



Australian
National
University

CENTRE FOR SOCIAL
RESEARCH & METHODS

A Fairer Tax and Welfare System for Australia:

CSRM Research Note

Associate Professor Ben Phillips, Richard Webster, Cukkoo Joseph

ANU Centre for Social Research and Methods

2023¹

¹ This research was commissioned by the St Vincent de Paul Society National Council of Australia Inc. and funded by St Vincent de Paul National Council, New South Wales, Victoria, Canberra-Goulburn and Tasmania. This research updates work published jointly by ANU CSRM and St Vincent de Paul Society in April 2022.

Contents

Executive Summary.....	2
Introduction	4
Methodology and Policy Proposal	5
Poverty lines and the JobSeeker Rate.....	9
Policy Proposals to lower poverty in Australia	13
Results.....	18
Poverty Results	20
Financial Impact of Policy Change	22
Gains and Losses Analysis	26
Implications for trends in personal income taxation.....	31
Long term implications for superannuation balances	34
Regional Implications.....	39
References	44
Appendix A: Optimal Policy Modelling	45
Appendix B	48
Appendix C	55

Executive Summary

This research paper was commissioned by the St Vincent de Paul Society National Council of Australia Inc. to help address the inadequacy of the Australian welfare system for some groups, in particular working age recipients. The paper proposes three simple policy proposals designed to improve the financial position of Australians most in need.

The groups at most risk of deep poverty and financial stress are identified as persons receiving JobSeeker payments and working age pensions, defined in this paper as including Disability Support Pension, Parenting Payments (Single) and Carer Payments. Other groups also linked to poverty and financial stress are renters, single parents and young persons. This research paper highlights how additional spending targeted to these groups can maximise reductions in poverty and financial stress. We estimate the measures outlined in this paper would lower poverty by up to 834,000 people, or from 11.7 per cent to 8.6 per cent of the overall population.

The proposed policy changes add to the equity of the existing welfare system, providing extra assistance to those who are most likely to be in deep poverty and financial stress. Increases are proposed to JobSeeker, Parenting Payment (Single), Disability Support Pension and Carer Payment along with increases to low-income renters through increased Commonwealth Rent Assistance (CRA). The most generous policy proposal includes an increase to Family Tax Benefits.

Three policy options, 'Low', 'Modest' and 'High', propose payment increases to JobSeeker payments, ranging from \$176 per fortnight for single recipients (Low) and \$249 per fortnight (Modest and 90 per cent of the age pension settings) up to \$338 per fortnight (High and set to around age pension settings). These increases would apply to the base payment for JobSeeker which, for a single person, is an expected \$753 per fortnight under current policy by December 2023². The 'Modest' and 'High' proposals also increase working age pensions such as the Disability Support Pension by \$69 per fortnight and \$249 per fortnight respectively from their current expected rate of around \$1110 per fortnight. The 'High' proposals also increase the maximum CRA amounts by 25 per cent and Family Tax Benefits by 20 per cent.

The additional social assistance is funded through moderate increases in capital gains tax, a progressive superannuation taxation, and raising the tax-free threshold. The increase in the tax-free threshold (from \$18,200 to \$24,000) lowers revenue in 2023-24 but the removal of the currently legislated 'stage 3 tax

² Based on a simple inflation projection for the base rate of JobSeeker using the first quarter of 2023 as the base.

A Fairer Tax and Welfare System for Australia

cuts' significantly increases revenue in the remaining three forward estimate years. The progressive superannuation tax replaces the current flat tax rate by increasing the rate of tax as income increases, leading to lower taxation for persons of low and middle income and wealth and modestly higher rates of taxation for persons of higher income and wealth.

Superannuation and capital gains are currently taxed concessionally. As outlined in the 2020 *Retirement Income Review*, superannuation tax concessions heavily favour high income households and their total value is projected to exceed the cost of age pensions into the future³ (Treasury 2020). This proposal reduces the extent of these significant concessions for higher income and wealth individuals and households.

The proposed policy changes would result in significant reductions in poverty rates amongst those groups of households with the highest rates of poverty. Applying the proposed 'High' policy lowers poverty for those groups at the greatest risk of poverty by around 50 per cent. The less ambitious policies 'Low' and 'Modest' also lower poverty, albeit not as significantly.

The policies direct more cash to existing payments such as JobSeeker, Disability Support Pension and Parenting Payment (Single). Changes to the overall architecture of the welfare or taxation system are avoided. Developing significantly different systems such as a universal basic income or a negative income tax was considered too politically difficult - regardless of the potential pros and cons of such policies.

The proposed 'Modest' and 'High' policies alter superannuation taxation from a mostly flat rate of tax of 15 per cent to one that is progressive, albeit still with a sizable discount to current marginal tax rates. The proposed changes to superannuation taxation modestly increase the total tax received through superannuation but lead to lower and middle-income persons paying less tax and receiving larger expected superannuation balances at retirement. Higher income and wealth persons are expected to pay slightly more tax and have modestly lower superannuation balances at retirement. Their balances would remain well in excess of what is required for a comfortable retirement⁴.

The proposal costs are relatively modest – between four and twenty billion dollars per year and are fully funded over the forward estimates. The proposed policy changes largely benefit low-income households – lowering poverty substantially for those most in need and increasing superannuation balances for persons of lower and middle income and wealth. The revenue required to achieve these gains is

³ See Chart 13 in <https://treasury.gov.au/sites/default/files/2021-02/p2020-100554-udcomplete-report.pdf>

⁴ There is considerable debate on the topic of what constitutes a 'comfortable retirement', one perspective in Australia and the most commonly cited are those compiled by The Association of Superannuation Funds <https://www.superannuation.asn.au/resources/retirement-standard>

A Fairer Tax and Welfare System for Australia

collected from persons who have, and are likely to continue to have, high levels of income and wealth for now and into their retirement.

The proposed policies will have a dramatic impact on regional Australia with the highest rates of poverty and financial stress. The regions with the highest rates of poverty are those typically in the western suburbs of Sydney with rates of poverty of 20 per cent or more. The 'High' policy would remove up to 7.1 percentage points from the poverty rates of the most poverty-stricken areas of Australia. Those areas with the highest rates of financial stress are generally similar to that of poverty but include a greater spread of regions outside of western Sydney and regional and remote communities.

Introduction

The Australian tax and social security system has evolved slowly over recent decades and its main features have remained largely intact. For individuals, the system comprises a progressive personal income tax system, tightly targeted welfare payments (social security) operating alongside an economy with a relatively high minimum wage and a retirement income system that combines the age pension and a contributory and compulsory superannuation system.

The St Vincent de Paul Society's first-hand experience of assisting Australians living in poverty informed the methodology underpinning this research. This paper identifies where the current system is not working optimally and models a range of policy changes that help address some of the disparity that exists within the current tax and social security system. The suggested policy changes are, by design, not revolutionary, yet beneficial to those most in financial need. The proposed changes are relatively simple to implement within the existing system and, as such, potentially feasible.

The paper sets out three separate, but related, policy proposals that have been identified as 'Low', 'Modest' and 'High' policy change. The changes focus on shifting policy toward a stronger safety net for those who rely on the social security system with the aim of lowering poverty and the associated risks of financial stress. The additional expenditure is funded through modest increases in personal income taxation for those on higher incomes. The suggested changes to the tax system focus on moderate changes to personal income taxation thresholds and reducing capital gains tax and superannuation tax concessions.

The proposed policy options are but three of any number of options available to policy makers. We do not suggest these are the only or best options. However, they provide an example of what can be achieved with relatively modest changes to the existing system and total expenditure on supporting low-income Australians. The proposed changes are targeted to benefit persons who have the greatest

financial need and would be paid for by those most able to accommodate a modest additional contribution.

The suggested policy changes to welfare payments use our optimal policy modelling methodology so as to minimise the required increase in taxation and maximise the reduction in poverty and financial stress (Phillips 2018). Optimal policy modelling is an algorithm developed by ANU to ensure that for a given change in social security expenditure, the changes to payment rates are set to minimise poverty and financial stress – essentially providing the best value allocation of funds with respect to lowering poverty and financial stress.

The policy changes suggested are modelled using the ANU microsimulation model of the Australian tax and transfer system – PolicyMod. This is a detailed model incorporating most elements of the Australian tax and transfer system for individuals and is based on an updated version of the Australian Bureau of Statistics (ABS) 2017-18 Survey of Income and Housing (SIH).

The modelling incorporates some important and significant changes to superannuation policy in Australia. We dynamically model these changes to understand their likely impact on the distribution of superannuation balances at retirement to ensure that vulnerable individuals are not unduly impacted. The dynamic modelling of the impacts on superannuation balances at retirement combines PolicyMod with a new dynamic modelling capability based on income transitions data from the ABS longitudinal Census data (ABS 2018).

Methodology and Policy Proposal

To gain an understanding of which groups in our society face the most financial disadvantage we consider their after-housing poverty rates and financial stress position. This analysis helps guide our suggested policy changes by showing which groups are in most need of further financial assistance. The poverty rates estimated in this paper are ‘after-housing’ in that they deduct housing costs from disposable income (gross income – personal income tax paid). Our poverty line is set at 50 per cent of the median of this ‘after-housing’ income measure.⁵

Income is adjusted for household size and composition using the Modified-OECD equivalence scale which adjusts the income to a ‘per adult’ basis. The first person in a household has a score of 1, subsequent adults 0.5 and children under 15 years of age 0.3. The bottom 2 percent of the income distribution has been excluded from poverty as recommended by the ABS. Such incomes (weekly estimates) may be an unreliable guide to the typical income of such households. As an example they may represent a low or negative week of income for a business.

A Fairer Tax and Welfare System for Australia

Table 1 shows the poverty rates and financial stress rates for different household types⁶. The poverty rates relate to 'after-housing' income. Poverty rates are an imperfect measure of disadvantage but still provide a reasonable assessment of which groups are more likely to be disadvantaged by serious financial stress. The poverty rates are estimates for December 2023 using the ANU PolicyMod model of the Australian tax and transfer system – largely based on an updated version of the ABS Survey of Income and Housing for 2017-18.

⁶ Financial stress relates to households estimated to have three or more forms of financial stress using the ABS Survey of Income and Housing 2019-20 as the underlying data set for regression modelling of financial stress in PolicyMod.

Table 1. After-Housing Poverty and Financial Stress by Household Type, PolicyMod December 2023

	<i>Category</i>	<i>Poverty %</i>	<i>Persons (000s)</i>	<i>Share</i>	<i>Stress</i>
Main Source of Income	Wages	6.7%	1223	38.9%	12%
	Business	26.5%	320	10.2%	11%
	Working Age Pension	25.7%	326	10.4%	41%
	Age Pension	15.0%	395	12.6%	10%
	JobSeeker	59.6%	283	9.0%	51%
	Other Welfare	54.5%	308	9.8%	49%
	Other Income	12.5%	289	9.2%	8%
	Income Quintile	Quintile 1	42.1%	2260	71.8%
Quintile 2		12.2%	658	20.9%	20%
Quintile 3		2.5%	133	4.2%	13%
Quintile 4		1.3%	72	2.3%	9%
Quintile 5		0.4%	22	0.7%	5%
Wealth Quintile	Quintile 1	21.5%	1155	36.7%	33%
	Quintile 2	11.1%	593	18.9%	16%
	Quintile 3	10.7%	574	18.2%	11%
	Quintile 4	8.5%	457	14.5%	8%
	Quintile 5	6.8%	366	11.6%	5%
Age	15 to 24	14.8%	116	3.7%	31%
	25 to 34	11.1%	450	14.3%	17%
	35 to 44	12.3%	806	25.6%	17%
	45 to 54	12.1%	720	22.9%	16%
	55 to 64	9.8%	412	13.1%	14%
	65 to 74	14.2%	407	12.9%	11%
	75+	9.7%	235	7.5%	6%
Household Type	Couple, Kids	9.6%	1014	32.2%	12%
	Couple Only	10.1%	617	19.6%	8%
	Lone Person	18.7%	482	15.3%	15%
	Other Household	9.0%	483	15.4%	17%
	Single Parent	25.5%	549	17.5%	38%
Tenure Type	Own Outright	6.4%	413	13.1%	7%
	Purchaser	11.3%	1354	43.0%	11%
	Renter	17.0%	1355	43.1%	25%
	Other	5.7%	23	0.7%	15%
All	All	11.7%	3145	100%	14%

The overall person-based poverty rate is 11.7 per cent of Australian households. This rate varies significantly by different household types. For main source of income, wage and salary households are the most common household types and have the highest number of persons in poverty, even though they have the lowest poverty rate of 6.7 per cent. Working age pensions (25.7 per cent poverty rate) and

A Fairer Tax and Welfare System for Australia

JobSeeker allowance (59.6 per cent poverty rate) and other welfare households (54.5%) have the highest rates of poverty and have a combined 917,000 persons in poverty⁷.

Poverty is significantly higher amongst low income and low wealth households. Income is ranked by disposable income without any adjustment for housing costs – unlike the poverty measure used. The bottom income quintile poverty rate is 42.1 per cent while that for wealth is 21.5 per cent. Not surprisingly, poverty is low for middle and high income households⁸. Poverty persists, albeit at relatively low rates for middle and high wealth households. Around 26 per cent of persons in poverty are in the top 40 per cent of the wealth distribution. Some of these households are likely to have a considerable share of their wealth tied up in owner occupier housing or superannuation. Both of which may not be liquid and therefore not easily accessed when needed.

Table 1 indicates that poverty is not strongly related to age. The rate is higher for households headed by persons 15 to 24 years (14.8 per cent in poverty). However, they only make up 3.7 per cent of those in poverty as few households are headed by persons aged 15 to 24 years. Households headed by persons aged between 25 and 74 years have moderately higher poverty rates than those headed by persons aged 75 years plus. Just over 1.5 million people, or almost half of those living in poverty (49 per cent), are aged between 35 to 54 years.

Single parents have the highest poverty rates (25.5 per cent) amongst the different family types. Lone persons are next highest with a poverty rate of 18.7 per cent. Couples with children have the second lowest poverty rate at 9.6 per cent but still a considerable 1 million persons in poverty. “Other” households (including group households) have the lowest rate of poverty at 9 per cent.

Strong increases in interest rates have likely pushed many mortgagor households into poverty. Poverty is usually dominated by those renting but renters and mortgagors now have similar numbers of persons in poverty (1.35 million). Renter poverty rate is 17 per cent compared to outright owners (6.4 per cent) and those purchasing a home at 11.3 per cent.

Poverty rates are an imperfect measure of disadvantage and only cover income and housing costs. However, the household types that the analysis suggests are doing it the hardest are also those same groups that typically come up in other studies that use other metrics such as financial stress (Phillips

⁷ Other welfare households could include households such as single parents or couples whose main source may not be their parenting payment or jobseeker payment but rather family tax benefit. The category may also include veterans.

⁸ It is possible for high income households (which are defined by disposable income not adjusted for housing costs) to be defined as being in poverty where their housing costs are very significant.

2021). These groups include working age welfare recipients, low-income and wealth households, single parents, lone persons and renters.

Table 1 shows the households with the highest rate of financial stress (3 forms of stress or more) are those whose main source of income is the JobSeeker payment (51 per cent) and working age payments (42 per cent) and other welfare payments (not including age pensions) at 48 per cent. These rates compare to a national household average of 14 per cent.

There is a clear relationship between income, wealth and financial stress. Households with low incomes (quintile 1) are nearly 5 times more likely to be in financial stress than a high-income household (quintile 5). Similarly, low wealth households have a rate of financial stress over 6 times that of high wealth households.

The youngest households are much more likely to experience financial stress (31 per cent) compared to older households such as those over 75 with a stress rate of just 6 per cent. Single parent households (38 per cent) are much more likely to experience financial stress than other household types. Couple only households are the least likely family type to experience financial stress at just 8 per cent.

Homeowners (both purchasers and outright owners) are much less likely to experience financial stress (11 and 7 per cent respectively) compared to renters at 25 per cent⁹.

The analysis provides insights that should help direct policy change to where it is most needed or most likely to make the greatest difference. Of those groups estimated to have the highest poverty rates, the most acute poverty is amongst recipients of working age pensions (such as Disability Support Pension, Parenting Payment (Single) and Carer Payment (25.7 per cent), JobSeeker recipients (59.6 per cent), single parents (25.5 per cent), lone persons (18.7 per cent) and renters (17 per cent).

Poverty lines and the JobSeeker Rate

For the last decade or so in Australia the JobSeeker payment has dominated discussion around the adequacy of welfare payments. This section considers the history of the level of the payment to help understand why the payment receives so much attention. For the JobSeeker payment, unlike most other payments, the indexation to the consumer price index sets the current low level of the payment. Pension

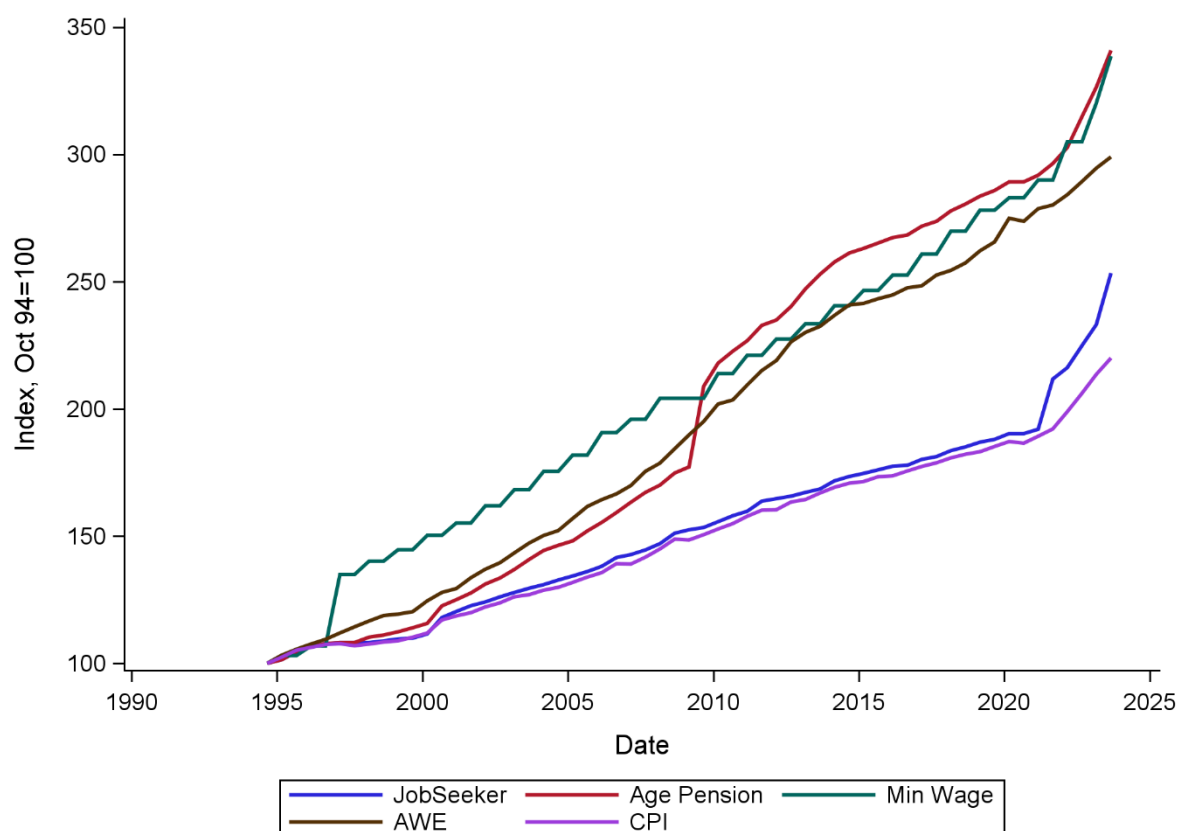
⁹ Caution should be taken in interpreting the financial stress estimates based on the modelled 2023 data which is based on regression modelling using the ABS 2019 Survey of Income and Housing. The ABS survey is cross-sectional and may not provide a sound basis for estimating financial stress of mortgage households who face significantly higher interest rates in 2023 than in 2019. The model does estimate stress based on higher interest rates but there may be considerable heterogeneity amongst mortgage holders with higher mortgages in 2019 and a longitudinal approach (for example using HILDA) may offer better prospects of estimating the true level of financial stress relating to significant interest rate increases.

A Fairer Tax and Welfare System for Australia

payments are all linked to a combination of wages growth and the consumer price index (the greater increase of the two) and this has meant that the JobSeeker payment continues to decline relative to other payments and other benchmarks.

Figure 1 shows the growth of the JobSeeker payment (single) compared to the age pension (single), average weekly earnings (Male FT, ordinary time earnings), consumer price index and the minimum wage. JobSeeker has mostly tracked the CPI (Consumer Price Index) with the exception of the \$50 pf increase in 2021 and the \$40 pf increase expected in September 2023 leading to a real gain of 15.2 per cent since 1994. Relative to the age pension, JobSeeker has fallen 29 per cent since 1994. Compared to the minimum wage JobSeeker has dropped by 25.2 per cent and compared to Average Weekly Earnings (AWE) JobSeeker has dropped 15.3 per cent. To maintain relativities to the mid-1990s JobSeeker would need to be increased by \$260 pf relative to the age pension, \$253 to the minimum wage, \$136 to AWE and lowered by \$99 pf to the CPI.

Figure 1 Growth Rates of JobSeeker compared to benchmark series



An obvious question is that if JobSeeker has increased broadly in line with the CPI, implying the payment has kept up with changes in prices, then what's the problem? The CPI is a measure of pure price change for consumption of goods and services. The measure does not take into account changes in community

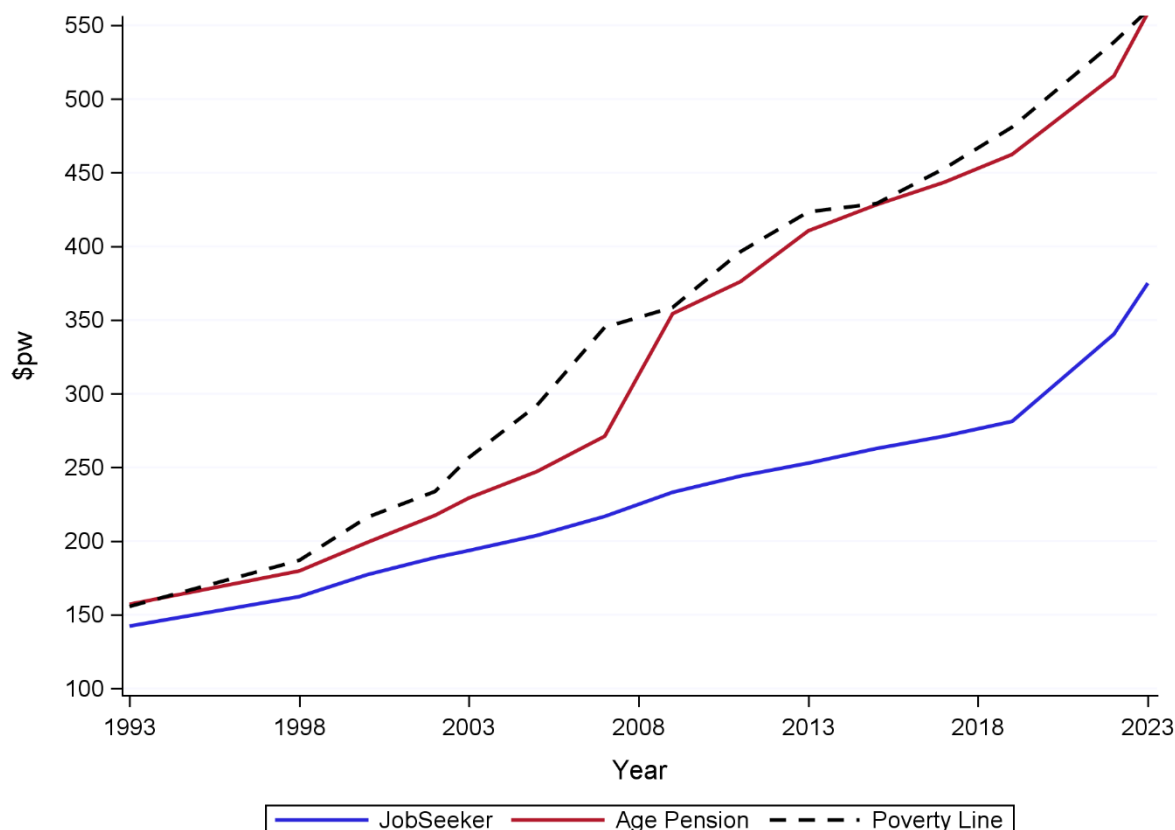
A Fairer Tax and Welfare System for Australia

expectations or needs in a modern society. For example, the published CPI begins in 1948 and the basket of goods and services didn't include most modern goods and services that are taken for granted and expected today, such as washing machines, TVs, computers, internet, streaming services, and mobile phones. There are also some items that were included that aren't in today's basket of goods and services such as radio licences. The general trend is towards a much larger basket of goods and services reflecting a generally more prosperous society.

Keeping up with just the CPI only provides a living standard that relates to a previous period. Community expectations today is that people (including the unemployed) would have a mobile phone and internet access. So, to keep up with community expectations for today **income needs to increase more in line with variables such as wages for household incomes**. To ensure that living standard relativities are maintained for JobSeeker the CPI is not appropriate for indexation. Roughly speaking, there are around 5 million adult recipients of welfare payments and 4 million of those receive pensions that are more generously indexed to the higher of wages or the CPI. The rest are mostly on either JobSeeker or Youth Allowance and those recipients' payments are linked only to the CPI. Through time we are likely to find their payments fall relative to most other welfare recipients and the general population outside the welfare system.

The social security system ideally aims to protect people from poverty. Figure 2 shows how the current JobSeeker and age pension payments (rates for singles) compare to the poverty line as defined by a simple half-median measure based on ABS survey data.

Figure 2 JobSeeker and Age Pension VS ABS income survey based Poverty Line¹⁰



The JobSeeker payment in 1993 was around 91 per cent of the poverty line but by the latest estimate in 2023 this has dropped to 67 per cent. The age pension was initially in parity with the poverty line but by 2007 had fallen behind to just 79 per cent of the poverty line. Largely due to the Harmer Review increase, by 2019 the age pension had returned to parity where it largely remains. JobSeeker fell behind the poverty line dramatically between 1993 and 2007 and the ratio of JobSeeker to the poverty line has been largely unchanged since 2007, albeit with some modest improvement with the \$50 pf and \$40 pf increases (above the usual indexation) in 2021 and 2023 respectively. In short, disposable incomes in Australia increased dramatically between 1993 and 2007 and JobSeeker recipients did not receive this benefit as their payment is linked to the CPI rather than household income. Linking JobSeeker to AWE would have made up much of the gap between JobSeeker and the poverty line. However, the growth in income was more than just a wages phenomenon with other sources of income and employment rates also increasing.

¹⁰ The poverty line value for 2022 is for December and is a projection based on the growth in household income (ABS 5206) since the 2019-20 ABS Survey of Income and Housing.

A Fairer Tax and Welfare System for Australia

There are a range of potential poverty lines that a researcher can choose from and numerous ways to construct the poverty numbers they are based on. The chosen approach here is to use a half-median measure of equivalised disposable income using person weights. It should be expected that different constructions of the poverty line using this general approach would provide different results, but the general conclusions are unlikely to shift by much. The income survey based relative poverty measures are an arbitrarily chosen 'line in the sand' for poverty which may or may not be a reasonable measure of actual needs of low income families. These are just measures of relative income and are widely used by practitioners in the poverty field who judge them to be a reasonable guide to poverty for both today and through time.

The Melbourne Institute publishes the Henderson Poverty Line which is based on the work of Ronald Henderson in the 1973 Federal Government Poverty Inquiry. This research, while ground-breaking at the time is now very dated. The Henderson Poverty Line relies on indexation to per capita income from the national accounts (household account). This indexation should provide a reasonable proxy for the movement of living standards for households. However, the indexation is only likely to be a rough approximation for changes in incomes for lower income households and indeed community expectations of their likely resource needs.

There is no one correct poverty line that perfectly describes the level of income that an individual (or household) requires to maintain a living standard that is generally considered acceptable to society. There is considerable heterogeneity between individuals and households. People for a host of reasons have differing needs. Like the poverty line there is also no single figure for JobSeeker that is the 'right' payment. However, the weight of evidence in this paper and from other research is that the JobSeeker payment has drifted well below most sensible metrics and recipients' rates of financial stress are much higher than the rest of the population – both the welfare and non-welfare populations.

Policy Proposals to lower poverty in Australia

The next section of this paper outlines a series of policy proposals that attempt to lower these poverty rates. The proposals are, by design, relatively modest and are not revolutionary in that they are more a tweak than an overhaul of existing policy.

We model three potential policy changes which we call 'Low', 'Modest' and 'High' with an increasing cost and therefore greater funding requirement as we progress from low to high. The modelling uses PolicyMod to ensure the policy options are costed in such a way that over the forward estimates (2023-24 to 2026-27) they are budget neutral. The model operates at the household level and provides detailed distributional results which shows how the policy changes affect different household types.

A Fairer Tax and Welfare System for Australia

Lowering poverty in Australia, where poverty is measured as a relative concept, can be achieved through raising incomes of low-income persons. This can be achieved indirectly through improving the economic opportunities and outcomes of lower income persons or through more direct measures such as increasing cash welfare payments. Some may view increasing welfare payments as being counter-productive if such payments act as a significant disincentive to paid employment. However, the evidence isn't compelling that modest changes to welfare payments lead to this outcome¹¹.

In this paper we focus on increasing cash welfare payments to lift low-income persons and households out of poverty – or at least lowering their poverty gap. We do not attempt to estimate second round impacts of policy change.

'Modest' and 'High' policies include changes to the tax treatment of superannuation. The current system taxes most superannuation contributions and earnings at a flat 15 per cent rate. There is a rebate for low-income earners, very high earners pay a 30 per cent rate (or potentially a 15 per cent discount on their marginal rate) and most people who are retired and over 60 years of age pay no tax on their earnings on super balances within the \$1.7 million and \$3.4 million limit for singles and couples respectively.¹²

The research models an alternative superannuation taxation system whereby the amount paid on tax is paid at an individual's top marginal tax rate with a substantial discount. Such a system provides a progressive tax system rather than the current flat rate system. Under the proposed system for the 'Modest' policy change actual superannuation tax paid for most taxpayers would either be similar or less than their current rate. For example, if your combined superannuation income and taxable income was currently just under the \$120,000 tax threshold your superannuation tax rate would drop from 15 per cent to 34.5 per cent (including Medicare) minus 20 per cent (i.e. 14.5 per cent). If your current top marginal tax rate was 21 per cent the proposed rate would be 1 per cent. Where your current marginal rate was 47 per cent (above \$180,000 per year) your superannuation tax rate would increase from 15 per cent to 27 per cent.

The 'Low' policy option is considered a minimal increase in payments that increases JobSeeker payments by \$176 per fortnight. This increases the current (expected for December 2023) fortnightly maximum payment from around \$753 per fortnight to \$929 per fortnight. Parenting Payment is also increased from around \$990 pf to \$1157 pf. (ie parenting payment increases by slightly less, \$167)

¹¹ The [Economic Inclusion Advisory Committee report](#) discusses the potential impacts of increases to JobSeeker to employment (Section 1.3.6) and also some related research on possible impacts.

¹² Retirees who do not choose an income stream at retirement and keep their superannuation in a lump sum continue to pay 15 per cent tax on their superannuation earnings.

A Fairer Tax and Welfare System for Australia

This increase is funded through a reduction in the current rate of discount applied to the capital gains tax from 50 per cent to 37.5 per cent. This policy is solely designed to provide some moderate relief to JobSeeker and parenting payment recipients. Table 1 showed that JobSeeker recipients had the highest rates of poverty at nearly 60 per cent.

The 'Modest' policy change makes a further increase to the single rate of JobSeeker with an additional \$249 per fortnight to move the payment in line with 90 per cent of the age pension for both singles and couples. Parenting Payments are increased to \$1228 of and Disability Support Pension and Carer payments are also increased by \$69 per fortnight recognizing the greater cost of living for people with a disability or caring responsibilities (from \$1110 to \$1179 per fortnight). To fund this increase in payments we model the following taxation changes:

- 1) lower the capital gains tax discount from 50 per cent to 37.5 per cent;
- 2) Increase the tax free threshold from \$18,200 to \$24,000 per year and remove the stage 3 tax cuts legislated for 2024; and
- 3) alter superannuation taxation to an individual's personal top marginal tax rate minus 20 percentage points rather than a largely 15 per cent on both contributions and earnings. The tax-free status for retiree superannuation income over the age of 60 is removed.

The 'High' policy option provides the largest increase to welfare payments. This option provides what could be viewed as an upper limit of what may be possible, given political or financial constraints. This shows what might reasonably be possible within the existing welfare framework in terms of poverty reduction. JobSeeker would be increased by \$338 per fortnight and Parenting Payment would be increased to \$1341 (a \$351 pf increase). Disability Support Pension and Carer payments would be increased by \$249 per fortnight and Family Tax Benefit (Part A) increased by 20 per cent. CRA would also be increased by 25 per cent. To fund such welfare increases we take the same tax increases in 'Modest' but reduce the discount on superannuation taxation from 20 per cent to 15 per cent.

To lower poverty we use our 'optimal policy modelling' (OPM) methodology. This method allocates any additional funding to welfare payments in such a way that poverty (or some other objective) is minimised. This paper's approach is to minimise both poverty (poverty gap rather than rate) and financial stress. We take the results of the OPM for the poverty gap and financial stress and average those results. The methodology employed for both the poverty gap and financial stress are described in detail Appendix A.

The 'Modest' and 'High' policy options involve some important changes to the taxation of superannuation. The current superannuation taxation approach is heavily concessional relative to the

A Fairer Tax and Welfare System for Australia

treatment of personal income tax. Generally, tax is applied at 15 per cent on contributions and earnings and there is no tax applied to withdrawals upon retirement. Income received after retirement on superannuation balances is also tax free (with a few exceptions for very high balances).

The logic of concessional taxation is to both provide an incentive to contribute to superannuation, and as compensation since usually people are not able to access their superannuation until retirement. One could argue that the incentive is for most people not necessary since the superannuation guarantee (SG) compels people to contribute to superannuation and by 2025 that contribution will be 12 per cent of employee earnings.

Recent changes to superannuation have limited the ability of individuals to hoard very large amounts of cash in superannuation accounts and benefit from the concessional tax treatment. The intent of superannuation is to provide funds for a reasonable income through retirement, not to be an avenue for tax minimisation for very large amounts of money.

In spite of recent improvements (annual contribution limits and balance limits in the retirement phase) there are strong arguments that superannuation is more concessional than it needs to be, particularly for high income and high wealth households who would still enjoy considerable financial wealth into retirement with more modest concessions. The goal of lightening the concessional nature of superannuation in this paper is to develop a system that doesn't disadvantage low and middle income and wealth families, enabling them to use superannuation in the future to improve their living standards. It should also be that any additional revenue raised will only impact those who are expected to retire with substantial superannuation balances. Any increase in tax to those persons should be modest and still provide the necessary incentives to ensure superannuation remains a reasonable investment for higher income and wealth families.

The proposals offered in this paper are to replace the 15 per cent flat tax with a 20 per cent (or 15 per cent for 'High' policy) discount to the individual's top marginal tax rate (including Medicare). We model these changes using PolicyMod which is based on detailed unit record data for actual people and households relating to income and wealth (and many other economic and demographic characteristics). The model calculates the annual impact on each person and therefore household in the sample since we have their taxable income, superannuation balance and contributions and age. Some assumptions are required around future returns which we conservatively place at 4 per cent per annum.

Using the current policy we estimate that relative to the personal income tax system the superannuation system saves individuals around \$40 billion per year as of 2022. This is roughly equivalent to the Treasury estimates of tax concessions for superannuation. The current split is roughly equal between

A Fairer Tax and Welfare System for Australia

contributions and earnings tax savings. The concessions are heavily distributed towards the top 10 and top 20 per cent of the income distribution. By applying the proposed alternative policies, we compare these tax savings (or tax concessions) and find that the 'Modest' tax saving is around \$4 billion per year and the 'High' tax saving is around \$12 billion per year. These amounts represent significant increases in annual revenue to the Commonwealth but remain highly concessional relative to the personal income tax system.

To better understand the impact on households and their expected retirement balances we have developed a dynamic microsimulation modelling capability within PolicyMod.

PolicyMod is a static model so in its standard form it is not suitable for such projections. We have taken income transition probabilities from the ABS Census 2016 longitudinal file to model the likely trajectory of income for all adults in the 2022 basefile of PolicyMod (around 27,000 adults). The transition probabilities are based on the income transitions between 2011 and 2016 by age, sex and labour force status for all persons in the 5 per cent sample contained in the 2016 longitudinal census file. The benefit of using real life transitions for income is that through the life course it's unlikely that people will take the average trajectory. A more realistic life course trajectory is that people will potentially take time out of the labour force for events such as childbirth, transition to unemployment or shift from full- to part-time work or become either permanently or temporarily disabled. The ABS transitions offer a realistic income trajectory that accounts for the ups and downs of one's employment and earnings history.

Like all models it is not possible to simulate all possible life events; nor do we attempt to simulate behavioural change. However, modelling realistic income transitions through the lifecourse offers a more realistic perspective on potential earnings and superannuation balances at retirement and, in particular, the distribution of expected superannuation balances at retirement. Given the substantial spread of superannuation balances it is important to understand how policy change impacts not just the average balance but also those towards the top and bottom of the distribution. Those with low balances are the people most vulnerable and potentially those who could benefit the most from the proposed policy. Those with high balances are the people who are the least vulnerable and most able to manage modest changes to their expected superannuation balance.

With such income transition modelling we can model the incomes of individuals every five years (which we interpolate to single years) between 2022 and 2062 using the implied income growth rate from the Census income transitions matrix. By applying their expected contributions and earnings and tax paid each year we can predict their superannuation balance at 65 years, when we assume they retire. We do this for the base model using current policies and compare to those same predicted future incomes but apply the new tax rates in our 'Modest' and 'High' policies.

A Fairer Tax and Welfare System for Australia

We simplify the modelling by assuming all figures for each year are ‘real’ or with inflation removed. We also assume real income/wages growth of 1.5 per cent as assumed in the Inter-Generational Report and a real return for superannuation investments over the coming 50 years to 2072 of 4 per cent per annum. This means that people who are 60 in 2022 will retire in the model in 2027. Those who are 25 today will have a full 40 years of income (and increasing real incomes) to increase their current (likely very low) superannuation balance. With all modelling done in real terms we believe we still get a useful comparison between generations and a useful perspective of the impact of the policy change on individual superannuation balances at retirement.

Younger generations get the benefit of a ‘mature’ superannuation system for all 50 years. Older generations have fewer years in the mature system but in recent years have benefited from real returns well above 4 per cent. Some have also benefited from earlier superannuation policy with fewer restrictions on contributions and earnings – which have enabled some very substantial balances that are unlikely to be repeated in the future. As such, it is important that our results consider the distribution of balances, not just averages which can be heavily skewed. The future will continue to see such a skew but perhaps to a lesser extent.

Results

The ‘Low’ policy increases the JobSeeker maximum rate by \$176 per fortnight (singles only) and parenting payment by \$167 pf. This policy change increases government expenditure by around \$4 billion per year from 2023. Tax revenue received from lowering the capital gains tax discount from 50 per cent to 37.5 per cent balances the increased spending over the forward estimates (2023-2026). The ‘Low’ policy represents a 3 per cent increase in current welfare cash payments.

The ‘Modest’ policy is a little more generous to JobSeeker recipients, lifting singles payments by \$249 per fortnight. The Disability Support Pension and Carer Payment are also lifted by \$69 per fortnight recognising their higher cost of living relative to age pensioners (see Phillips 2021). Those on Parenting Payment also have a significant boost to current payment of around \$238 pf. The cost of the ‘Modest’ policy change is around \$10 billion per year from 2023. Replacing the stage 1, 2 and 3 tax cuts with a higher tax-free threshold of \$24,000 (up from the current \$18,200), lower super and capital gains concessions balance the costs with higher taxation revenues over the forward estimates. The ‘Modest’ policy represents an 8 per cent increase in current welfare cash payments.

The ‘High’ policy scenario makes further increases to welfare payments, including a very significant increase to JobSeeker by \$338 per fortnight along with increases to Parenting Payment (up \$380 pf Disability Support Pension and Carer Payment up by \$239 per fortnight, Family Tax Benefit Part A up by

A Fairer Tax and Welfare System for Australia

20 per cent and CRA up by 25 per cent. All these rate increases are based on a \$20 billion per year increase to welfare payments as optimised by PolicyMod’s optimal policy algorithm to minimise the average of after-housing poverty and severe financial stress. To offset these costs the same tax increases as per ‘Modest’ are modelled but a reduced superannuation tax discount of 15 per cent is applied. The ‘High’ policy represents a 16 per cent increase in the current welfare cash payments.

Figure 3 Tax and Transfer Aggregate household impact of proposed policies

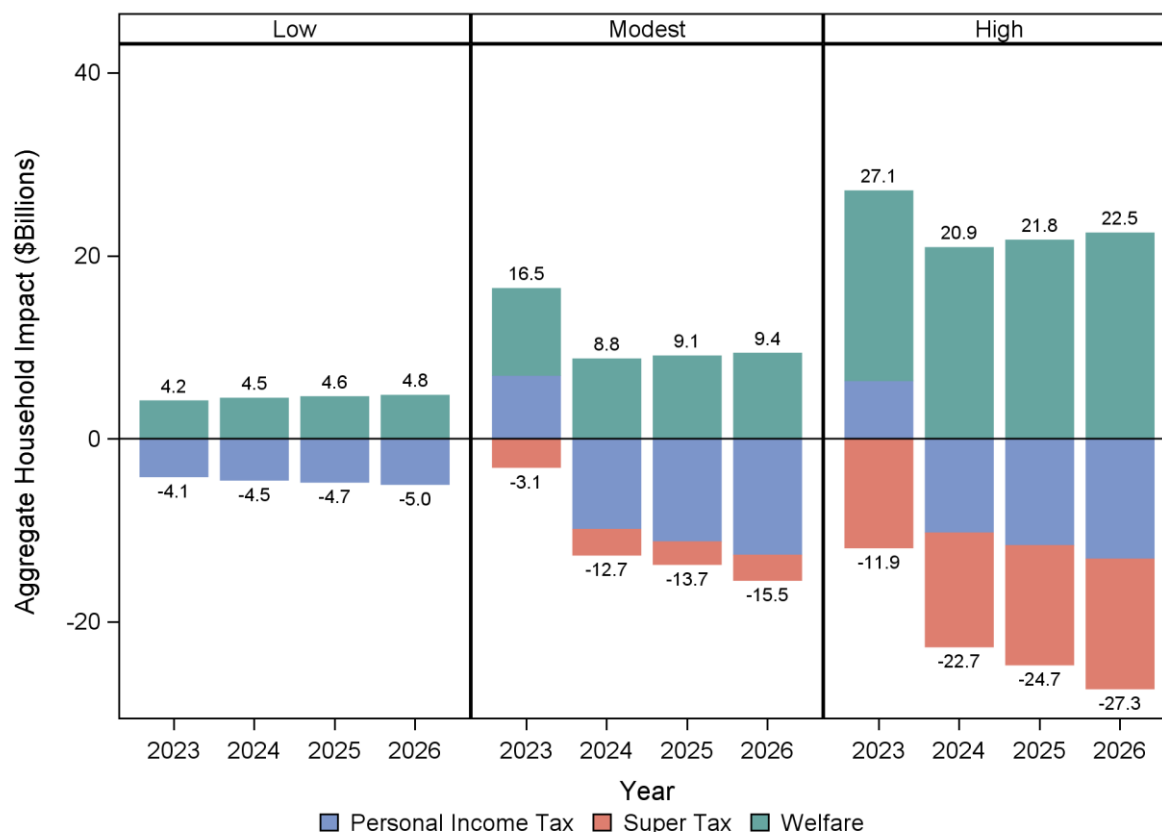


Figure 3 provides an overview of the major aggregates that result from the three proposed policy changes. The increases in personal income tax and tax on superannuation show up as a negative impact on household finances while the increase in welfare is a positive. In net terms, the policies approximately net out to a zero impact on household finances (and therefore government finances) over the forward estimates (2023-24 to 2026-27).

While the overall impact on finances may be roughly zero the results differ markedly when the distributional impacts are considered. With Australia’s tightly means tested welfare system, most of the increase in welfare will be a transfer to lower income households. Since most personal income tax is paid by high income households and most superannuation tax is paid by high income/wealth households, the additional (although modest) tax burden would be felt by high income and wealth households. In net

terms the suggested policy reforms are highly progressive and result in significant reductions in both inequality and perhaps more so, poverty.

Poverty Results

The current all-households estimate for after-housing poverty rate for 2023 (December) for Australia is 11.7 per cent of persons (or 3.15 million persons). The 'Low' policy proposal reduces the share of households in poverty to 11 per cent (2.95 million). The 'Modest' policy reduces poverty further to 9.9 per cent (2.66 million). The 'High' policy lowers poverty to 8.6 per cent or to 2.31 million persons. The 'Low' policy reduces poverty by 193,000, the 'Modest' policy by 491,000 and the 'High' policy by 834,000 persons.

Arguably a better measure of poverty is the 'after-housing' poverty gap rather than the head count measure. The gap considers the depth of poverty and estimates the average distance households are from the poverty line – where a household not in poverty has a distance of 0. Using this measure the average poverty gap lowers from a current policy world estimate of \$1,205 per year per adult to \$1,144 for 'Low' (5.1 per cent reduction), \$1,064 for 'Modest' (11.7 per cent reduction) and \$981 for 'High' (18.6 per cent reduction).

Figure 4 shows increasingly large reductions in poverty for those households whose main source of income are welfare payments. Both JobSeeker and 'WA Pensions' (Disability Support Pension, Parenting Payment (Single) and Carer Payment) poverty rates are more than halved. In the case of JobSeeker, poverty rates drop from 59.6 per cent to 29.9 per cent for the 'High' policy change. Since most of the proposed spending increases relate to welfare payments and most of the tax increases are applied to households not in or near the poverty line, it is not surprising that wage and salary, age pension and business households are not strongly impacted by the change with regard to poverty. Those on working age pensions also receive substantial reductions in poverty with the base case poverty rate dropping from 25.7 per cent to just 9.4 per cent under the 'High' policy option.

Figure 4 Poverty Rates by Main Source of Income

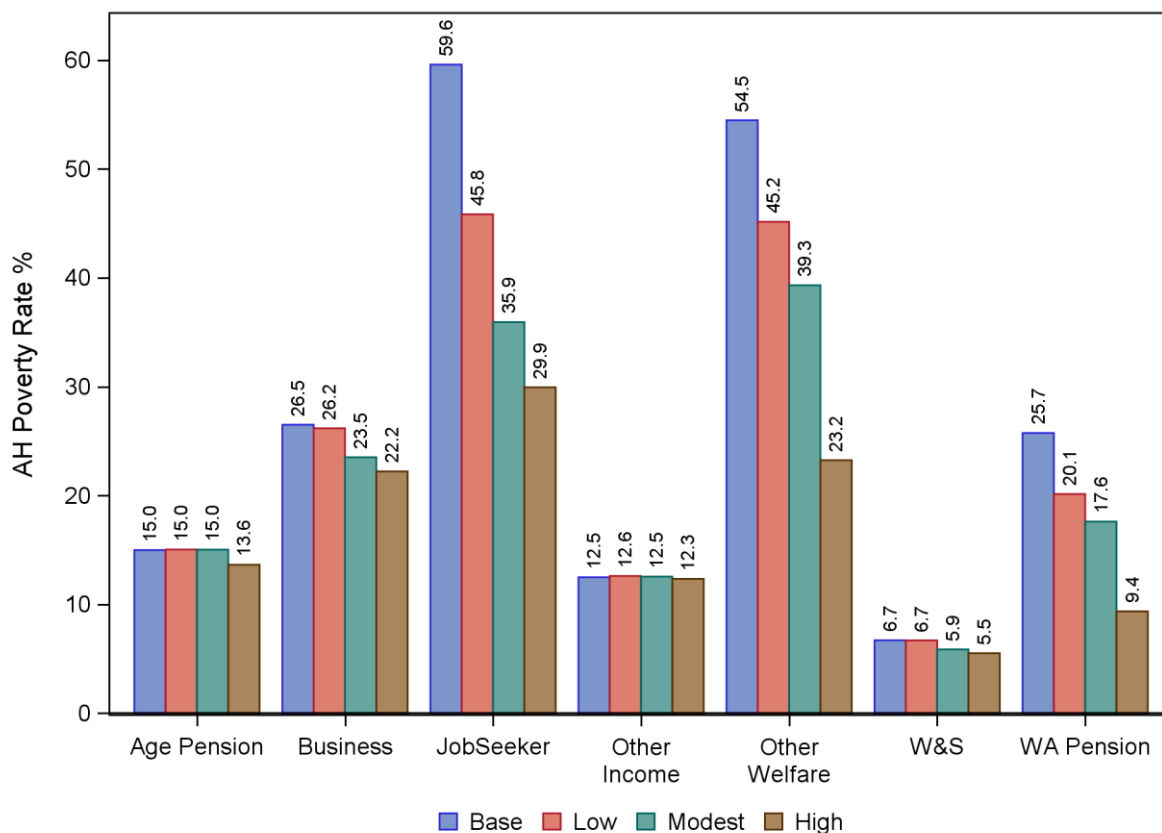
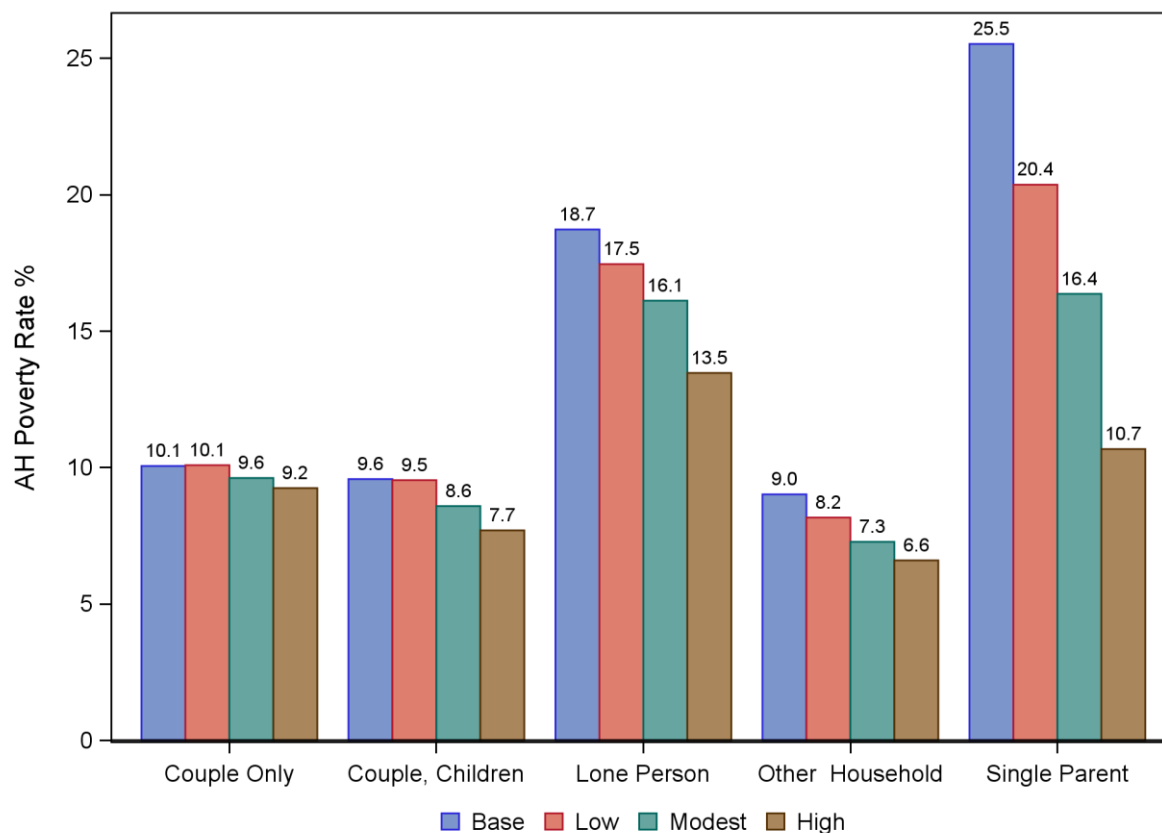


Figure 5 shows that the proposed policy changes would lower poverty rates most substantially for lone persons and single parents – the family types with the highest rates of poverty currently. The rate of poverty for single parents would reduce from a current rate of 25.5 per cent to 10.7 per cent for the ‘High’ policy – more than halving poverty. For lone persons the poverty rate would drop from 18.7 per cent to 13.5 per cent. The reductions for couples and couples with children are less substantial but these cohorts have a much lower base level of poverty. The less ambitious policies also result in lower poverty across all family types. However, the reductions are less substantial and generally in proportion to the additional expenditure.

Figure 5 Poverty Rates by Family Type



Financial Impact of Policy Change

The previous section focussed on the reduction in poverty and therefore the impact of policy change on lower income households. This section considers the financial impact with respect to disposable income. This section shows the financial impact across the full distribution of incomes by considering that impact by income and wealth levels and by age of the head of the household. We also split the result between 2023 and 2025 financial years. The main reason for this is that the policy change for ‘Modest’ and ‘High’ involves the removal of the stage three tax cuts in 2024. This change materially alters the results on the tax side of the equation. Otherwise, the policy changes tend to be linear through time.

Figure 6 shows the average impact by the main source of income for households. JobSeeker households are dramatically impacted by the policy change, with a net positive dollar impact in 2023 of between 14 and 28.4 per cent of their current household disposable income. Recipients of working age pensions are also positively impacted, with gains of between 2.2 and 18.7 per cent. Most other groups (outside of the welfare system) are largely unaffected. The losses, while small relative to the much larger incomes for these households, are enough to fund the gains for the much lower income households, which is typically the case for JobSeeker and working age payment recipients. The results are similar for 2023 and 2025

except that the losses for those households that are worse off (wage and salary and business) are larger losses.

Figure 6 Dollar Impact relative to disposable income – Main Source of Income

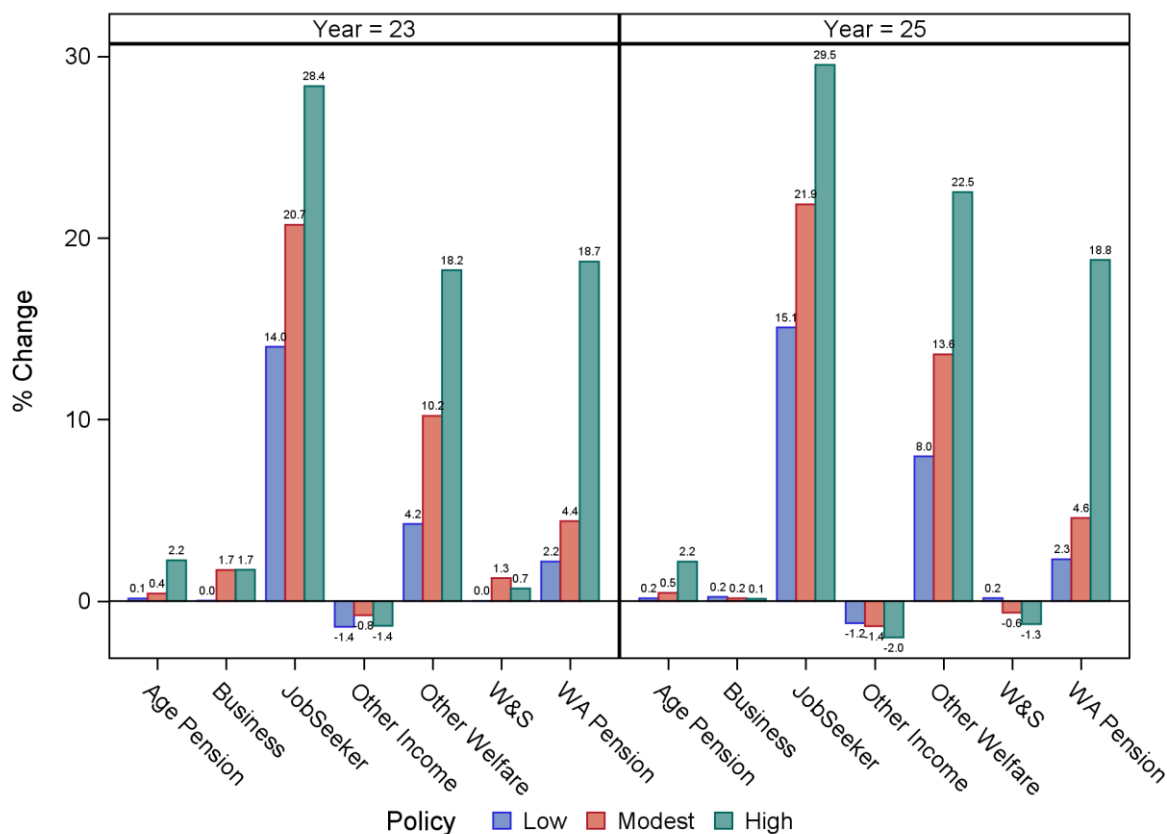


Figure 7 considers the relative financial impact by income quintile. The results show that for both 2023 and 2025 financial years the policy changes are very progressive, with significant gains for the bottom 2 income quintiles and modest losses for the top two quintiles. The ‘High’ policy yields gains of 6.7 and 7.6 per cent respectively in 2023 with slightly larger gains in 2025 for quintile 1. The losses for the top two quintiles are not as dramatic, with a loss of up to 3.5 per cent for the ‘High’ policy in 2025. It should be noted that for the ‘Low’ policy change a surprising result is that the bottom quintile is, on average, only very marginally impacted. This is likely driven by a small number of low-income households with significant capitals gains offsetting the gains of those households benefiting from the increase to JobSeeker and CRA.

Figure 7 Dollar Impact relative to disposable income – Income Quintile

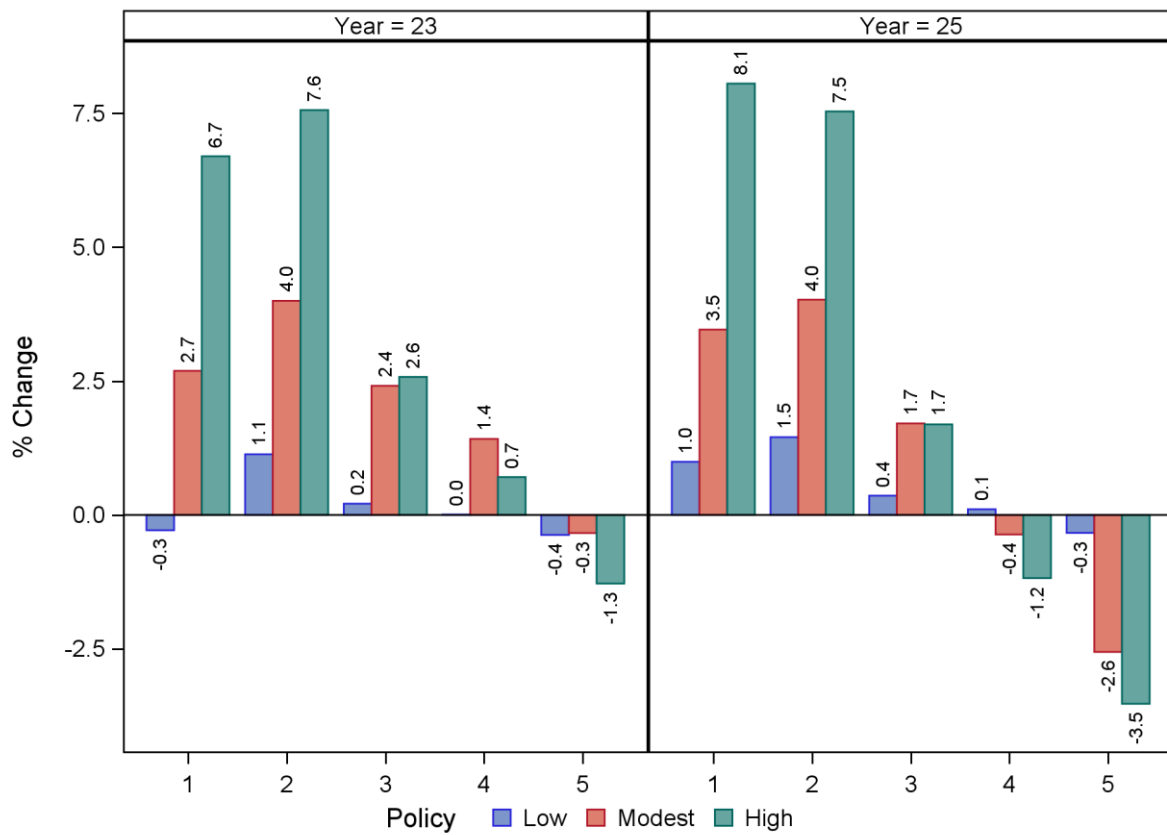


Figure 8 shows the results by wealth quintile. The impact of high wealth but low-income households disappears here and both quintile 1 and quintile 2 benefit across all policy options. Again, the results show a very progressive outcome with low wealth household benefiting and high wealth households worse off. Both Figure 7 and 8 show limited average impacts for households of middle income and wealth.

Figure 8 Dollar Impact relative to disposable income – Wealth Quintile

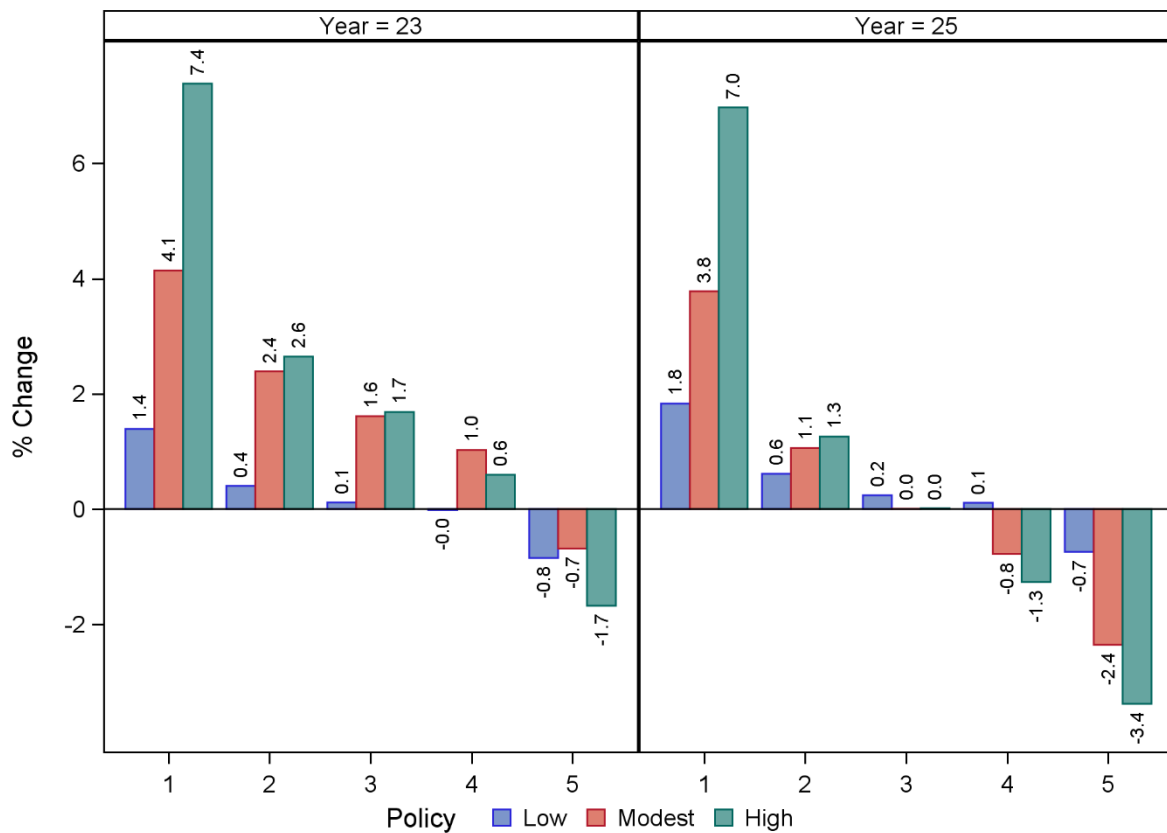
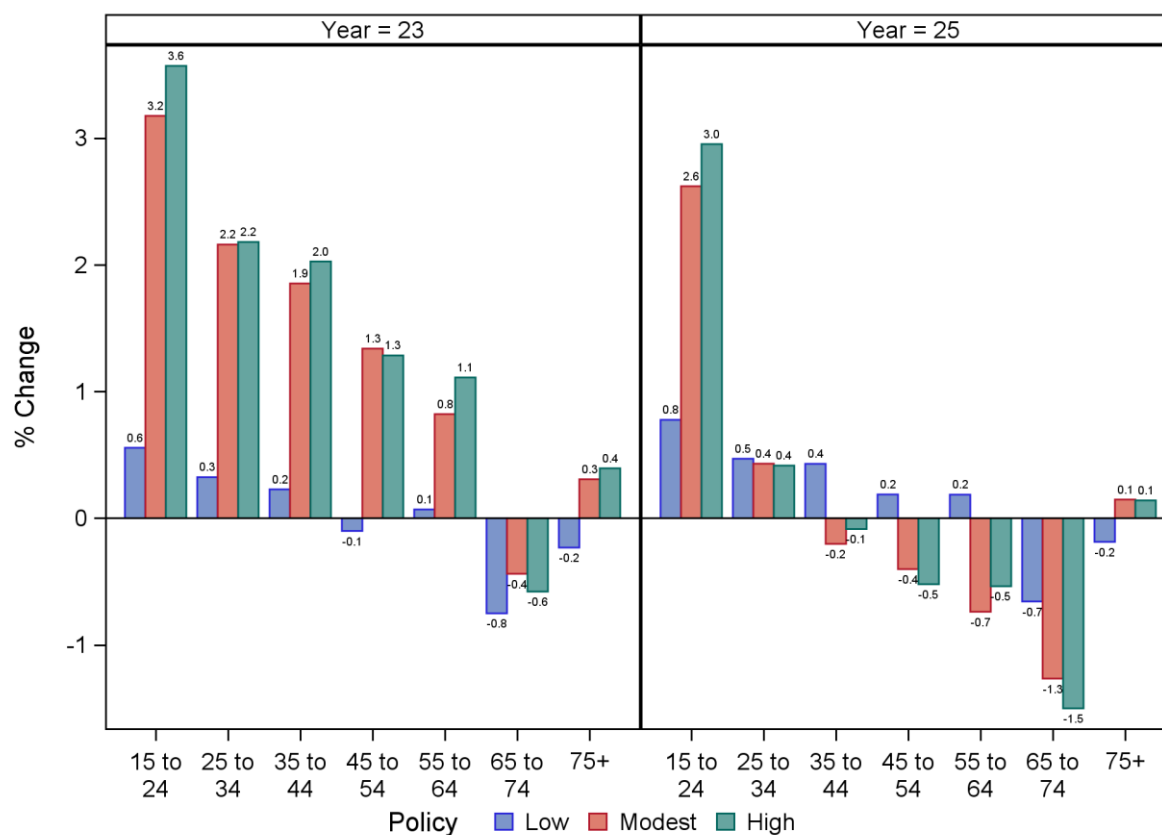


Figure 9 considers the average relative financial impact by age of the head of the household. The relevance of age is partly related to the potential impact of the superannuation changes. The chart shows that the policy changes strongly benefit younger households (15 to 24 years) but middle-aged households are modestly worse off on average. The oldest age category (75 years and over) is better off on average for the 'Modest' and 'High' policy scenarios and unaffected by the 'Low' policy on average.

Figure 9 Dollar Impact relative to disposable income – Age of Head of Household



Gains and Losses Analysis

This next section moves beyond averages and attempts to better understand the actual size of gains or losses. Averages may mask potentially important changes to households. For example, where one low-income household was better off by \$1000 and another low-income household was worse off by \$1000 the average would suggest that on average low-income households are not impacted.

Figure 10 breaks the gains and losses down to seven categories for both high and low income. Three categories for gains, three for losses and a 'no change' category. Again, the results are split between 2023 and 2025 financial years due to potential differences arising from our more ambitious policies.

The 'Low' policy clearly has no impact on most households, with around 90 per cent unaffected. Around 15 per cent of low-income households are better off and around 7 per cent of high-income households are worse off. There is little difference between 2023 and 2025 as the policy changes are similar between years.

A Fairer Tax and Welfare System for Australia

The 'Modest' policy has a broader impact across the income distribution. The policy incorporates a tax system with a higher tax-free threshold rather than including the stage 3 tax cuts in 2024. The policy also has a larger increase to various payments and impacts many persons through a change to superannuation taxation that benefits most households but does disadvantage some higher wealth and likely higher income households. Indeed, the modest policy proposal results show that low-income households tend to either have no impact or are significantly better off (more than \$3000 per year). The high-income households tend to be impacted moderately in the 2023 year and, on average, more substantially towards the '<\$3000' category in 2025 with the stage 3 tax cuts removed.

The 'High' policy distribution of results is similar to that of 'Modest' but with a higher share of households gaining by more than \$3000 per year and losing by more than \$3000 per year. Again, the distribution is heavily weighted towards high income households losing and low-income households gaining. The main policy difference with 'High' relative to 'Modest' is the higher capture of superannuation tax revenue through less generous tax concessions for superannuation. The 'High' policy also uses that additional revenue to make more substantial increases to welfare payments with most areas of welfare increased (with the exception of the age pension).

Figure 10 Gains and Losses by low and high income (Quintile 1 vs Quintile 5)

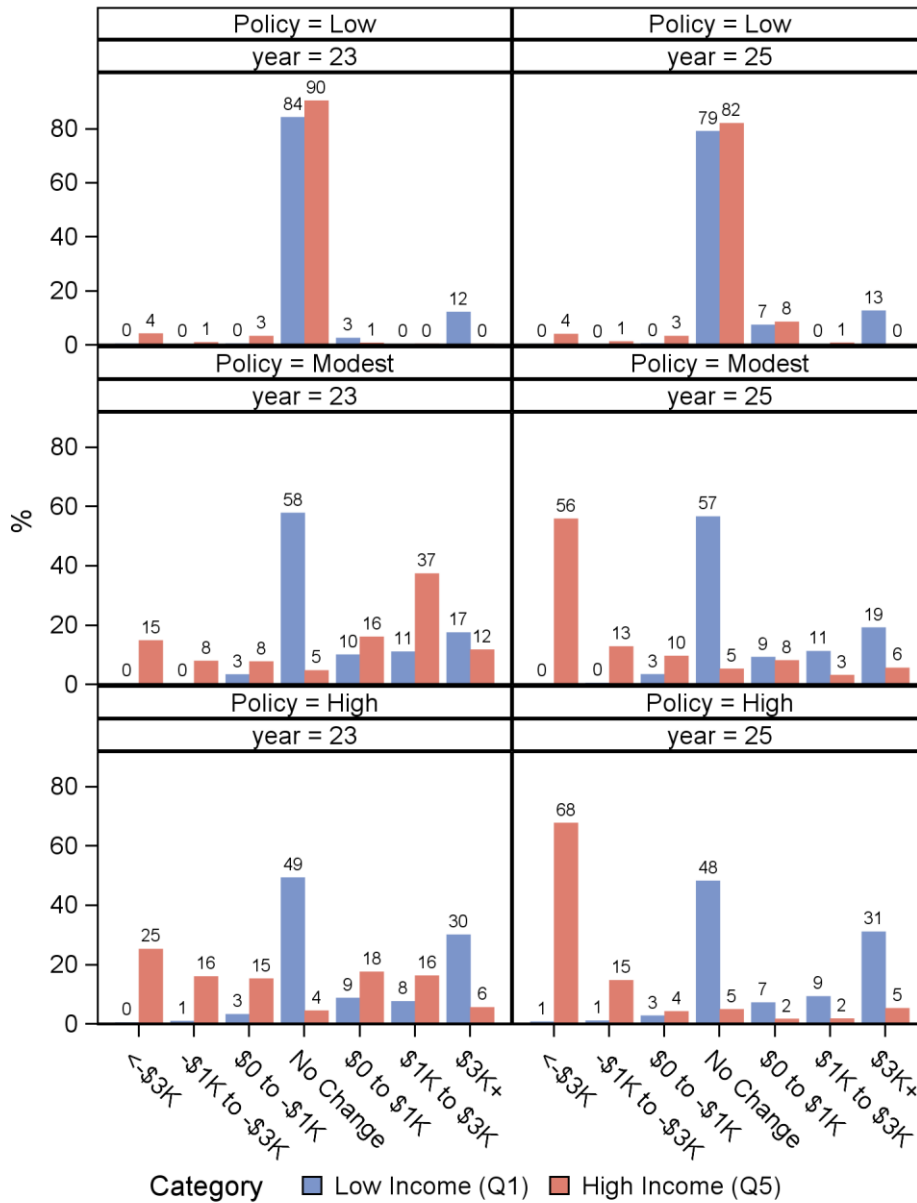


Figure 11 shows the same information as Figure 8 except the households are split by wealth quintiles rather than income quintiles. Wealth is of particular interest for the policy options presented in this paper as a major element of the proposed reform is aimed at superannuation, specifically what we would expect to be higher income and higher wealth households who are in a better position to wear some loss of income (and ultimately wealth) than those persons and households with less income and wealth.

Figure 11 shows that for the 'Low' policy scenario, 90 per cent of high income households are not impacted in 2023. This should not be a surprise since most households are not claiming capital gains in any one year and this is the sole source of funding of the 'Low' policy expenditure measures. The

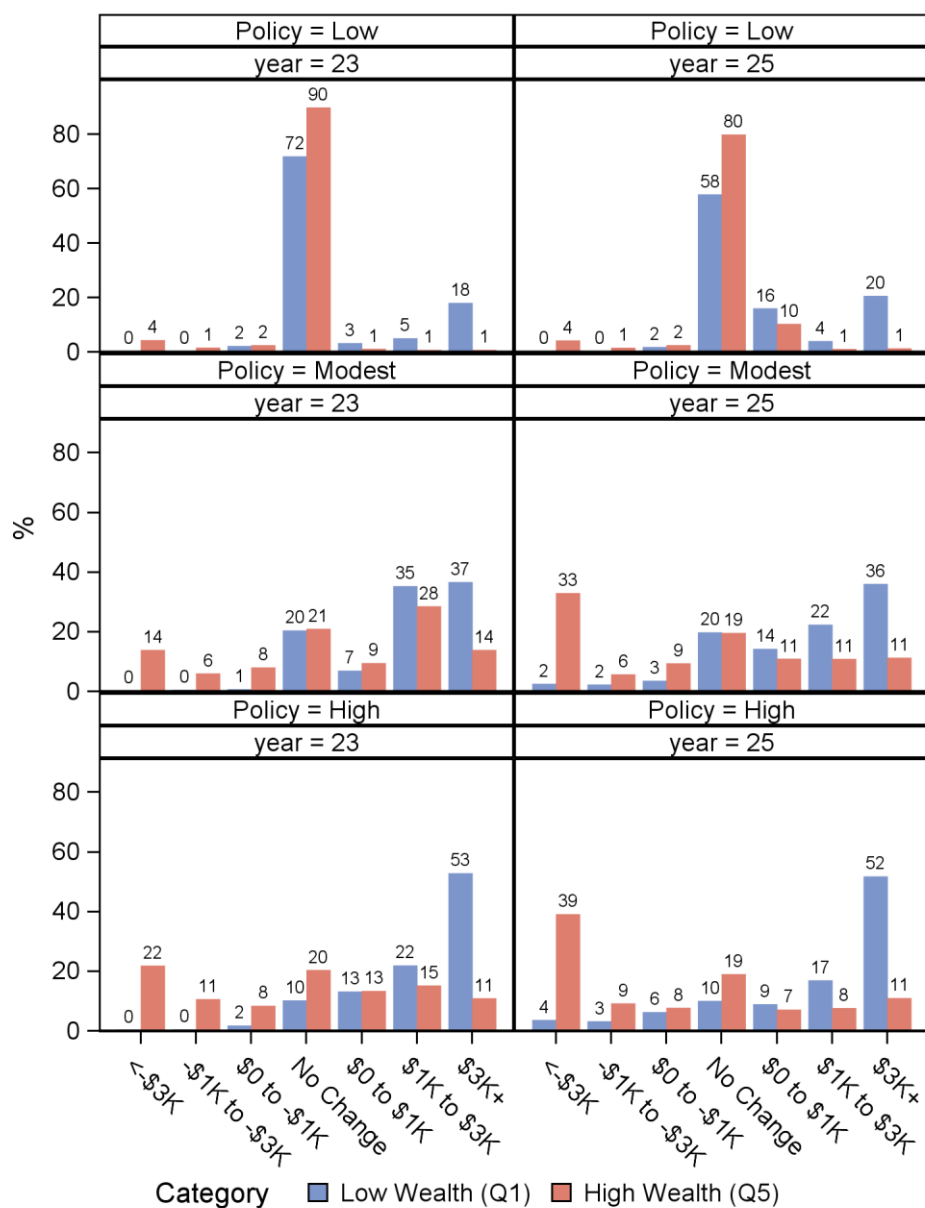
A Fairer Tax and Welfare System for Australia

increase in JobSeeker assists the low-income households, with very few households losing but a significant share (26 per cent) gaining, and 18 per cent gaining by at least \$3000 per year. Around 4 per cent of higher wealth households (quintile 5) lose more than \$3000 per year (through higher capital gains tax) compared to 0 per cent of low wealth households.

In the 'Modest' policy, 35 per cent and 36 per cent of households in the bottom quintile of wealth are ahead in 2023 and 2025 respectively by \$3000 per year or more. Virtually no low wealth households lose by \$3000 a year or more. For high wealth households the situation is reversed, with 14 per cent in 2023 and 33 per cent in 2025 losing by more than \$3000 per year. Around 20 per cent of both high and low wealth households are not impacted by the 'Modest' policy change.

In the 'High' policy, gains and losses are again magnified somewhat. 53 per cent of low-income households are ahead by more than \$3000 per year in 2023 and 52 per cent in 2025. However, 22 per cent and 39 per cent of high wealth households are behind by \$3000 per year in those same years. Around 20 per cent of high-income households are not impacted by the 'High' policy but the share of 'no change' households is reduced for low-income households as the welfare changes are more broad-based for the 'High' policy scenario. Again, virtually no low wealth households are impacted by more than \$3000 per year.

Figure 11 Gains and Losses by low and high wealth (Quintile 1 vs Quintile 5)



A general caveat for all the results above is that these results relate to a ‘static’ simulation. By this we mean that we take a snapshot of time and there are no behavioural responses. If considered through time you would find that the results may be less dramatic from year to year or decade to decade as households transition between income and wealth levels. Behavioural changes are difficult to estimate and are more likely to impact the results over the longer term as people respond to the altered set of incentives that the suggested policies entail. The superannuation changes will have dynamic impacts into the future. For example, higher superannuation tax will mean that some (mostly high income and wealth) retirees in the future will have smaller superannuation balances (all other things being equal). Of course, ‘other things’ are rarely equal and investment behaviour will likely change as a result of such policy

A Fairer Tax and Welfare System for Australia

change. For example, individuals or couples may decide to invest less into super and more into housing or the stock market. Alternatively, they may invest more into superannuation to ensure their nest egg at retirement is not impacted. Attempting to figure out such behavioural change is beyond the scope of this research and in any case is subject to considerable debate and uncertainty.

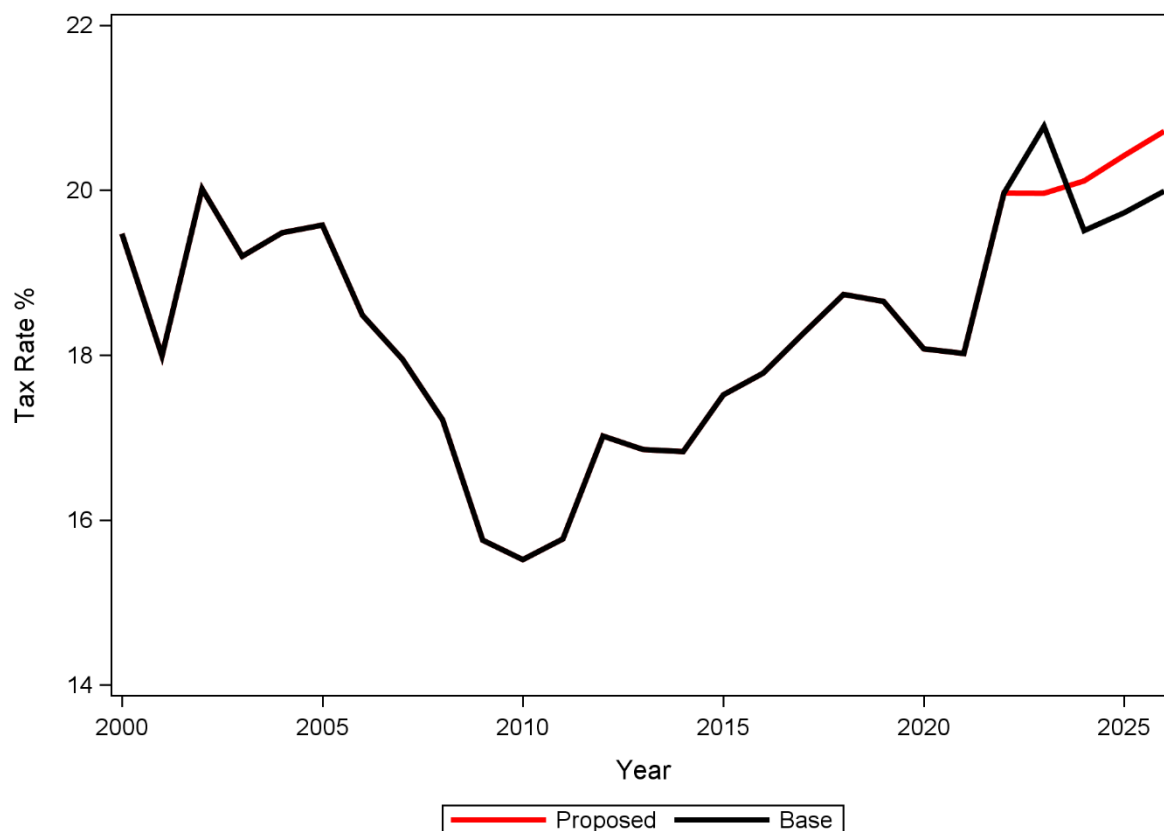
Overall, we find that the three policy options are very progressive with respect to income and wealth levels. The payment increases were designed to lower poverty (reduce the poverty gap) and financial stress so it should come as no surprise that low-income households (which are by definition more likely to be in poverty and are far more likely to be in financial stress (Phillips 2021) benefit the most. The burden of paying for a more generous welfare system falls upon the tax system and by design we have attempted to shift that burden onto areas that are lightly taxed (superannuation and capital gains) and have also re-designed the personal income tax system in such a way that is arguably fairer from the perspective of providing tax relief that is directed less towards the top end of the income distribution.

The three policy options vary in respect to magnitude of change. The 'Low' option represents around \$4 billion per year in spending while the 'Modest' and 'High' options increase that expenditure by \$8 billion and \$20 billion. The higher cost options clearly have more significant impact than lower cost options.

Implications for trends in personal income taxation

A significant element of the 'Modest' and 'High' policy options is the removal of the stage 3 tax cuts and the implementation of a higher tax-free threshold in their place. Over the forward estimates period (2023-24 to 2026-27) this leads to some reduction in personal income tax in 2023-24 but increases thereafter with the removal of the stage three tax cuts. Figure 12 shows the aggregate picture on the impact of such policy change.

Figure 12 Average Household Tax Rate – Current, Past and Projected



It is worth considering the history of tax reform via Figure 12. Changes in the economy mean that change in the average tax rate may not always directly relate to policy changes to the personal income tax system. However, it is not surprising to see large reductions in average tax rates in the second half of the 2000s decade where governments lowered tax rates and increased tax thresholds significantly. From 2010, in the absence of policy change up until 2017, there were significant increases in the rate, almost entirely due to bracket creep, with wages growth pushing individuals into higher income tax brackets or, at least, higher shares of income in higher tax brackets.

The Government’s 10-year tax plan (stage 1,2 and 3) contributed to reductions in average personal income tax beyond 2017. It should be noted that these reductions are much more modest than those of the previous decade. With some bracket creep beyond the end of stage 3 tax cuts (2024) we project that average tax rates will return to levels a little above the 20-year average. The proposed policy initially arrests bracket creep related tax rate increases, albeit briefly, but does ultimately lead to rates at the end of the forward estimates similar to current (2023) rates, or slightly above. In aggregate, the tax revenue is increased over the forward estimates and contributes significantly to the funds required to pay for the increase in welfare payments in the ‘Modest’ and ‘High’ policies.

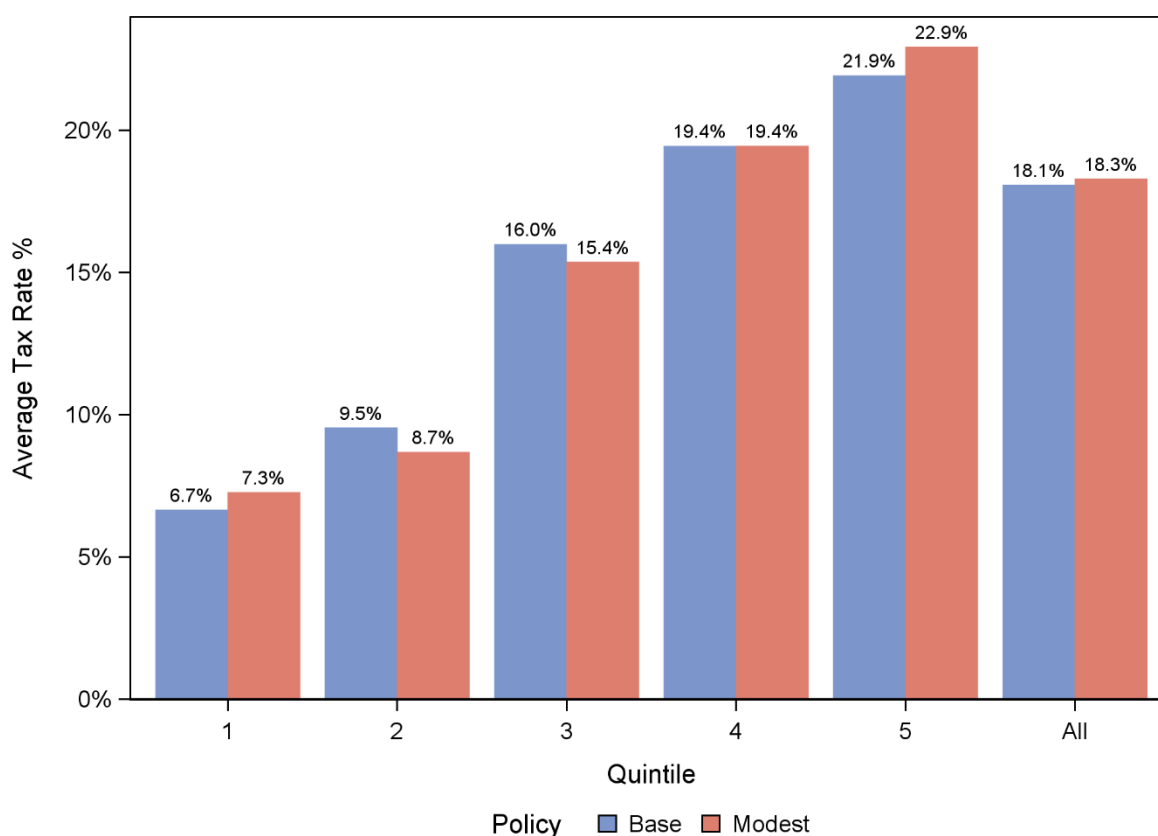
A Fairer Tax and Welfare System for Australia

While the Government's tax plan does make some significant tax cuts (even beyond bracket creep) perhaps what is of more interest is the distribution of those tax cuts. Previous work suggests that the gains mostly accrue to high income individuals and households.

Figure 13 shows the results of a simulation of the current ten 10-year tax plan against that of the proposed policy with the proposed higher tax-free threshold. The estimates show that on average higher income households would face a larger increase in personal income tax compared to the lower income households.

Overall, households over the forward estimates would, in aggregate, pay 18.3 per cent compared to 18.1 per cent under the existing policy. Shifting to the proposed policy would increase tax for the highest income households from 21.9 per cent to 22.9 per cent but lower tax on average for those between the 20th and 60th percentile. The lowest income households would pay slightly more tax, on average, as a result of a small number of high wealth but low-income households paying more capital gains tax under the proposed tax changes.

Figure 13 Income Quintile Average Tax Rates of Ten-year Tax Plan – Indexed proposal



Long term implications for superannuation balances

The 'Modest' and 'High' policy scenarios propose important changes to superannuation taxation, moving from a (mostly) flat tax rate of 15% to a progressive tax rate. The progressive rate would be based on an individual's top marginal tax rate (including medicare levy) minus a discount of either 15 percentage points ('High' policy) or 20 percentage points ('Modest' policy). Both proposals increase the taxation of superannuation (at least through the forward estimates period 2023-24 to 2026-27) and therefore reduce the size of tax concessions through superannuation.

The current superannuation tax concessions for superannuation are estimated to be over \$40 billion per year over the forward estimates (Treasury 2023) which matches up closely with that estimated in this paper. Superannuation is, in theory, designed to provide for a relatively comfortable retirement living standard for most people.

The proposed policies will have implications for retirees with most retirees impacted through changes to their retirement superannuation balances and income streams. The majority of lower income and wealth persons will benefit from higher expected superannuation balances at retirement. However, some higher income and wealth people will have modestly lower balances.

In this section we estimate the impact on retirement balances from the policy changes. Ideally, it should be the case that only persons with superannuation balances well in excess of what are reasonable levels will be adversely impacted and those with low to modest balances have larger superannuation balances at retirement¹³.

To investigate the impact of policy change we use a dynamic version of the ANU PolicyMod model and considered the distribution of expected retirement balances for three age groups: 15-34; 35-49; and 50 to 64, for both males and females. The impact for persons aged over 65 years is mostly covered in the static analysis shown in the earlier analysis in this paper. The impact was felt through lower income for higher income retirees since there is the potential for some retirees to pay some more income tax than is currently the case.

Those aged 15 to 34 years in 2023 would (where they retire at 65) have benefited from a superannuation guarantee of at least 9 per cent for all of their working career and the majority of their career at the 12 per cent rate (legislated to begin in 2025). Those aged between 35 and 49 years in 2023 will have also spent the vast majority of their working career with a super guarantee of at least 9 per cent and

¹³ There is no agreed level that superannuation balances should be prior to retirement, however Association of Superannuation Funds of Australia (ASFA) recommends \$545,000 for a single and \$640,000 for a couple for a 'comfortable' lifestyle. This estimate assumes funds are drawdown by death and used in combination with the age pension. <https://www.superannuation.asn.au/resources/retirement-standard>

A Fairer Tax and Welfare System for Australia

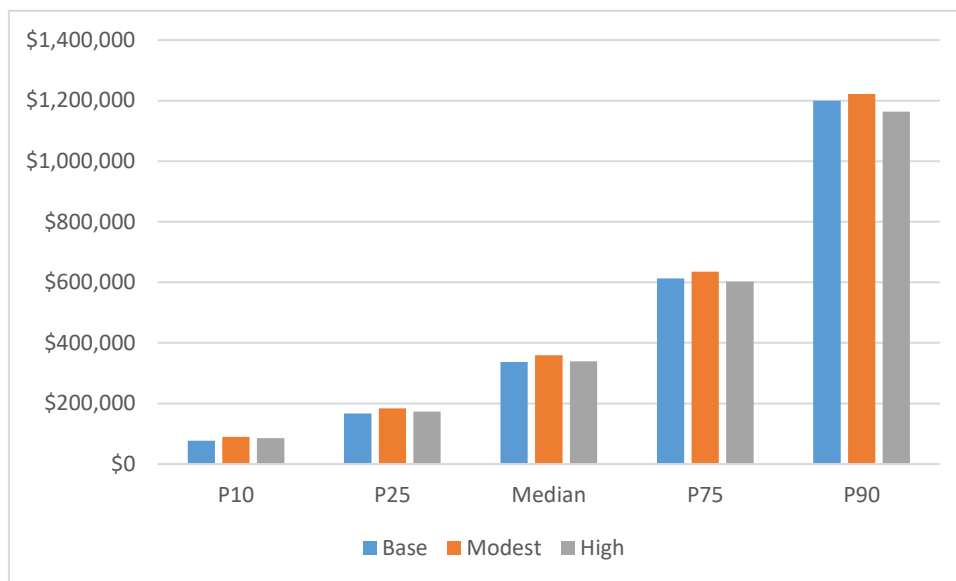
potentially a significant amount of time with a rate greater than 9 per cent. Those aged 50 and over may have a significant period of their working career without superannuation and/or at a rate between 3 and 9 per cent – below the current rate of 10 per cent and the 12 per cent rate for 2025 and beyond. The older groups have benefited from very strong returns in recent years and may have benefited from less restrictions on superannuation contributions in years gone by.

We estimate the distribution of superannuation balances for each of these groups for the current policy and compare with the ‘Modest’ and ‘High’ policies with regard to their proposed changes to superannuation tax rules. We consider the 10th, 25th, 50th (median), 75th, and 90th percentiles of superannuation balances at retirement. The 10th percentile relates to the superannuation balance 10 per cent along the distribution of all balances, implying if you ranked the incomes of 100 people from lowest to highest the 10th percentile would be the person with the tenth lowest income. The 50th percentile is the median or the halfway point of the distribution. This logic continues up to the 90th percentile which is the start of the top 10 per cent of superannuation balances.

Figure 14 shows the distributional results for projected retirement balances for the current and proposed superannuation policy. We find that the proposed policies do improve superannuation balances for low- and middle-income individuals. The only decreases in balances are for those people expected to be at the higher end of the superannuation balance distribution. Groups we would expect to have the greater financial challenges and rely heavily on the age pension are all estimated to improve their balances.

Figure 14 shows the distribution of retirement balances (at age 65 years) for all persons in Australia currently aged between 15 and 64. Retirement balances for the bottom 10 percent point (P10) of balances right up to the 90th percentile (P90) are all higher than the base or current policy for the ‘Modest’ policy. For the ‘High’ policy, where a 15 per cent discount is applied to top marginal rates rather than the current policy of mostly a flat 15 per cent, the balances are higher for P10 up to P50 (median). The ‘High’ policy lowers expected balances for P75 and P90. The most significant reduction is for the P90 (top 10 per cent of expected superannuation balances) where there is expected to be a 3 per cent drop from \$1.2 million to \$1.16 million – both remain a comfortable balance for retirement for an individual and significantly above the asset thresholds where the age pension cuts out for singles of \$859,250 for a renter or \$634,750 for a homeowner.

Figure 14 Expected Retirement Balance distribution at age 65 years for all persons aged 15 to 64 years in 2023 by policy, PolicyMod Dynamic



The biggest gains from the suggested policy change are for the bottom 10 percentage point of superannuation balances at retirement under the ‘Modest’ policy with a 16 per cent increase, raising average balances from \$77,400 to \$89,800. The ‘High’ policy increases balances of the bottom 10 percent to \$85,400 or 10 per cent. The ‘Modest’ policy increases typical or median (P50) balances by 6 per cent from \$337,000 to \$359,000. The ‘High’ policy leaves expected balances 1 per cent higher at \$340,000¹⁴.

Figure 14 combines all persons aged 15 to 64 years. Superannuation is expected to continue ‘maturing’ over the next half century mostly thanks to the super guarantee increasing to 12 per cent by 2025, having been as low 3 per cent when first introduced in the early 1990s. There are also important differences between men and women, with women tending to have lower superannuation balances, particularly older women today who have typically worked less than men and typically being paid less for the work they have done. The gap between males and females is expected to shrink over time as female participation in the workforce increases relative to male rates in recent decades.

Noting such dynamics at play with superannuation, Figure 15 provides details for the expected retirement balances of age and sex for the different policy options. Age is split into three categories; 15 to 34 (early career), 35-49 (mid-career) and 50 to 64 (late-career). The expected superannuation balances at retirement of the early career group benefit from the majority of their accumulation years being at the 12 per cent superannuation guarantee rate. They also benefit from our assumed 1.2 per cent real growth in wages and therefore contributions. The mid-career group’s expected superannuation

¹⁴ Percent changes and dollar figures presented may not exactly match due to rounding of dollar figures.

A Fairer Tax and Welfare System for Australia

balances will also benefit from many years of high contributions and higher real incomes – but on average 17.5 fewer years. The late-career group may enjoy a small number of years at the higher contribution rate and some real wage growth but 15 fewer years than mid-career persons and 32.5 fewer years than early-career persons.

Figure 15 Age by Sex expected superannuation balances at retirement distribution, PolicyMod Dynamic

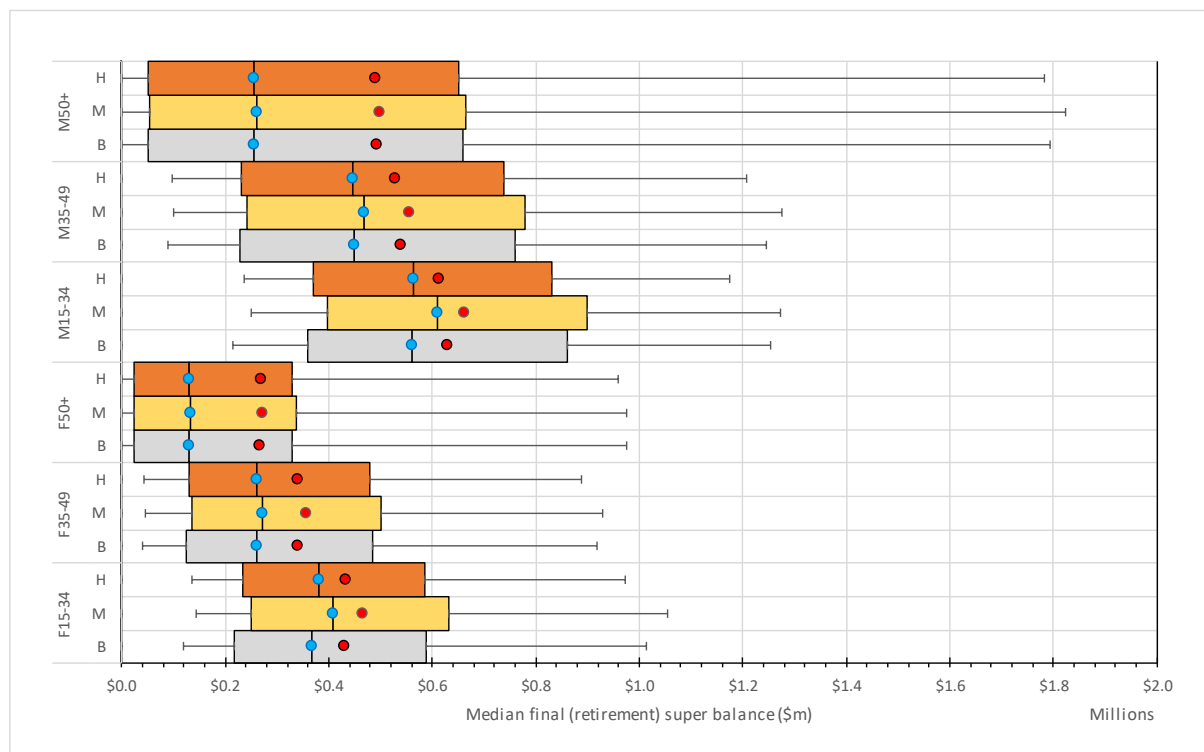


Figure 15 shows the dramatic difference that more years in a ‘mature’ superannuation system and higher incomes will do for expected superannuation balances. Clearly the early career persons are expected to retire with significantly more than late career persons, particularly for the lower balance percentiles. For example, the bottom 25th percentile of superannuation balances at retirement for males is expected to be \$360,000 for those currently aged 15-34 whereas those aged 50 to 64 are expected to only reach \$50,000. For women the 25th percentile figures are \$217,000 and \$23,000 – indicating an expected continuation of superannuation gaps into the future by gender but overall, there is substantial gains in retirement balances for both males and females.

The Figure shows some helpful gains for those early career persons with lower wealth levels for both men and women from the proposed policy change. Gains of around 15 percent for women and 11 percent for men for the 25th percentile of superannuation balances. A 25-year-old women today at the 25th percentile would benefit from a gain in their expected balances from the current policy from \$217,000 to \$249,000. At the other end of the scale, a male who is 25 today at the 90th percentile of retirement

A Fairer Tax and Welfare System for Australia

balances would drop from an expected balance of \$1.25 million to \$1.18 million under the 'High' policy scenario (6.3 per cent reduction).

The model's expectation around median superannuation balances shows some improvements resulting from the proposed changes to superannuation in this paper. For women, the youngest age group would be expected to increase their retirement balances from \$367,000 to \$408,000 for the 'Modest' policy change and to \$381,000 for the 'High' change. For young men the median balance currently is expected to increase from \$561,000 to \$609,000 for the 'Modest' policy and \$563,000 for the 'High' policy. For middle and older aged persons, the expected median superannuation balances are smaller than those projected for the youngest cohort but generally remain favourable or close to unchanged for both policies relative to the current policy.

The modelling shows that women are expected to retire with significantly lower superannuation balances. Females in younger cohorts are expected to make considerable gains in the future with higher expected retirement balances. These gains are due to greater workforce participation over working age years, higher superannuation guarantee rates and higher real wages in the future. In spite of these significant gains, females are expected to still lag well behind males for each age cohort. Women are expected to remain roughly 20 years, a generation, behind their male counterparts. This implies that women who are 45 today and who retire in 20 years will be in a similar position to males retiring today. They will be around 42 per cent behind their 45-year-old male counterparts. A more progressive approach to superannuation taxation, such as those proposed in this paper, does lower this gap, albeit very modestly.

An important implication of the modelling is that the superannuation balances are mostly not adversely impacted by the policy change but where there are some modest reductions those impacts are for very high superannuation balances. These superannuation balances may be a little smaller, but such change is unlikely to impact longer term age pension liabilities for the Government. Those persons most likely to receive the Age Pension will typically retire with superannuation balances that will either be similar or higher than under the current policy.

In summary, the detailed age by sex analysis of expected superannuation retirement shows that the main beneficiaries of policy change would be younger people with low to moderate expected superannuation balances. The gains are large enough to make a difference for the lower wealth persons, being up to around 20 per cent larger superannuation balances at retirement. The largest negative impacts would be those persons who are already expected to have very significant superannuation balances (well over a million dollars and in the top 10 per cent of the superannuation distribution). The impacts are relatively

A Fairer Tax and Welfare System for Australia

minor with the largest negative impact being a 6.3 per cent reduction in retirement balance for the top 10 per cent of young males - \$1.18 million down from \$1.25 million.

Regional Implications

The earlier results for poverty and financial stress cannot be directly estimated from PolicyMod at the regional level (below capital city and rest of state). However, using the PolicyMod regional model we can synthetically estimate poverty and financial stress rates and overall gains and losses.

PolicyMod Regional combines Census data, SA3 house price median prices (Corelogic), SA3 superannuation median balances and SA3 welfare data from the Department of Social Services. The methodology used to combine these data is called spatial microsimulation which involves altering the weights in PolicyMod at the national level to become a set of weights for each region. PolicyMod Regional uses the ABS gregwt.sas software to calculate weights for each region (SA3) so that they sum up to population totals and align to each region's demographic and economic profile. Gregwt.sas incorporates a large range of variables (benchmarks) that each region's weights must align to including age by sex, labour force, occupation, income, education levels, number of persons in a household, family type, housing costs, tenure type, welfare payments, superannuation and house price data.

Table 2 shows the SA3s with the highest rates of poverty in Australia. The region with the highest rate of poverty (after-housing) is the Merrylands-Guildford in western Sydney. Merrylands-Guildford has a poverty rate of 28.9 per cent under current policies for 2023. 7 of the top 10 SA3s ranked by poverty are in the western suburbs of Sydney, reflecting both relatively low income and high housing costs in these regions.

In Merrylands-Guildford the 'Low' policy reduces poverty by 0.5 percentage points to 28.4 per cent while the 'High' policy reduces poverty considerably further to 23.7 per cent – a drop of 5.2 percentage points. The largest possible drops in poverty are in East Arnhem with estimated maximum reductions of 7.1 percentage points. It would be expected that SA3s with a high share of welfare recipients, in particular JobSeeker, would benefit the most from the proposed policies.

Table 2 Poverty Rates, SA3s (top 20 out of 151)

ANU CSRM Poverty and Financial Stress Analysis			Poverty Rate (After-Housing)				
SA3	Electorate (main)	State	Policies Modelled				Maximum Reduction
			Base	\$4b	\$10B	\$20B	
Merrylands - Guildford	McMahon	NSW	28.9%	28.4%	26.2%	23.7%	-5.2%
Auburn	Blaxland	NSW	28.7%	28.3%	26.3%	24.8%	-4.0%
Bringelly - Green Valley	Werriwa	NSW	27.3%	26.8%	24.7%	23.0%	-4.3%
Tullamarine - Broadmeadows	Calwell	VIC	27.2%	26.3%	23.6%	21.1%	-6.1%
Canterbury	Watson	NSW	26.7%	26.2%	24.4%	22.5%	-4.2%
East Arnhem	Lingiari	NT	26.4%	25.3%	22.8%	19.2%	-7.1%
Casey - South	Holt	VIC	25.8%	25.2%	22.8%	21.1%	-4.8%
Bankstown	Blaxland	NSW	25.8%	25.4%	23.4%	21.6%	-4.2%
Fairfield	Fowler	NSW	25.7%	25.1%	23.3%	21.1%	-4.6%
Liverpool	Fowler	NSW	25.7%	25.2%	23.1%	20.9%	-4.8%
Mount Druitt	Chifley	NSW	25.0%	24.4%	22.3%	19.6%	-5.4%
Campbelltown (NSW)	Macarthur	NSW	24.7%	24.0%	21.8%	19.5%	-5.2%
Browns Plains	Rankin	QLD	23.6%	22.8%	20.2%	17.4%	-6.2%
Carlingford	Parramatta	NSW	23.5%	23.2%	21.8%	20.8%	-2.6%
Caboolture Hinterland	Longman	QLD	22.9%	22.4%	21.1%	19.3%	-3.6%
Springwood - Kingston	Rankin	QLD	22.7%	22.0%	20.4%	18.3%	-4.4%
Jimboomba	Wright	QLD	22.7%	21.8%	19.5%	18.0%	-4.6%
Southport	Moncrieff	QLD	22.6%	21.7%	19.4%	17.8%	-4.7%
Wyndham	Lalor	VIC	22.6%	21.8%	19.5%	17.8%	-4.8%
Playford	Spence	SA	22.5%	21.5%	19.7%	17.2%	-5.3%

Source: ANU PolicyMod Regional

At the other end of the scale the SA3s with the lowest rates of poverty are East and West Pilbara in Western Australia, Bowen Basin – North in Queensland and South Canberra. East Pilbara has the lowest poverty rate in Australia at 5.2 per cent. Smaller poverty reductions are possible for these SA3s due to their low share of welfare recipients. A full list of SA3 results for poverty is provided in Appendix B.

Table 3 Poverty Rates, SA3s (bottom 20 out of 151)

ANU CSRM Poverty and Financial Stress Analysis			Poverty Rate (After-Housing)				
SA3	Electorate (main)	State	Policies Modelled				Maximum Reduction
			Base	\$4b	\$10B	\$20B	
East Pilbara	Durack	WA	5.2%	5.0%	4.0%	2.8%	-2.3%
West Pilbara	Durack	WA	5.3%	5.2%	4.3%	3.2%	-2.1%
Bowen Basin - North	Capricornia	QLD	9.3%	8.8%	7.5%	6.0%	-3.3%
South Canberra	Canberra	ACT	9.6%	9.4%	8.8%	8.4%	-1.2%
Weston Creek	Bean	ACT	11.0%	10.9%	10.4%	9.8%	-1.2%
Wheat Belt - South	O'Connor	WA	11.0%	10.4%	9.8%	9.0%	-2.0%
Central Highlands (Qld)	Flynn	QLD	11.2%	10.6%	9.1%	7.5%	-3.8%
Lower Murray	Farrer	NSW	11.3%	10.5%	9.6%	8.5%	-2.8%
Woden Valley	Bean	ACT	11.5%	11.3%	10.7%	10.2%	-1.2%
Stonnington - East	Higgins	VIC	11.6%	11.3%	10.7%	10.3%	-1.3%
Queanbeyan	Eden-Monaro	NSW	11.7%	11.3%	10.3%	9.5%	-2.1%
Kenmore - Brookfield - Moggill	Ryan	QLD	11.7%	11.7%	11.2%	10.9%	-0.8%
Stonnington - West	Higgins	VIC	11.8%	11.1%	10.1%	8.9%	-2.9%
Manly	Warringah	NSW	11.9%	11.7%	10.3%	10.1%	-1.8%
North Canberra	Canberra	ACT	12.0%	11.5%	10.6%	9.7%	-2.3%
Biloela	Flynn	QLD	12.1%	11.5%	10.2%	8.9%	-3.2%
Grampians	Mallee	VIC	12.1%	11.3%	10.5%	9.2%	-2.9%
Goldfields	O'Connor	WA	12.1%	11.6%	10.2%	8.5%	-3.6%
Nilumbik - Kinglake	Jagajaga	VIC	12.3%	12.2%	11.8%	11.4%	-1.0%
Cottesloe - Claremont	Curtin	WA	12.4%	12.2%	11.5%	11.1%	-1.2%

Table 4 provides an alternative to poverty – financial stress based on the share of households who report having 3 or more forms of financial stress in the ABS Survey of Income and Housing 2019-20. The stress results are not a one-for-one with poverty however there is a correlation.

Table 4 Highest Financial Stress Rates by SA3, Modelled in PolicyMod for 2023

Financial Stress (3+ responses) by region				
SA3 Region	Electorate (main)	State	Rate	Poverty
Daly - Tiwi - West Arnhem	Lingiari	NT	27.8%	19.6%
Playford	Spence	SA	24.2%	22.5%
Katherine	Lingiari	NT	23.1%	17.3%
Far North	Leichhardt	QLD	23.1%	17.8%
East Arnhem	Lingiari	NT	22.6%	26.4%
Brighton	Lyons	Tas	21.7%	19.3%
Browns Plains	Rankin	QLD	21.6%	23.6%
Mount Druitt	Chifley	NSW	21.2%	25.0%
Caboolture	Longman	QLD	20.9%	22.1%
Fairfield	Fowler	NSW	20.9%	25.7%
Kimberley	Durack	WA	20.8%	15.9%
Springfield - Redbank	Oxley	QLD	20.6%	20.4%
Beenleigh	Forde	QLD	20.5%	20.7%
Springwood - Kingston	Rankin	QLD	20.2%	22.7%
Forest Lake - Oxley	Oxley	QLD	20.1%	21.3%
Merrylands - Guildford	McMahon	NSW	19.9%	28.9%
Alice Springs	Lingiari	NT	19.6%	17.3%
Ipswich Inner	Blair	QLD	19.5%	17.4%
Salisbury	Makin	SA	19.4%	21.2%

The highest stress SA3s is Daly-Tiwi-West Arnhem in the NT with 27.8 per cent of households estimated to suffer financial stress with at least three forms of stress. Playford in outer Adelaide has the second highest rate of stress at 24.2 per cent closely followed by Katherine in NT (23.1 per cent) and Far North in Queensland (23.1 per cent) and East Arnhem in the NT at 22.6 per cent.

The poverty numbers tend to place a higher weight on SA3s with high housing costs which pushes the western Sydney SA3s to the top of the poverty table. These SA3s all rank highly in financial stress but there is greater variation. NSW has two SA3s in the top 10 SA3s by financial stress – Mt Druitt and Fairfield in western Sydney. Suburban Greater Brisbane features much more heavily in high financial stress regions with Caboolture, Springfield-Redbank, Beenleigh, Springfield-Kingston and Forest Lake-Oxley and Inner Ipswich all from Greater Brisbane in the top 20 most stressed. Appendix C provides the full set of results for financial stress estimates.

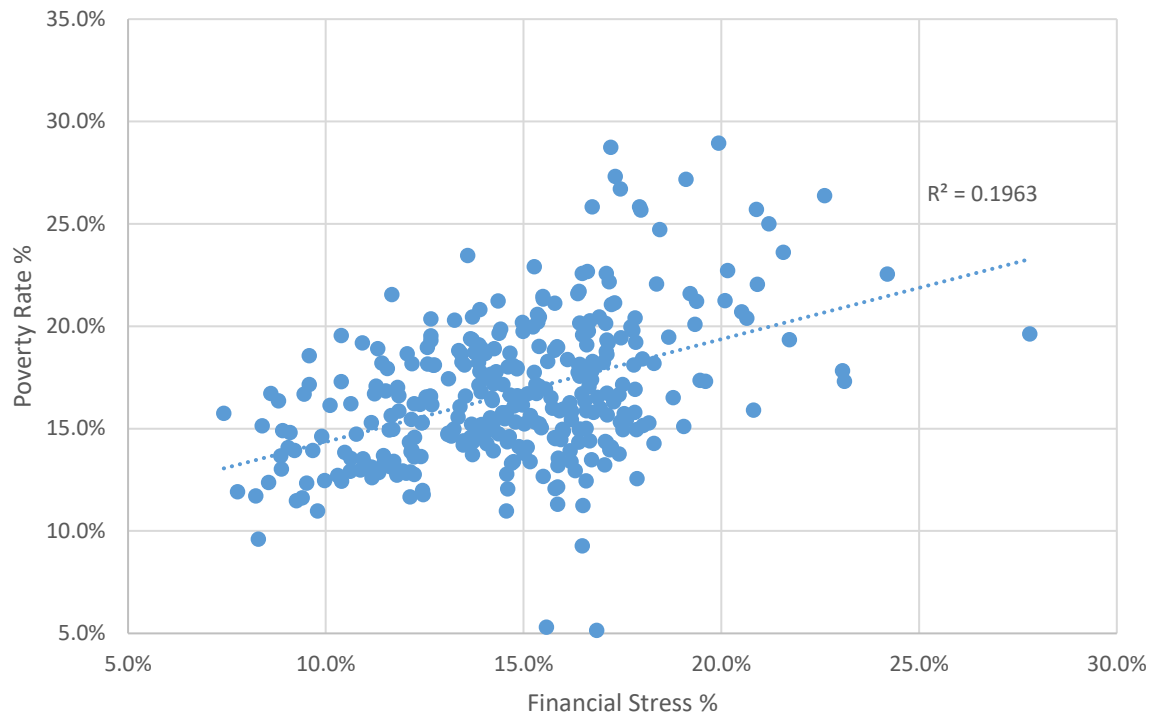
SA3s with the least financial stress tend to be those in well known, high income and wealth suburbs of Australia's capital cities. The SA3 with the lowest financial stress is Ku-ring-gai (7.4 per cent or about a quarter that of the most stressed SA3s) which lines the northern shore of Sydney Harbor. The next least financially stressed SA3s are Manly in North Sydney, Kenmore-Brookfield-Moggill in the western suburbs of Brisbane, South Canberra, Eastern Suburbs – North in Sydney and Cottesloe-Claremont in Perth.

Table 5 Lowest Financial Stress Rates by SA3

Financial Stress (3+ responses) by region				
SA3 Region	Electorate (main)	State	Rate	Poverty
Ku-ring-gai	Bradfield	NSW	7.4%	15.7%
Manly	Warringah	NSW	7.8%	11.9%
Kenmore - Brookfield - Moggill	Ryan	QLD	8.2%	11.7%
South Canberra	Canberra	ACT	8.3%	9.6%
Eastern Suburbs - North	Wentworth	NSW	8.4%	15.1%
Cottesloe - Claremont	Curtin	WA	8.6%	12.4%
Baulkham Hills	Mitchell	NSW	8.6%	16.7%
Pittwater	Mackellar	NSW	8.8%	16.3%
Bayside	Goldstein	VIC	8.9%	13.7%
Manningham - East	Menzies	VIC	8.9%	13.0%
North Sydney - Mosman	North Sydney	NSW	8.9%	14.9%
Leichhardt	Grayndler	NSW	9.1%	14.1%
Chatswood - Lane Cove	North Sydney	NSW	9.1%	14.8%
Boroondara	Kooyong	VIC	9.2%	13.9%
Woden Valley	Bean	ACT	9.3%	11.5%
Stonnington - East	Higgins	VIC	9.4%	11.6%
Dural - Wisemans Ferry	Berowra	NSW	9.5%	16.7%
Nillumbik - Kinglake	Jagajaga	VIC	9.5%	12.3%
Pennant Hills - Epping	Bennelong	NSW	9.6%	18.6%

There can be significant differences between SA3 poverty rates and financial stress rates. For example, the lowest poverty SA3 is East Pilbara in the NT. East Pilbara also ranks favourably for financial stress but its rank is 77th least financially stressed. The differences between such regions are likely to relate to the financial stress measure being a much broader measure of financial wellbeing by including such variables as wealth, education, occupation. Figure 16 shows the relationship between the two variables is correlated but significant variation remains unexplained.

Figure 16 Poverty vs Financial Stress Rates, SA3 Regions



References

Australian Bureau of Statistics (2018) *Australian Census Longitudinal Dataset (ACLD)*.

Australian Bureau of Statistics (2019) *Survey of Income and Housing, 2017-18*.

Interim Economic Inclusion Advisory Committee (2023), *2023-24 Report to the Australian Government*

Phillips, Webster and Gray (2018) *Optimal Policy Modelling: A Microsimulation Methodology for Setting the Australian Tax and Transfer System*.

Phillips, Narayanan (2021) *Financial Stress and Social Security Settings in Australia*, ANU Centre for Social Research and Methods Research Note.

Treasury (2023) *Tax Expenditures and Insights Statement 2023*, Commonwealth of Australia.

Treasury (2020) *Retirement Income Review: Final Report*, Commonwealth of Australia.

Treasury (2021) *2021 Intergenerational Report: Australia over the next 40 years*, Commonwealth of Australia.

Appendix A: Optimal Policy Modelling

The current Australian social security system provides a social safety net for Australians who require financial assistance to help meet their basic costs of living because of age, disability, unemployment, caring responsibilities or other factors that limit their ability to be in paid employment. The system also provides targeted assistance to families with dependent children, based on income level. The system helps to alleviate poverty and redistributes income from higher-income to lower-income households.

Over time, the system has evolved into a complex system of payments that vary in eligibility requirements (e.g. disability, age, whether a person is studying, whether a person has dependent children, the age of dependent children), payment rates, thresholds for private income above which the rate of government benefit is reduced, rate of withdrawal of payment as private income increases, indexing of payments to increases in the cost of living, and treatment of the incomes of other people in the income unit.

The complexity of the social security system makes it challenging for policy makers to assess what changes should be made to the system to achieve policy objectives, and the implications of changes to the system. This can be posed as a question: How could the system be optimised to better achieve a policy goal, such as poverty reduction, subject to a budget constraint or some other constraint?

In this paper, we use a recently developed modelling tool, Optimal Policy Modelling, for optimising the social security system to achieve a minimum of financial stress and poverty (Phillips 2018). We do this by using a microsimulation approach that involves altering welfare payments (or other parameters) to minimise financial stress and poverty, subject to a range of constraints, such as the overall social security budget or relationships between payment rates. The simulations are undertaken using the ANU Centre for Social Research & Methods microsimulation model of the Australian tax and transfer system (PolicyMod).

Financial stress is a more direct way of measuring financial difficulties than poverty measures. Relative poverty measures don't guarantee financial stress. For some households, a given relative poverty line may be more than enough to live on while for others it may not be enough, depending on factors such as the cost of living, for example housing costs. In developing the ANU algorithm this paper uses a measure of deep stress. This measure is the count of financial stressors faced by a household squared. The squaring of the response variable ensures more weight is placed on households in

A Fairer Tax and Welfare System for Australia

deeper stress. Stress questions included in our study are limited to the 8 that are most likely to represent deeper forms of stress, excluding the management of household income question (Phillips 2021). We simply felt that our interest was the deeper forms of stress which are likely to be most relevant to households in receipt of social security payments.

A methodological challenge in using financial stress rather than poverty measures for optimal policy modelling is determining the link between changes in social security payments (income) and financial stress. There is a direct link between changes to social security payments and poverty rates and the poverty gap – more money equals a lower poverty gap for those under the poverty line. The link is not so straightforward for financial stress.

To determine the link between income and financial stress Phillips (2021) develops an econometric model that links income and financial stress. In simple terms, a regression model that links the square of the number of financial stress responses from each household to a range of economic, demographic and household level variables. One of these variables is income and by varying income the impact of changing social security payments for a given household on their financial stress level is estimated. The key interest is to understand the impact of changes in income on financial stress. We include a range of interaction terms to better understand this relationship for groups that are most likely to be impacted by changes in social security payments.

In principle, the problem of determining the rates of payment that result in the lowest financial stress could be solved by running the microsimulation model repeatedly while varying the payment rates. However, this approach is not practicable because the number of times the model would need to be run with different combination of payment rates is enormous, and this would take an impractical amount of time. To overcome this problem, we have developed a new methodology that drastically reduces the number of simulations required. The OPM methodology involves first creating a dataset that relates different combinations of the rate of social security payments to total financial stress in Australia using a microsimulation model of the Australian tax and transfer system.

In the version of the work reported in this paper, 2500 combinations of the rate of social security payments are simulated. The relationship between payment rate and financial stress is then estimated using a linear regression model that provides parameter values for an equation that describes how changes in payment rates affect financial stress. This equation can be used to

A Fairer Tax and Welfare System for Australia

determine 'optimal' payment rates, subject to constraints such as a budget constraint or changes from current payment levels.

Establishing statistical relationships between payment levels and the policy objective variable (financial stress) significantly reduces the size of the problem by allowing use of standard mathematical programming techniques to optimise payment rates to achieve a particular objective. This approach means that it is not necessary to simulate a vast number of combinations of payment rates.

The modelling in this paper optimises outcomes with respect to financial stress and poverty and then averages the two results. The social security system also has important impacts on work incentives (e.g., effective marginal tax rates), income inequality and horizontal equity.

An expected benefit of modelling social security payments based on financial stress rather than just that based on poverty lines is that there are likely to be significant differences between both household types and individual households with respect to their relative needs. A relative poverty line-based approach as previously modelled (Phillips 2018) assumes for example that a retiree couple's poverty line is the same as that of a couple where both are working. It is well known that employed persons under the age of retirement are likely to have significantly higher living costs than persons who are retired. A retiree for example may also have significant wealth from which to draw upon. A relative poverty measure may not fully account for the likely impact of such wealth. A financial stress measure in this sense arguably is a better basis for determining relative needs of different household types. A financial stress measure is also perhaps a better measure of the financial needs of some categories of social security payments such as those on disability support or the Carer Payment. Both of these categories of payment may well have significantly higher costs due to their disability or carer requirements.

Appendix B

Poverty and Financial Stress Analysis		Poverty Rate (After-Housing)					Financial Stress
		Policies Modelled					%
SA3	State	Base	\$4b	\$10B	\$20B	Max Reduction	
Merrylands - Guildford	NSW	28.9%	28.4%	26.2%	23.7%	-5.2%	19.9%
Auburn	NSW	28.7%	28.3%	26.3%	24.8%	-4.0%	17.2%
Bringelly - Green Valley	NSW	27.3%	26.8%	24.7%	23.0%	-4.3%	17.3%
Tullamarine - Broadmeadows	VIC	27.2%	26.3%	23.6%	21.1%	-6.1%	19.1%
Canterbury	NSW	26.7%	26.2%	24.4%	22.5%	-4.2%	17.4%
East Arnhem	NT	26.4%	25.3%	22.8%	19.2%	-7.1%	22.6%
Casey - South	VIC	25.8%	25.2%	22.8%	21.1%	-4.8%	16.7%
Bankstown	NSW	25.8%	25.4%	23.4%	21.6%	-4.2%	17.9%
Fairfield	NSW	25.7%	25.1%	23.3%	21.1%	-4.6%	20.9%
Liverpool	NSW	25.7%	25.2%	23.1%	20.9%	-4.8%	18.0%
Mount Druitt	NSW	25.0%	24.4%	22.3%	19.6%	-5.4%	21.2%
Campbelltown (NSW)	NSW	24.7%	24.0%	21.8%	19.5%	-5.2%	18.4%
Browns Plains	QLD	23.6%	22.8%	20.2%	17.4%	-6.2%	21.6%
Carlingford	NSW	23.5%	23.2%	21.8%	20.8%	-2.6%	13.6%
Caboolture Hinterland	QLD	22.9%	22.4%	21.1%	19.3%	-3.6%	15.3%
Springwood - Kingston	QLD	22.7%	22.0%	20.4%	18.3%	-4.4%	20.2%
Jimboomba	QLD	22.7%	21.8%	19.5%	18.0%	-4.6%	16.6%
Southport	QLD	22.6%	21.7%	19.4%	17.8%	-4.7%	17.1%
Wyndham	VIC	22.6%	21.8%	19.5%	17.8%	-4.8%	16.5%
Playford	SA	22.5%	21.5%	19.7%	17.2%	-5.3%	24.2%
Melton - Bacchus Marsh	VIC	22.2%	21.4%	19.3%	17.4%	-4.7%	17.2%
St Marys	NSW	22.1%	21.5%	19.4%	17.2%	-4.9%	18.4%
Caboolture	QLD	22.1%	21.2%	19.2%	16.6%	-5.5%	20.9%
Blacktown	NSW	21.7%	21.3%	19.4%	17.6%	-4.1%	16.4%
Ormeau - Oxenford	QLD	21.6%	20.9%	18.9%	17.1%	-4.5%	16.4%
Kwinana	WA	21.6%	20.9%	18.8%	16.8%	-4.8%	19.2%
Blacktown - North	NSW	21.5%	21.5%	20.3%	19.7%	-1.8%	11.7%
Rocklea - Acacia Ridge	QLD	21.5%	20.8%	18.9%	17.4%	-4.1%	15.5%
Sunnybank	QLD	21.3%	20.9%	19.3%	17.7%	-3.7%	15.5%
Forest Lake - Oxley	QLD	21.3%	20.6%	18.7%	16.2%	-5.0%	20.1%
Robina	QLD	21.2%	20.9%	19.2%	18.3%	-2.9%	14.4%
Salisbury	SA	21.2%	20.4%	18.6%	16.2%	-5.0%	19.4%
Adelaide City	SA	21.1%	20.1%	18.2%	16.2%	-4.9%	17.3%
Whittlesea - Wallan	VIC	21.1%	20.5%	18.5%	16.8%	-4.3%	15.8%
Dandenong	VIC	21.1%	20.6%	19.1%	17.4%	-3.7%	17.2%
Botany	NSW	20.8%	20.5%	19.2%	18.6%	-2.2%	13.9%
Beenleigh	QLD	20.7%	20.0%	17.9%	15.2%	-5.5%	20.5%
Nerang	QLD	20.6%	20.1%	18.3%	17.0%	-3.6%	15.4%
Gosnells	WA	20.4%	19.8%	17.9%	16.3%	-4.2%	16.9%
Hurstville	NSW	20.4%	20.2%	18.8%	17.9%	-2.6%	13.7%
Cardinia	VIC	20.4%	19.7%	17.9%	16.4%	-4.0%	15.4%
Brimbank	VIC	20.4%	19.8%	18.2%	16.5%	-3.9%	17.8%
Springfield - Redbank	QLD	20.4%	19.3%	16.9%	14.6%	-5.8%	20.6%
Mudgeeraba - Tallebudgera	QLD	20.4%	20.1%	19.0%	18.3%	-2.1%	12.7%
Kogarah - Rockdale	NSW	20.3%	19.9%	18.5%	17.6%	-2.7%	13.3%
Maryborough - Pyrenees	VIC	20.3%	19.3%	18.6%	17.1%	-3.1%	16.7%
Serpentine - Jarrahdale	WA	20.2%	19.5%	17.5%	16.6%	-3.6%	15.4%
Gold Coast - North	QLD	20.2%	19.5%	17.8%	16.2%	-4.0%	15.0%

A Fairer Tax and Welfare System for Australia

Wyong	NSW	20.2%	19.4%	17.7%	15.9%	-4.2%	16.4%
Armadale	WA	20.1%	19.4%	17.3%	15.7%	-4.4%	17.1%
Beaudesert	QLD	20.1%	19.3%	18.0%	15.6%	-4.5%	19.3%
Nambour	QLD	20.0%	19.4%	17.8%	16.3%	-3.7%	15.2%
Narangba - Burpengary	QLD	20.0%	19.2%	17.4%	15.3%	-4.6%	17.7%
Surfers Paradise	QLD	19.9%	19.0%	17.5%	15.7%	-4.1%	14.4%
North Lakes	QLD	19.8%	18.9%	16.9%	14.7%	-5.0%	17.8%
Swan	WA	19.8%	19.2%	17.1%	15.7%	-4.1%	16.6%
Casey - North	VIC	19.7%	19.3%	17.7%	16.2%	-3.6%	15.0%
Tweed Valley	NSW	19.7%	19.0%	17.7%	16.6%	-3.1%	14.4%
Daly - Tiwi - West Arnhem	NT	19.6%	18.6%	16.3%	11.9%	-7.7%	27.8%
Wanneroo	WA	19.6%	18.9%	17.0%	15.7%	-3.9%	16.5%
Rouse Hill - McGraths Hill	NSW	19.6%	19.6%	18.6%	18.1%	-1.4%	10.4%
Noosa Hinterland	QLD	19.5%	19.1%	18.3%	17.4%	-2.2%	12.7%
Hobart - North West	Tas	19.5%	18.8%	17.3%	14.9%	-4.6%	18.7%
Gympie - Cooloola	QLD	19.4%	18.6%	17.2%	15.2%	-4.2%	17.5%
Sunshine Coast Hinterland	QLD	19.4%	18.9%	17.6%	16.5%	-2.8%	13.7%
Brighton	Tas	19.3%	18.2%	16.2%	13.2%	-6.2%	21.7%
Coolangatta	QLD	19.3%	18.8%	17.5%	16.7%	-2.7%	13.7%
Melbourne City	VIC	19.3%	18.3%	16.6%	14.8%	-4.5%	17.1%
Gold Coast Hinterland	QLD	19.3%	18.9%	18.1%	17.3%	-2.0%	12.7%
Loganlea - Carbrook	QLD	19.2%	18.6%	17.0%	15.1%	-4.1%	17.8%
Innisfail - Cassowary Coast	QLD	19.2%	18.3%	16.5%	14.4%	-4.8%	17.1%
Manningham - West	VIC	19.2%	19.0%	18.0%	17.5%	-1.7%	10.9%
Hervey Bay	QLD	19.1%	18.2%	16.9%	14.9%	-4.2%	16.6%
Richmond Valley - Coastal	NSW	19.1%	18.5%	17.1%	16.0%	-3.1%	13.9%
Port Douglas - Daintree	QLD	19.0%	18.2%	16.6%	14.8%	-4.2%	15.4%
Tablelands (East) - Kuranda	QLD	19.0%	18.1%	16.5%	14.5%	-4.5%	15.8%
Penrith	NSW	19.0%	18.3%	16.6%	15.1%	-3.9%	15.9%
Strathfield - Burwood - Ashfield	NSW	19.0%	18.6%	17.4%	16.6%	-2.3%	12.6%
Bribie - Beachmere	QLD	18.9%	18.3%	17.6%	16.0%	-3.0%	13.9%
Maroochy	QLD	18.9%	18.1%	16.5%	14.7%	-4.2%	14.3%
Marrickville - Sydenham - Petersham	NSW	18.9%	18.1%	16.6%	15.9%	-3.0%	11.3%
Coffs Harbour	NSW	18.8%	18.0%	16.4%	14.9%	-4.0%	15.8%
Wollondilly	NSW	18.8%	18.3%	17.1%	16.2%	-2.6%	13.4%
Rockingham	WA	18.8%	18.0%	16.0%	14.4%	-4.4%	17.1%
Caloundra	QLD	18.7%	18.3%	17.0%	15.7%	-3.0%	13.8%
Yorke Peninsula	SA	18.7%	18.0%	16.6%	14.9%	-3.8%	14.7%
Parramatta	NSW	18.7%	18.3%	16.7%	15.5%	-3.1%	14.0%
Monash	VIC	18.7%	18.4%	17.4%	16.6%	-2.0%	12.1%
Camden	NSW	18.6%	18.2%	17.0%	16.1%	-2.5%	13.4%
Port Adelaide - East	SA	18.6%	18.0%	16.4%	14.5%	-4.1%	17.1%
Pennant Hills - Epping	NSW	18.6%	18.4%	17.3%	17.1%	-1.5%	9.6%
Strathpine	QLD	18.4%	17.6%	15.9%	13.9%	-4.5%	18.0%
Mandurah	WA	18.4%	17.6%	16.0%	14.3%	-4.0%	16.1%
Frankston	VIC	18.3%	17.7%	16.3%	14.8%	-3.4%	15.6%
Clarence Valley	NSW	18.3%	17.4%	16.0%	14.2%	-4.1%	16.7%
Gosford	NSW	18.2%	17.8%	16.6%	15.5%	-2.7%	13.4%
Augusta - Margaret River - Busselton	WA	18.2%	17.6%	16.1%	14.5%	-3.7%	13.9%
Ipswich Hinterland	QLD	18.2%	17.5%	16.3%	14.5%	-3.8%	17.0%
Ryde - Hunters Hill	NSW	18.2%	17.9%	16.8%	16.2%	-1.9%	11.4%
Maryborough	QLD	18.2%	17.1%	16.3%	14.1%	-4.1%	18.3%
Whitehorse - West	VIC	18.2%	17.8%	16.8%	16.0%	-2.1%	12.2%
Noosa	QLD	18.2%	17.6%	16.1%	14.6%	-3.5%	12.6%

A Fairer Tax and Welfare System for Australia

Richmond - Windsor	NSW	18.1%	17.7%	16.3%	14.8%	-3.3%	16.4%
Mt Gravatt	QLD	18.1%	17.8%	16.5%	15.3%	-2.8%	13.5%
Kempsey - Nambucca	NSW	18.1%	17.1%	15.9%	13.7%	-4.4%	17.8%
Buderim	QLD	18.1%	17.8%	16.6%	15.6%	-2.5%	12.7%
Dapto - Port Kembla	NSW	18.1%	17.3%	15.7%	14.0%	-4.1%	16.4%
Great Lakes	NSW	18.1%	17.2%	16.2%	14.6%	-3.5%	14.7%
Broadbeach - Burleigh	QLD	18.1%	17.5%	16.2%	15.5%	-2.6%	12.7%
Shoalhaven	NSW	18.0%	17.4%	16.3%	14.8%	-3.2%	14.6%
Huon - Bruny Island	Tas	18.0%	17.3%	16.2%	14.6%	-3.4%	14.8%
Eastern Suburbs - South	NSW	17.9%	17.6%	15.9%	15.4%	-2.6%	11.6%
Port Stephens	NSW	17.9%	17.3%	15.9%	14.4%	-3.5%	14.8%
Taree - Gloucester	NSW	17.8%	17.0%	15.9%	14.0%	-3.9%	16.7%
Far North	QLD	17.8%	16.9%	14.8%	11.7%	-6.1%	23.1%
Sydney Inner City	NSW	17.8%	17.3%	15.8%	14.4%	-3.4%	13.9%
Port Macquarie	NSW	17.8%	17.2%	16.1%	14.6%	-3.2%	14.3%
Redcliffe	QLD	17.8%	17.1%	15.8%	14.0%	-3.7%	16.4%
Whitsunday	QLD	17.7%	17.1%	15.5%	14.0%	-3.8%	15.3%
Fleurieu - Kangaroo Island	SA	17.7%	17.0%	16.1%	14.6%	-3.0%	14.2%
Onkaparinga	SA	17.6%	16.9%	15.5%	13.8%	-3.7%	16.4%
Kiama - Shellharbour	NSW	17.5%	17.0%	15.8%	14.6%	-3.0%	14.1%
Litchfield	NT	17.4%	17.1%	15.7%	14.5%	-3.0%	13.1%
Gladstone	QLD	17.4%	16.6%	14.9%	12.8%	-4.6%	16.7%
Ipswich Inner	QLD	17.4%	16.6%	14.9%	12.6%	-4.8%	19.5%
Katherine	NT	17.3%	16.4%	14.5%	11.5%	-5.8%	23.1%
Alice Springs	NT	17.3%	16.5%	14.6%	12.0%	-5.3%	19.6%
Hornsby	NSW	17.3%	17.3%	16.4%	15.8%	-1.5%	10.4%
Moreland - North	VIC	17.2%	16.6%	15.1%	13.8%	-3.4%	14.2%
Baw Baw	VIC	17.2%	16.5%	15.2%	13.9%	-3.2%	14.5%
Richmond Valley - Hinterland	NSW	17.2%	16.2%	14.8%	12.9%	-4.2%	17.5%
Warringah	NSW	17.2%	17.0%	15.8%	15.4%	-1.7%	9.6%
Sorell - Dodges Ferry	Tas	17.2%	16.6%	15.3%	13.7%	-3.4%	15.3%
Gippsland - South West	VIC	17.1%	16.5%	15.5%	14.2%	-2.9%	13.9%
Brisbane Inner	QLD	17.1%	16.2%	14.6%	12.9%	-4.1%	15.4%
Whitehorse - East	VIC	17.1%	17.0%	16.3%	15.6%	-1.4%	11.3%
Gawler - Two Wells	SA	17.1%	16.4%	15.2%	13.6%	-3.5%	16.7%
Yarra	VIC	17.0%	16.3%	14.7%	14.1%	-2.9%	11.8%
West Coast	Tas	16.9%	16.3%	14.7%	12.9%	-4.0%	15.6%
Port Adelaide - West	SA	16.9%	16.1%	14.8%	12.9%	-4.0%	17.8%
Hawkesbury	NSW	16.8%	16.6%	15.7%	15.1%	-1.7%	11.5%
Wheat Belt - North	WA	16.8%	16.3%	15.0%	13.6%	-3.2%	13.9%
Eyre Peninsula and South West	SA	16.7%	16.0%	14.3%	12.2%	-4.5%	17.1%
Glenelg - Southern Grampians	VIC	16.7%	16.2%	15.5%	14.4%	-2.3%	15.3%
Baulkham Hills	NSW	16.7%	16.6%	15.9%	15.6%	-1.1%	8.6%
Southern Highlands	NSW	16.7%	16.5%	15.7%	15.0%	-1.8%	11.2%
Meander Valley - West Tamar	Tas	16.7%	16.0%	14.9%	13.4%	-3.3%	15.1%
Central Highlands (Tas.)	Tas	16.7%	15.9%	14.8%	13.0%	-3.7%	16.5%
Dural - Wisemans Ferry	NSW	16.7%	16.5%	15.9%	15.4%	-1.3%	9.5%
Bundaberg	QLD	16.7%	15.8%	14.8%	13.0%	-3.6%	17.4%
Darebin - North	VIC	16.6%	16.0%	14.6%	13.4%	-3.2%	14.7%
Lake Macquarie - West	NSW	16.6%	16.0%	14.7%	13.3%	-3.3%	14.8%
Port Phillip	VIC	16.6%	15.7%	14.7%	14.0%	-2.6%	11.9%
Creswick - Daylesford - Ballan	VIC	16.6%	16.1%	15.2%	14.2%	-2.4%	12.6%
Cleveland - Stradbroke	QLD	16.6%	16.1%	14.9%	13.8%	-2.7%	13.5%
Yarra Ranges	VIC	16.6%	16.1%	15.0%	14.0%	-2.6%	12.6%

A Fairer Tax and Welfare System for Australia

Knox	VIC	16.5%	16.2%	15.2%	14.2%	-2.4%	12.5%
Granite Belt	QLD	16.5%	15.8%	15.0%	13.4%	-3.1%	16.9%
Mid West	WA	16.5%	15.8%	14.2%	12.5%	-4.0%	15.7%
Cairns - South	QLD	16.5%	15.5%	13.5%	11.5%	-5.0%	18.8%
South Coast	NSW	16.5%	15.8%	14.8%	13.4%	-3.1%	14.2%
Canning	WA	16.4%	15.8%	14.4%	13.3%	-3.1%	14.2%
Pittwater	NSW	16.3%	16.3%	15.6%	15.5%	-0.9%	8.8%
North East	Tas	16.3%	15.4%	14.3%	12.5%	-3.9%	16.6%
Lower Hunter	NSW	16.3%	15.4%	13.9%	12.2%	-4.1%	17.3%
Maitland	NSW	16.3%	15.4%	13.9%	12.2%	-4.1%	16.2%
Sherwood - Indooroopilly	QLD	16.2%	15.9%	14.8%	14.1%	-2.1%	12.2%
Cronulla - Miranda - Caringbah	NSW	16.2%	16.1%	15.1%	14.7%	-1.5%	10.6%
Barwon - West	VIC	16.2%	15.8%	14.6%	13.7%	-2.4%	12.4%
Maroondah	VIC	16.2%	15.8%	14.7%	13.6%	-2.6%	12.7%
Sandgate	QLD	16.2%	15.6%	14.2%	12.7%	-3.5%	15.0%
Canada Bay	NSW	16.1%	16.0%	14.8%	14.5%	-1.6%	10.1%
Manjimup	WA	16.1%	15.4%	14.4%	13.2%	-2.9%	14.8%
Wollongong	NSW	16.1%	15.6%	14.4%	13.5%	-2.6%	13.4%
Albany	WA	16.0%	15.2%	14.1%	12.5%	-3.5%	15.7%
Launceston	Tas	16.0%	15.2%	13.9%	12.0%	-4.0%	16.9%
Charters Towers - Ayr - Ingham	QLD	15.9%	15.3%	13.7%	11.9%	-4.0%	16.0%
Kimberley	WA	15.9%	14.7%	12.9%	10.9%	-5.0%	20.8%
Toowoomba	QLD	15.9%	15.2%	13.9%	12.2%	-3.7%	16.6%
Darwin Suburbs	NT	15.9%	15.2%	13.7%	12.0%	-3.9%	15.9%
Mornington Peninsula	VIC	15.9%	15.5%	14.6%	13.8%	-2.1%	11.9%
Bunbury	WA	15.8%	15.1%	13.7%	12.1%	-3.7%	16.2%
Burnie - Ulverstone	Tas	15.8%	15.0%	13.8%	11.6%	-4.2%	17.8%
Broken Hill and Far West	NSW	15.8%	14.8%	13.2%	11.1%	-4.7%	16.8%
Upper Goulburn Valley	VIC	15.8%	15.2%	14.3%	13.1%	-2.7%	14.5%
Cairns - North	QLD	15.8%	15.2%	13.9%	13.0%	-2.8%	14.6%
Ku-ring-gai	NSW	15.7%	15.7%	15.0%	14.9%	-0.9%	7.4%
Inverell - Tenterfield	NSW	15.7%	14.6%	13.7%	11.9%	-3.8%	17.5%
Devonport	Tas	15.7%	14.9%	13.8%	12.0%	-3.7%	17.1%
Gippsland - East	VIC	15.6%	14.8%	13.7%	12.0%	-3.6%	15.2%
Blue Mountains	NSW	15.6%	15.3%	14.4%	13.4%	-2.2%	11.7%
Nathan	QLD	15.6%	15.1%	13.9%	12.7%	-2.8%	13.3%
Maribyrnong	VIC	15.5%	14.8%	13.3%	12.2%	-3.3%	14.2%
Newcastle	NSW	15.5%	14.9%	13.6%	12.3%	-3.2%	14.5%
Hobart Inner	Tas	15.4%	15.0%	14.2%	13.3%	-2.1%	12.2%
Armidale	NSW	15.4%	14.5%	13.2%	11.4%	-4.1%	16.2%
Sunbury	VIC	15.4%	14.9%	13.4%	12.2%	-3.2%	14.2%
Mid North	SA	15.4%	14.4%	13.7%	11.7%	-3.7%	17.6%
Murray and Mallee	SA	15.3%	14.4%	13.5%	12.1%	-3.3%	17.5%
Marion	SA	15.3%	14.8%	13.5%	12.2%	-3.2%	14.8%
Belmont - Victoria Park	WA	15.3%	14.6%	13.0%	11.8%	-3.5%	15.3%
Hobart - South and West	Tas	15.3%	15.0%	13.9%	12.7%	-2.6%	12.4%
Surf Coast - Bellarine Peninsula	VIC	15.3%	15.0%	14.1%	13.2%	-2.1%	11.2%
Heathcote - Castlemaine - Kyneton	VIC	15.3%	14.8%	14.0%	13.0%	-2.3%	12.4%
Palmerston	NT	15.3%	14.9%	13.1%	11.9%	-3.4%	18.2%
Loddon - Elmore	VIC	15.2%	14.2%	13.7%	12.3%	-2.9%	15.4%
Geelong	VIC	15.2%	14.6%	13.3%	11.8%	-3.4%	15.0%
Capalaba	QLD	15.2%	14.8%	13.6%	12.5%	-2.7%	13.7%
Hobart - North East	Tas	15.2%	14.8%	13.8%	12.2%	-3.0%	13.9%
Burnett	QLD	15.1%	14.1%	13.1%	11.5%	-3.7%	18.0%

A Fairer Tax and Welfare System for Australia

Eastern Suburbs - North	NSW	15.1%	14.5%	12.8%	12.5%	-2.6%	8.4%
Outback - North and East	SA	15.1%	14.3%	12.5%	10.1%	-5.0%	19.1%
Barossa	SA	15.1%	14.6%	13.5%	12.3%	-2.8%	14.2%
Goulburn - Mulwaree	NSW	15.0%	14.4%	13.2%	11.7%	-3.3%	15.5%
Bendigo	VIC	15.0%	14.2%	12.9%	11.2%	-3.8%	16.6%
Holland Park - Yeronga	QLD	15.0%	14.5%	13.3%	12.3%	-2.7%	13.2%
Darling Downs (West) - Maranoa	QLD	15.0%	14.3%	12.7%	11.0%	-4.0%	16.4%
Wellington	VIC	15.0%	14.2%	13.2%	11.6%	-3.4%	16.0%
Gungahlin	ACT	15.0%	14.8%	13.7%	12.9%	-2.1%	11.7%
Shepparton	VIC	15.0%	14.2%	13.1%	11.3%	-3.6%	17.5%
Mildura	VIC	15.0%	14.2%	13.0%	11.3%	-3.7%	17.9%
Ballarat	VIC	14.9%	14.1%	12.7%	11.0%	-4.0%	16.4%
Kingston	VIC	14.9%	14.6%	13.8%	13.1%	-1.8%	11.6%
Mundaring	WA	14.9%	14.5%	13.5%	12.7%	-2.2%	13.2%
North Sydney - Mosman	NSW	14.9%	14.6%	13.4%	13.2%	-1.7%	8.9%
Lithgow - Mudgee	NSW	14.9%	14.1%	12.8%	11.2%	-3.7%	16.0%
West Torrens	SA	14.9%	14.4%	13.3%	12.2%	-2.7%	14.1%
Lower North	SA	14.8%	14.0%	13.3%	11.9%	-2.9%	16.0%
Chatswood - Lane Cove	NSW	14.8%	14.7%	13.7%	13.5%	-1.4%	9.1%
Lake Macquarie - East	NSW	14.8%	14.2%	13.2%	11.9%	-2.9%	13.9%
Campbelltown (SA)	SA	14.8%	14.4%	13.4%	12.3%	-2.4%	13.1%
Cockburn	WA	14.7%	14.1%	12.7%	11.7%	-3.0%	14.4%
Glen Eira	VIC	14.7%	14.4%	13.5%	13.0%	-1.8%	10.8%
Kalamunda	WA	14.7%	14.1%	12.8%	12.0%	-2.7%	13.1%
Wynnum - Manly	QLD	14.6%	14.2%	13.0%	11.9%	-2.7%	13.2%
Sutherland - Menai - Heathcote	NSW	14.6%	14.5%	13.8%	13.3%	-1.3%	9.9%
Charles Sturt	SA	14.6%	14.1%	12.9%	11.6%	-3.0%	14.6%
Norwood - Payneham - St Peters	SA	14.6%	14.1%	13.2%	12.3%	-2.3%	12.2%
Snowy Mountains	NSW	14.6%	13.9%	12.6%	11.2%	-3.4%	13.7%
Moira	VIC	14.6%	13.8%	13.0%	11.5%	-3.1%	15.8%
Bathurst	NSW	14.5%	14.0%	12.8%	11.3%	-3.2%	15.8%
Campaspe	VIC	14.5%	13.7%	12.8%	11.2%	-3.2%	15.9%
Chermside	QLD	14.4%	13.9%	12.8%	11.6%	-2.8%	13.5%
Albury	NSW	14.4%	13.6%	12.4%	10.7%	-3.7%	16.7%
Nundah	QLD	14.4%	13.9%	12.7%	11.5%	-2.8%	13.7%
Rockhampton	QLD	14.4%	13.7%	12.4%	10.9%	-3.5%	17.1%
Esperance	WA	14.3%	13.7%	12.3%	10.9%	-3.5%	14.6%
Moree - Narrabri	NSW	14.3%	13.6%	12.1%	10.3%	-4.1%	16.4%
Brunswick - Coburg	VIC	14.3%	13.8%	12.6%	11.9%	-2.4%	12.1%
Darling Downs - East	QLD	14.3%	13.6%	12.8%	11.8%	-2.5%	17.1%
Lalor	VIC	14.3%	13.2%	12.0%	10.1%	-4.2%	18.3%
Bayswater - Bassendean	WA	14.3%	13.6%	12.3%	11.2%	-3.1%	14.1%
Stirling	WA	14.2%	13.6%	12.4%	11.4%	-2.8%	13.5%
Colac - Corangamite	VIC	14.1%	13.4%	12.5%	11.2%	-2.9%	14.9%
Bourke - Cobar - Coonamble	NSW	14.1%	13.3%	11.8%	9.9%	-4.2%	17.2%
Townsville	QLD	14.1%	13.4%	12.0%	10.5%	-3.6%	17.2%
Wodonga - Alpine	VIC	14.1%	13.5%	12.4%	11.1%	-3.0%	15.1%
Leichhardt	NSW	14.1%	13.7%	12.1%	11.5%	-2.5%	9.1%
Tamworth - Gunnedah	NSW	14.0%	13.2%	12.1%	10.7%	-3.3%	17.2%
Fremantle	WA	13.9%	13.2%	12.0%	11.1%	-2.8%	12.2%
Burnside	SA	13.9%	13.8%	13.2%	12.6%	-1.4%	9.7%
Boroondara	VIC	13.9%	13.7%	13.0%	12.7%	-1.2%	9.2%
Wagga Wagga	NSW	13.9%	13.3%	12.4%	11.0%	-2.9%	16.2%
Young - Yass	NSW	13.9%	13.4%	12.3%	11.1%	-2.8%	14.2%

A Fairer Tax and Welfare System for Australia

Adelaide Hills	SA	13.9%	13.5%	12.4%	11.6%	-2.3%	12.2%
Molonglo	ACT	13.8%	13.8%	12.9%	12.4%	-1.4%	10.5%
Wangaratta - Benalla	VIC	13.8%	13.1%	12.1%	10.7%	-3.1%	15.0%
Dubbo	NSW	13.8%	13.0%	11.8%	10.1%	-3.6%	17.4%
Tea Tree Gully	SA	13.7%	13.3%	12.3%	11.3%	-2.4%	13.7%
South Perth	WA	13.7%	13.2%	12.1%	11.4%	-2.3%	11.5%
Bayside	VIC	13.7%	13.6%	13.0%	12.6%	-1.1%	8.9%
Hobsons Bay	VIC	13.6%	13.1%	12.0%	11.1%	-2.5%	12.4%
Brisbane Inner - North	QLD	13.6%	13.2%	12.0%	11.2%	-2.4%	12.2%
Tumut - Tumbarumba	NSW	13.6%	12.9%	12.1%	10.8%	-2.8%	15.9%
Brisbane Inner - West	QLD	13.5%	13.2%	12.3%	11.8%	-1.8%	10.6%
Macedon Ranges	VIC	13.5%	13.3%	12.4%	11.8%	-1.8%	10.9%
Lachlan Valley	NSW	13.5%	12.6%	11.8%	10.6%	-2.9%	16.7%
Holdfast Bay	SA	13.4%	13.0%	12.2%	11.4%	-2.0%	11.7%
Warrnambool	VIC	13.4%	12.7%	11.5%	10.3%	-3.1%	14.7%
Murray River - Swan Hill	VIC	13.4%	12.6%	11.9%	10.6%	-2.8%	16.2%
Orange	NSW	13.4%	12.6%	11.3%	9.9%	-3.5%	15.2%
Banyule	VIC	13.3%	13.0%	12.2%	11.4%	-2.0%	11.5%
Upper Murray exc. Albury	NSW	13.3%	12.7%	11.8%	10.5%	-2.8%	14.7%
Carindale	QLD	13.3%	13.0%	12.3%	11.6%	-1.7%	11.0%
Upper Hunter	NSW	13.2%	12.4%	11.4%	10.0%	-3.3%	17.1%
Keilor	VIC	13.2%	12.9%	12.1%	11.5%	-1.7%	11.0%
Outback - South	QLD	13.2%	12.5%	11.1%	9.7%	-3.5%	15.9%
Bald Hills - Everton Park	QLD	13.1%	12.9%	11.9%	11.1%	-2.0%	11.6%
Darebin - South	VIC	13.1%	12.6%	11.6%	11.0%	-2.1%	11.2%
Manningham - East	VIC	13.0%	12.9%	12.6%	12.2%	-0.9%	8.9%
The Hills District	QLD	13.0%	12.8%	11.9%	11.3%	-1.7%	10.9%
Limestone Coast	SA	12.9%	12.2%	11.4%	10.3%	-2.7%	16.3%
Perth City	WA	12.9%	12.3%	11.0%	10.3%	-2.7%	11.9%
Unley	SA	12.9%	12.6%	11.9%	11.2%	-1.7%	10.6%
Prospect - Walkerville	SA	12.9%	12.6%	11.7%	10.8%	-2.1%	11.8%
Tuggeranong	ACT	12.9%	12.5%	11.4%	10.2%	-2.7%	12.1%
Brisbane Inner - East	QLD	12.9%	12.5%	11.5%	10.9%	-2.0%	11.3%
The Gap - Enoggera	QLD	12.8%	12.6%	11.8%	10.8%	-2.0%	12.0%
Darwin City	NT	12.8%	12.2%	10.9%	9.4%	-3.3%	14.6%
Essendon	VIC	12.8%	12.2%	11.2%	10.4%	-2.4%	12.2%
Belconnen	ACT	12.7%	12.4%	11.5%	10.7%	-2.1%	11.8%
Melville	WA	12.7%	12.5%	11.7%	11.1%	-1.6%	10.3%
Mackay	QLD	12.7%	12.1%	10.7%	9.4%	-3.3%	15.5%
Joondalup	WA	12.6%	12.3%	11.3%	10.7%	-1.9%	11.2%
Outback - North	QLD	12.6%	11.7%	10.1%	8.1%	-4.4%	17.9%
Centenary	QLD	12.5%	12.3%	11.6%	11.0%	-1.4%	10.0%
Griffith - Murrumbidgee (West)	NSW	12.4%	11.9%	10.8%	9.4%	-3.1%	16.6%
Mitcham	SA	12.4%	12.2%	11.5%	10.9%	-1.5%	10.4%
Cottesloe - Claremont	WA	12.4%	12.2%	11.5%	11.1%	-1.2%	8.6%
Nillumbik - Kinglake	VIC	12.3%	12.2%	11.8%	11.4%	-1.0%	9.5%
Goldfields	WA	12.1%	11.6%	10.2%	8.5%	-3.6%	15.9%
Grampians	VIC	12.1%	11.3%	10.5%	9.2%	-2.9%	15.8%
Biloela	QLD	12.1%	11.5%	10.2%	8.9%	-3.2%	14.6%
North Canberra	ACT	12.0%	11.5%	10.6%	9.7%	-2.3%	12.5%
Manly	NSW	11.9%	11.7%	10.3%	10.1%	-1.8%	7.8%
Stonnington - West	VIC	11.8%	11.1%	10.1%	8.9%	-2.9%	12.5%
Kenmore - Brookfield - Moggill	QLD	11.7%	11.7%	11.2%	10.9%	-0.8%	8.2%
Queanbeyan	NSW	11.7%	11.3%	10.3%	9.5%	-2.1%	12.1%

A Fairer Tax and Welfare System for Australia

Stonnington - East	VIC	11.6%	11.3%	10.7%	10.3%	-1.3%	9.4%
Woden Valley	ACT	11.5%	11.3%	10.7%	10.2%	-1.2%	9.3%
Lower Murray	NSW	11.3%	10.5%	9.6%	8.5%	-2.8%	15.9%
Central Highlands (Qld)	QLD	11.2%	10.6%	9.1%	7.5%	-3.8%	16.5%
Wheat Belt - South	WA	11.0%	10.4%	9.8%	9.0%	-2.0%	14.6%
Weston Creek	ACT	11.0%	10.9%	10.4%	9.8%	-1.2%	9.8%
South Canberra	ACT	9.6%	9.4%	8.8%	8.4%	-1.2%	8.3%
Bowen Basin - North	QLD	9.3%	8.8%	7.5%	6.0%	-3.3%	16.5%
West Pilbara	WA	5.3%	5.2%	4.3%	3.2%	-2.1%	15.6%
East Pilbara	WA	5.2%	5.0%	4.0%	2.8%	-2.3%	16.9%

Appendix C

Financial Stress (3+ responses) by region 2023			
SA3	State	Financial Stress	Poverty
Daly - Tiwi - West Arnhem	NT	27.8%	19.6%
Playford	SA	24.2%	22.5%
Katherine	NT	23.1%	17.3%
Far North	QLD	23.1%	17.8%
East Arnhem	NT	22.6%	26.4%
Brighton	Tas	21.7%	19.3%
Browns Plains	QLD	21.6%	23.6%
Mount Druitt	NSW	21.2%	25.0%
Caboolture	QLD	20.9%	22.1%
Fairfield	NSW	20.9%	25.7%
Kimberley	WA	20.8%	15.9%
Springfield - Redbank	QLD	20.6%	20.4%
Beenleigh	QLD	20.5%	20.7%
Springwood - Kingston	QLD	20.2%	22.7%
Forest Lake - Oxley	QLD	20.1%	21.3%
Merrylands - Guildford	NSW	19.9%	28.9%
Alice Springs	NT	19.6%	17.3%
Ipswich Inner	QLD	19.5%	17.4%
Salisbury	SA	19.4%	21.2%
Beaudesert	QLD	19.3%	20.1%
Kwinana	WA	19.2%	21.6%
Tullamarine - Broadmeadows	VIC	19.1%	27.2%
Outback - North and East	SA	19.1%	15.1%
Cairns - South	QLD	18.8%	16.5%
Hobart - North West	Tas	18.7%	19.5%
Campbelltown (NSW)	NSW	18.4%	24.7%
St Marys	NSW	18.4%	22.1%
Maryborough	QLD	18.3%	18.2%
Latrobe Valley	VIC	18.3%	14.3%
Palmerston	NT	18.2%	15.3%
Burnett	QLD	18.0%	15.1%
Strathpine	QLD	18.0%	18.4%
Liverpool	NSW	18.0%	25.7%
Bankstown	NSW	17.9%	25.8%
Outback - North	QLD	17.9%	12.6%
Mildura	VIC	17.9%	15.0%
Loganlea - Carbrook	QLD	17.8%	19.2%
Port Adelaide - West	SA	17.8%	16.9%
Brimbank	VIC	17.8%	20.4%
Burnie - Ulverstone	Tas	17.8%	15.8%
Kempsey - Nambucca	NSW	17.8%	18.1%

A Fairer Tax and Welfare System for Australia

North Lakes	QLD	17.8%	19.8%
Narangba - Burpengary	QLD	17.7%	20.0%
Mid North	SA	17.6%	15.4%
Inverell - Tenterfield	NSW	17.5%	15.7%
Shepparton	VIC	17.5%	15.0%
Richmond Valley - Hinterland	NSW	17.5%	17.2%
Gympie - Cooloola	QLD	17.5%	19.4%
Murray and Mallee	SA	17.5%	15.3%
Canterbury	NSW	17.4%	26.7%
Bundaberg	QLD	17.4%	16.7%
Dubbo	NSW	17.4%	13.8%
Bringelly - Green Valley	NSW	17.3%	27.3%
Adelaide City	SA	17.3%	21.1%
Lower Hunter	NSW	17.3%	16.3%
Dandenong	VIC	17.2%	21.1%
Bourke - Cobar - Coonamble	NSW	17.2%	14.1%
Townsville	QLD	17.2%	14.1%
Auburn	NSW	17.2%	28.7%
Tamworth - Gunnedah	NSW	17.2%	14.0%
Melton - Bacchus Marsh	VIC	17.2%	22.2%
Innisfail - Cassowary Coast	QLD	17.1%	19.2%
Devonport	Tas	17.1%	15.7%
Eyre Peninsula and South West	SA	17.1%	16.7%
Melbourne City	VIC	17.1%	19.3%
Port Adelaide - East	SA	17.1%	18.6%
Darling Downs - East	QLD	17.1%	14.3%
Rockingham	WA	17.1%	18.8%
Southport	QLD	17.1%	22.6%
Armadale	WA	17.1%	20.1%
Rockhampton	QLD	17.1%	14.4%
Upper Hunter	NSW	17.1%	13.2%
Ipswich Hinterland	QLD	17.0%	18.2%
Launceston	Tas	16.9%	16.0%
Gosnells	WA	16.9%	20.4%
Granite Belt	QLD	16.9%	16.5%
East Pilbara	WA	16.9%	5.2%
Broken Hill and Far West	NSW	16.8%	15.8%
Clarence Valley	NSW	16.7%	18.3%
Casey - South	VIC	16.7%	25.8%
Taree - Gloucester	NSW	16.7%	17.8%
Lachlan Valley	NSW	16.7%	13.5%
Gladstone	QLD	16.7%	17.4%
Maryborough - Pyrenees	VIC	16.7%	20.3%
Albury	NSW	16.7%	14.4%
Gawler - Two Wells	SA	16.7%	17.1%
Swan	WA	16.6%	19.8%
Jimboomba	QLD	16.6%	22.7%
Hervey Bay	QLD	16.6%	19.1%

A Fairer Tax and Welfare System for Australia

Toowoomba	QLD	16.6%	15.9%
Griffith - Murrumbidgee (West)	NSW	16.6%	12.4%
Bendigo	VIC	16.6%	15.0%
North East	Tas	16.6%	16.3%
Central Highlands (Qld)	QLD	16.5%	11.2%
Wanneroo	WA	16.5%	19.6%
Bowen Basin - North	QLD	16.5%	9.3%
Wyndham	VIC	16.5%	22.6%
Central Highlands (Tas.)	Tas	16.5%	16.7%
Richmond - Windsor	NSW	16.4%	18.1%
Darling Downs (West) - Maranoa	QLD	16.4%	15.0%
Wyong	NSW	16.4%	20.2%
Onkaparinga	SA	16.4%	17.6%
Ballarat	VIC	16.4%	14.9%
Blacktown	NSW	16.4%	21.7%
Moree - Narrabri	NSW	16.4%	14.3%
Dapto - Port Kembla	NSW	16.4%	18.1%
Redcliffe	QLD	16.4%	17.8%
Ormeau - Oxenford	QLD	16.4%	21.6%
Limestone Coast	SA	16.3%	12.9%
Bunbury	WA	16.2%	15.8%
Armidale	NSW	16.2%	15.4%
Murray River - Swan Hill	VIC	16.2%	13.4%
Wagga Wagga	NSW	16.2%	13.9%
Maitland	NSW	16.2%	16.3%
Mandurah	WA	16.1%	18.4%
Lithgow - Mudgee	NSW	16.0%	14.9%
Charters Towers - Ayr - Ingham	QLD	16.0%	15.9%
Lower North	SA	16.0%	14.8%
Wellington	VIC	16.0%	15.0%
Campaspe	VIC	15.9%	14.5%
Darwin Suburbs	NT	15.9%	15.9%
Tumut - Tumbarumba	NSW	15.9%	13.6%
Outback - South	QLD	15.9%	13.2%
Lower Murray	NSW	15.9%	11.3%
Goldfields	WA	15.9%	12.1%
Penrith	NSW	15.9%	19.0%
Tablelands (East) - Kuranda	QLD	15.8%	19.0%
Bathurst	NSW	15.8%	14.5%
Grampians	VIC	15.8%	12.1%
Whittlesea - Wallan	VIC	15.8%	21.1%
Moira	VIC	15.8%	14.6%
Coffs Harbour	NSW	15.8%	18.8%
Albany	WA	15.7%	16.0%
Mid West	WA	15.7%	16.5%
Frankston	VIC	15.6%	18.3%
West Pilbara	WA	15.6%	5.3%
West Coast	Tas	15.6%	16.9%

A Fairer Tax and Welfare System for Australia

Mackay	QLD	15.5%	12.7%
Sunnybank	QLD	15.5%	21.3%
Rocklea - Acacia Ridge	QLD	15.5%	21.5%
Goulburn - Mulwara	NSW	15.5%	15.0%
Loddon - Elmore	VIC	15.4%	15.2%
Cardinia	VIC	15.4%	20.4%
Brisbane Inner	QLD	15.4%	17.1%
Port Douglas - Daintree	QLD	15.4%	19.0%
Serpentine - Jarrahdale	WA	15.4%	20.2%
Nerang	QLD	15.4%	20.6%
Glenelg - Southern Grampians	VIC	15.3%	16.7%
Sorell - Dodges Ferry	Tas	15.3%	17.2%
Belmont - Victoria Park	WA	15.3%	15.3%
Whitsunday	QLD	15.3%	17.7%
Caboolture Hinterland	QLD	15.3%	22.9%
Nambour	QLD	15.2%	20.0%
Gippsland - East	VIC	15.2%	15.6%
Orange	NSW	15.2%	13.4%
Meander Valley - West Tamar	Tas	15.1%	16.7%
Wodonga - Alpine	VIC	15.1%	14.1%
Geelong	VIC	15.0%	15.2%
Wangaratta - Benalla	VIC	15.0%	13.8%
Casey - North	VIC	15.0%	19.7%
Gold Coast - North	QLD	15.0%	20.2%
Sandgate	QLD	15.0%	16.2%
Colac - Corangamite	VIC	14.9%	14.1%
Lake Macquarie - West	NSW	14.8%	16.6%
Port Stephens	NSW	14.8%	17.9%
Huon - Bruny Island	Tas	14.8%	18.0%
Marion	SA	14.8%	15.3%
Manjimup	WA	14.8%	16.1%
Warrnambool	VIC	14.7%	13.4%
Great Lakes	NSW	14.7%	18.1%
Upper Murray exc. Albury	NSW	14.7%	13.3%
Darebin - North	VIC	14.7%	16.6%
Yorke Peninsula	SA	14.7%	18.7%
Charles Sturt	SA	14.6%	14.6%
Shoalhaven	NSW	14.6%	18.0%
Biloela	QLD	14.6%	12.1%
Esperance	WA	14.6%	14.3%
Darwin City	NT	14.6%	12.8%
Cairns - North	QLD	14.6%	15.8%
Wheat Belt - South	WA	14.6%	11.0%
Newcastle	NSW	14.5%	15.5%
Baw Baw	VIC	14.5%	17.2%
Upper Goulburn Valley	VIC	14.5%	15.8%
Surfers Paradise	QLD	14.4%	19.9%
Tweed Valley	NSW	14.4%	19.7%

A Fairer Tax and Welfare System for Australia

Cockburn	WA	14.4%	14.7%
Robina	QLD	14.4%	21.2%
Port Macquarie	NSW	14.3%	17.8%
Maroochy	QLD	14.3%	18.9%
Moreland - North	VIC	14.2%	17.2%
Young - Yass	NSW	14.2%	13.9%
Barossa	SA	14.2%	15.1%
Canning	WA	14.2%	16.4%
South Coast	NSW	14.2%	16.5%
Sunbury	VIC	14.2%	15.4%
Fleurieu - Kangaroo Island	SA	14.2%	17.7%
Maribyrnong	VIC	14.2%	15.5%
Kiama - Shellharbour	NSW	14.1%	17.5%
West Torrens	SA	14.1%	14.9%
Bayswater - Bassendean	WA	14.1%	14.3%
Parramatta	NSW	14.0%	18.7%
Hobart - North East	Tas	13.9%	15.2%
Wheat Belt - North	WA	13.9%	16.8%
Bribie - Beachmere	QLD	13.9%	18.9%
Botany	NSW	13.9%	20.8%
Sydney Inner City	NSW	13.9%	17.8%
Lake Macquarie - East	NSW	13.9%	14.8%
Gippsland - South West	VIC	13.9%	17.1%
Richmond Valley - Coastal	NSW	13.9%	19.1%
Augusta - Margaret River - Busselton	WA	13.9%	18.2%
Caloundra	QLD	13.8%	18.7%
Nundah	QLD	13.7%	14.4%
Hurstville	NSW	13.7%	20.4%
Tea Tree Gully	SA	13.7%	13.7%
Coolangatta	QLD	13.7%	19.3%
Capalaba	QLD	13.7%	15.2%
Sunshine Coast Hinterland	QLD	13.7%	19.4%
Snowy Mountains	NSW	13.7%	14.6%
Carlingford	NSW	13.6%	23.5%
Cleveland - Stradbroke	QLD	13.5%	16.6%
Mt Gravatt	QLD	13.5%	18.1%
Chermside	QLD	13.5%	14.4%
Stirling	WA	13.5%	14.2%
Gosford	NSW	13.4%	18.2%
Camden	NSW	13.4%	18.6%
Wollongong	NSW	13.4%	16.1%
Wollondilly	NSW	13.4%	18.8%
Nathan	QLD	13.3%	15.6%
Kogarah - Rockdale	NSW	13.3%	20.3%
Holland Park - Yeronga	QLD	13.2%	15.0%
Mundaring	WA	13.2%	14.9%
Wynnum - Manly	QLD	13.2%	14.6%
Litchfield	NT	13.1%	17.4%

A Fairer Tax and Welfare System for Australia

Campbelltown (SA)	SA	13.1%	14.8%
Kalamunda	WA	13.1%	14.7%
Buderim	QLD	12.7%	18.1%
Broadbeach - Burleigh	QLD	12.7%	18.1%
Maroondah	VIC	12.7%	16.2%
Noosa Hinterland	QLD	12.7%	19.5%
Mudgeeraba - Tallebudgera	QLD	12.7%	20.4%
Gold Coast Hinterland	QLD	12.7%	19.3%
Yarra Ranges	VIC	12.6%	16.6%
Creswick - Daylesford - Ballan	VIC	12.6%	16.6%
Noosa	QLD	12.6%	18.2%
Strathfield - Burwood - Ashfield	NSW	12.6%	19.0%
Knox	VIC	12.5%	16.5%
Stonnington - West	VIC	12.5%	11.8%
North Canberra	ACT	12.5%	12.0%
Hobart - South and West	Tas	12.4%	15.3%
Heathcote - Castlemaine - Kyneton	VIC	12.4%	15.3%
Hobsons Bay	VIC	12.4%	13.6%
Barwon - West	VIC	12.4%	16.2%
Norwood - Payneham - St Peters	SA	12.2%	14.6%
Brisbane Inner - North	QLD	12.2%	13.6%
Essendon	VIC	12.2%	12.8%
Sherwood - Indooroopilly	QLD	12.2%	16.2%
Whitehorse - West	VIC	12.2%	18.2%
Fremantle	WA	12.2%	13.9%
Hobart Inner	Tas	12.2%	15.4%
Adelaide Hills	SA	12.2%	13.9%
Tuggeranong	ACT	12.1%	12.9%
Queanbeyan	NSW	12.1%	11.7%
Brunswick - Coburg	VIC	12.1%	14.3%
Monash	VIC	12.1%	18.7%
The Gap - Enoggera	QLD	12.0%	12.8%
Perth City	WA	11.9%	12.9%
Port Phillip	VIC	11.9%	16.6%
Mornington Peninsula	VIC	11.9%	15.9%
Yarra	VIC	11.8%	17.0%
Belconnen	ACT	11.8%	12.7%
Prospect - Walkerville	SA	11.8%	12.9%
Holdfast Bay	SA	11.7%	13.4%
Gungahlin	ACT	11.7%	15.0%
Blacktown - North	NSW	11.7%	21.5%
Blue Mountains	NSW	11.7%	15.6%
Bald Hills - Everton Park	QLD	11.6%	13.1%
Kingston	VIC	11.6%	14.9%
Eastern Suburbs - South	NSW	11.6%	17.9%
Hawkesbury	NSW	11.5%	16.8%
Banyule	VIC	11.5%	13.3%
South Perth	WA	11.5%	13.7%

A Fairer Tax and Welfare System for Australia

Ryde - Hunters Hill	NSW	11.4%	18.2%
Brisbane Inner - East	QLD	11.3%	12.9%
Marrickville - Sydenham - Petersham	NSW	11.3%	18.9%
Whitehorse - East	VIC	11.3%	17.1%
Southern Highlands	NSW	11.2%	16.7%
Joondalup	WA	11.2%	12.6%
Darebin - South	VIC	11.2%	13.1%
Surf Coast - Bellarine Peninsula	VIC	11.2%	15.3%
Keilor	VIC	11.0%	13.2%
Carindale	QLD	11.0%	13.3%
Macedon Ranges	VIC	10.9%	13.5%
Manningham - West	VIC	10.9%	19.2%
The Hills District	QLD	10.9%	13.0%
Glen Eira	VIC	10.8%	14.7%
Brisbane Inner - West	QLD	10.6%	13.5%
Cronulla - Miranda - Caringbah	NSW	10.6%	16.2%
Unley	SA	10.6%	12.9%
Molonglo	ACT	10.5%	13.8%
Mitcham	SA	10.4%	12.4%
Hornsby	NSW	10.4%	17.3%
Rouse Hill - McGraths Hill	NSW	10.4%	19.6%
Melville	WA	10.3%	12.7%
Canada Bay	NSW	10.1%	16.1%
Centenary	QLD	10.0%	12.5%
Sutherland - Menai - Heathcote	NSW	9.9%	14.6%
Weston Creek	ACT	9.8%	11.0%
Burnside	SA	9.7%	13.9%
Warringah	NSW	9.6%	17.2%
Pennant Hills - Epping	NSW	9.6%	18.6%
Nillumbik - Kinglake	VIC	9.5%	12.3%
Dural - Wisemans Ferry	NSW	9.5%	16.7%
Stonnington - East	VIC	9.4%	11.6%
Woden Valley	ACT	9.3%	11.5%
Boroondara	VIC	9.2%	13.9%
Chatswood - Lane Cove	NSW	9.1%	14.8%
Leichhardt	NSW	9.1%	14.1%
North Sydney - Mosman	NSW	8.9%	14.9%
Manningham - East	VIC	8.9%	13.0%
Bayside	VIC	8.9%	13.7%
Pittwater	NSW	8.8%	16.3%
Baulkham Hills	NSW	8.6%	16.7%
Cottesloe - Claremont	WA	8.6%	12.4%
Eastern Suburbs - North	NSW	8.4%	15.1%
South Canberra	ACT	8.3%	9.6%
Kenmore - Brookfield - Moggill	QLD	8.2%	11.7%
Manly	NSW	7.8%	11.9%
Ku-ring-gai	NSW	7.4%	15.7%

