Who does the Government Support Through Job Loss?

Australian Conference of Economists, 2025

Matthew Maltman, Zachariah Hayward, and Matt Nolan 07/07/2025



A short framework for government support

- Job loss is a major economic and personal shock, with lasting material consequences for individuals.
- Governments aim to soften this impact by providing Income Support, which can be broadly split into two categories:
 - **Insurance:** where benefits depend on prior earnings and contributions
 - **Social Assistance:** a rights-based or social obligation approach to guaranteeing a minimum income for individuals who meet job search requirements

Most countries distinguish between these through separate programs. In Australia, a single policy (JobSeeker) is expected to achieve both.

How do we think about the trade-offs from Income Support Programs?

- Adequacy
- Incentives to Work
- Fiscal Cost to Government



Introduction	Data	Methodology	Results	Conclusion
Our paper				

How well does Australia's income support system insure against job loss? Who is well protected, and who risks poverty or major cuts to consumption if they lose their job?

We simulate job loss for currently employed Australians using e61 TaxSim and the Survey of Income and Housing to assess the distribution of:

- **Income replacement**: How much of pre-job income is replaced by the tax-transfer system?
- **Poverty risk**: How many, and who, would fall below the poverty line?

More richly understanding replacement rates also complements previous e61 work on the consumption responses to job loss in Australia.



What is a replacement rate?

• A **replacement rate** is the net income replaced by the tax-transfer system following the loss of income due to job loss.

Net Replacement Rate = Change in Taxes Paid and Transfers Recieved after job loss Initial Net Labour Income

- A replacement rate is useful in telling us about the *insurance properties about the tax and transfer system* (*social insurance*), as they provide information about the significance of an earnings shock to a household.
 - They however tell us little about poverty prevention (often inversely related).
- Individuals can self-insure for labour market shocks social insurance is not the only way individuals protect themselves against job loss.
 - These behaviours are endogenous to the tax and transfer system.
- The inverse of a replacement rate is a participation tax rate.

Stylised fact: Australia is considered an outlier on replacement rates.



Source: OECD.Stat

* Replacement Rate is for a single person earning the average wage. Housing costs = 30% of the average Wage Sources: e61; OECD

Replacement rates 2023

5 **eSl**

%

80

60

40

20

Introduction	Data	Methodology	Results	Conclusion

Methodology:

- We use data from the Survey of Income and Housing (SIH) 2019-20
 - 2019-20 is the most recent year of the SIH (unfortunately). We scale up parameters to 2024-25 by inflating incomes by WPI and assets by bond yields.
 - SIH has detailed information on household income sources.
- We run the e61 Tax and Transfer calculator over the SIH to simulate incomes at two different world states for each individual: current hours worked, and hours worked = 0 (i.e. job loss).
 - We throw out all individuals not aged between 22-54, and those working less than 30 hours a week
 - We have results which includes part-time workers and finds similar results.
 - We throw out all individuals with a disability (we do not have DSP in the calculator!)
- Assumptions:
 - 100% take-up.
 - No deductions or preferential treatment for capital income sources (e.g. capital gains tax discount).
 - No state level taxes or transfers.
 - People are unemployed for 12 months (remove the Liquid Assets Waiting Period).

Example of the e61 Tax Calculator



EMTRs for a unpartnered home owner earning \$ 5





Distribution of Replacement Rates for eligible recipients

• There is substantial heterogeneity in replacement rates, with the mean and median being 36%

• 28% of FT workers would have a replacement rate of 0 after job loss.

 Surprisingly, the variance in replacement rates is more driven by the numerator than the denominator (despite the JSP being a flat payment!)



* Eligible recipients are those who recieve either taxable benefits or FTB.

Distribution of Replacement Rates by Prior Income



* Replacement Rates following Job Loss, after one-year. Income quantiles defined for all Full Time workers. Sources: ABS; e61

Poverty Rates vs. Replacement Rates



* Y-axis shows replacement rate groups. X-axis reflects the share of that group in poverty.

** Poverty defined relative to half the Median Income of the employed population. Experiment asks what proportion of households fall into this measure of poverty after job loss.

*** Housing costs reflect the full gross rent or mortgage paid. Other housing expenses are excluded. Sources: ABS; e61

Poverty and Replacement Rates: Number of Workers





Single Households are More Likely to Face Poverty Following Job Loss



* Poverty defined relative to half the Median Income of the employed population. Experiment asks what proportion of households fall into this measure of poverty after job loss.

** Housing costs reflect the full gross rent or mortgage paid. Other housing expenses are excluded. Sources: ABS; e61

Experiment: How would increasing the JSP affect poverty rates post job loss?



* Experiment is how many households would be in poverty if one member of the household lost their job. Note that only those eligible for the JSP or PP recieve the hypothetical increase here, so the `Failed Assets Test` Category is unchanged over the period

Experiment: How would increasing the JSP affect RRs



Replacement Rate Distributions

* Weighted distribution of Replacement Rates for those eligible for either JSP or PP after job loss.
** Solid verticle lines represent median replacement rate.
Sources: ABS; e61

Introduction	Data	Methodology	Results	Conclusion

Conclusion

- There is substantial heterogeneity in the degree to which Australian workers are insured against job loss. The modal replacement rate is zero. On average, eligible full-time workers experience a 64% drop in net income after job loss (36% replacement rate).
 - Surprisingly, more of the variance comes from different levels of income insurance, rather than different levels of income.
- Nearly half (47%) of households would fall into poverty after job loss, with poverty risk highest for singles without children
- Higher replacement rates do not guarantee adequate support: in fact higher replacement rates are generally negatively correlated with poverty risk post job-loss