

# Revising Poverty Assignments of Unrelated Children under Age 15 in the Supplemental Poverty Measure Report

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## **Introduction**

Following decades of research, an Interagency Technical Working Group on Developing a Supplemental Poverty Measure (ITWG) developed a series of recommendations to allow the U.S. Census Bureau, in cooperation with the Bureau of Labor Statistics, to produce the Supplemental Poverty Measure (SPM). The SPM is released along with the official poverty measure each year.<sup>1</sup> The SPM expands the official poverty measure in several ways, with a more comprehensive resource measure and geographically-adjusted thresholds, which vary by housing tenure. The SPM also extends the definition of a resource unit beyond the Census family definition, to include unmarried partners and their relatives, foster children under age 22, and unrelated children under age 15. This expansion not only changes the composition of resource units from the official measure but also adds unrelated individuals under age 15 to the universe included in the poverty estimation sample.

As a result of this universe difference, “official” poverty rates published in Census’ annual SPM Reports (see Renwick and Fox, 2016) have historically differed from the official poverty rates published in Census’ Income and Poverty Reports (see Proctor, Semega and Kollar, 2016). This paper describes the methodology that has been used by the Census Bureau to estimate the official poverty status of unrelated individuals under age 15 in both sets of reports. This paper then presents a suggested revision to more accurately reflect the likely status of unrelated individuals under age 15 and reduce some of the disparity in estimates of official poverty across Census publications.

## **Poverty Status Treatment of Unrelated Individuals under Age 15**

The official measure of poverty was established by the Office of Management and Budget (OMB) in Statistical Policy Directive 14 and was designed to be used by federal agencies in their statistical work. Official poverty data come from the Current Population Survey Annual

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<sup>1</sup> The SPM does not replace the official poverty measure and is not designed to be used for program eligibility or funding distribution.

Social and Economic Supplement (CPS ASEC) and are released each year in Census' Income and Poverty Report.

Poverty status is estimated based on a comparison of a family's or individual's pretax cash income to a poverty threshold that varies by family size, composition, and age of the family head. Poverty status is estimated separately for families and unrelated individuals within a household. Families are defined as a group of two or more people related by birth, marriage, or adoption and residing together; all such people (including related subfamily members) are considered as members of one family. Unrelated individuals are people of any age who are not members of families or subfamilies. As the CPS ASEC does not ask individuals under age 15 any income questions, children who reside in a household without any relationship to the reference person, or other relatives in the household (i.e. an unrelated individual under age 15) have no income information to be used as the basis for establishing official poverty status. As a result, these individuals are excluded from the poverty universe. In 2015, there were 364,000 such individuals.

In comparison, the unit of analysis for the SPM includes all related individuals who live at the same address, any coresident unrelated children who are cared for by the family (such as foster children), and any cohabiters and their relatives. Unrelated individuals under age 15 are in the poverty universe and considered a member of the resource unit in a household that includes the household reference person. For comparison purposes, the SPM report also includes an estimate of official poverty but with the extended universe. As all unrelated individuals under age 15 have incomes of \$0 and face a poverty threshold for a single person unit, they have all been categorized as "in official poverty" in the SPM reports.

Due to this differential treatment of unrelated individuals under age 15, in 2015, the "official" poverty rate in the SPM report differed from the official poverty rate in Census' Income and Poverty Report by 0.2 percentage points. This paper proposes changing the way official poverty status is determined for these individuals. Rather than categorizing them as all being in poverty, we propose that we set the poverty status of each unrelated individual under age 15 to match that of the reference person of the household in which they reside. We would not recalculate the official poverty status of anyone else in the household—only give the unrelated child the same status as the householder. This would result in the official poverty rate looking much more similar between the two reports, as well as more closely reflecting the likely poverty status of the unrelated individuals under age 15.

### **Impact of Reclassifying "Official" Poverty Status of Unrelated Individuals under Age 15 in the SPM Report**

Table 1 shows the results of this reclassification on the "official" poverty estimates in the SPM report compared to the official poverty estimates in the Income and Poverty Report for 2013 through 2015. This adjustment results in "official" poverty estimates for the SPM report which are not statistically different from the estimates released in Income and Poverty Report for each of the years of interest. Poverty rates overall and for children under age 18 can be seen in Table 1.

**Table 1. Poverty Rates by Treatment of Unrelated Individuals under Age 15, 2013 to 2015**

Description	Official Poverty Rate			
	All people		Under 18 years old	
	Percent	Margin of error <sup>†</sup> (+/-)	Percent	Margin of error <sup>†</sup> (+/-)
<b>2015</b>				
Official in Income & Poverty Report	13.5	0.3	19.7	0.6
"Official" in SPM Report	13.7	0.3	20.1	0.6
Revised "official" in SPM Report	13.5	0.3	19.7	0.6
<b>2014</b>				
Official in Income & Poverty Report	14.8	0.3	21.1	0.5
"Official" in SPM Report	14.9	0.3	21.5	0.5
Revised "official" in SPM Report	14.8	0.3	21.1	0.5
<b>2013*</b>				
Official in Income & Poverty Report	14.8	0.5	21.5	1.0
"Official" in SPM Report	14.9	0.5	21.9	1.0
Revised "official" in SPM Report	14.8	0.5	21.6	1.0

† The margin of error (MOE) is a measure of an estimate's variability. The larger the MOE in relation to the size of the estimate, the less reliable the estimate. This number, when added to and subtracted from the estimate, forms the 90-percent confidence interval. The MOEs shown in this table are based on standard errors calculated using replicate weights. For more information, see 'Standard Errors and Their Use' at <[www2.census.gov/library/publications/2016/demo/p60-256sa.pdf](http://www2.census.gov/library/publications/2016/demo/p60-256sa.pdf)>.

\* The 2014 CPS ASEC included redesigned questions for income and health insurance coverage. All of the approximately 98,000 addresses were eligible to receive the redesigned set of health insurance coverage questions. The redesigned income questions were implemented to a subsample of these 98,000 addresses using a probability split panel design. Approximately 68,000 addresses were eligible to receive a set of income questions similar to those used in the 2013 CPS ASEC and the remaining 30,000 addresses were eligible to receive the redesigned income questions. The source of the 2013 data for this table is the portion of the CPS ASEC sample which received the redesigned income questions, approximately 30,000 addresses.

Source: U.S. Census Bureau, Current Population Survey, 2014-2016 Annual Social and Economic Supplements.

## Conclusion

Due to different poverty universes used in two Census reports, differing estimates of “official” poverty are released each year. To avoid some of the disparity between the reports and potential confusion, we recommend changing the way “official” poverty status of all unrelated individuals under age 15 in the SPM report is determined to match the official poverty status of the reference person of the household. This change would not impact the official poverty status of any other household members and would not impact the official poverty estimates, as released in the Income and Poverty reports. We recommend this change be implemented in the SPM report immediately.

## References

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