

AUGUST 21, 2019 | NUMBER 177

## The Use and Misuse of Income Data and Extreme Poverty in the United States

BY BRUCE D. MEYER, UNIVERSITY OF CHICAGO; DEREK WU, UNIVERSITY OF CHICAGO;  
VICTORIA R. MOOERS, UNIVERSITY OF CHICAGO; AND CARLA MEDALIA, U.S. CENSUS BUREAU

There are reasons to be simultaneously concerned and skeptical about recent reports of high and rising rates of extreme poverty in the United States. Several distinguished scholars have argued that millions of Americans—many of them children—live on less than a few dollars per day. Other researchers have reported high rates of “disconnected” people, defined as those with neither earnings nor government benefits. Relying predominantly on survey reports of income, both groups claim that these problems have been rising sharply over time. On the other hand, researchers have long contended that survey reports in the tails of the income distribution have a disproportionate share of errors. Some of these scholars have pointed to evidence of increased underreporting of income in household surveys or conflicting evidence from consumption data.

We address these questions by bringing to bear a combination of previously underutilized survey data and newly linked administrative data. These data allow us to reexamine rates of extreme poverty and shed light on other issues, including

the targeting of in-kind transfers, the effects of welfare reform, and the measurement of poverty.

Focusing on 2011 data from the Survey of Income and Program Participation (SIPP), we show that more than 90 percent of the 3.6 million households with survey-reported cash income below \$2 per person per day are misclassified. Our methodology first implements a series of adjustments using only the survey data. We begin by reclassifying households as not in extreme poverty if they received sufficiently high amounts of in-kind transfers, including Supplemental Nutrition Assistance Program (SNAP); the Special Supplemental Nutrition Program for Women, Infants, and Children; and housing assistance. We then account for those who either reported hours worked for pay but underreported earnings (failing to report any earnings in the vast majority of cases) or possessed substantial assets. To further examine households not captured by the survey-only adjustments, we replace survey reports of earnings; asset income; retirement distributions; Old-Age, Survivors, and Disability Insurance (OASDI); Supplemental Security

*Any opinions and conclusions expressed herein are those of the author(s) and do not necessarily represent the views of the U.S. Census Bureau. This paper meets all of the U.S. Census Bureau's Disclosure Review Board (DRB) standards and has been assigned DRB approval numbers CBDRB-FY18-324 and CBDRB-FY19-173.*

Editor, Jeffrey Miron, Harvard University and Cato Institute

Income (SSI); SNAP; and housing assistance with values from linked administrative tax and program data and also account for the Earned Income Tax Credit (EITC).

In the end, our best estimate of the extreme poverty rate is 0.24 percent among households and 0.11 percent among individuals, with 90 percent of the remaining extreme-poor households made up of single individuals. We suspect the true extreme poverty rate is lower, given the evidence of survey underreporting for many income sources—including unemployment insurance, Temporary Assistance for Needy Families, workers' compensation, veterans' benefits, and informal earnings—for which we have not been able to incorporate administrative data.

Our results are robust to a number of modifications. For example, few households with survey-reported incomes of over \$2 per person per day fall below \$2 per person per day after applying the administrative data and removing imputed earnings. Excluding imputed hours from the corrections for underreported earnings also yields trivial impacts. In addition, according to the administrative data alone, nearly 80 percent of the misclassified households overall are initially categorized as extreme poor because of errors or omissions in cash reports of earnings, asset income, retirement income, OASDI, SSI, or the EITC. As a result, in-kind transfers play a secondary role. Replicating the analysis with the 2012 Current Population Survey Annual Social and Economic Supplement, we estimate that only 0.18 percent of households and 0.13 percent of individuals are in extreme poverty for the 2011 calendar year. These estimates from the two surveys are remarkably similar to rates that researchers have calculated using consumption data, suggesting that improved measures of income can reconcile past inconsistencies between income and consumption measures of poverty.

One of our key methodological advances is the use of multiple sources of administrative and survey data to validate the survey-only adjustments. As the survey-only adjustments alone can account for 78 percent of the total decrease in extreme poverty that we calculate, showing that they are confirmed by other sources makes the evidence compelling. For the groups reclassified because of underreported earnings and substantial assets, we find that 72–93 percent of these households have incomes from the administrative data above the extreme poverty threshold and 47–65 percent have incomes above the poverty line, depending on the subgroup. Using detailed information from SIPP topical modules, we find that these groups have material well-being levels (based on measures of material hardship, appliance ownership, and housing quality) that

are similar to the U.S. average. They are also comparable to the average household on a host of other survey-reported dimensions, such as years of education, health insurance coverage (especially private coverage), and occupation.

Accordingly, the preponderance of evidence suggests that the households reclassified by underreported earnings and substantial assets have survey incomes that are likely to be gross errors. These results provide a potential explanation for the lack of a strong correlation between income poverty and material hardship found by several studies. In contrast, the households reclassified because of receipt of in-kind transfers appear to be significantly worse off than the official poor on multiple dimensions of well-being, implying that these benefits are well targeted to the needy. These results are consistent with past findings that individuals excluded from the poverty rolls under the Census Bureau's Supplemental Poverty Measure (which incorporates in-kind transfers into income and raises some recipients above the poverty line) appear worse off, on average, than the official income poor.

It is important to keep in mind that our best estimate of the extreme poverty rate is not necessarily a final estimate for the population. The SIPP excludes homeless individuals and institutionalized populations (such as those living in nursing-care facilities and prisons) from its survey frame, meaning our estimates of extreme poverty are understated if substantial numbers of the homeless and institutionalized populations are in extreme poverty. We should emphasize, however, that the literature reporting high rates of extreme poverty has also relied on survey data that exclude the homeless and institutionalized. If anything, these caveats further highlight the imperfect ability of most survey data alone, when taken at face value, to identify the extreme poor.

While we demonstrate that the rate of extreme poverty in the United States is substantially lower than what has been reported, we do not contend that there is little deprivation in the United States. Rather, we argue that focusing on such low-income thresholds as \$2 per person per day in the United States is likely to yield a group filled with more gross errors than households that are truly impoverished. For instance, nearly 50 percent of the households classified as extreme poor based on survey-reported cash have incomes above the poverty line in our administrative data sources (which we know to be incomplete). Moreover, almost all the households receiving means-tested in-kind transfers—who appear to be among the most materially deprived Americans—are not in extreme poverty simply by virtue of the extreme-poverty income thresholds being lower than benefit amounts. Among the households that appear to be truly extreme poor, and

therefore disconnected from work or the safety net, the vast majority consist of a single childless individual. Contrasting sharply with the focus in the literature on extreme poverty among households with children, this finding is consequential from a policy perspective, as eligibility for programs is often dependent on household composition.

**NOTE:**

This research brief is based on Bruce D. Meyer, Derek Wu, Victoria R. Mooers, and Carla Medalia, “The Use and Misuse of Income Data and Extreme Poverty in the United States,” NBER Working Paper no. 25907, May 2019, <http://www.nber.org/papers/w25907>.