substantial difference between the net worth of couples and single households (Gibson, Le, and Scobie 2006).

Denton and Boos's (2007) analysis of 1999 Canadian data revealed that a gender wealth gap persists once individual characteristics are taken into account and that differences in men's and women's income, labor market participation, age, marital status, and returns to education contribute to an observed gender wealth gap favoring men. More recently, analysis of data from the German Socio-Economic Panel (SOEP) addressed the importance of the intrahousehold allocation of wealth (Sierminska, Frick, and Grabka 2010) and identified considerable gender wealth gaps within a range of household types except for households comprised of individuals who are widowed or had never married. The gender wealth gap was found to be "particularly large" in couple households (Sierminska, Frick, and Grabka 2010: 680). However, the decomposition of the wealth gap indicated that differences in the income and labor market characteristics of men and women accounted for most of the gender wealth gap.

THE AUSTRALIAN CONTEXT

To date, no Australian studies of the gender gap in net worth or its composition have been undertaken. Several previous studies of wealth in Australia have focused on the large inequalities in overall distribution. Analysis of 2002 data from the HILDA Survey reveals the wealthiest 10 percent of households account for 45 percent of total household wealth, while the bottom 50 percent of Australian households own less than 10 percent (Bruce Heady, Gary Marks, and Mark Wooden 2005: 159). There are also correlations between household wealth and a variety of socioeconomic characteristics of household members: "The wealthiest households have male Australian born 'heads' with parents from high status backgrounds, and wealth tends to peak at around age 55 years" (Headey, Marks, and Wooden 2005: 169). Later analysis of HILDA data from 2002–6 shows that the wealth of Australian households increased without substantial changes in the level of total inequality (Roger Wilkins, Dianna Warren, and Markus

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Hahn 2009). Patric H. Hendershott, Rachel Ong, Gavin A. Wood, and Paul Flatau (2009) used the same data source to identify the importance of homeownership and superannuation to the net wealth position of Australian households.

Some Australian studies have examined the gendered aspects of particular types of wealth. Using confidential data from the Australian Bureau of Statistics 2005–6 Survey of Income and Housing, George Rothman and David Tellis (2008) found women's pension account balances (known in Australia as superannuation) were approximately 60 percent of men's. Therese Jefferson and Alison Preston (2005) identified how women's lower average earnings and fewer years in paid employment combined to reduce women's lifetime earnings and, consequently, their superannuation balances. Other gendered studies of Australian wealth have focused on housing wealth and the distribution of assets on divorce. For example, Susan J. Smith (1990) reported links between housing wealth, income, and gender. Grania Sheehan and Jody Hughes (2001) showed that women's financial outcomes following divorce are generally worse than men's (see also Grania Sheehan, April Chrzanowski, and John Dewar [2008]).

The attention given to superannuation accumulations reflects Australia's approach to retirement incomes, whereby employers pay an amount equivalent to 9 percent of wages to their employees' superannuation accounts. Employees are able to make additional contributions to these accounts, which are tax privileged and particularly attractive to middle- and high-income earners. The tax concessions and the proportionality between employer contributions and workers' current earnings promote the accumulation of wealth by men rather than women (Rhonda Sharp and Siobhan Austen 2007).

A further relevant element of Australia's institutional environment is its legacy of divorce law. Prior to 2001, superannuation accounts (a form of private pension accumulation) were not formally considered an asset that could be apportioned between partners on divorce. Women who divorced before 2001 could not make a claim against their partner's (typically much larger) superannuation assets, with consequences for gender inequality between divorcees (Grania Sheehan 2002). Australia became a signatory to the United Nations Convention for the Elimination of Discrimination of all forms Against Women (CEDAW) in 1983, and this facilitated the equal division of property between divorcing men and women. However, divorce court rulings on the allocation of assets continue to take account of two key principles: the past contributions of each partner to matrimonial property and their likely future financial needs. The application and interaction of these principles is complicated. In some cases, women's lower financial contribution to assets such as superannuation accounts might mean that women continue to have a relatively lower claim to this asset. In other cases, the inclusion of superannuation in the definition of shared financial

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assets might lead to a larger pool of assets to be shared on the basis of past contributions but, due to the legal reasoning chain, reduce the assets allocated to divorcing women on the basis of future financial needs (Sheehan, Chrzanowski, and Dewar 2008). As such, it is possible that the allocation of housing as compared to business and financial assets between divorced men and women – and, thus, the composition of wealth held by single men and women – will continue to differ.

The gendered aspects of inheritance have been the subject of limited research in Australia, although several researchers have examined the inheritance of specific assets such as housing and land and their possible links with wealth distribution (Lisel A. O'Dwyer 2001; Jim McAllister and Barbara Geno 2004; Michael Gilding 2005; Jeanette A. Lawrence and Jacqueline J. Goodnow 2011). Gendered practices in this area are likely to be informal and may take the form of norms that favor bequests to sons over daughters. This has been recognized as a historical factor in the case of family farm inheritances (McAllister and Geno 2004). In Australia, the distribution of property on death is generally determined by the will of the deceased or, in the case of intestacy, laws prescribing the distribution of property. The formal regulatory framework is gender neutral in its treatment of children as beneficiaries in the absence of a will. There are no direct taxes on inherited wealth in any Australian states, and this may contribute to the emergence and persistence of inequalities in wealth due to intergenerational transfers and bequests. The lack of such a tax means that there are few data available to investigate for patterns of inherited wealth by gender.

DATA AND SAMPLE

This study makes use of wealth data from the 2006 HILDA wealth module to investigate gender differences in the total value of the wealth portfolios of single Australian households, the diversification of their asset and debt portfolios, and the factors that might contribute to a gender gap in wealth. HILDA began in 2001 as a large nationally representative panel survey, which each year collects data on the sociodemographic characteristics, education, labor market history, income, and geographic location of its participants (Nicole Watson and Mark Wooden 2002). Special modules of the survey, in 2002, 2006, and 2010 (which was not available for analysis at the time of this study), collected an extensive range of self-reported data on the assets and debts of Australian households. The modules measure assets in the form of the primary home, other property, superannuation, business, equity and cash investments, bank accounts, trust funds, cash-redeemable life insurance, vehicles, and collectibles. The modules also measure the key categories of debt, including debt secured against the primary home, other property and business, as well as the Higher Education Contribution Scheme (HECS), Australia's tertiary education loan scheme,² and a range of financial

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debts (such as credit card loans, car loans, hire purchase agreements, personal loans, and overdue bills). In our study, we take into account all of the above asset and debt types when measuring net worth, which we define as the net balance of total assets less total debt.

Data from the HILDA wealth modules have been used to generate broadly similar estimates of the aggregate value of household net worth as the data collections of the Australian Bureau of Statistics (ABS; [Paul Bloxham and Thomas Betts 2009](#)). However, the HILDA wealth modules do suffer some limitations. First, due to non-response from some interviewees, the modules include asset and debt values imputed by statisticians (see [Clinton Hayes and Nicole Watson \[2009\]](#)). Among all the heads of single households in the 2006 wealth module, 18 percent did not respond fully to the asset and/or debt questions.

The representativeness of the HILDA Survey has also been affected by attrition over time. When the 2006 HILDA data was collected, 28 percent of the original (nationally representative) HILDA sample had been lost, and the loss was not random (Nicole Watson and Mark Wooden 2010). To counteract this loss of representativeness, HILDA's statisticians "followed" members of the original wave 1 households over time, and over the life of the panel the sample was extended to include children born to or adopted by an original sample member, as well as any persons who joined the household of an original sample member ([Nicole Watson 2012](#)). To further bolster the representativeness of the data, we applied cross-sectional population weights for the 2006 data to our empirical analysis. We also compared the gender wealth gaps in the 2002 and 2006 wealth module data to ensure that loss of sample representativeness did not affect our results in a substantial way. Our comparisons indicate that the broad patterns by gender remain relatively unchanged between 2002 and 2006. Furthermore, that sample attrition affected households toward the bottom of the wealth distribution most, while the gender wealth gap is concentrated in the top of the distribution, suggests that the impact of attrition on our results will be minimal.

Finally, the wealth modules primarily comprise information on assets and debts that was collected from households rather than individuals. We have decided to limit our analysis to comparisons between SFHs and Single Male Households (SMHs) in this study. These are households in which a single adult lives alone or with dependent children. They account for a substantial and growing share of the Australian population, comprising 31 percent of all households in 2006, up from 23 percent in 1982.³ We do not attempt any analysis of gender wealth gaps in couple households because this would require assumptions about the division of wealth between the adults in the household.

The basic sample for this study is, thus, households in the 2006 HILDA wealth module with a single "head."⁴ We make a number of further restrictions to this sample. First, to focus on differences in net worth between

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adults, we exclude households where the oldest independent member of the household is under 15 years of age. We also exclude households where the household head is a widow or widower for reasons discussed below. Second, we exclude multiple income unit households (approximately 15 percent of all single households) because, as is the case in couple households, we cannot identify individual asset ownership in these household types.⁵ The final sample for analysis is 1,594 households: 824 SMHs and 770 SFHs. The sample includes individuals who have never married and are currently not in a de facto relationship (851 in total), as well as individuals who are divorced or separated and are currently neither married nor in a de facto relationship (743 in total).⁶ When population weights are applied, the sample represents 816,000 SMHs and 763,000 SFHs.

A final comment on how marital history affects our analysis is warranted. We excluded widows and widowers from the sample because the net worth of these households is likely to reflect the accumulations of a couple over an extended period of time (Sierminska, Frick, and Grabka 2010). As such, their net worth is likely to be substantially different from – and be affected by a different set of factors than – other single households. Gender differences in life expectancy result in a relatively large number of widows; thus, including widows and widowers in the sample would distort the data on differences in net worth between SFHs and SMHs.

It is also likely that some household heads who are divorced or separated will, due to wealth accumulation during previous marriages, have higher levels of net worth than their never-married counterparts. However, in this analysis, we retain divorced and separated household heads in our sample and account for differences in net worth associated with this factor using control variables in the regression analysis. We acknowledge that, if the pattern of remarriage differs between men and women, then our data on gender differences in net worth will be distorted. Given available information indicating that divorced men are more likely to remarry than divorced women and that remarriage is more likely to occur for individuals with high wealth, we anticipate that our data are likely to understate the gender wealth gap in Australian single households.⁷

METHOD

Our analysis comprises a descriptive analysis of gender wealth gaps and a decomposition analysis of the factors contributing to their existence. The descriptive analysis focuses on the median and average wealth levels of single households and how these differ with gender, age, and marital history. This is complemented by an analysis of differences in the composition of net worth across SFHs and SMHs and a distributional analysis of net worth, which is undertaken to identify the nature and extent of gender wealth gaps at different parts of the wealth distribution.

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The decomposition analysis of the observed gender gap within the sample uses the standard (Oaxaca–Blinder) decomposition methodology adjusted for a quantile regression framework. Use of this framework was motivated by data showing large inequalities in the distribution of wealth across single Australian households (as summarized in the following results). A standard OLS decomposition, which relies on estimates of the relationship between characteristics and net worth at mean values, would be ineffective in uncovering the role of differences in the characteristics of SMHs and SFHs at different parts of the net worth distribution.

Our method is expressed algebraically as follows:

$$\overline{NW}_q^m - \overline{NW}_q^f = [\beta_q^m(X_q^m - X_q^f)] + [(\beta_q^m - \beta_q^f)X_q^f]$$

where \overline{NW} equals predicted net worth, q represents 25th, 50th, 75th, or 90th quantile, m and f represent SMHs and SFHs respectively, and β represents the coefficients from a regression analysis of the importance of the set of X explanatory individual characteristics potentially relevant to household wealth (including measures of marital history, age, parenting roles, education, earnings, and labor market experience). The equation separates the predicted percentile q net worth gap of SMHs and SFHs ($\overline{NW}_q^m - \overline{NW}_q^f$) into two key components. The first component, $[(\beta_q^m - \beta_q^f)X_q^f]$, is the net worth gap at percentile q attributable to differences in the measured individual characteristics of the households at this point in the net worth distribution. This effect is evaluated using the regression coefficients β_q^m . The second component, $[(\beta_q^m - \beta_q^f)X_q^f]$, is the net worth gap at percentile q attributable to the different relationships between net worth and the various measured individual characteristics of the two household types (evaluated in this case at the values of the SFHs' characteristics at the relevant percentile). By adjusting the Oaxaca–Blinder approach for the quantile regression framework, the exercise is undertaken across the net worth distribution, utilizing the explanatory variables and coefficients in the quantile regressions (rather than at the mean values for the whole distribution, which is the standard case). The analysis is performed using the `rqdeco` command from STATA (Blaise Melly 2007).⁸

RESULTS

Descriptive statistics on the gender wealth gap among single Australian households

The results of our descriptive analysis of the gaps in the net worth across all SFHs and SMHs are summarized in Tables 1 and 2 (and Figure 1 in

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Table 1 Net worth and gender wealth gap in single Australian households, 2006

	Median wealth holding (AUD'000)			Mean wealth holding (AUD'000)		Gender gap (SMH-SFH) (AUD'000)	Gender gap ratio (SFH/SMH)	Portfolio composition (% of net worth)		Participation rate (% of households with wealth)	
	SFH	SMH	SFH	SFH	SMH			SFH	SMH	SFH	SMH
Primary home	0	0	127.5	98	26.6	-29.5	1.301	48.4	32.6	44.1	40.2
Other property	0	0	50.8	26.6	67.2	-24.2	1.910	19.3	8.8	10.4	10.3
Superannuation	8.7	15	42.4	31.8	77.4	24.8	0.631	16.1	22.3	73.8	78.9
Business	0	0	10.8	31.8	301	21	0.340	4.1	10.6	4.3	7.6
Other ^a	9	13.4	31.8	263.2	37.8	45.6	0.411	12.1	25.7	97.2	94.9
Net worth	81	102	263.2	301			0.874	100.0	100.0		

Note: SFH refers to single female household, and SMH refers to single male household.

^aOther assets comprise financial instruments such as equity investments, cash investments, bank accounts, trust funds and redeemable life insurance, vehicles, and collectibles. Other debt is the sum of credit card loans, HECS loans, car loans, hire purchase agreements, investment loans, personal loans from a bank/financial institution, loans from other lenders, loans from friends/relatives, and overdue personal bills.

Source: Authors' own calculations from the confidential unit record files of the 2006 HILDA Survey.

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Table 2 Net worth of single Australian households, by household type and quartile, 2006

	Mean (AUD'000)									
	Quartile									
	Q1		Q2		Q3		Q4		Total	
	SFH	SMH	SFH	SMH	SFH	SMH	SFH	SMH	SFH	SMH
Primary home	0	−1.8	6.2	6.5	134.7	107.7	394.1	297.3	127.5	98
Other property	0	0	0.8	2.4	17.7	12.7	196	97.7	50.8	26.6
Superannuation	2.5	5.1	15.6	21	34.5	60.8	124.2	192	42.4	67.2
Business	−0.2	0	0.2	0.3	1	3.9	44.7	131.9	10.8	31.8
Other ^a	−2.6	−7.6	13.8	17.5	25.6	42	96.1	273.6	31.8	77.4
Net worth	−0.2	−4.3	36.6	47.7	213.4	227.1	855.2	992.5	263.2	301
	Gender gap (SMH-SFH) (AUD'000)									
	Q1		Q2		Q3		Q4		Total	
Primary home	−1.8		0.3		−27		−96.8		−29.5	
Other property	0		1.6		−5		−98.3		−24.2	
Superannuation	2.6		5.4		26.3		67.8		24.8	
Business	0.2		0.1		2.9		87.2		21	
Other ^a	−5		3.7		16.4		177.5		45.6	
Net worth	−4.1		11.1		13.7		137.3		37.8	
	Gender gap ratio (SFH/SMH)									
Primary home	−		0.954		1.251		1.326		1.301	
Other property	−		0.333		1.394		2.006		1.910	
Superannuation	0.490		0.743		0.567		0.647		0.631	
Business	−		0.667		0.256		0.339		0.340	
Other ^a	−		0.789		0.610		0.351		0.411	
Net worth	−		0.767		0.940		0.862		0.874	

^aPlease refer to Table 1 footnote for a description of “Other.”

Source: Authors' own calculations from the confidential unit record files of the 2006 HILDA Survey.

this article's online supplementary files⁹). The data in Table 1 show that, on average, SMHs achieve a level of net worth that is almost AUD38,000 (or 14.4 percent) higher than SFHs. The figures in Table 2 show that, although the gender wealth gap favors SFHs in the lowest quartile of the wealth distribution, it favors SMHs by a large margin in the higher quartiles. Although not shown in Table 2, the gap reaches AUD137,300 in the top quartile and AUD952,000 at the 99th percentile.¹⁰ Thus, it is apparent that the *average* gender wealth gap that favors SMHs is largely produced

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by differences in the achievement of very high levels of wealth by SMHs and SFHs.

As is the case with most wealth distributions, the data in Table 2, together with the diagrammatic representation of the distribution of SMH and SFH net worth in Supplementary Figure 1, indicate that the wealth of single Australian households is unequal and largely concentrated at the top of the distribution. The net worth of low-quartile SFHs and SMHs is negative (by AUD200 and AUD4,300 respectively). However, top-quartile SFHs achieve, on average, a net worth of AUD855,200, while SMH net worth in the top quartile is close to AUD1 million.

The data in Table 1 highlight a number of other important features of the distribution of wealth. First, primary home assets are a very important part of the wealth portfolios of SFHs (representing, on average, 48.4 percent of total SFH net worth, as compared to 32.6 percent for SMHs). Second, financial instruments and business assets are relatively insignificant in the wealth portfolios of SFHs (business assets account, on average, for only 4.1 percent of the net worth of SFHs, as compared to 10.6 percent of the net worth of SMHs). Third, the gender wealth gap favoring SMHs is mainly associated with non-property assets. Specifically, the data identify a gender gap in property assets that, on average, favors SFHs. However, large gaps favor SMHs in the other asset groups – and these outweigh the gaps favoring SFHs in property assets. Thus, at mean values, if we count only housing assets, the gender gap favors women by 30 percent. Including other property in the measure of net worth increases this gap by 13 percentage points, to 43 percent. However, the inclusion of superannuation, business, and financial assets shift the gap in favor of SMHs by 28.0, 11.5, and 16.0 percentage points, respectively.

It is important to note that the relationship between the gender wealth gap at mean values and the different components of wealth are heavily affected by the wealth characteristics of top-quartile SMHs and SFHs. The data for top-quartile households in Table 2 show that if we count only housing assets, the gender wealth gap favors women by 32 percent. Including other property in the measure of net worth increases this gap by 17 percentage points, to 49 percent. However, the inclusion of superannuation shifts the gap in favor of SMHs by 27.7 percentage points, while business and financial assets shift the gap in favor of SMHs by 16.1 and 19.4 percentage points, respectively. In contrast, in the second quartile, primary home assets favor SMHs by 5 percent. Including other property in the measure of net worth increases the gender wealth gap favoring SMHs to 21.5 percent. Superannuation, business, and other business assets also favor SMHs but have a relatively small impact on the gender wealth gap. Thus, it is apparent that the *average* gender wealth gap that favors SMHs is not simply the product of differences in the representation of SMHs and SFHs in the group of high net worth households. Differences in the composition of the wealth portfolios of

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top-quartile SFHs and SMHs are also important in the determination of the overall gender wealth gap. It is also important to recall that, in Australia, remarriage rates following divorce are higher for men and for high net worth individuals. As a result, our results, which are based on a sample of single men and women, are likely to understate both the average gender wealth gap and the size of gender wealth gap in the upper portion of the wealth distribution.

Tables 3 and 4 provide insights to patterns in the level and types of wealth across different single households. Table 3 compares households headed by people who have never married with those headed by single people who are divorced or separated. The data show that a gender gap in average wealth favoring SMHs exists in each subgroup (20 percent in the group of single and never-married people, and 19.2 percent in the group who were separated or divorced). However, the gap in median wealth between divorced or separated SFHs and SMHs is relatively small, 5.2 percent, while the gap in median wealth between never married SFHs and SMHs is particularly large at 55.9 percent. This reflects a relatively high rate of growth in the net worth of never-married SMHs as we move from the bottom percentiles to the median. For never-married SMHs, net worth rises from AUD5,000 in the 5th percentile to AUD63,500 in the 50th percentile. For never-married SFHs, net worth rises from AUD9,800 in the 5th percentile to AUD28,000 in the 50th percentile.

The data in Table 3 also indicate that the average wealth of separated or divorced people is much higher than that of people who have never married (108.4 percent higher in SFHs and 106.4 percent in SMHs). The composition of the wealth portfolios of the two groups also differs. Property assets account for a relatively large share of the total wealth of divorced or separated SFHs. Superannuation is more important for women who have never married and for both SMH groups.

Table 4 compares single households in three age groups: 15–34 years, 35–54 years, and 55+ years. The data reveal that age-related differences in wealth are a major source of total wealth inequality. Among SFHs, average net worth climbs by 537 percent between age groups 15–34 years and 55+ years; the difference is 338 percent for SMHs. The data also show that the gender wealth gap varies across the age groups. A relatively large gap (of 45.3 percent) favors SMHs in the youngest group, a small gap (0.5 percent) favors SFHs in the middle age group, and a gender wealth gap of 30.3 percent favors SMHs in the older age group. The greater importance of property assets to SFH, as compared to SMH, wealth is evident in each age group. Similarly, business and other assets play a relatively minor role for SFH wealth in each age group. Primary home assets appear to be particularly important to SFH wealth in the oldest age group, accounting for 52.8 percent of their total net worth.

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Table 3 Net worth of single Australian households, by household type and marital status, 2006

	Median (AUD'000)				Mean (AUD'000)				Gender gap (SMH-SFH) (AUD'000)				Gender ratio (SFH/SMH)			
	Single never married		Separated or divorced		Single never married		Separated or divorced		Single never married		Separated or divorced		Single never married		Separated or divorced	
	SFH	SMH	SFH	SMH	SFH	SMH	SFH	SMH	SMH-SFH	SMH-SFH	SMH-SFH	SMH-SFH	SFH/SMH	SFH/SMH	SFH/SMH	SFH/SMH
Primary home	0	0	93	0	76.3	78	176.4	128.5	1.7	-47.9	0.978	1.373	0.978	1.373	0.978	1.373
Other property	0	0	0	0	26.2	18	74.2	39.8	-8.2	-34.4	1.456	1.864	1.456	1.864	1.456	1.864
Superannuation	7.5	15	10	20	40.4	52.1	44.3	90.1	11.7	45.8	0.775	0.492	0.775	0.492	0.775	0.492
Business	0	0	0	0	3.6	8.8	17.7	66.8	5.2	49.1	0.409	0.265	0.409	0.265	0.409	0.265
Other ^a	6.0	10.9	12.1	15.5	22.9	54.8	40.3	111.7	31.9	71.4	0.418	0.361	0.418	0.361	0.418	0.361
Net worth	28	63.5	188.7	198	169.3	211.7	352.9	436.9	42.4	84.0	0.800	0.808	0.800	0.808	0.800	0.808

^aPlease refer to Table 1 footnote for a description of "Other."

Source: Authors' own calculations from the confidential unit record files of the 2006 HILDA Survey.

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Table 4 Net worth of single Australian households, by household type and age band, 2006

	Median (AUD'000)						Mean (AUD'000)						Gender gap (SMH-SFH) (AUD'000)						Gender gap ratio (SFH/SMH)					
	15-34 yrs		35-54 yrs		55+ yrs		15-34 yrs		35-54 yrs		55+ yrs		15-34 yrs		35-54 yrs		55+ yrs		15-34 yrs		35-54 yrs		55+ yrs	
	SFH	SMH	SFH	SMH	SFH	SMH	SFH	SMH	SFH	SMH	SFH	SMH	SFH	SMH	SFH	SMH	SFH	SMH	SFH	SMH	SFH	SMH	SFH	SMH
Primary home	0	0	72	0	183	165	29	31.6	151.4	102.7	219.8	187.7	2.6	-48.7	-32.1	0.918	1.474	1.171						
Other property	0	0	0	0	0	0	10.2	8	86.9	24.6	38.5	58.1	-2.2	-62.3	19.6	1.275	3.533	0.663						
Superannuation	4.8	10	21	40	0	0	12.4	30.8	57.3	82.6	55.8	92.2	18.4	25.3	36.4	0.403	0.694	0.605						
Business	0	0	0	0	0	0	4	26.6	4.8	25.7	31.8	50.8	22.6	20.9	19	0.150	0.187	0.626						
Other ^a	2.6	6.4	12.4	13.4	20	33.6	9.6	22.2	27.8	91	70.4	133.7	12.6	63.2	63.3	0.432	0.305	0.527						
Net worth	10.2	28	181	179.3	258.4	323.2	65.3	119.4	328.2	326.7	416.3	522.5	54.1	-1.5	106.2	0.547	1.005	0.797						

^aPlease refer to Table 1 footnote for a description of “Other.”
Source: Authors’ own calculations from the confidential unit record files of the 2006 HILDA Survey.

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Decomposition of the gender wealth gap among single Australian households

Our decomposition analysis compares the importance of measured differences in the individual characteristics of SMHs and SFHs (such as differences in their age and marital status) on the gender wealth gap with the effect on this gap of similarly situated single women and men achieving different wealth outcomes. Reflecting the data presented above, we include measures of the household head's age and marital history to account for the possibility that these characteristics differ between the men and women in the sample – and that their impacts on wealth differ between SFHs and SMHs. We add further variables to capture the likely importance of labor market characteristics, such as employment history and current wages, for wealth outcomes (Jefferson and Preston 2005; Denton and Boos 2007; Sierminska, Frick, and Grabka 2010) and to take into account differences in the labor market experiences of Australian men and women, as well (Jefferson and Preston 2005). Other variables focus on education, due to possible links between knowledge of financial matters (Denton and Boos 2007; Sierminska, Frick, and Grabka 2010) and a positive gap in university qualifications favoring Australian women (Siobhan Austen and Fiona MacPhail 2011). A further set of variables target intergenerational influences. Following the practice of previous Australian studies of household wealth (Headey, Marks, and Wooden 2005; Hendershott et al. 2009), we use the occupational status of the respondent's father, parental marital history, and the number of siblings to proxy the likelihood of inheritance. Australian research on wealth has also identified wealth differences between Australian households according to language backgrounds (Headey, Marks, and Wooden 2005) and the presence of adult children (Tim Seelig, Alice Thompson, Terry Burke, Simon Pinnegar, Sean McNelis, and Alan Morris 2009). Our analysis also includes these variables. A summary of the characteristics of our sample and the definition of variables for our analysis is provided in online Supplementary Tables 1 and 2.

We start our investigation of the importance of specified individual characteristics to the wealth outcomes with data on differences in the measured characteristics of SFHs and SMHs. Several characteristics of SFHs are likely to boost their net worth in comparison to SMHs. First, SFHs feature a relatively high proportion of household heads who are either divorced or separated (50.8 as compared to 38.7 percent of SMHs). Second, SFHs are, on average, slightly older than their male counterparts (by about six months). Third, the proportion of household heads of SFHs with a bachelor's degree is relatively high (27.8 as compared to 19.3 percent of SMHs – although this pattern reverses for other post-school qualifications). However, several other characteristics of SFHs are likely to contribute to lower net worth

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compared with SMHs. First, parenthood is more prevalent in the SFHs, with 32 percent of SFHs having a child under the age of 15 years, compared with 17 percent of SMHs. Second, the average annual earnings of SFHs are 32.3 percent lower than SHMs. Third, the proportion of time spent in paid work since leaving full-time education is relatively low for SFHs (67.6 percent as compared to 82 percent for SMHs).

Our next step is to examine the relationship between the measured characteristics of SMHs and SFHs and their wealth. We conduct this analysis by estimating quantile regression models of net worth for each household type. Table 5 presents the results and reveals that being 55 years of age or older is the only variable that has an effect on wealth that is both statistically significant in each household type *and* differs significantly between SFHs and SMHs in each part of the wealth distribution. Across the distribution, being over 55 (rather than under 35 years of age) has a positive effect on both SMH and SFH wealth. However, this effect is larger in SMHs than SFHs (for example, lifting average wealth by AUD821,800 in SMHs as compared to AUD625,800 in SFHs at 90th percentile values).

The results indicate that at median values (but not in other parts of the wealth distribution), a number of other variables have different effects on the wealth of SFHs than they do on SMH wealth. First, household earnings and bachelor degree qualifications have a larger positive impact on SFH wealth than SMH wealth (this pattern also applies in the other quartiles, but the difference is not always statistically significant). Second, the presence of children under 25 years old has a negative impact on SMH wealth but is not a statistically significant source of difference in SFH wealth. Third, having more siblings negatively affects the wealth of SFHs but not SMHs (a similar pattern applies at 75th percentile values). Fourth, recent separation is positively correlated with SFH wealth, while the wealth levels of recently separated SMHs and those who have never married are similar. In SMHs, individuals who have been separated for more than one year or have recently divorced achieve higher wealth.

The covariates that are similar across the SFH and SMH regressions follow a fairly predictable pattern. Age has a strong positive impact of the net worth of each household type, demonstrating that time is a key factor in the accumulation of assets and the paying down of debts. Current earnings also have a positive effect that is large in magnitude on net worth for both SFH and SMH in most parts of the wealth distribution, demonstrating a clear link between labor market outcomes and net worth. A positive impact of post-school qualifications on net worth is also apparent at 50th percentile values and above. In contrast, the results in Table 4 generally indicate that the presence of children in single households has a negative effect on wealth. Compared to their counterparts without children, SFHs with adult children (ages 25+) have relatively low wealth. These effects also apply in SMHs at 50th and 75th percentile values. As noted above, at 50th percentile values,

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Table 5 Quantile regression results, SFHs and SMHs, 2006

Explanatory variables	25th percentile		50th percentile		75th percentile		90th percentile	
	SFH	SMH	SFH	SMH	SFH	SMH	SFH	SMH
	Coef. (std. error)	Coef. (std. error)	Coef. (std. error)	Coef. (std. error)	Coef. (std. error)	Coef. (std. error)	Coef. (std. error)	Coef. (std. error)
Recently separated (within last year)	0.391*** (0.133)	-0.102 (0.167)	0.758*** (0.287)	0.076 (0.196)	1.554*** (0.352)	0.752 (0.554)	2.379*** (0.884)	3.541 (2.737)
Separated more than one year ago	0.272** (0.111)	0.109 (0.147)	0.004 (0.247)	1.134*** (0.173)	-0.479* (0.282)	1.687*** (0.456)	2.518*** (0.618)	2.680 (1.810)
Recently divorced (within last year)	0.208* (0.117)	-0.154 (0.178)	0.051 (0.266)	0.558*** (0.194)	0.039 (0.277)	0.858* (0.481)	-0.019 (0.559)	-1.282 (2.088)
Divorced more than one year ago	0.250*** (0.087)	-0.256** (0.129)	0.272 (0.193)	0.138 (0.138)	0.511** (0.220)	0.200 (0.373)	0.919* (0.505)	-0.097 (1.485)
Separated or divorced from multiple marriages	-0.137 (0.088)	0.063 (0.139)	-0.629*** (0.212)	0.003 (0.156)	-0.871*** (0.260)	-1.297*** (0.392)	-0.821 (0.571)	2.233 (1.462)
Age 35-54 years	0.249*** (0.080)	0.397*** (0.092)	1.153*** (0.177)	1.190*** (0.107)	2.178*** (0.191)	2.002*** (0.286)	2.932*** (0.403)	3.374*** (1.249)
Age 55+ years	0.649*** (0.095)	0.957*** (0.114)	2.810*** (0.227)	3.175*** (0.142)	4.359*** (0.280)	5.900*** (0.419)	6.258*** (0.644)	8.218*** (1.575)

(Continued)

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Table 5 Continued

Explanatory variables	25th percentile		50th percentile		75th percentile		90th percentile	
	SFH	SMH	SFH	SMH	SFH	SMH	SFH	SMH
	Coef. (std. error)	Coef. (std. error)	Coef. (std. error)	Coef. (std. error)	Coef. (std. error)	Coef. (std. error)	Coef. (std. error)	Coef. (std. error)
Has children aged 0–14 years	0.057 (0.075)	−0.049 (0.109)	0.093 (0.165)	−0.396*** (0.116)	0.281 (0.185)	−0.393 (0.316)	−0.019 (0.418)	−0.940 (1.360)
Has children aged 15–24 years	0.087 (0.079)	0.017 (0.120)	0.258 (0.187)	−0.306** (0.126)	−0.027 (0.213)	−0.588* (0.326)	0.309 (0.488)	0.430 (1.237)
Has children aged 25+ years	−0.247*** (0.087)	0.018 (0.127)	−0.630*** (0.200)	−0.647*** (0.148)	−0.344 (0.251)	−0.730* (0.426)	−1.289** (0.566)	−1.653 (1.587)
Has disability	−0.021 (0.061)	−0.014 (0.078)	0.127 (0.147)	−0.032 (0.099)	0.167 (0.177)	−0.143 (0.277)	0.622 (0.410)	−0.280 (1.170)
Major city	−0.066 (0.057)	−0.024 (0.083)	0.032 (0.131)	0.042 (0.087)	0.011 (0.154)	0.429* (0.222)	0.206 (0.366)	−0.638 (0.916)
Annual household earnings/AUD100,000	1.114*** (0.108)	0.677*** (0.095)	2.033*** (0.288)	1.336*** (0.127)	2.258*** (0.358)	1.862*** (0.368)	2.711*** (0.918)	2.313 (1.617)
Percentage of working age years spent in paid work	0.004*** (0.001)	0.004*** (0.001)	0.007*** (0.003)	0.010*** (0.002)	0.004 (0.003)	0.009** (0.004)	0.011 (0.007)	0.018 (0.022)

(Continued)

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Table 5 Continued

English is first language	0.069 (0.105)	0.234 (0.161)	-0.276 (0.245)	0.252 (0.170)	-0.020 (0.269)	-0.266 (0.420)	0.585 (0.618)	-1.020 (1.720)
Bachelor degree or higher	0.084 (0.074)	-0.099 (0.114)	0.412** (0.174)	0.013 (0.124)	1.118*** (0.192)	0.942*** (0.315)	2.281*** (0.459)	3.118*** (1.228)
Other post-school qualification	0.072 (0.066)	0.089 (0.078)	0.188 (0.153)	0.304*** (0.088)	0.450*** (0.173)	0.666*** (0.235)	0.585 (0.389)	1.133 (0.944)
Whether father was a manager or professional	-0.012 (0.058)	0.038 (0.081)	-0.036 (0.137)	0.005 (0.090)	-0.028 (0.158)	0.032 (0.237)	0.203 (0.360)	0.895 (1.005)
Whether parents ever separated or divorced	-0.039 (0.065)	-0.045 (0.084)	-0.009 (0.147)	-0.133 (0.098)	-0.005 (0.165)	0.008 (0.253)	0.006 (0.403)	0.533 (1.075)
Number of siblings	-0.021 (0.014)	0.000 (0.016)	-0.066** (0.031)	0.008 (0.019)	-0.157*** (0.036)	-0.021 (0.055)	-0.152*** (0.077)	-0.166 (0.198)
Constant	-0.460*** (0.147)	-0.738*** (0.212)	-0.339 (0.349)	-1.196*** (0.249)	0.064 (0.390)	-0.407 (0.657)	-0.399 (0.936)	1.556 (2.864)
Sample	816	761	816	761	816	761	816	761
Pseudo R^2	0.065	0.044	0.167	0.128	0.175	0.147	0.164	0.173

Notes: ***, **, * denote statistical significance at the 1, 5, and 10 percent levels, respectively. Shaded cells signify coefficients in SFH regression and SMH regression that are *not* significantly different at the 1, 5, or 10 percent level. Variables for age, earnings, number of working years and number of siblings are continuous while the rest are binary.

Source: Authors' own calculations using the 2006 HILDA Survey.

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the presence of younger children also reduces SMH wealth in comparison to childless households.

Some further findings in Table 5 are also noteworthy. First, the difference in the magnitude of the effect of age on SMH and SFH wealth implies that single women have a lower ability to accumulate wealth as they age compared with men with similar individual characteristics. We also find that current household earnings and education are more important for SFH wealth than they are for SMH wealth, at least in the lower half of the wealth distribution. In total, these results indicate that the accumulation of wealth by SFHs is relatively more dependent on education and earnings and less dependent on the time available for investments to mature.

A second finding is the positive correlation in our data between separation or divorce and SFH net worth. Previous Australian studies of the effects of marital dissolution, such as [Hendershott et al. \(2009\)](#), have identified a negative effect of divorce on individual wealth. [Yamokoski and Keister \(2006\)](#) also find that marital dissolution lowers the mean wealth of women with children. The pattern is most likely due to the fact that our comparator group is women and men who have never married, rather than individuals who remained married. It suggests that when marriage partnerships dissolve, women retain some of a couple's wealth "advantage" compared with individuals who have never married. Thus, we identify never-married women as a particularly disadvantaged group.

Our analysis also reveals a negative relationship between the presence of older (25+) children and net worth in SFHs and SMHs. This could indicate that the presence of children in a household can limit its ability to accumulate wealth. A number of other studies have produced similar results. For example, [James Banks, Richard Blundell, and Ian Preston \(1994\)](#) concluded that households will consume a greater share of lifetime resources when children are present relative to families with fewer children, all else being equal. Using US data from 1992, [John Karl Scholz and Ananth Seshadri \(2009\)](#) found that the ratio of net worth to lifetime income is highest for families with no children and falls monotonically with the number of children above two. Alfred [Michael Dockery \(2009\)](#) found that the net wealth of Australian married couples falls with each year that they have one of their children resident in the household.

It should be noted that the overall explanatory power of the model is relatively small. Similar to results commonly reported for wage equations, the "*R*-squared" of the estimation for men at the 50th percentile is 12.8 percent; it is 16.7 percent for women. This result could reflect the influence of socioeconomic and other factors (such as those related to portfolio composition) not captured in the model on the wealth outcomes of individuals.

The final step in our decomposition analysis identifies the contribution of gender differences in characteristics, as opposed to differences in *returns*

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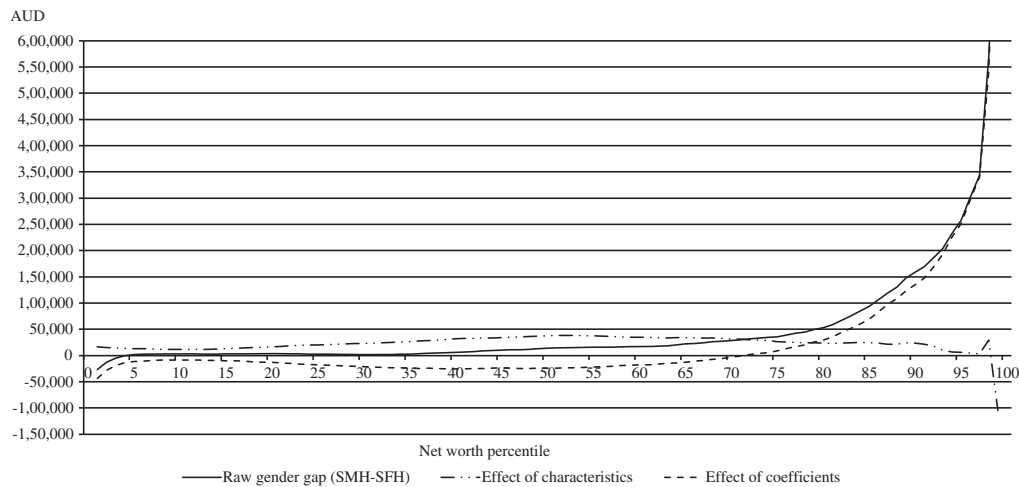


Figure 1 Decomposition of gender net worth gap into effects of characteristics and coefficients across the net worth distribution, 2006, Australian dollars

Note: The vertical axis has been truncated at AUD600,000. At the 99th percentile, the raw gap is in fact AUD952,000.

Source: Authors' own calculations using the 2006 HILDA Survey.

to characteristics, to the overall gap. The results are summarized in Figure 1 (and Table 3 in this article's online supplementary files) and show that the distribution of differences in the measured individual characteristics of SMHs and SFHs contribute to the gender wealth gap favoring men throughout. However, at approximately the 75th percentile, the "effects of coefficients" change from positive to negative. Below the 75th percentile, differences in the "effects of coefficients" (that is, differences in the "returns" on characteristics such as education and current earnings) tend to favor the relative wealth position of SFHs and play a relatively minor role in accounting for the gender wealth gap. However, in the top part of the wealth distribution, the large majority of the gender wealth gap favoring men is either due to the relatively poor returns to characteristics (such as age) experienced by SFHs, or a residual effect representing unobservable factors not included in our regression model.

At the 90th percentile, when all the returns to the characteristics of SFHs are set equal to those of SMHs, the estimated gender wealth gap favoring men (of AUD23,800) is only 15 percent of the actual gap (AUD158,700). Thus, differences in the returns on characteristics and/or factors *not* measured in our regression analysis contribute to an overwhelming 85 percent of the gender wealth gap at the top of the distribution. Differences in characteristics, such as differences in earnings, also contribute to the gender wealth gap, but by a relatively small amount.

A different pattern applies at the lower end of the wealth distribution. At the 25th percentile, differences in the returns on characteristics and/or

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factors *not* measured in our regression analysis act to lower the gender wealth gap from the levels that would obtain if the characteristics of SFHs and SMHs were “rewarded” in the same way. The different characteristics of SMHs, such as their higher earnings and longer length of time in the labor market, contribute substantially to the gender wealth gap in their favor.

DISCUSSION AND CONCLUSION

Single Australian households have a gender wealth gap that favors SMHs in each broad household type and in most age groups. The gap is concentrated at the top of the wealth distribution and largely associated with men’s greater holdings of superannuation, business, and financial assets. There are strong links between wealth, social recognition, and power ([Milan Z. Zafirovski 2000](#); [Michael Gilding 2004](#); [Sierminska, Frick, and Grabka 2010](#)), and possible links between wealth, bargaining power, and ongoing economic advantage ([John P. Harding, Stuart S. Rosenthal, and C. F. Sirmans 2003](#)). As such, our findings suggest that the gender gap in wealth is an important aspect of economic inequality in Australia that warrants continuing policy and research attention.

Our analysis shows that the gender gap in wealth favoring single Australian men is large (in absolute terms) in the upper quartile of the net worth distribution, relatively small in other parts of the wealth distribution, and reversed at the very lowest quartile. This reflects the concentration of wealth in a relatively small group of single households, with wealth levels close to zero for both SFHs and SMHs situated toward the bottom of the wealth distribution. Our results contrast with [Schmidt and Sevak’s \(2006\)](#) finding that the gender wealth gap in the US is largest in the lowest quartile of the wealth distribution. A likely explanation for this difference is the exclusion of widows or widowers from our analysis on the grounds that their wealth is likely to reflect the accumulations of a couple over an extended period of time, and thus be substantially higher than other single households. Schmidt and Sevak’s finding that a large gender wealth gap favoring men emerges at the top of the wealth distribution when characteristics, such as widowhood, are taken into account supports this analysis.

Our decomposition analysis within a quantile regression framework reveals that differences in the characteristics of SFHs and SMHs play a relatively minor role in explaining the gender wealth gap. Across the wealth distribution, the lower earnings and smaller length of time in paid work of SFH heads contribute to the gender wealth gap favoring SMHs. This replicates the findings of studies of the gender wealth gap in other country contexts ([Denton and Boss 2007](#); [Sierminska, Frick, and Grabka 2010](#)). The greater prevalence of children in SFHs also contributes to the gender wealth gap favoring men, due to a wealth penalty for parenthood.

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Our findings raise a number of questions for future research, including the important issue of factors that explain the gender wealth gap favoring SMHs, given that observed differences in the individual characteristics in our dataset play a relatively small role. The evidence in this paper suggests that the composition of men and women's wealth portfolios is a factor worthy of further investigation. The dominant role that property assets play in the wealth portfolios of SFHs implies they are more exposed to changes in rates of return on a single class of assets than their male counterparts. Furthermore, their relatively low rate of participation in financial investments beyond the primary home may limit the ability of SFHs to accumulate wealth. Ideally, future research into women's dependence on primary home assets will take account of the unique geographic, social, and emotional dimensions of these assets. Primary home assets are typically linked closely to other elements of women's "social capital," connections to family and friends, attachment to neighborhood, ontological security, and access to services ([Emma Baker and Selina Tually 2008](#)). Institutional aspects of men and women's asset portfolios, such as the long-term effects of asset distribution on divorce, are also worthy of further investigation. It is possible that greater allocations of housing assets may create disadvantages for women as they attempt to negotiate favorable outcomes for their financial and broader well-being.

Additional research into the reasons for women's relatively low level of involvement in other forms of wealth is also warranted. Some studies suggest that women are relatively risk averse in their investment strategies ([Vickie L. Bajtelsmit and Jack L. VanDerhei 1997](#); [Nancy Ammon Jianakoplos and Alexandra Bernasek 1998](#); [Alexandra Bernasek and Stephanie Schriff 2001](#)). However, the explanatory power of risk aversion is reduced when specific features of women's social context are taken into account, such as the influence of workplace peer groups and ease of access to relevant information ([Melanie Powell and David Ansic 1997](#); [Annika E. Sundén and Brian J. Surette 1998](#); [Marilyn Clark-Murphy and Paul Gerrans 2001](#); [Esther Duflo and Emmanuel Saez 2002](#)). Women's relative lack of social networks is a further element of their social context that may limit their capacity to build wealth by accessing a range of investment products ([Candida G. Brush, Nancy M. Carter, Patricia G. Greene, Myra M. Hart, and Elizabeth Gatewood 2002](#)).

As further HILDA wealth modules become available, the ability to explore links between portfolio composition, wealth accumulation, and the gender wealth gap will improve. The longitudinal nature of the HILDA data will, as more wealth modules are conducted, increase the potential for research on the determinants of household wealth that account for age and cohort effects. In this paper we have not been able to measure generational (or cohort) differences in the use and availability of different types of assets and debts. As further waves of the longitudinal

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data become available, the nature of these differences should be explored.

However, as it is currently designed, the HILDA data are not well equipped to support research into gender wealth gaps affecting couple households. This is an important limitation, as intrahousehold allocations have long been recognized as important determinants of women's economic well-being (Martin Browning 2000; Shelly Lundberg, Richard Startz, and Steven Stillman 2003; Schmidt and Sevak 2006). There is an important need for new Australian data on intrahousehold holdings of wealth and, ideally, this would be combined with qualitative data to provide insights into the reasons for and implications of observed patterns of intrahousehold asset distribution.

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NOTES

¹ A focused search of the phrase “gender wealth gap” in all fields of the EconLit database on March 2, 2012 yielded only six returns. Of these, two were focused on wealth as a factor in women’s access to education. Three of the remaining four were published in the special 2006 edition of *Feminist Economics* on gender and wealth and the fourth was by [Sierminska, Frick, and Grabka \(2010\)](#). A search for the terms “gender AND wealth AND distribution” generated 442 returns. However, of these 411 had only a minor link with the issue of gender and wealth and were usually included in the search results due to the use of a subject heading such as “income and wealth distribution.” A further sixteen were historical studies from pre-twentieth-century contexts. Three were written in languages other than English and were therefore difficult to classify. Of the remaining twelve articles, only seven were directly relevant and have been included in this paper’s discussion.

² HECS debt is measured at an individual (rather than household) basis. It is attributed to the student, rather than the parent. We do not include it in the measurement of the parent’s wealth.

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- ³ Authors' estimates using microdata from the 1982 and 2005–6 ABS Surveys of Income and Housing.
- ⁴ The “head” of the household is identified by the authors, based on the age of the people in the household (adults versus children) and their dependency relationships.
- ⁵ An income unit is a group of persons who share income. By focusing on single income units we exclude households where, for example, an adult child who is earning an income is present. We assume that dependent children do not own their own assets or debt, so the entire household reported wealth is attributed to the single adult.
- ⁶ In Australia, the term “de facto” refers to individuals who are living with another person but are not formally married.
- ⁷ We are grateful to a referee for identifying this pattern.
- ⁸ This command bootstraps the results on the quantile regression 100 times to estimate standard errors.
- ⁹ The online supplementary appendix is available at <http://dx.doi.org/10.1080/13545701.2014.911413>
- ¹⁰ This difference is not directly observable from the figure, as the vertical axis is truncated to highlight some of the differences at the lower percentiles.

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Appendix 3B: Recent Increases in the Gender Wealth Gap

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Exploring recent increases in the gender wealth gap among Australia's single households

Siobhan Austen, Rachel Ong, Sherry Bawa and Therese Jefferson
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Abstract

This study uses three wealth modules from the Household, Income and Labour Dynamics in Australia Survey to explore the gender wealth gap for single Australian households between 2002 and 2010. The findings indicate a significant gender wealth gap, which has increased over the 8 years explored. Most of the increase in the wealth gap was associated with a relatively rapid increase in the value of housing assets by single men over the study period. The findings of this study challenge a wider literature that tends to emphasise that men are more prepared to invest in 'risky' assets such as shares and that their higher wealth is due to these investment strategies. Instead, this study emphasises how, in the Australian context at least, it was higher growth rates in the value of housing assets owned by single men that improved their wealth position relative to single women over the last decade.

JEL Codes: D31, R219

Keywords

Assets, Australia, gender, portfolio composition, wealth

Introduction

Compared with studies on wages, gender wealth gaps are under-researched. Yet, differences in wages provide only a static snapshot of economic inequality, while an analysis

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of the distribution of wealth can better illustrate how economic inequality accumulates over the life course (Deere and Doss, 2006).

This article contributes to a small but growing international literature on links between gender and wealth. We use data from the Household, Income and Labour Dynamics in Australia (HILDA) Survey to examine changes in the wealth gap between single female and single male households (SMHs)¹ in Australia between 2002 and 2010. We establish the categories of wealth where the gender wealth gaps are greatest and review changes in these gaps over time and explore the extent to which changes in the relative wealth position of men and women are linked to changes in the composition of their portfolios. We also examine wealth gaps between men and women in different age groups and evaluate whether, during the study period, wealth outcomes changed in similar ways across younger and older groups of single men and women. Our findings suggest that the wealth accumulations of single men and women reflect not only different levels of wealth but also different portfolio compositions.

Background and previous research

A large and varied body of literature is concerned with gendered patterns of access to economic resources and their policy implications. Economic theories emphasise how access to resources influences the capacity of individuals to realise particular choices, not only with respect to consumption but also with respect to investment and future wealth accumulation. Inequities with respect to earning an income or accessing accumulated wealth are viewed as key barriers to a socially equitable economy. This perspective forms the basis of numerous studies of different average levels of income for different population groups defined by characteristics such as sex, age and race.

Nevertheless, despite the importance of accumulated wealth as a source of economic capacity, a search of the EconLit database reveals that fewer than 10 published articles have explored the extent and distribution of gender wealth gaps in developed countries in recent decades (Austen et al., 2014) and that only 1 article has examined changes in gendered patterns of wealth holding over time. Using data from the German Socio-Economic Panel, Sierminska et al. (2010) identified significant gender wealth gaps for a range of household types. The gender wealth gap was found to be ‘particularly large’ in couple households. However, most of this wealth gap could be accounted for by differences in the income and labour market characteristics of men and women. Owing to the absence of data on intra-household wealth allocations in other data collections, insights on gendered patterns of wealth distribution have tended to rely on analyses of single person households. The examination by Denton and Boos (2007) of data from the 1999 Canadian Survey of Financial Security identified differences in men’s and women’s income, labour market participation, age, marital status and returns to education as factors contributing to an observed gender wealth gap favouring men. Warren (2006) used the 1996 Family Resources Survey to investigate gender asset gaps in the United Kingdom. Her study included data on pension wealth and found that women’s relatively low pension assets accounted for a large part of the observed gender wealth gap favouring men. Using data from the 2000 National Longitudinal Survey of Youth, Yamokoski and Keister (2006) found that the median non-pension wealth

of single men and women was similar, once account was taken of their different socio-economic characteristics.

Reflecting data availability and significant policy changes affecting retirement income accumulation, Australian research has tended to focus specifically on superannuation accumulations (Jefferson, 2005). However, studies which explore wealth holdings in addition to superannuation suggest that particular groups of women, such as female sole parents, have low levels of wealth (Warren et al., 2001); that there is a gender wealth gap concentrated in the upper end of Australia's wealth distribution; and that single women's asset portfolios are, on average, less diversified than men's and dominated by their investment in a primary home (Austen et al., 2014).

The only existing study of *changes* in the gender wealth gap over time examined data for single person households in Sweden from 1978 to 1992 (Bolin and Palsson, 2001). It found that female wealth² increased relative to male wealth, and the explanation offered was that the risk profile of women's wealth portfolios was relatively low. The women in the study tended to invest more in relatively secure assets, such as bonds and bank accounts, compared with men. During the study period, there was a sharp decline in the value of assets held more commonly by men, such as shares (the Swedish stock exchange, like other exchanges around the world, experienced a sharp recession in 1987).

This study pursues similar research questions to those of Bolin and Palsson. That is, it is concerned first with the extent and direction of *changes* in the relative wealth position of men and women (in this case, Australian men and women between 2002 and 2010). It also investigates the possible connection between these changes and the nature of men's and women's wealth portfolios. By comparing the results with those of Bolin and Palsson, we can potentially achieve insights as to how gender wealth gaps can change under different economic circumstances and timeframes.

Data, sample and approach

This study utilises data from the HILDA Survey, which is conducted annually and collects data from a representative sample of households. Annual data collections include questions on socio-demographic characteristics, education, labour market history, income and location. In 2002, 2006 and 2010, the survey also included 'special modules' designed to measure wealth stored in the primary home, other property, superannuation, business, equity and cash investments, bank accounts, trust funds, cash redeemable life insurance, vehicles and collectibles. Key categories of debt, including debt secured against the primary home, other property, business, credit card and the Higher Education Contribution Scheme (HECS),³ were also included. These three waves of data form the basis of our study.

The comprehensive nature of the asset and debt measures in the HILDA special wealth modules is a key advantage for exploring the extent and composition of gender wealth gaps. However, the survey also suffers some limitations. Importantly, most asset and debt data are collected from households rather than individuals, and, as a result, a gender analysis of differences in household wealth can only be conducted using data on single female households (SFHs) and single male households (SMHs). Use of household level data prevents the attribution of assets and debts to different individuals such as would be

required to achieve a gender analysis of differences in wealth in couple households. This limitation cannot be overcome by assuming that assets and debts are pooled in couple households because the ownership of, and the benefits from, wealth is often not equal within the household (Denton and Boos, 2007).

The sample used in this study is thus restricted to households with a 'single head'. It is further restricted to households where the oldest independent adult member of the household is aged 15 years or over, to households with only one income unit⁴ and to households where the head is not a widow or widower. Multiple income unit households are excluded because, as is the case in couple households, it is not possible to identify who owns household assets in these household types. Widows and widowers are excluded to avoid distorting the analysis of single men's and women's ability to accumulate wealth. The net worth of single households comprising widows or widowers is likely to reflect the accumulations of a couple over an extended period of time (Sierminska et al., 2010). Their net worth is thus likely to be substantially different from – and be affected by a different set of factors to – that of other single households. However, with these exclusions in place, the final sample available for analysis in this study is still substantial: 975 SFHs and 864 SMHs in 2002, 998 SFHs and 917 SMHs in 2006, and 1009 SFHs and 910 SMHs in 2010.

The wealth holdings of SMHs and SFHs are measured by net worth, defined as total assets less total debt. These totals are derived from data on the various categories of assets and debts, namely, primary home, other property, superannuation, business and financial assets (i.e. equity and cash investments, bank accounts, trust funds and cash redeemable life insurance), and primary home, other property, business and other debt (i.e. credit card and HECS debt).

To assess the extent and direction of changes in the relative wealth position of SFHs and SMHs, we measure the gender wealth gap, calculated as the difference between SMHs' net worth and SFHs' net worth, expressed as a proportion of SFHs' net worth. We first report the gender wealth gap and compare the composition of SFH and SMH wealth for different age groups (less than 35 years, 35–55 years and more than 55 years) and household types (never-married and divorced/separated from a previous partner) and in each year. This enables us to take into account the differences in wealth accumulation across different stages of the life cycle and between individuals who have/have not been married. To take account of the skewed nature of the wealth distribution, we also report on changes in the median wealth of SFHs and SMHs and compare the gender wealth gap in the various quartiles of the wealth distribution.

Our exploration of the sources of change in the gender wealth gap between 2002 and 2010, including differences in portfolio composition, utilises decomposition techniques. These are designed to quantify, first, the impact of observed differences in the growth in various SMH and SFH assets on changes in the gender wealth gap. Our decomposition analysis also quantifies the effect of observed changes in the profile of single households (with regard to their age, wealth and composition) on the gender wealth gap between 2002 and 2010. The details of these techniques are outlined in section 'Decomposing changes in the gender wealth gap between 2002 and 2010', following a description of how the gender wealth gap changed over the 8-year period.

Table 1. Real^a asset and debt values of single adult Australian households, by household type, 2002–2010 (AUD'000).

Asset/debt	2002		2006		2010	
	SFH	SMH	SFH	SMH	SFH	SMH
Mean total assets ^b	209.2	231.2	252.3	290.2	262.4	311.1
Mean total debt	33.5	37.2	41.8	50.6	56.3	58.0
Mean net worth ^c	175.6	193.9	210.5	239.6	206.1	253.0
GWG ^d (measured at mean values)	10.4%		13.8%		22.8%	
Median total assets	85.6	91.0	62.3	94.1	82.5	119.1
Median total debt	2.3	2.4	3.5	5.5	1.9	3.5
Median net worth	54.9	65.1	49.5	67.4	54.8	93.2
GWG ^d (measured at median values)	18.5%		36.1%		70%	

GWG: gender wealth gap; SFH: single female household; SMH: single male household; CPI: consumer price index; HILDA: Household, Income and Labour Dynamics in Australia.

Source: Authors' own calculations from the confidentialised unit record files of the 2002, 2006 and 2010 HILDA Survey.

^aReal values have been calculated by deflating the mean values of assets and debt by using CPI taking 2002 as the base year.

^bThis is the sum of wealth stored in the primary home, other property, superannuation, business, financial instruments, vehicles and collectibles. The value of vehicles and collectibles combined comprises only around 3.5% of average asset values and so is not reported separately in the table.

^cGender difference is statistically significant (as measured by a *T* test of the difference in mean values) at the 1% level in each year.

^dGender wealth gap.

Changes in the gender wealth gap: 2002–2010

The HILDA data reveal a substantial gender wealth gap among single Australian households. As shown in Table 1, in 2010, the average net worth holdings of SMHs in Australia was AUD46,900 greater than SFHs, representing a gender wealth gap of 22.8%. The data also indicate that the gender disparity in wealth increased between 2002 and 2010, with the gender difference in average net worth increasing from AUD18,300 in 2002 to AUD29,100 in 2006 and to AUD46,900 in 2010 (a 156.3% increase). The gender wealth gap more than doubled from 10.4% in 2002 to 22.8% in 2010.

The gender wealth gap and the distribution of wealth

The data in Table 1 also highlight the inequality in the distribution of Australian wealth. Median SMH net worth in 2010 was AUD93,200, while the average net worth of SMHs was AUD253,000, indicating a large concentration of SMH wealth at the top of the wealth distribution. This finding is in line with those of a number of other Australian studies of wealth inequality (see Bloxham and Betts, 2009; Headey et al., 2005). Gender disparities remain apparent at the median values reported in Table 1. Furthermore, the gender wealth gap at median values increased from AUD10,200 in 2002 to AUD38,400 in 2010, and the gender wealth gap at these values increased from 18.5% to 70%.

Table 2. Real^a asset and debt values of single adult Australian households, by household type and quartile in the wealth distribution, 2002–2010 (\$'000).

Average net worth	2002			2006			2010		
	SFH	SMH	GWG ^b %	SFH	SMH	GWG ^b %	SFH	SMH	GWG ^b %
Quartile 1	–2.2	–2.3	–4.5	–6.4	–3.7	42.2	–3.8	–1.8	52.6
Quartile 2	21.4	29.9	39.7	19.6	31.4	60.2	22.8	47.1	106.6
Quartile 3	123.4	123.4	0	145.1	150.7	3.9	154.9	183.4	18.4
Quartile 4	562.7	626.7	11.4	684.3	781.5	14.2	651.8	785.7	20.5

GWG: gender wealth gap; SFH: single female household; SMH: single male household; HILDA, Household, Income and Labour Dynamics in Australia; CPI: consumer price index.

Source: Authors' own calculations from the confidentialised unit record files of the 2002, 2006 and 2010 HILDA Survey.

^aReal values have been calculated by deflating the mean values of assets and debt by using CPI taking 2002 as the base year.

^bThis is the sum of wealth stored in the primary home, other property, superannuation, business, financial instruments, vehicles and collectibles. The value of vehicles and collectibles combined comprises only around 3.5% of average asset values and so is not reported separately in the table.

Further insights into the unequal nature of wealth distribution in Australia are available from the data in Table 2 and Figure 1. These report the net worth of SMHs and SFHs according to their position in their respective wealth distributions. The very low net worth of many Australian single households is evident in this data (in each year close to 40% of SMHs and SFHs had negligible net worth), as is the very high net worth of top percentile households. Furthermore, the figures show that increases in wealth over 2002–2010 occurred primarily in top decile households. The households in the lowest quartile of the SFH wealth distribution in 2010 recorded, on average, a level of net worth that was AUD1600 lower (in real terms) than that recorded by their counterpart households in 2002. In comparison, the households in the top quartile of the SFH wealth distribution achieved a level of net worth in 2010 that was, on average, AUD89,100 higher than their counterpart households in 2002. The changes in wealth across SMHs followed a similar pattern with the average net worth of low quartile households increasing by only AUD500, while the increase recorded in the top quartile was AUD159,000.

The data also show that the gender differences in wealth favouring men are relatively large between high net worth SFHs and SMHs. In 2010, for example, the average net worth of the top quartile SMHs was AUD133,900 larger than the counterpart SFHs. At the median, the gender wealth gap was AUD17,911. Between 2002 and 2010, the gender wealth gap increased in favour of SMHs in all parts of the wealth distribution.

The gender wealth gap and age structure

A key component of wealth inequality is age-related difference in net worth. Individuals and households commonly accumulate wealth over the life course, and thus, the net worth of older people is typically substantially higher than that of younger people. The data in Table 3 summarise the asset and debt holdings of SMHs and SFHs in three broad groups based on the age of the household head: under 35 years, 35–55 years and over 55

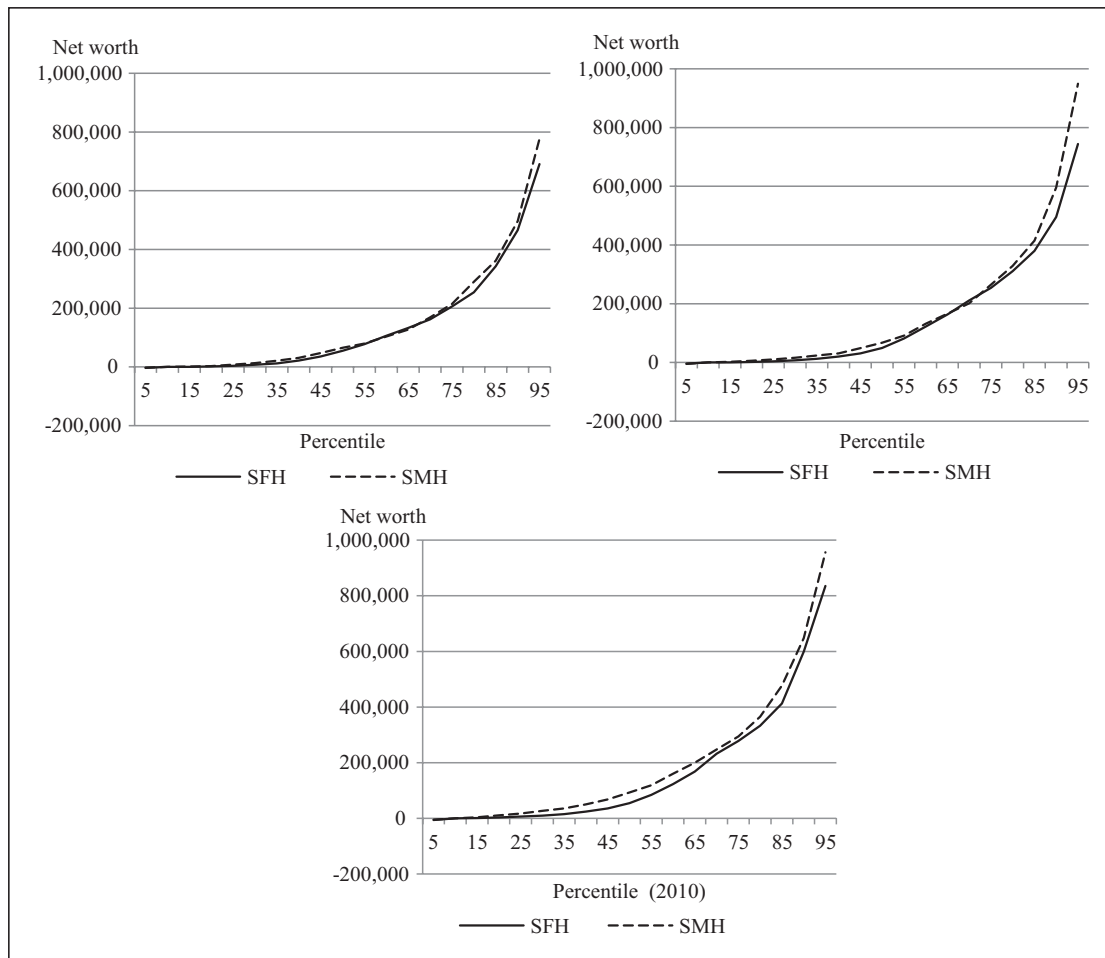


Figure 1. Net worth of single male and single female households, by percentile, 2002–2010.

HILDA: Household, Income and Labour Dynamics in Australia; SFH: single female household; SMH: single male household.

Source: Authors' own calculations from the confidentialised unit record files of the 2002, 2006 and 2010 HILDA Survey.

years. As expected, net worth is higher in older age groups. In 2010, for example, the average net worth of 'younger' SFHs was AUD63,500; for 'mid-age' (35–55 years) SFHs, average net worth was AUD212,700 and for 'older' SFHs, average net worth reached AUD410,000. Relatedly, debt–asset ratios fall with age. In 2010, the debt–asset ratio was 48.1% among 'younger' SFHs and 25.0% among 'mid-age' SFHs, but fell to 6.0% among 'older' SFHs.

Gender differences in net worth, measured at the mean, increased substantially in the 'younger' group of households between 2002 and 2010, rising from AUD9000 in 2002 to AUD56,700 in 2010. The gender wealth gap increased from 16% to 89% in this age group. In the 'mid-age' group, the average gender difference in net worth increased from AUD9100 in 2002 to AUD58,500 in 2010, with the gender wealth gap rising from 4% to 28%. However, in the 'older' age group, the gender difference in net worth fell from AUD45,500 to AUD10,000 between 2002 and 2010, with the gender wealth gap falling from 15.7% to 2.4%.

Table 3. Real^a asset and debt values of single adult Australian households, by household type and age group, 2002–2010 (AUD'000).

Age group	2002		2006		2010	
	SFH	SMH	SFH	SMH	SFH	SMH
<35 years						
Mean total assets ^b	85.5	103.3	91.7	128.6	122.4	165.7
Mean total debt	29.4	38.2	32.2	47.3	58.9	45.5
Mean net worth	56.1	65.1	59.5	81.2	63.5	120.2
GWG ^c	16%		36.5%		89.3%	
35–55 years						
Mean total assets	269.5	280.0	337.6	336.4	283.8	360.5
Mean total debt	46.6	48.0	63.3	61.3	71.0	89.3
Mean net worth	222.9	232.0	274.3	275.1	212.7	271.2
GWG ^c	4.1%		0.3%		27.5%	
>55 years						
Mean total assets	305.3	349.5	378.1	499.4	437.0	444.4
Mean total debt	16.4	15.0	18.3	35.2	26.9	24.3
Mean net worth	288.9	334.4	359.9	464.2	410.0	420.0
GWG ^c	15.7%		29.0%		2.4%	

GWG: gender wealth gap; SFH: single female household; SMH: single male household; HILDA, Household, Income and Labour Dynamics in Australia; CPI: consumer price index.

Source: Authors' own calculations from the confidentialised unit record files of the 2002, 2006 and 2010 HILDA Survey.

^aReal values have been calculated by deflating the mean values of assets and debt by using CPI taking 2002 as the base year.

^bThis is the sum of wealth stored in the primary home, other property, superannuation, business, financial instruments, vehicles and collectibles. The value of vehicles and collectibles combined comprises only around 3.5% of average asset values and so is not reported separately in the table.

^cGender difference is statistically significant (as measured by a *T* test of the difference in mean values) at the 1% level in each year.

The gender wealth gap and household type

Wealth inequality among single households can also arise from differences in the net worth of different types of single households, such as between households comprising individuals who have never married and those comprising individuals who are divorced or separated. Individuals in the latter group may have benefited from the greater ability of couple households to accumulate wealth, if they were able to retain a share of these benefits on divorce or separation. They are also likely to be older than the never-married individuals and have higher wealth as a result. Table 4 summarises the asset and debt holdings of SMHs and SFHs in the two household types. As anticipated, net worth is higher in separated or divorced households. In 2010, for example, the average net worth of separated/divorced SFHs was AUD286,900, while for never-married SFHs average net worth was only AUD138,800. For SMHs, these figures were, respectively, AUD347,900 and AUD205,600.

Table 4. Real^a asset and debt values of single adult Australian households, by household type and marital status, 2002–2010 (AUD'000).

Marital status	2002		2006		2010	
	SFH	SMH	SFH	SMH	SFH	SMH
Separated/divorced						
Mean total assets	255.9	282.4	345.7	409.2	342.4	403.1
Mean total debt	33.9	42.7	48.7	63.8	55.5	55.2
Mean net worth	221.9	239.7	297.1	345.3	286.9	347.9
GWG ^b	8.0%		16.2%		21.3%	
Never married						
Mean total assets	155.1	193.3	168.0	222.4	195.9	265.0
Mean total debt	33.1	33.2	35.7	43.1	57.1	59.4
Mean net worth	121.9	160.0	132.4	179.3	138.8	205.6
GWG ^b	31.2%		35.4%		48.1%	

GWG: gender wealth gap; SFH: single female household; SMH: single male household; HILDA, Household, Income and Labour Dynamics in Australia; CPI: consumer price index.

Source: Authors' own calculations from the confidentialised unit record files of the 2002, 2006 and 2010 HILDA Survey.

^aReal values have been calculated by deflating the mean values of assets and debt by using CPI taking 2002 as the base year.

^bThis is the sum of wealth stored in the primary home, other property, superannuation, business, financial instruments, vehicles and collectibles. The value of vehicles and collectibles combined comprises only around 3.5% of average asset values and so is not reported separately in the table.

Between 2002 and 2010, average net worth grew particularly strongly (by 45.1%) in the group of separated/divorced SMHs. Average separated/divorced SFH net worth grew by 29.3%, average never-married SFH net worth increased by 13.9% and average never-married SMH net worth rose by 28.5%. As a result of these different trends, and as shown in Table 4, the gender difference in net worth, measured at the mean, increased in both groups of households between 2002 and 2010. The gender wealth gap increased from 8.0% to 21.3% in the group of separated/divorced households and from 31.2% to 48.1% in the group of never-married households.

Gender wealth gaps and portfolio composition

As Bolin and Palsson (2001) suggest, further insights into gender-based wealth inequality can be gained by comparing the composition of the wealth portfolios of SMHs and SFHs. The data in Table 5 enable such a comparison, and this reveals the greater importance of primary home assets in the asset portfolios of SFHs across the survey period and in each age group. In the group of 'mid-age' SFHs, for example, primary home assets comprised 52.6% of total assets in 2010. The comparative figure for SMHs was lower at 42.3%. In part, these gender differences reflect the relatively small level of other assets in SFHs, especially business assets and financial instruments. In 2010, business assets accounted for less than 2% of the total assets held by SFHs in each age group, whereas they accounted for close to 5% of the assets of SMHs.

Table 5. Composition of real^a assets and debts of single adult Australian households, by household type and age group, 2002 and 2010 (per cent by column).

	SFH						SMH					
	<35 years		35–55 years		55+ years		<35 years		35–55 years		55+ years	
	2002	2010	2002	2010	2002	2010	2002	2010	2002	2010	2002	2010
Assets												
Primary home	45.3	44.4	51.4	52.6	53.3	52.7	40.4	41.2	38.3	42.3	33.7	42.8
Other property	15.3	23.1	10.4	14.0	5.8	10.7	8.2	19.0	12.7	15.5	6.1	11.1
Superannuation	20.1	10.3	18.1	17.0	12.3	16.9	16.6	11.8	23.9	19.6	16.9	17.5
Business assets	0.4	0.7	2.3	1.7	8.6	1.1	5.0	4.6	4.5	4.6	14.6	4.8
Financial instruments ^b	10.2	16.3	12.6	11.1	16.9	16.4	20.3	16.1	15.5	12.6	23.4	20.7
Total assets ^c	100	100	100	100	100	100	100	100	100	100	100	100
Debt												
Primary home	69.9	56.1	71.8	64.6	61.5	65.6	63.2	55.7	59.9	61.5	34.7	42.4
Other property	7.9	30.2	14.0	19.6	16.9	28.6	12.9	21.1	20.6	22.2	5.5	36.3
Business	0.0	0.0	1.5	4.2	2.6	0.2	4.0	1.0	3.6	2.3	43.2	8.4
Other ^d	22.2	13.7	12.7	11.6	19.0	5.6	20.0	22.2	15.9	13.9	16.6	12.9
Total debt	100	100	100	100	100	100	100	100	100	100	100	100

SFH: single female household; SMH: single male household; HILDA, Household, Income and Labour Dynamics in Australia; CPI: consumer price index; HECS: Higher Education Contribution Scheme.

Source: Authors' own calculations from the confidentialised unit record files of the 2002 and 2010 HILDA Survey.

^aReal values have been calculated by deflating the mean values of assets and debt by using CPI taking 2002 as the base year.

^bFinancial instruments comprise equity and cash investments, bank accounts, trust funds and redeemable life insurance.

^cThis is the sum of wealth stored in the primary home, other property, superannuation, business, financial instruments, vehicles and collectibles. The value of vehicles and collectibles combined comprises only around 3.5% of average asset values and so is not reported separately in the table.

^dOther debt is the sum of credit card loans, HECS loans, car loans, hire purchase agreements, investment loans, personal loans from a bank/financial institution, loans from other lenders, loans from friends/relatives and overdue personal bills.

Table 6. Composition of real^a assets and debts of single adult Australian households, by household type and marital status, 2002 and 2010 (per cent by column).

	SFH				SMH			
	Separated/ divorcees		Never married		Separated/ divorcees		Never married	
	2002	2010	2002	2010	2002	2010	2002	2010
Assets								
Primary home	51.3	52.9	50.7	49.1	35.1	38.8	39.3	44.9
Other property	8.5	11.9	12.0	17.5	10.0	14.9	9.6	14.5
Superannuation	14.0	15.6	21.3	16.4	20.7	19.0	20.1	16.2
Business assets	5.7	1.9	1.0	0.5	11.4	7.3	4.1	2.7
Financial instruments ^b	15.4	14.8	10.3	13.0	17.3	15.1	20.5	16.7
Total assets ^c	100	100	100	100	100	100	100	100
Debt								
Primary home	68.4	64.2	72.1	59.4	50.8	48.9	66.6	62.2
Other property	14.2	21.9	10.1	26.6	19.6	28.9	13.4	20.7
Business	1.9	4.8	0.1	0.1	12.7	7.3	2.0	0.4
Other ^d	15.5	9.1	17.7	13.8	16.8	14.8	18.0	16.8
Total debt	100	100	100	100	100	100	100	100

SFH: single female household; SMH: single male household; HILDA, Household, Income and Labour Dynamics in Australia; CPI: consumer price index; HECS: Higher Education Contribution Scheme.

Source: Authors' own calculations from the confidentialised unit record files of the 2002 and 2010 HILDA Survey.

^aReal values have been calculated by deflating the mean values of assets and debt by using CPI taking 2002 as the base year.

^bFinancial instruments comprise equity and cash investments, bank accounts, trust funds and redeemable life insurance.

^cThis is the sum of wealth stored in the primary home, other property, superannuation, business, financial instruments, vehicles and collectibles. The value of vehicles and collectibles combined comprises only around 3.5% of average asset values and so is not reported separately in the table.

^dOther debt is the sum of credit card loans, HECS loans, car loans, hire purchase agreements, investment loans, personal loans from a bank/financial institution, loans from other lenders, loans from friends/relatives and overdue personal bills.

Similar patterns are evident in the data on the wealth portfolios of never-married and separated/divorced households in Table 6. Primary home assets comprise a relatively large (52.9%) share of the assets of separated/divorced SFHs and a relatively small (38.8%) share of the assets of separated/divorced SMHs.

A key focus of this article is on the effect of gender differences in portfolio composition on the evolution of the gender wealth gap. The data in Table 7 show different patterns of growth in assets and debts across SMHs and SFHs in the three age groups. Table 8 shows the patterns of growth in assets and debts of never-married and separated/divorced households. Of greatest importance to the evolution of the gender wealth gap are the different growth rates for primary home assets (given the significance of these assets in wealth portfolios). It is important to note that in this asset class, growth rates favoured SMHs in each age group and in each household type. For example, the average value of primary home assets held by SMHs climbed by 63.5% in the 'younger' age group, by 42.2% in the 'mid-age' group and by 61.6% in the 'older' age group. The comparative rates in SFHs were 40.6%, 7.9% and 41.8%, respectively. The average value of primary home assets increased by 57.7% in the group of separated/divorced SMHs and by 56.6% in the group of never-married SMHs. The comparative figures for SFHs were 38.0% and 22.3%.

Table 7. Growth of real^a assets and debts of single adult Australian households, by household type and age group, 2002 and 2010 (per cent by column).

	SFH			SMH		
	<35 years	35–55 years	55+ years	<35 years	35–55 years	55+ years
	2002–2010	2002–2010	2002–2010	2002–2010	2002–2010	2002–2010
Assets						
Primary home	40.6	7.9	41.8	63.5	42.2	61.6
Other property	115.3	40.9	162.9	275.0	57.3	130.3
Superannuation	–25.7	–0.8	98.6	14.0	5.5	31.8
Business assets	166.7	–22.2	–82.1	49.0	31.7	–58.4
Financial instruments ^b	129.9	–7.1	40	27.3	4.6	12.5
Total assets ^c	43.2	5.3	43.1	60.4	28.8	27.1
Debt						
Primary home	60.2	37.0	77	5.0	90.6	98.1
Other property	673.9	113.8	185	95.9	100	1000
Business assets	800.0	328.6	–87.5	–66.7	23.5	–68.4
Other ^d	24.6	39.0	–51.6	32.9	63.2	25.2
Total debt	100.3	52.4	64	19.1	86	62

SFH: single female household; SMH: single male household; HILDA, Household, Income and Labour Dynamics in Australia; CPI: consumer price index; HECS: Higher Education Contribution Scheme.

Source: Authors' own calculations from the confidentialised unit record files of the 2002 and 2010 HILDA Survey.

^aReal values have been calculated by deflating the mean values of assets and debt by using CPI taking 2002 as the base year.

^bFinancial instruments comprise equity and cash investments, bank accounts, trust funds and redeemable life insurance.

^cThis is the sum of wealth stored in the primary home, other property, superannuation, business, financial instruments, vehicles and collectibles. The value of vehicles and collectibles combined comprises only around 3.5% of average asset values and so is not reported separately in the table.

^dOther debt is the sum of credit card loans, HECS loans, car loans, hire purchase agreements, investment loans, personal loans from a bank/financial institution, loans from other lenders, loans from friends/relatives and overdue personal bills.

In the 'younger' and 'mid-age' groups, the growth of other property and superannuation assets also favoured SMHs. The average value of other property assets held by SMHs grew by 275.0% in the 'younger' age group and by 57.3% in the 'mid-age' group. The comparative rates in SFHs were 115.3% and 40.9%. The average value of superannuation assets held by 'younger' and 'mid-age' SFHs fell over the study period (by 25.7% and 0.8%, respectively), while increases occurred in the average superannuation balances of 'younger' and 'mid-age' SMHs (by 14.0% and 5.5%). Among 'older' households, a different pattern of growth occurred across SMHs and SFHs. SFHs in this age group recorded a relatively high rate of growth in the average value of both other property and superannuation assets (162.9% and 98.6%, respectively). The comparative rates in older SMHs were 130.3% and 31.8%.

Decomposing changes in the gender wealth gap between 2002 and 2010

The above discussion alludes to the complexities associated with assessing the 'drivers' of the gender wealth gap among single households. Observed wealth gaps between

Table 8. Growth of real^a assets and debts of single adult Australian households, by household type and marital status, 2002 and 2010 (per cent by column).

	SFH		SMH	
	Separated/ divorcees	Never married	Separated/ divorcees	Never married
	2002–2010	2002–2010	2002–2010	2002–2010
Assets				
Primary home	38.0	22.3	57.7	56.6
Other property	88.5	84.6	112.3	106.9
Superannuation	49.3	–2.6	30.6	10.5
Business assets	–55.8	–42.6	–9.2	–8.5
Financial instruments ^b	29.2	60.5	24.8	11.5
Total assets ^c	33.8	26.3	42.7	37.1
Debt				
Primary home	53.4	42.0	24.4	66.8
Other property	152.9	352.3	89.9	176.5
Business	350	150	–25.0	–68.0
Other ^d	–3.9	34.7	13.8	66.0
Total debt	63.7	72.4	29.2	78.7
Net worth	29.3	13.9	45.1	28.5

SFH: single female household; SMH: single male household; HILDA, Household, Income and Labour Dynamics in Australia; CPI: consumer price index; HECS: Higher Education Contribution Scheme.

Source: Authors' own calculations from the confidentialised unit record files of the 2002 and 2010 HILDA Survey.

^aReal values have been calculated by deflating the mean values of assets and debt by using CPI taking 2002 as the base year.

^bFinancial instruments comprise equity and cash investments, bank accounts, trust funds and redeemable life insurance.

^cThis is the sum of wealth stored in the primary home, other property, superannuation, business, financial instruments, vehicles and collectibles. The value of vehicles and collectibles combined comprises only around 3.5% of average asset values and so is not reported separately in the table.

^dOther debt is the sum of credit card loans, HECS loans, car loans, hire purchase agreements, investment loans, personal loans from a bank/financial institution, loans from other lenders, loans from friends/relatives and overdue personal bills.

SMHs and SFHs clearly vary across groups of households defined by the age of the household head and by the household type. The gender gap also varies across different types of assets and debts. For similar reasons, changes in the gender wealth gap over time could have a number of sources, including differential growth rates in the value of different types of assets, change in the participation of different household types in these assets, change in the level of debt of different types of households and change in the demographic characteristics of households.

In the following paragraphs, we explore these various possibilities in turn using decomposition techniques designed specifically to quantify the impact of observed differences in the growth in SMH and SFH assets, and other characteristics on changes in the gender wealth gap. It is important to note the specific type of decomposition technique used in

this article. We are *not* using the standard (Oaxaca–Blinder) decomposition methodology because we are *not* attempting to measure how much of the gender wealth gap (at a particular point in time) can be attributed to gender differences in characteristics, such as age and income. Austen et al. (2014) conducted such an exercise using 2006 HILDA data (international examples include Sierminska et al., 2010). In this study, because our research question is about the sources of *change* in the gender wealth gap, our decomposition technique is quite different.

We first decompose the gender wealth gap (measured at mean values) into its key asset components

$$GWG^t = (NW_m^t - NW_f^t) \quad (1)$$

where GWG is the gender wealth gap at time t , NW_m is the average net worth of SMHs and NW_f is the average net worth of SFHs. In this formulation, GWG is expressed as an absolute gap. To facilitate interpretation of its meaning (especially to international audiences), we report the derived measures of the GWG as the difference divided by SFH net worth.

The average net worth of each household group can be expressed in terms of its component parts

$$NW^t = PH^t + OP^t + B^t + S^t + F^t \quad (2)$$

where PH^t is the average net value of primary home assets in year t , OP is the average net value of other property assets, B is the average net value of business assets, S is the average net value of superannuation assets and F is the average net value of financial assets.

Thus, the gender wealth gap can be decomposed into

$$GWG^t = (PH_m^t - PH_f^t) + (OP_m^t - OP_f^t) + (B_m^t - B_f^t) + (S_m^t - S_f^t) + (F_m^t - F_f^t) \quad (3)$$

where, for example, PH_m^{10} is the average net value of SMH primary home assets in 2010. To focus on how the gender wealth gap was affected by differences in the rate of growth of SMH and SFH assets, we consider, for each asset class, a particular counterfactual: that the real value of SMH assets grew at the same rate as SFH assets between 2002 and 2010. By comparing the 2010 gender wealth gap in each counterfactual situation with the actual 2010 wealth gap, we achieve a measure of the impact of observed differences in the growth in SMH and SFH assets on the gender wealth gap.

This analysis provides important insights into the different experiences of single men and women in various asset and debt markets over the study period and how these

differences impacted the inequality in the distribution of wealth. The exercise also tests the oft-mooted hypothesis in the wider literature that men are more prepared to invest in 'risky' assets such as shares and that their higher wealth is due to these investment strategies. Using our decomposition strategy, we are able to assess whether this hypothesis is applicable to Australian experience in recent decades.

The evolution of the gender wealth gap over the study period may have also been affected by changes in the age structure of SMHs and SFHs and by changes in the representation of divorced and separated (as compared to never-married) individuals in the sample. To account for these impacts, we follow a similar approach to the one outlined above. That is, we first decompose the net worth of each household group into a number of different parts. In the case of the age structure, we define the gender wealth gap (at mean values) in each year as the weighted sum of the mean net worth of each age group in the year

$$NW^t = \left(\sum_{j=1}^3 s_j NW_j \right)^t \quad (4)$$

where $j = 1$ for those under 35 years, $j = 2$ for those aged 35–55 years and $j = 3$ for those aged over 55 years; s is the population share of age group j at time t and NW is the average net worth for the age group at time t . We measure the effects of changes in the age structure on the wealth gap by comparing the actual wealth gap in 2010 with the one that would have been obtained in the counterfactual situation, where the population share of each age group remained unchanged from 2002 values. A similar approach is taken to assessing the effects on the gender wealth gap of changes in the distribution of single households across never-married and separated/divorced types.

To isolate the importance of changes in wealth gaps in each age group on the overall gender wealth gap, we compare the actual wealth gap in 2010 with the one that would have been obtained in three counterfactual situations: (a) where SFH and SMH wealth in the 'younger' age group grew at the same rate between 2002 and 2010, (b) where SFH and SMH wealth in the 'mid-age' group grew at the same rate between 2002 and 2010 and (c) where the wealth of SFHs and SMHs in the 'older' age group grew at the same rate between 2002 and 2010. This approach is replicated to examine the effect on the overall gender wealth gap of changes in the gaps affecting never-married and separated/divorced households and to examine how changes in wealth gaps in different parts of the wealth distribution affected the evolution of the overall gender wealth gap between 2002 and 2010.

The role of portfolio composition in explaining the evolution of the gender wealth gap

We first measure the impact on the gender wealth gap of different rates of growth in the assets held by SMHs and SFHs over the study period. This is achieved by considering, for each asset class and each age group, the counterfactual: that growth in the value of the SMH asset occurred at the same rate as the growth in the value of the SFH asset

between 2002 and 2010. We estimate a ‘synthetic’ gender wealth gap in 2010 based on this counterfactual and compare this with the 2010 gender wealth gap. The difference between the synthetic and actual gender wealth gaps in 2010 is our measure of the impact of the differential rate of growth in the particular asset across SMHs and SFHs.

The actual gender wealth gap (measured in levels) in 2010, in each age group, is given by

$$GWG^{10} = (PH_m^{10} - PH_f^{10}) + (OP_m^{10} - OP_f^{10}) + (B_m^{10} - B_f^{10}) + (S_m^{10} - S_f^{10}) + (F_m^{10} - F_f^{10}) \quad (5)$$

A synthetic estimate of the 2010 wealth gap that removes the influence of differential changes in the growth in SMH versus SFH primary home asset values is given by

$$GWG^{10*} = (PH_m^{10*} - PH_f^{10}) + (OP_m^{10*} - OP_f^{10}) + (B_m^{10*} - B_f^{10}) + (S_m^{10*} - S_f^{10}) + (F_m^{10*} - F_f^{10}) \quad (6)$$

where PH_m^{10*} is derived by increasing PH_m^{02} by the growth rate in PH_f between 2002 and 2010. The same approach yields synthetic estimates of the 2010 wealth gap that remove the influence of different growth rates in the other types of assets and debts. A comparison of the actual and synthetic wealth gaps in each age group (expressed as a proportion of SFH net worth) is provided by the data in Table 9.

The data in Table 9 elucidate some important features of the change in the wealth gap between SFHs and SMHs between 2002 and 2010. Most importantly, the data show that, across the age groups, the increase in the gender wealth gap from 10.4% to 22.8% was largely driven by the relatively high rate of growth in average SMH primary home asset values. Between 2002 and 2010, the average value of SMH primary home assets climbed by 53.1%, while the average value of SFH primary home assets grew by only 26.1%. As these assets account for a large share of total assets and net worth, the differential growth rate had a large bearing on the change in the gender wealth gap. Indeed, the data in Table 9 show that, if primary home assets had grown in value at the same rate in SMHs as it did in SFHs, the gender wealth gap in 2010 would have reached only 11.7% (in comparison with its actual level of 22.8%). The same pattern applies to the gender wealth gap in each age group. If the primary home assets of ‘younger’ SMHs had increased at the same rate as those of SFHs, the gender wealth gap in the ‘younger’ group of households would have reached 74.2% in 2010, 15.2 percentage points lower than the actual 2010 level of 89.4%. Among ‘mid-age’ single households, the differential between the actual and synthetic gender wealth gap is 17.3 percentage points. In the ‘older’ group of households, without the relatively favourable change in SMH primary home assets, the gender wealth gap in 2010 would have been in women’s favour (by 3.2%), while the actual gap in 2010 favoured men by 2.4%.

It is interesting to note that the data in Table 9 show that, across the age groups, the relatively high rate of growth in SMH primary home assets was *not* matched by the growth in their primary home *debts*. Indeed, if SMH primary home debt had grown at the same rate as SFH primary home debt between 2002 and 2010, the gender wealth gap

Table 9. GWGs in 2010 under alternative scenarios relating to asset and debt growth rates, by type of asset and age.

Counterfactual	GWG All age groups (actual = 22.8%)	GWG <35 years (actual 89.4%)	GWG 35–55 years (actual 27.5%)	GWG >55 years (actual 2.4%)
Primary home assets grew at the same rate in SMHs and SFHs	11.7%	74.2%	10.2%	–3.2%
Other property assets grew at the same rate in SMHs and SFHs	20.9%	68.2%	24.8%	4.1%
Superannuation assets grew at the same rate in SMHs and SFHs	24.2%	78.6%	25.5%	12.1%
Business assets grew at the same rate in SMHs and SFHs	19.2%	98.7%	24.3%	–0.6%
Financial assets grew at the same rate in SMHs and SFHs	25.9%	123.1%	25.1%	7.9%
<i>The total assets of SMHs grew at the same rate as those of SFHs</i>	12.6%	61.2%	–3.4%	16.1%
Primary home debt grew at the same rate in SMHs and SFHs	23.4%	68.3%	34.8%	2.7%
Other property debt grew at the same rate in SMHs and SFHs	19.4%	44.7%	26.9%	4.0%
Business debt grew at the same rate in SMHs and SFHs	23.0%	68.8%	25.1%	2.7%
Other debt grew at the same rate in SMHs and SFHs	23.5%	90.3%	28.4%	2.9%
<i>The total debt of SMHs grew at the same rate as that of SFHs</i>	20.6%	40.4%	35.1%	2.4%

GWG: gender wealth gap; SMHs: single male households; SFHs: single female households; HILDA: Household, Income and Labour Dynamics in Australia.

Source: Authors' own calculations from the confidentialised unit record files of the 2002 and 2010 HILDA Survey.

in 2010 would have been marginally higher (at 23.4%) than it actually was (at 22.8%). This reflects the fact that, across the age groups, SFH primary home *debts* grew faster than SMH primary home debts, while the opposite was true for their primary home *assets*. The one exception to this pattern was in the group of 'younger' single households, where SFH primary home debt increased by a relatively large amount.

The fact that the primary home assets of mid-life and older SMHs values grew relatively quickly over the study period, but their primary home debt did not, suggests that particular phenomena were affecting their wealth outcomes. In particular, the data

suggest, first, that SMHs benefited from an escalation in the value of properties that had been purchased before or soon after 2002. In these situations, SMHs could have benefited from rising primary home asset values without a matching increase in their primary home debt. The observed patterns in the data are also consistent with mid-life and older SMHs acquiring primary home assets during the study period without much debt. However, the proportion of SMHs with primary home assets actually fell over the study period (from 42.5% to 38.9%), which is not supportive of a hypothesis that SMHs ‘moved into’ primary home assets in a significant way. Thus, of the two possible explanations for the relatively large rise in SMH primary home wealth, an increase in the value of the primary home assets held by SMHs at or near the start of the study period is the most likely.

Another noteworthy feature of the data in Table 9 is the evidence they provide on the relatively high rates of growth in the value of superannuation and financial assets held by SFHs over the study period and show how these changes exerted a negative impact on the gender wealth gap. For example, between 2002 and 2010, the average value of SFH and SMH superannuation grew by 20.9% and 14.6%, respectively. In the absence of this differential, the gender wealth gap would have reached 24.2% in 2010. However, these positive changes were limited to the ‘older’ age group. In this age group, in the absence of the relatively high rate of growth in the superannuation assets of SFHs, the gender wealth gap in 2010 would have reached 12.1% (as compared to the actual 2.4% level). However, in the ‘younger’ and ‘mid-age’ groups, the rate of growth in superannuation assets favoured men. Without these differentials, the gender wealth gap in the ‘younger’ age group would have reached 78.6% (rather than 89.4%) and in the ‘mid-age’ group the gap would have reached 25.5% (rather than 27.5%).

The role of age structure and household composition in explaining the evolution of the gender wealth gap

The second part of our decomposition analysis examines whether observed changes in the gender wealth gap were affected by changes in the age structure and distribution of household types across SMHs and SFHs. This step in our analysis is important because, if changes in the age structure and/or the distribution of household types had a large impact on the gender wealth gap during the study period, the importance of differential rates of growth in the assets held by SFH and SMH will fall.

We explore the impact on the gender wealth gap of changes in the age structure by posing the question ‘What would the gender wealth gap in 2010 have been if the population shares of each age group had remained unchanged since 2002?’ Similarly, the impact on the gender wealth gap of changes in the distribution of household types (i.e. never-married and divorced/separated types) is estimated by posing the question ‘What would the gender wealth gap in 2010 have been if the population shares of each household type had remained unchanged since 2002?’

The average net worth of SMHs in 2010 is given by

$$NW_m^{10} = s_{m,<35}^{10} NW_{m,<35}^{10} + s_{m,35-50}^{10} NW_{m,35-50}^{10} + s_{m,>50}^{10} NW_{m,>50}^{10} \quad (7)$$

Table 10. The GWG in 2010 under alternative scenarios relating to changes in the age structure and the representation of different household types in SMHs and SFHs.

Counterfactual	GWG in 2010 (actual = 22.8%)
Population share of each age group remained unchanged at 2002 levels	23.7%
Population share of each household type (never married and separated or divorced) remained unchanged at 2002 levels	21.9%

GWG: gender wealth gap; SMHs: single male households; SFHs: single female households; HILDA: Household, Income and Labour Dynamics in Australia.

Source: Authors' own calculations from the confidentialised unit record files of the 2002 and 2010 HILDA Survey.

and the average net worth of SFHs in 2010 is given by

$$NW_f^{10} = s_{f,<35}^{10} NW_{f,<35}^{10} + s_{f,35-50}^{10} NW_{f,35-50}^{10} + s_{f,>50}^{10} NW_{f,>50}^{10} \quad (8)$$

where, for example, $s_{f,<35}^{10}$ is the share of SFHs in the younger age group in 2010.

The gender wealth gap in 2010 (in levels) is given by

$$GWG^{10} = (NW_m^{10} - NW_f^{10}) \quad (9)$$

A synthetic gender wealth gap for 2010, which removes the influence of changes in the age structure of single households since 2002, is achieved by replacing the values for each of the s terms in the above equations with 2002 values. A similar approach is used to examine the effects of changes in the representation of single versus divorced/separated individuals in SFHs and SMHs. The results of these exercises are summarised in Table 10.

The figures in Table 10 indicate, first, that changes in the age structure had a negligible impact on the overall gender wealth gap between 2002 and 2010. In the absence of changes in the population shares of the three age groups in this study, the gender wealth gap would have reached 23.7% (rather than 22.8%) in 2010. Changes in the population shares of the never-married and separated/divorced over the study period also had a negligible influence on the evolution of the gender wealth gap. The figures in Table 10 show that the gender wealth gap in 2010 would have been 21.9% (rather than 22.8%) without these changes, *ceteris paribus*.

The evolution of the gender wealth gap in different parts of the age structure and in different types of single households

The third part of our decomposition analysis explores the effect on the total gender wealth gap of changes in wealth gaps in different parts of the age structure and in

Table 11. The GWG in 2010 under alternative scenarios relating to changes in the growth of SMH and SFH net worth within household groups and changes in the household structure.

Counterfactual	GWG in 2010 (actual = 22.8%)
Net worth of <35 years SMHs grew at the same rate as that of SFHs	14.8%
Net worth of 35–55 years SMHs grew at the same rate as that of SFHs	13.1%
Net worth of more than 55 years SMHs grew at the same rate as that of SFHs	29.2%
Net worth of never-married SMHs grew at the same rate as that of SFHs	15.3%
Net worth of separated or divorced SMHs grew at the same rate as that of SFHs	16.8%

GWG: gender wealth gap; SMHs: single male households; SFHs: single female households; HILDA: Household, Income and Labour Dynamics in Australia.

Source: Authors' own calculations from the confidentialised unit record files of the 2002 and 2010 HILDA Survey.

never-married, as opposed to separated/divorced, households. Using the counterfactual approach, we pose questions such as 'What would the gender wealth gap in 2010 have been if the net worth of younger/mid-age/older SMHs had grown at the same rate as younger/mid-age/older SFHs?' We utilise equations (7) to (9), replacing the actual measures of $NW_{m,i}^{10}$ with synthetic values, which are derived by inflating $NW_{m,i}^{02}$ by the relevant rate of growth in SFH net worth between 2002 and 2010. A similar approach is used to examine the 2010 gender wealth gap in counterfactual situation where the net worth of never-married and separated/divorced SMHs had grown at the same rate as never-married and separated/divorced SFHs.

The data in Table 11 also show that the change in the gender wealth gap was driven by the large differentials between SMH and SFH net worth in the 'younger' and 'mid-age' groups. If 'younger' SFH and SMH net worth had grown, on average, at the same rate between 2002 and 2010, then, *ceteris paribus*, the gender wealth gap would have been 8.0 percentage points lower than the actual ratio recorded in 2010. If 'mid-age' SFHs had kept pace with 'mid-age' SMHs, then, *ceteris paribus*, the gender wealth gap in 2010 would have only reached 13.1% (a level 9.7 percentage points lower than the rate that was actually recorded). In contrast, if 'older' SFH and SMH net worth had grown at the same rate, then, *ceteris paribus*, the gender wealth gap would have been larger (at 29.2%, compared to the actual 22.8%).

The data in Table 11 also show that the change in the gender wealth gap was driven by the large differentials between the growth of SMH and SFH net worth in *both* the 'never-married' and the 'separated/divorced' households. If 'never-married' SFH and SMH net worth had grown, on average, at the same rate between 2002 and 2010, then, *ceteris paribus*, the gender wealth gap would have been 7.5 percentage points lower than the actual ratio recorded in 2010. If 'separated/divorced' SFH and SMH net worth had grown at the same rate, then, *ceteris paribus*, the gender wealth gap in 2010 would have been 16.8% (a level 6 percentage points lower than the rate that was actually recorded).

Table 12. The 2010 GWG in alternative scenarios relating to changes in the growth of SMH and SFH net worth in different quartiles of the wealth distribution.

Counterfactual	GWG in 2010 (actual = 22.8%)
Net worth of quartile 1 SMHs grew at the same rate as that of SFHs	23.0%
Net worth of quartile 2 SMHs grew at the same rate as that of SFHs	21.0%
Net worth of quartile 3 SMHs grew at the same rate as that of SFHs	19.4%
Net worth of quartile 4 SMHs grew at the same rate as that of SFHs	15.6%

GWG: gender wealth gap; SMHs: single male households; SFHs: single female households; HILDA: Household, Income and Labour Dynamics in Australia.

Source: Authors' own calculations from the confidentialised unit record files of the 2002 and 2010 HILDA Survey.

The evolution of the gender wealth gap across the wealth distribution

The final part of our decomposition analysis explores the effect of changes in wealth gaps in different parts of the wealth distribution on the overall gender wealth gap. Using the counterfactual approach once again, the question we address in this part of the article is 'What would the gender wealth gap in 2010 have been if the average net worth of SMHs in quartiles 1 through 4 had grown at the same rate as the wealth of their counterpart SFHs between 2002 and 2010?' We use a similar approach to that used to examine the 2010 gender wealth gap in the counterfactual situations relating to age structure and household type. The results are summarised in Table 12.

The data in Table 12 show that the change in the overall gender wealth gap was most heavily influenced by the differential rate of growth in the average net worth of top quartile SMHs and SFHs. However, as noted earlier, the rate of growth in net worth favoured SMHs in all quartiles, and thus, the overall increase in the gender wealth gap was due to changes that occurred across the wealth distribution. If, between 2002 and 2010, the average net worth of top quartile SFHs and SMHs had grown at the same rate, then, *ceteris paribus*, the gender wealth gap would have been 7.2 percentage points lower than the actual ratio recorded in 2010. If the average net worth of quartile 3 SFHs had kept pace with their counterpart SMHs, then, *ceteris paribus*, the gender wealth gap in 2010 would have been 3.4 percentage points lower than the gap that was actually recorded. The impact of changes in the lower quartiles on the overall gender wage gap was less, largely as a result of the low share of total wealth held by these groups.

Cohort changes and the evolution of the gender wealth gap

It is also likely that between 2002 and 2010 the composition of SFHs and SMHs changed in ways that affected the observed levels of wealth. For instance, the more recent cohorts of mid-age and older individuals would have benefited from the compulsory superannuation guarantee, which was introduced in the early 1990s (see Parr

et al., 2007). Several compositional changes appear likely to have contributed to the observed increase in the gender wealth gap. For example, between 2002 and 2010, the proportion of highly educated individuals (as proxied by university qualifications) grew more strongly in the group of SMHs than in the SFHs (2.6 percentage points compared to 1.9 percentage points). SMHs' income-earning capacity also grew at a greater rate over this period, with their median disposable incomes rising by 25.1% compared to 19.7% among SFHs. However, some other compositional changes would have acted to reduce the gender wealth gap. For example, the proportion of individuals with children fell more strongly in the group of SFHs than in the SMHs. Thus, on balance, the effects of changes in the composition of SFHs and SMHs over the study period on the evolution of the gender wealth gap are likely to have been small.

Discussion and conclusion

This article examined how the wealth gap between SFHs and SMHs in Australia changed over the time period 2002–2010. Using data from the wealth modules of the HILDA Survey, we found that the gender wealth gap increased substantially over the study period, from 10% to 23%. The study found dramatic increases in the gender wealth gap in the group of 'younger' single households – from 16% to 89% – and 'mid-age' households (from 4% to 28%). However, the gender wealth gap fell in the 'older' group of single households (from 16% to 2.5%). The gender wealth gap increased in the group of single households comprising individuals who had never married and in those single households headed by a person who was separated or divorced. The gap increased in each of the four quartiles of the wealth distribution.

A key finding of this study is that the increase in the gender wealth gap between 2002 and 2010 was largely driven by a relatively high rate of increase in the average value of primary home assets held by SMHs. This pattern was apparent across the age groups and the different household types. Importantly, the differential rate of growth of primary home assets that favoured SMHs was not matched by the changes in primary home debt. Thus, SMHs achieved a relatively high rate of growth in their primary home assets without a matching increase in their debt.

Although, overall, SFHs recorded relatively strong growth in their superannuation and financial assets, these changes in the wealth portfolios of SFHs, starting from a low base, were not sufficient to offset the impact on the gender wealth gap of the different rates of growth in primary home assets across SFHs and SMHs. In the absence of the differential rate of growth in primary home assets across SMHs and SFHs, the gender wealth gap would have been 11.7% in 2010, rather than the 22.7% level that it actually reached.

These results are an interesting contrast to Bolin and Palsson's (2001) findings from Swedish data for 1978–1992. Bolin and Palsson found a reduction in the gender wealth gap. They linked this change to differences in the risk profile of men's and women's wealth portfolios by arguing that, due to negative developments in financial markets over the period, men's wealth deteriorated faster than women's. The context of our study is clearly different from that of Bolin and Palsson, with many

Australian households experiencing increases in their net worth over the study period. However, it does not appear that the increased gender wealth gap that was recorded in this period was due to the higher participation of SMHs in 'risky' assets such as shares. Rather, the better outcomes that SMHs achieved on primary home assets, typically thought of as a less risky asset, were the key source of the increased gender wealth gap.

The findings of this study also challenge a wider literature that tends to emphasise differences in the risk profiles of men's and women's wealth portfolios (see, for example, Bertocchi et al., 2008) and on how this may result in lower returns to wealth for women (see Schmidt and Sevak, 2006). The volatility in house prices in Australia is significantly less than that of share prices (see, for example, De Silva and Wood, 2011). Hence, the primary home is commonly perceived as a relatively low-risk investment compared to, say, shares. One would expect the primary home to therefore yield lower rates of return than shares. However, in this study, we find that, in the Australian context at least, it is differential growth rates in the value of the primary home in wealth portfolios that can impact heavily on the gender wealth gap.

The study's finding of large gender differences in the changes in value of primary home assets is perplexing but important to consider further, given their economic and policy implications. Some might argue that SFHs pursue lower-risk primary home assets than do SMHs and that this explains the changes in the gender wealth gap over the study period. Alternatively, the findings could indicate gender differences in occupations and pay and how these changed over the study period. For example, the construction sector is male-dominated and relatively well-paid. During the study period, these patterns were accentuated by an increase in the proportion of 'younger' SMHs working in the construction sector (by 10 percentage points), a decrease in the proportion of 'younger' SFHs in the sector and relatively high wage growth in the sector.⁵ As such, at least some SMHs were relatively well placed to improve their net worth.

Our findings could also indicate the barriers to home ownership faced by single parents. SFHs are much more likely to have dependent children than SMHs. In 2010, one-third of SFHs had dependent children living with them, compared to under 5% of SMHs. Hence, it would not be unsurprising to find that SFHs experience greater constraints on their housing choices than SMHs,⁶ associated with the financial cost of raising children and limitations on work hours due to childcare responsibilities.

Overall, our findings are consistent with Smith's (1990) Australian study, which finds that Australian men are able to buy higher priced houses as their opportunities for wealth accumulation are much higher. We find that SMHs are advantaged by their labour market experiences and familial status, which more likely than not excludes dependent children. Labour market policies are thus critical tools for reducing the gender wealth gap over time. These include policies that remedy the current undervaluation of work typically performed in feminised sectors and flexible workplace policies that seek to accommodate child-raising responsibilities. In addition, housing policies that address potential mortgage market discrimination and alleviate housing affordability stress can go some way towards curtailing the widening wealth gap between SMHs and SFHs, by offering greater numbers of SFHs assistance with purchasing and sustaining home ownership in areas with healthy property growth rates.

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Notes

1. Single households comprise persons who, at the time of the interview, were separated, divorced or had never been married before and were living either on their own or with their children only.
2. Defined by total disposable assets and total debts.
3. First established in 1989, the Higher Education Contribution Scheme (HECS) is the proportion of undergraduate university fees paid by a local student, the Commonwealth government paying the balance. The HECS debt can be deferred, with the Commonwealth paying the university and the student subsequently repaying the government through the tax system, once income reaches a certain level.
4. An income unit is a group of persons who share income. In contrast, a household is a group of people living in the same dwelling, and it can be made up of multiple income units. For example, a single young full-time employed adult could be still living in the same house as his parents. He would be classified as a separate income unit from his parents as he has an independent source of income, and his parents' household would be classified as a multiple income unit household. We exclude multiple income unit households from our sample on the grounds that it is not possible to identify who owns household assets in these household types.
5. Average weekly ordinary time earnings (AWOTE) increased by 66.6% in the construction sector between May 2002 and May 2010. Across all industries, wages increased by 45.3% (Australian Bureau of Statistics (ABS), 2013). In female-dominated industries, such as Health Care and Social Assistance, the average wage increased by less than 40%.
6. Wood and Ong (2011) found that sole parents are more prone to experiencing persistent housing stress than singles without dependent children.

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