POVERTY IN AUSTRALIA: NEW ESTIMATES AND RECENT TRENDS

RESEARCH METHODOLOGY FOR THE 2016 REPORT

Peter Saunders, Melissa Wong and Bruce Bradbury
Social Policy Research Centre
UNSW Australia

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This paper provides details of the definitions and technical methods that were used to generate the updated poverty estimates for 2013-14 and earlier years commissioned by ACOSS. Any queries should be directed in the first instance to Peter Saunders at p.saunders@unsw.edu.au

This document describes key features of the data and provides details of the methodology that have been used to produce the poverty estimates published in *Poverty in Australia 2016* (ACOSS, 2016). This is the fifth in a biennial series of Poverty and Inequality reports that the Social Policy Research Centre (SPRC) has provided to ACOSS.

The document follows the outline developed in the previous report (Saunders, Bradbury and Wong, 2014) in explaining how the estimates were derived and setting out key definitions. It also provides details of the changes from the approach used previously and explains why these have been made.

Data Sources

The poverty estimates have mainly been derived from the basic confidentialised unit record file (CURF) data based on the *Survey of Income and Housing* (SIH) conducted by the Australian Bureau of Statistics (ABS). Summary results from those surveys are published in ABS *Household Income and Income Distribution* reports *(ABS* Catalogue No. 6523.0).

The SIH is currently conducted every two years, with the most recent survey referring to income data for the financial year 2013-14. This analysis draws on the latest data, but the trend analysis]TJETcET24 0 0 1(t)-0 0h134ompares previous TJETSurveys, covering the 13 years 2003-04, 2005-06, 2007-08 2009-10, 2011-12 and 2013-14.

Income is collected in these surveys in current form (i.e. in the wee(t)-0 before the survey) and in annual form (i.e. over the previous financial ear). The 0htimates in this study are all based on current income.[1,2]

In 2009-10, the basic SIH sample was expanded to just over 18,000 households (of whom]found 10,000 were]TJE in the HES survey). The number of householdsTcETparticipating in the subsequent two surveys (2011

The new estimates resulted in an increase in inequality as measured by the Gini coefficient. As was noted by ABS at the time:

> 'This reflects that most of the changes have been to the scope of employment income and *at the higher end of the income distribution i.e. fourth and highest quintiles*' (ABS, 2009, p. 63: emphasis added)

The definitional changes introduced in 2007-08 (and in earlier years in the 2000s) are described by Wilkins (2014), who confirms that these definitional changes increased measured inequality.[4] Although the ABS notes that the changes have mainly affected those at the top of the income distribution, this does not automatically imply that they have not affected poverty rates, for two reasons: firstly, because there will be some changes at the bottom that may cause some people to shift from one side of the poverty line to the other; and second, because the definitional changes will affect the level of median income and hence the poverty line itself.[5]

The detailed poverty estimates presented here for the latest year (2013-14) are based estim

Poverty rates and poverty gaps have been estimated using poverty lines set at 50% and 60% of median income (or income minus housing costs). Almost all Australian poverty researchers now use one of these two poverty lines. The use of both provides an insight into the sensitivity of the estimates to shifts in the poverty line.

Baseline Case

The baseline estimates utilise all of the data provided on the CURF for each year and apply the methods described above to estimate the overall poverty rate and its level for different groups. No adjustments have been made to the full ABS sample, nor are any changes (other than the CPI-adjustment described above) made to the reported values of income used to derive the median value and hence the poverty line.

Sample Exclusions and Income Adjustments

Building on the approach developed in previous SPRC studies conducted for ACOSS, the baseline data have been adjusted to reflect two aspects that have been shown to be important when estimating poverty.

The first adjustment (identified here as an exclusion) involves removing from the sample in each year the following two groups:

1. All households who report zero or negative incomes
2. All self-employed households

In both cases, the rationale is that the reported income data is likely to be an unreliable measure of the standard of living of the household and is thus not suitable for establishing their poverty status. The rationale for this is self-evident in the case of those reporting zero or negative income, while the exclusion of the self-employed reflects the difficulty involved in distinguishing between personal and business income.

Self-employed households are defined for this purpose very broadly to include those households that either report any income (negative or positive) from their own unincorporated business, or who contain individuals who report their labour force status as employer, own account worker, contributing family worker or employee paid in kind in their main or second job. There is substantial overlap between these two exclusion categories. Around half of those with zero or negative income are also classified as self-employed.[8]

In our previous reports, the number of people in poverty is calculated by applying the estimated poverty rate to the estimating population. This approach effectively assumes that there is no poverty among those households who have been excluded from the estimating sample. While this might be a reasonable assumption for those who report zero or negative income, it is less justifiable in its treatment of the self-employed.

For this reason, this report has changed the method used to estimate the numbers in poverty (the change does not affect poverty rates). This new method instead assumes that the poverty rate among the people in the two excluded groups is not zero is but the same as the estimated poverty rate for all other households. In practice, this is implemented by multiplying the number of people estimated to be poor within the restricted population

[8] Application of the zero/negative income exclusion results in 2011-12 resulted in the removal from the actual (unweighted) sample of 93 households with zero and/or negative household income when measured on a Current (2007-08) basis and 102 households when measured on a 2005-06 basis. A total of 2,064 households fit

(people who are not excluded) by the ratio of the total population to the restricted population. To ensure adding up consistency, the same ratio is applied both to the overall population and to any sub-populations.

The second adjustment relates to the treatment of housing costs. As is well known, the high home ownership rates that exist in Australia mean that many households face low housing costs once they have paid off their mortgage. Low housing costs means that a given level of income can go further in meeting other needs and thus that the exposure to poverty may be lower than otherwise – particularly for older households where outright home ownership is most common.

Reflecting these considerations, it is common for poverty to be estimated in the Australian context before and after housing costs by using income concepts and poverty lines that include and exclude housing costs (Melbourne Institute, 2014; Saunders, 2013).

When estimating poverty on an after housing costs basis, weekly housing costs have been deducted from income, and the difference (income after housing) has then been divided by the equivalence scale. (The same equivalence scale is used for both the before and after housing costs poverty calculations). The median of this adjusted measure is then derived, the poverty line is set at the relevant percentage of the new median and poverty is estimated by comparing income after housing costs with the after housing costs poverty line.

For this purpose, housing costs include recurrent outlays by household members in providing for their shelter and is limited to major cash outlays on housing, that is, mortgage repayments (including for any dwelling alterations or additions) and general and water rates for owners, and rent payments for renters.[9]

The benchmark estimates of median equivalised income derived from the latest SIH on this basis for 2013-14 (using the 'new, i.e. 2007-08' income measure) are $844.9 (before housing costs) and $682.1 (after housing costs), a difference of $162.7 or 23.9% (Table A).

We thus end up with four alternative definitions of poverty. Results for each of these have been calculated using the 2005-06 and 2007-08 income basis:

1. Definition 1: The benchmark definition that includes all observations and takes no account of housing costs
2. Definition 2: As above, but excluding all observations that either report having zero or negative income or are self-employed
3. Definition 3: As 1 above, but deducting housing costs from income and using an after-housing costs poverty line
4. Definition 4: As 2 above, but deducting housing costs from income and using an after-housing costs poverty line

Changes Over Time

When examining changes over time, comparability demands that account must be taken of the changes to the definition of income that have been introduced by ABS over the period.

For the trend analysis we therefore use the most recent definition that allows us to produce consistent estimates over the longest possible period. As explained in our previous reports (Saunders, Bradbury and Wong, 2012, 2014) the best measure to use for this purpose is that based on the 2005-06 definition, since we are able to derive estimates for all years since 2005-

As can be seen from Table A, median income rose faster than the CPI over the period (whether or not h

References

ABS, (2009),

Appendix A: Specification of Disaggregated Groups

1. Gender

All persons in the household have been categorised according to their gender.

2. Adults and Children

Following the ABS definitions, adults are defined as 15 years and over while dependent children are defined as being under 15 years of age.

3. Adult Age Categories

The age groups of adults have been categorised into: 15 to 24 years, 25 to 64 years, and 65 years and above.

4. Family Type

Household family type has been derived from the family composition household variable identified in the ABS data file (FAMLYCOM). Lone person households have been mapped into sin377.95 60a2l94 Tm[6( )-21(A)32(:)4)]TJETBT1 0 0 1 453.BT1 0 0 1 486.82 605.02 Tm[an)32 EMCd